

**An Exploration of the Role of Ethics in Leadership Decision-Making  
in Change Initiatives in Queensland Government Owned  
Corporations**

**by**

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## **Abstract**

The context for this thesis is a perceived convergence of two themes: high failure rates of change initiatives and growing concern about ethics in leadership decision-making (LDM). Change initiatives have become pervasive in business and government and are increasing in volume, speed and size (Burnes 1996; Keller & Aiken 2008). Change processes however have a high failure rate with significant financial, social and political consequences. One of the consistently identified factors contributing to these failure rates is the 'Lack of Leadership/Executive Support' (*Chaos, The Standish Group Report* 1995; *A guide to ERP Success* 2001; *Challenge of Change: Australia* 2010; Cooke et al. 2001; Eser et al. 2007; Keller & Aiken 2008; KPMG 1997; OASIG 1995), although there is limited research of what this comprises. Decision-making is however a core leadership competency (Woiceshyn 2011) increasing concern and research has focused attention on the ethical context in which leaders make decisions (Coldwell 2010; Dassah 2010; Fykse Tveit 2010; Schwab et al. 2010) particularly in the light of recent business scandals. Compounding this situation is the rate of change in business (Coldwell 2010) coupled with the perceived and actual role of leadership decision making (LDM). Consequently, there is increasing pressure on organisations to improve the quality of LDM processes in change initiatives. To date, the interrelationships and behaviours of leaders and the ethics they employ often appear as separate fields of ontological inquiry; in terms of LDM however, these interrelationships form the essence of improving LDM within organisational contexts and their impact on society.

This thesis is a qualitative analysis of two case studies of change initiatives in Queensland Government owned corporations focussing on the processes, consequences and outcomes of LDM. The research findings indicate that the quality of LDM may be improved by addressing the two issues of equivocality and uncertainty through the inclusion of ethics and logic in a prescriptive and iterative LDM process. The proposed Q.L.D. model for improving the quality of LDM in change initiatives combines the elements of ethics, logic, organisational learning and change leadership to decrease levels of equivocality and uncertainty. The Q.L.D. model presents a disciplined and focused process for leadership decision making in change initiatives by decreasing the impact of the factors affecting failure rates.



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### **Certification of Thesis**

I certify that the ideas, experimental work, results, analyses, software and conclusions reported in this thesis are entirely my own effort, except where otherwise acknowledged. I also certify that the work is original and has not been previously submitted for any other award, except where otherwise acknowledged.

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Signature of Candidate      Date

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Signature of Supervisor/s      Date

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## **1.0 INTRODUCTION**



## Chapter 1.0 Introduction

Organisations in today's world operate in an increasingly complex and challenging environment. The nature of business is changing, driven by, for example, technology advances and globalization. Concurrently, resulting from increasingly common business and government scandals, society's attitude to, and expectations of, its institutions is changing. These events have focused interest on, and raised questions about, the ethical environments in which leaders have operated and made decisions (King 2013; Milkman et al. 2008). It is likely that these two changes are contributing to a change in the nature of leadership (Coldwell 2010) which is occurring as a result of pressure on businesses to be concerned with more than making profits. At the same time, change initiatives are increasing in volume, pace and scope (Keller & Aiken 2008), and their failure rates remain high. The factors contributing to these failure rates remain consistent, with "leadership" being continually identified as one of the top three contributors (*Chaos, The Standish Group Report 1995; A guide to ERP Success 2001; Cooke et al. 2001; Eser et al. 2007; KPMG 1997; Qassim 2010*). This thesis submits that these two trends are converging, and that this highlights a potential relationship between leadership decision-making (LDM) and change initiative failure rates. Further, that this convergence drives a demand for improvement in the quality of LDM, and that this is achieved by balancing the roles of ethics and logic in the decision-making process. The research is conducted within the context of Government Owned Corporations (GOCs), for a number of reasons. Firstly, the unique legal and governance structure of GOCs creates an LDM environment of political, social, legislative and operational pressures potentially more complex than that for leaders in the private and traditional public sectors. Secondly, these often competing pressures highlight the need for an LDM process that manages the complexity while ensuring the best possible quality of decision outcome. Finally, the provision of essential public services, and the potential impact of inadequate delivery of these services, highlights the consequential nature of LDM.

### 1.1 Background to the research

The consequences of the high failure rates of change initiatives in business and government include significant lost investment, decrease in or disruption to service delivery, sub-optimal outcomes and organisational disruption (KPMG 1997). Two assumptions may be reasonably made from this. Firstly, given the investment and effort required for these initiatives, approvals for them should, at a minimum, be based on some form of logical business case that justifies the costs and risks. Secondly, the continuing, persistently high failure rates of change initiatives suggest that the factors contributing to them are not being adequately addressed by either the change models adopted or by the initiative managers, or both. The highest rating of recurring contributing factors to failure rates of change initiative have been generally grouped as "human" or "organisational" and include "Leadership/Executive Support", "User Involvement" and "Unrealistic Expectations" (*Chaos, The Standish Group Report 1995; A guide to ERP Success 2001; Challenge of Change: Australia 2010; Cooke et al. 2001; Eser et al. 2007; Keller & Aiken 2008; KPMG 1997; OASIG 1995*). There is, however, limited research on what those factors comprise, particularly "leadership support" (Lipshitz & Mann 2004; Patzer & Voegtlin 2010). It is likely that the increasing number of change initiatives resulting from organisations' responses, planned and unplanned, to recent scandals has further contributed to failure rates (Burnes 1996; Dassah 2010). Moreover, these scandals have resulted in concerns about, and loss of confidence in, business leaders through exposure of their perceived ethical shortcomings within their LDM process (Coldwell 2010; Fykse Tveit 2010; Schwab et al. 2010). Further, the consequences of the decisions made leading

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to the recent business scandals affect individuals, organisations, markets, economies and societies (Milkman et al. 2008; Woiceshyn 2011). Consequently, there has been a growing call for change to be managed more ethically (By et al. 2012), and for an improvement in the quality of LDM (Rausch 2007). In the context of this thesis, then, LDM is the process of decision-making by a leader within the boundaries of a change initiative, with the leader being the person accountable for the particular initiative.

The consequences of LDM on the provision of public services can be significant. As with other industries, however, demands for increased effectiveness and efficiency drive policy and structural reviews in government provision of these services (Starr 1988). Throughout the early 1980s, the complexity of government environments was intensified by the evolution of the privatization policy movement. This movement continued into the early 1990s, as a response to the increasingly complex social environment and its ensuing challenges to efficiently delivering public services (Osbourne & Gaebler 1992; Sozzani 2001). During these periods, governments in the United Kingdom, the United States, the Peoples' Republic of China, New Zealand, Australia, the Netherlands and many others introduced various forms of privatization. Australia, in particular, seemed to embrace the concept during its emergence from the "economic rationalization" period of the 1980s, during which Australian productivity did not keep pace with other developed countries and growth slowed ('Greed was Good' 2006). Privatization is the culmination of a three-stage continuum that begins with corporatization and commercialization (Sozzani 2001; Starr 1988). Corporatization, on the other hand, has been defined as a change in the governance structure of a government organisation, while privatization is a material change of ownership (Sozzani 2001). In Australia, States and the Federal Government adopted a corporatization policy, with the introduction of the Queensland Government Owned Corporations Act (1993) and the Federal National Competition Policy (1993) (Booth & Noon 2011). State Government organisations that corporatized became known as Government Owned Corporations (GOCs). Providing public services on a commercial basis while remaining compliant with the 1993 Act created various change initiatives for GOCs, including remaining compliant with changing legislation and policy, changing Federal and State fee and pricing structure changes, and competitive pressure from private sector providers. LDM in this environment is not only complex and demanding, but also highlights the consequential nature of LDM on provision of critical public services. Consequently, this research focuses on LDM in Queensland Government Owned Corporations (GOCs) which provide public services on a commercial basis.

For Government Owned Corporations (GOCs) there are obligations to government, community, customers, employees and shareholders to deliver these services efficiently and to be commercially successful (*Government Owned Corporations Act 1993; Public Sector Ethics Act 1994; Corporate Governance Guidelines for Government Owned Corporations 2009*). [Appendix 1](#) presents the Introduction to the Government Owned Services Act (1993), which defines the objectives of corporatization. This Act defines "commercial success" as meeting financial and non-financial targets (*Government Owned Corporations Act 1993*). The Queensland Government requires that business practices in GOCs, including ethical LDM, reflect the "significant public responsibility" of GOCs (*Government Owned Corporations Act 1993; Public Sector Ethics Act 1994; Corporate Governance Guidelines for Government Owned Corporations 2009*). The requirement to reflect the "significant public responsibility" of GOCs, and the goal of operating on a commercial basis, suggests that GOC leaders have at least similar performance demands and expectations to their private sector counterparts. These competing, and sometimes

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conflicting, pressures and expectations create a situation that makes it difficult for GOC leaders to avoid what has been described as a moral crisis (Rosenthal 2009). A moral crisis occurs when ethics and logic are not aligned. In a similar, and perhaps more empathetic vein for GOC leadership, GOCs may in fact be a perfect example of the *paradoxant systems* described by Perezts et al (2011). In their discussion of the ethical challenges created for managers in complex organisations, such as GOCs, they describe the phenomenon of “serving two masters” as creating *paradoxical injunctions* (Perezts et al. 2011). The legal and political structures of GOCs, combined with the inherent cultural confusion resulting from a government agency attempting to operate as a competitive corporate entity, create ethical challenges for leadership and management, highlighted in the LDM process. For example, a GOC in Queensland may have an independent Board which is appointed by the Government. In this case, the “independence” of the Board is likely to be influenced by the relevant Government Minister, who is also the single shareholder (*Government Owned Corporations Act 1993*). At the same time, The Queensland Department of Treasury and Trade has responsibility for the governance of GOCs (*Corporate Governance Guidelines for Government Owned Corporations 2009*). Finally, some GOCs may also be subject to oversight by the Queensland Competition Authority, regarding prices and fees. The competing and sometimes contradictory requirements of these relationships are likely to create paradoxical injunctions.

The human decision-making process has interested researchers in areas including leadership, LDM, ethics, psychology and philosophy (Sonenshein 2007). Decision-making, including LDM, is a consequential activity (Lipshitz & Mann 2004) that involves choosing between alternatives by gathering and analysing information and considering influencing factors (Rilling & Sanfey 2011). The quality of the process can be improved by how the necessary information is collected and analysed (Rausch & Anderson 2011). However, humans do not always make rational decisions as they are subject to “bounded rationality” (Aldag 2012), even if they follow a logical process (Peirce 1905). Consequently, this thesis suggests that the quality of the decision-making process may only be improved within the bounds of human rationality. Bounded rationality was proposed by Simon (1955) as a complementary, but more realistic, view of “rational man” and suggested that human beings cannot optimize decisions as they are restricted, or “bounded”, by cognitive, situational and perceptual factors. Simon (1955) further proposed that, as a result of the bounds on rationality, decision-makers *satisfice* by looking for the best available alternative solution. This thesis contends that the *satisficing* process may be improved through enhanced methods for identifying, collecting and analysing inputs to the process. Further, that such enhanced methods for managing inputs would likely decrease the conditions of uncertainty and equivocality under which human beings make decisions (Sonenshein 2007). Therefore, this thesis contends that improving the quality of decision-making requires a process that identifies best available solutions by integrating input sources to decrease conditions of uncertainty and equivocality, by increasing understanding of the consequences of each available solution. Leadership decision-making (LDM) has potentially more and greater consequences on a wider range of stakeholders than does an individual decision, and this may be compounded in a change initiative.

The consequences of LDM in a change initiative can involve downsizing, job restructuring, redundancies, organisation and workflow restructuring, all of which can impact stakeholders, including employees, families, customers, shareholders and suppliers amongst others. Consequently, LDM in change initiatives becomes a significant

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factor. Research on the related topics and issues, for instance leadership, ethics and LDM, and of their inter-relationships is still limited (Lipshitz & Mann 2004; Patzer & Voegtlin 2010). Leadership ethics in change leadership is also attracting increasing, but still limited, research attention (Higgs & Rowland 2011; Uday Bhaskar et al. 2003; Zhu et al. 2004). Moreover, research interest has been growing in the related areas of change management, leadership and organisational learning (Garcia-Morales et al. 2009; Gronn 1997; Pham & Swierczek 2006; Stewart & O'Donnell 2007), although this is still limited (Carmeli & Sheaffer 2008). Research of organisational learning has shown that learning is a critical success factor in change initiatives (Stewart & O'Donnell 2007).

In summary, there is no consolidated research of the interdependence of the respective elements of ethics, logic, organisational learning and change management within the context of decision-making in change initiatives. There is, however, research on the relationship between specific elements such as ethics and change management, for example (By et al. 2012). Moreover, while ethics seems to be central to the process, there does not seem to be a clear understanding of its role and its relationships with the related elements of logic, LDM, organisational learning and change management.

### **1.2 Research Problem**

The research problem addressed by this thesis is:

*There is a lack of understanding of the role of ethics in leadership decision-making (LDM) in change initiatives.*

This thesis contends that the consequential nature of LDM in change initiatives, particularly on provision of public services, demands the highest possible quality of those decisions. Further, the quality of the LDM process may only be improved within the bounds of human rationality. Moreover, the improvement in quality is likely to result from enhanced methods for identifying, collecting and analysing inputs to the process. LDM in a change initiative, however, has a number of elements which, to achieve the lowest possible levels of uncertainty and equivocality, need to be integrated. Consequently, this thesis proposes that the role of ethics in LDM in change initiatives is to improve the quality of decision-making by decreasing levels of uncertainty and equivocality, and it achieves this through integrating the elements of logic, organisational learning and change management in the process.

#### **1.2.1 Research Purposes**

This research has two purposes. The first is to explore the role of ethics in LDM in change initiatives in Queensland Government Owned Corporations (GOCs). The second purpose is to use the research findings to develop a model for improving the quality of LDM in change initiatives.

#### **1.2.2 Research Question**

The research question addressed is:

*What is the role of ethics in LDM in change initiatives?*

#### **1.2.3 Research Propositions**

The Research Propositions developed are:

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*R.P.1 LDM is a significant factor contributing to change initiative failure rates*

*R.P.1.1 Quality of LDM may be improved by decreasing the levels of uncertainty and equivocality in the process*

*R.P.1.1.1 Levels of uncertainty and equivocality in LDM may be decreased through consideration of ethical issues*

*R.P.1.2 Quality of LDM may be improved by applying organisational learning processes*

### 1.3 Justification for the research

This research is justified by its unique contributions to existing theory, as well as by its practical application of the research findings to develop the Q.L.D. model for improving the quality of leadership decision-making in change initiatives.

#### 1.3.1 Theoretical justification

There is no currently identifiable, unified theory for improving the quality of LDM in change initiatives. The major themes identified from the literature review for this thesis were:

- a. The nature of leadership is changing
- b. Leadership is a significant factor contributing to change initiative failure rates
- c. LDM is a core leadership competence
- d. Quality of LDM needs to be improved
- e. Ethics plays a balancing role with logic in improving the quality of LDM and,
- f. There is a call to increase ethics in change management (By et al. 2012).

None of the research, however, addresses the interdependence of all of the elements, as Table 1-A shows. The Table presents a sample of the major related research identified and used in this thesis, a short description of the major content, and the elements which each addresses.

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Table 1-A. Representative list of theories used in this thesis

| Researchers          | Year | Theme                               | Interdependent elements |        |       |              |                 | Change | Literature focus   |
|----------------------|------|-------------------------------------|-------------------------|--------|-------|--------------|-----------------|--------|--|
|                      |      |                                     | Leader ship             | Ethics | Logic | Org Learning | Decision making |        |  |
| Patzer & Voegtlin    | 1999 | Change management                   |                         |        |       |              |                 | X      | a process for continually renewing the direction, structure and capabilities of an organisation to serve stakeholders                                    |
| Boal & Hooijberg     | 2001 | Leadership                          | X                       |        |       | X            | X               |        | Strategic Leadership   |
| Gronn                | 2004 | Leadership                          | X                       | X      | X     |              | X               |        | Leadership in organisational transformaiton  |
| Woiceshyn            | 2011 | Decision-making                     | X                       |        |       | X            |                 |        | Intuition, Reasoning and Moral Principles in ethical Decision Making   |
| Lipshitz & Mann      | 2004 | Decision-making                     |                         | X      |       |              | X               |        |  |
| Sonenshein           | 2004 | Decision-making                     |                         | X      |       |              | X               |        | Research into the responses to ethical issues at work, including intuition, justification and construction   |
| Rausch & Anderson    | 2007 | Decision-making                     |                         | X      | X     |              | X               |        | Applying quality criteria to improve decision-making   |
| Rosenthal            | 2011 | Quality of Decision-making          |                         | X      | X     |              | X               |        | The application of ethics in leadership and the impact on quality of decision-making   |
| Velasquez            | 2009 | Ethics                              |                         | X      |       |              | X               |        | The philosophy of ethics   |
| Peretz et al         | 2009 | Ethics; Leadership                  | X                       | X      |       |              | X               |        | Research into leadership and management in contradictory organisationa, i.e. serving two masters   |
| Ciulla               | 2006 | Ethics; Leadership                  | X                       | X      | X     |              | X               |        | Philosophical issues and research into ethics and leadership   |
| Zhu et al            | 2010 | Leadership and ethics               | X                       | X      | X     |              | X               | X      | The effects of leadership behaviour on employees   |
| Higgs & Rowland      | 2011 | Leadership in Change Management     |                         | X      |       |              |                 | X      | The role of leaders as contributors to successful change initiatives   |
| Uday Bashkar         | 2003 | Ethics; Change Management           |                         | X      |       |              |                 | X      | Research into the ethical issues in change management  |
| By & Burnes          | 2012 | Ethics; Change Management           |                         | X      |       |              |                 | X      | The need for an increased role of ethics in change management  |
| Garcia-Morales et al | 2009 | Organisational Learning             |                         |        |       | X            |                 |        | the series of activities, experiences and knowledge which, combined and used effectively, allows an organisation's past to affect its present and future |
| Carmeli & Sheaffer   | 2008 | Organisational Learning             |                         |        |       | X            |                 |        | Leadership in organisational learning and the impact on failures   |
| Coldwell             | 2010 | Leadership & decision-making        | X                       | X      | X     |              |                 | X      | Leadership and management freedom, moral orientation and responsible leadership  |
| Buchanan             | 2008 | Leadership; Organisational Politics | X                       |        |       |              | X               | X      | Leadership and management perceptions of organisational politics   |

The Table shows that, whereas there is research in each of the relevant identified areas, and selective identification of interdependencies, there is no current theory or research that integrates all of the related elements. Consequently, the theoretical justifications of this thesis are that it:

- a. Consolidates interdependent research elements, and
- b. Increases understanding of the role of ethics in leadership decision-making in change initiatives

### 1.3.1.1 Consolidating interdependent research elements

This thesis presents a unique model for improving the quality of leadership decision-making that integrates heretofore loosely coupled existing and emerging research in leadership ethics,

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ethics in decision-making, organisational learning and change management. The thesis contributes to the existing body of theoretical knowledge by consolidating these interdependent elements into a unified approach to improving the quality of leadership decision-making in change initiatives. The recent and current business environment, and the scandals attendant to poor decisions and applications of public monies, suggests there is a need to understand how the quality of leadership decisions can be improved.

### 1.3.1.2 An increased understanding of the role of ethics in leadership decision-making

This thesis defines the role of ethics in leadership decision-making in change initiatives. Perceptions of lack of ethics resulting from the Global Financial Crisis, the Queensland Floods insurance situation (Robertson & Solomons 2011), the Queensland Health payroll case (Madigan 2013b, 2013a) and others have highlighted a need to improve the quality of LDM. In particular, these situations have raised questions about the role of ethics in the LDM.

### 1.3.2 Practical justification

The Q.L.D. model presented in this thesis provides a practical mechanism for helping organisations improve the quality of leadership decision-making in change initiatives. Further, it is probable that the Q.L.D. model, correctly applied, may contribute to a decrease in the factors affecting change initiative failure rates. The Q.L.D. model also has immediate practical application in the Public Sector, and specifically in GOCs.

#### 1.3.2.1 A practical mechanism

There are a number of practical benefits of implementing the Q.L.D. model. Firstly, organisations would have a framework or model which would provide a measure of accountability for LDM in change initiatives. Secondly, leaders would be required, at a minimum, to acknowledge ethical issues and considerations, particularly given the accountability measure presented above. By identifying the Consequence Specificity (CS) of these ethical issues, as the Q.L.D. model requires, decision outcomes would be more deeply understood. More specifically, there would be increased transparency as the stakeholders involved would have greater understanding of how decisions were made and why. Thirdly, leaders would put more emphasis on identifying factors and issues that impact levels of uncertainty and equivocality and address them proactively.

#### 1.3.2.2 Decreasing factors affecting change initiative failure rates

The Q.L.D. model, correctly applied, is likely to contribute to a decrease in the factors affecting change initiative failure rates. Failures in change initiatives are expensive, and have potentially damaging impacts on employees and organisations and, in some cases, society (KPMG 1997). LDM contributes to the success or failure of a change initiative, and, consequently, must be of the highest possible quality (*Chaos, The Standish Group Report* 1995; *A guide to ERP Success* 2001; *Challenge of Change: Australia* 2010; Cooke et al. 2001; Eser et al. 2007; Keller & Aiken 2008; KPMG 1997; OASIG 1995). The leadership behaviours required to implement the LDM process presented in this thesis would, at a minimum, demonstrate Zhu et al's (2004) research findings that leadership behaviour, including LDM, increases employee engagement. As lack of employee engagement is one of the top three factors contributing to change initiative failure rates (*Chaos, The Standish Group Report* 1995; *A guide to ERP Success* 2001; *Challenge of Change: Australia* 2010;

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Cooke et al. 2001; Eser et al. 2007; Keller & Aiken 2008; KPMG 1997; OASIG 1995), there would likely be a subsequent impact on the factors contributing to these failure rates.

### 1.3.3 GOC/Government Implications

Continuing pressures to decrease the size of the public sector, or to increase its efficiency, by privatization, efficiency and effectiveness programs and restructuring, such as those being conducted by Premier Newman in Queensland at the time of writing this thesis, sustain the high levels of change initiatives suggested earlier. Consequently, with a potential decrease in available public service employees to staff these initiatives (Ironsides 2013b), resourcing these change initiatives would likely be an increasing challenge. Moreover, employee concerns about further staff reductions will potentially impact their attitude to these change initiatives. As a result, LDM in GOCs could be further complicated, and issues of trust could become even more relevant than they currently are. The impact on GOC/public sector leaders could include increased pressure to continue to deliver services efficiently and to be commercially successful, while conforming to business practices, including ethical LDM, that reflect the “significant public responsibility” of GOCs (*Government Owned Corporations Act 1993; Public Sector Ethics Act 1994; Corporate Governance Guidelines for Government Owned Corporations 2009*). Consequently, processes that help improve the quality of LDM could assist with managing these impacts, and may even be critical to their success. This thesis demonstrates that it is highly likely that the quality of LDM in change initiatives may be improved through the use of the Q.L.D. model.

## 1.4 Related publishing and applications

This thesis has generated both related publishing and practical applications.

### 1.4.1 Publishing

Research and concepts from this thesis were used to develop the article by Brown et al (2011), 'The BGR Model for Leading Change', published in the *International Journal of Learning and Change*, vol. 6, no. ½ (Brown et al. 2012). This article presented a change model based on the initial research for this thesis. Further, the BGR Model incorporated a specified and mandatory leadership decision-making task.

Additionally, a more comprehensive and larger article has been written, which expands the initial BGR Model and also presents the Q.L.D. Model for improving the quality of leadership decision-making in change initiatives, as described in this thesis. This article will be submitted to *The Journal of Organizational Change Management* in 2014.

### 1.4.2 Practical Application

Some of the key concepts in thesis have been applied in a change initiative in the author's employment as a Senior Change Manager. The initial BGR Model was modified and used as the change framework for a significant change initiative in WorldVision, the international aid agency. The WV Change Framework incorporated a mandatory leadership decision-making point. [Appendix 35, Slide 1](#), shows the WV Change Framework. Additionally, the concepts of “equivocality” and “uncertainty” were applied in a senior leadership workshop to define both the current status of the initiative and the outstanding challenges and risks. Participants were asked to work in small groups to identify what information they felt was still lacking (uncertainty) and what they were still unclear about (equivocality). [Appendix 35, Slide 2](#), presents the slide that was used to facilitate that discussion. Finally, participants were

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provided with a decision-making worksheet that incorporated the concepts of “consequence”, “equivocality” and “uncertainty”. [Appendix 35, Slide 3](#), presents that decision-making worksheet.

### 1.5 Research Methodology

This research is a multi-method qualitative analysis of two case studies (Yin 2009). The methodology is based on a Pragmatic philosophy, using a subjective, Radical Humanist paradigm. The research approach combines the inductive and deductive processes.

#### 1.5.1 Research Philosophy and Paradigm

The Pragmatic philosophy suggests that a mix of methods is most applicable, particularly when the research question does not clearly dictate a specific philosophy (Saunders et al. 2009). The research paradigm is based on the underlying research philosophy. It defines the belief system guiding the research, including driving questions and discussion (Guba & Lincoln 1994). An underlying assumption of this research is that the consequences of recent scandals have been too significant, and potentially harmful, for the status quo of LDM to be considered optimal. Consequently, this thesis adopts a Radical Humanist paradigm, which is based on the belief that the status quo needs to be changed (Saunders et al. 2009).

#### 1.5.2 Assumptions

Defining a research paradigm requires the researcher to articulate their view of the world in context of the research, their ontology (Saunders et al. 2009). One way of achieving this is by describing the assumptions driving the research, the ontology. Ontology has two classifications of objectivism and subjectivism (Saunders et al. 2009). Objectivism is based on the belief that knowledge is reality, external to our minds and separate from the researcher. The subjectivist view is that knowledge is socially constructed and the researcher interacts in the study of the meanings attached to phenomena. This research is concerned with the LDM processes of leaders in change initiatives in GOCs, and the role of ethics in that process. In this context, the subjectivist view was most appropriate. The subjectivist assumptions driving this thesis are:

- a. The quality of LDM in organisations needs to be improved
- b. The decisions made in the early stages of a change project, in the Set-Up and Initiation phases, have on-going implications throughout the remainder of the change initiative
- c. Leaders have a number of responsibilities, including to the people they lead, all of which have equal weighting
- d. Leaders are influenced by, and are pressured to conform to, the culture of their organisations, which may emphasize one responsibility over others
- e. Organisations have responsibilities beyond provision of services and products, which are equal in importance to profits and service provision.

#### 1.5.3 Research Approach

There are two research approaches, deductive and inductive (Saunders et al. 2009). Deduction applies a structured methodology to develop a hypothesis, or a testable proposition, define controls and test the hypothesis or proposition. A deductive approach uses existing theory to help define the research approach, while an inductive approach develops theory through qualitative data gathering and analysis (Saunders et al. 2009). Induction creates research questions requiring descriptive answers (Perry 1998a). The aim of this thesis

## **Chapter 1.0 Introduction**

is to use existing theory to explore the role of ethics in LDM. Some elements of both deductive and inductive approaches are applicable if the research intends to develop a theoretical framework and test it through analysis (Saunders et al. 2009). Consequently, this thesis combines elements of both a deductive and an inductive research approach.

### **1.5.4 Research Process**

The Research Process is:

- a. Obtain Ethics Approval from The University of Southern Queensland
- b. Obtain approval from each of the Case Studies, including completing any required Confidentiality or Non-Disclosure Statements
- c. Obtain Informed Consent approvals and signatures from participants
- d. Conduct preliminary interviews to define and confirm semi-structured Interview protocols
- e. Conduct semi-structured interviews
- f. Collect and analyse relevant documents, emails, presentations and reports
- g. Analyse and triangulate data
- h. Develop conclusions

## Chapter 1.0 Introduction

### 1.6 Thesis structure

This thesis has six (6) chapters, as shown in Figure 1-A, below.

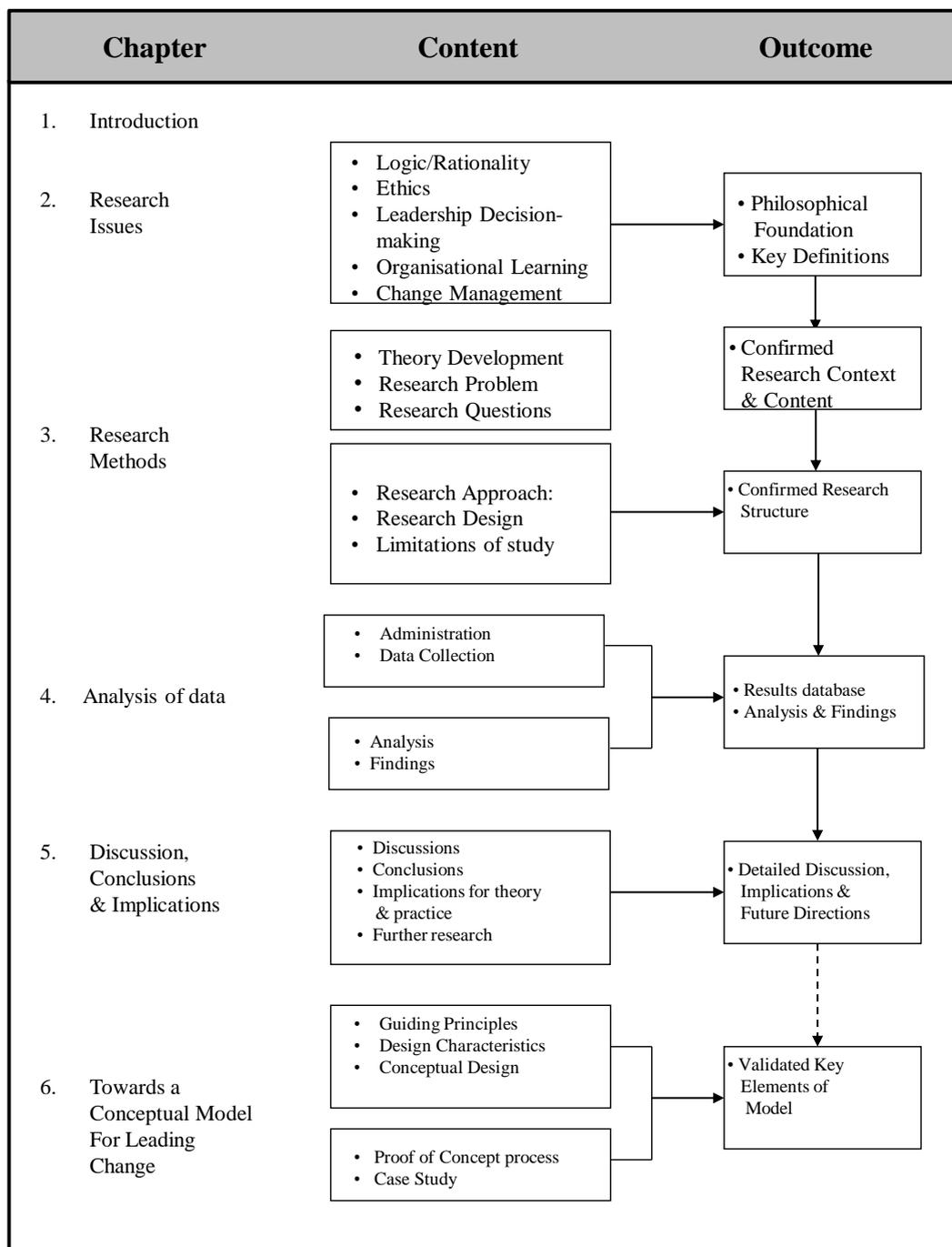


Figure 1-A. Thesis structure

## **Chapter 1.0 Introduction**

Chapter 1 describes the background of the thesis, and introduces the research methodology, problem and questions. This Chapter also outlines the theoretical and practical justification for the research. In this section of the Chapter, key research is identified which is later used to link the detailed Discussion and Conclusions in Chapter 5. Key definitions are presented, and the delimitations of scope and key assumptions described.

Chapter 2 identifies and clarifies the Research Gap and Research Problem through a Literature Review of the major areas of Ethics, Logic, Leadership, Decision-making, Organisational Learning (OL) and Change Management. Research Propositions are defined.

Chapter 3 describes the development of a model for improving the quality of LDM in change initiatives.

Chapter 4 presents the Research Methodology in detail, including the justification for the approach selected. The general process is described, supported by discussion of research philosophies, paradigms and approaches. Using the requirements of the Research Question and Issues, a Research Paradigm is defined. The use of qualitative analysis software, NVivo, is described.

Chapter 5 describes the Five Phase data collection and analysis process used in this research (Yin 2011). This Chapter describes the manual and NVivo-based analysis processes, and describes the use of a template analysis approach to developing coding structures and protocols (King 2004). The Universal Semantic Relationship Model is also described as the protocol for defining relationship parameters in NVivo (Spradley 1979).

Chapter 6 presents detailed discussion, findings and analysis of the data. This Chapter also presents implications for practice and for theory by linking the findings back to the major research presented in Chapter 1, Introduction.

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### 1.7 Key definitions

Key definitions are presented in Table 1-B, below:

Table 1-B. Key definitions

| Key Term                     | Definition   | Source                      |
|------------------------------|--|-----------------------------|
| Ethics                       | a. behavioural standards according to which we should act  | Velasquez et al, 2009       |
| Logic                        | a. science of the relationship between the premises and conclusions of valid arguments   | Hannah, 2006                |
| Rationality                  | a. the ability to consciously and practically consider, analyse and make decisions   | Hannah, 2006                |
| Uncertainty                  | a. Level of doubt about a decision based on available information  | Sonenshein, 2007            |
| Equivocality                 | a. Potential for misinterpretation or multiple interpretations of issues   | Sonenshein, 2007            |
| Organisational Learning      | a. the series of activities, experiences and knowledge which, combined and used effectively, allows an organisation's past to affect its present and future            | Argote, 2011                |
| Change Management            | a. a process for continually renewing the direction, structure and capabilities of an organisation to serve stakeholders   | Moran & Brightman, 2001     |
| Government Owned Corporation | a. a government entity established as a body corporate under an Act or the Corporations Act; and declared by regulation to be a GOC                                    | Queensland Government, 1993 |
| Change Initiative Failure    | a. either a new project that is formulated and not implemented, or one that was implemented but with poor results (e.g. missed schedules, expected values not reached) | Decker et al. 2012          |

There are also a number of acronyms used throughout this thesis, and these are presented in Table 1-C.

## Chapter 1.0 Introduction

Table 1-C. List of acronyms

| Acronym | Concept                                       |
|---------|---|
| LDM     | Leadership Decision-making                    |
| GOC     | Government Owned Corporation                  |
| PMBOK   | Project Management Body of Knowledge          |
| Q.L.D.  | Quality in Leadership Decision-making         |
| OL      | Organizational Learning                       |
| CS      | Consequence Specificity                       |
| EA      | Ethical Alignment                             |
| OD      | Organization Development                      |
| ERP     | Enterprise Resource Planning                  |
| TQM     | Total Quality Management                      |
| ICT     | Information and Communications Technology     |
| IT      | Information Technology                        |
| DA      | Decision Analysis                             |
| CFF     | Critical Failure Factors                      |
| K.O.    | Key Observations                              |
| SEQW    | South East Queensland Water                   |
| UN      | United Nations                                |
| CDC     | Critical Design Criteria                      |
| SWIMS   | Strategic Water Information Management System |
| NWMS    | National Water Management System              |
| BILL    | Business Intelligence Liquid Ledger           |
| SME     | Subject Matter Expert                         |
| CSR     | Corporate Social Responsibility               |

Generally, acronyms will be presented with the first introduction of a term or concept and used throughout the remainder of the thesis as applicable.

### 1.8 Delimitations of scope and key assumptions

Qualitative research has general limitations and shortcomings. The key limitations include:

- a. Generally, a narrow focus and small sample
- b. Difficulty in generalizing results and findings

## Chapter 1.0 Introduction

- c. Difficulty in developing definitive conclusions
- d. Difficult to replicate

Consequently, as in the case of this thesis, further longitudinal, quantitative research is suggested. This thesis addresses the above limitations through the application of [standards of rigor](#) and [quality](#), as described in Chapter 4, Methodology. Additionally, the scope of this research was clearly defined.

### 1.8.1 Scope of the Literature Review

There are two major areas of scope and research boundaries that define the limitations of this thesis. Firstly, the number of research areas and related topics is, by definition, large and complex. Each identified discipline and research area, by itself, potentially comprises a complete thesis. The topic of “leadership” alone has generated extensive and wide-ranging research and literature, and it is beyond the scope of this thesis to review that literature. Consequently, it was necessary to refine the scope of review of the identified disciplines, and focus the research on the topics within each area that were relevant to the core of this thesis, i.e. the quality of leadership decision-making. Table 1-D defines the specific areas of research in each of the major disciplines in the Literature Review, and describes the rationale for each particular focus.

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**Table 1-D. Classifications of Literature Review Topics**

| Research Area           | Relevant topics  | Rationale   |
|-------------------------|--|---|
| Leadership              | The current environment of leadership and leadership decision- | Trends and patterns that impact or influence leadership to the extent that they are likely to affect leadership decision making |
|                         | Changing nature of business                                    | The relationship of the changing nature of business resulting from, for instance, the GFC, to leadership                        |
|                         | Relevance of leadership theory                                 | Current leadership theory/theories that are likely to be most relevant to changes to business and leadership                    |
|                         | Organizational culture   | The relationship of organizational culture to leadership behaviour generally, and to leadership decision-making specifically    |
|                         | Organizational Politics  | The relationship of organizational politics to leadership behaviour, and to leadership decision-making specifically             |
| Change Management       | Effectiveness of Current Change Models                         | The role of leadership decision-making in current change models, and how these models manage LDM                                |
|                         | Failure rates  | Factors contributing to change initiative failure rates, specifically leadership-related factors                                |
| Organizational Learning | Impact on Change Initiative Failure rates                      | The role of organizational learning in change management, and its potential relationship to change initiative failure rates     |
|                         | Leadership willingness to apply                                | Factors related to leadership willingness and ability to apply available organizational learning                                |
|                         | Organizational culture   | The relationship of culture to leadership decisions to apply organizational learning  |
| Philosophy              | Ethics   | The relationship of ethics to leadership and to decision-making   |
|                         | Logic  | The relationship of logic to leadership and to decision-making  |
|                         | Rationality  | The role of rationality in decision-making  |
|                         | Morality   | The role of morality in decision-making   |
| Decision-Making         | Theories   | Current decision-making theories  |
|                         | Role of ethics   | How current theories address the role of ethics   |
| GOCs                    | Requirements of leaders  | The social, legislative and political factors likely to contribute to GOC leaders   |
|                         | Change initiatives   | The volume, scope and pace of change initiatives in government generally, and in GOCs specifically                              |

For each of the major disciplines being reviewed, sub-topics were identified that were likely to have particular relevance to either leadership decision-making generally, or to quality of leadership decision-making. This filtering was addressed within the context of change management. For example, to refine the scope of the major area of “leadership”, the criteria applied was “the current environment of leadership and leadership decision-making”. This refined scope identified, from the Literature, that the changing nature of business, and society’s changing expectations of business, likely affected leadership decision-making. Similarly, the voluminous literature on “ethics” required a significant focus of the scope of the Literature Review in that area. The criteria applied were “the relationship of ethics to leadership and to decision-making”. The subsequent Literature Review of these major disciplines was focussed not on the general history and major theories of the area, but on the specific topics related to leadership decision-making or the quality of leadership decision-making.

### 1.8.2 The scope of the research

The scope of this research is the Start-Up and Initiation Phases of operational change initiatives in Queensland Government Owned Corporations (GOCs). Operational change

## Chapter 1.0 Introduction

initiatives include changes to processes, work flows, systems, job roles, accountabilities and work structures. Specifically, the research is concerned with the decision making processes up to, and including, the “initiation” stage of a project, which involves the activities up to formal approval to start a new initiative. These activities are critical as the decisions made here continue throughout the project, and impact subsequent decisions and activities. The research assumes a standard PMBOK (Project Management Institute 2004) or the Prince2 (ILX 2013) methodology; Initiation, Executing, Monitoring & Controlling, Close. Organisations in the two case studies customized the terms and some of the Phase content, but complied with the overall phase structures. Project initiation includes financial and budget approval, resource allocation approval and Sponsor appointment. Each organisation had a specific set of activities, culminating in a Business Case which was the foundation document for Initiation. The target population comprised project team members who were involved in activities up to and including initiation. Consequently, this limited available and relevant participants as, generally, there are few people involved in these tasks. There is limited agreement between qualitative researchers about acceptable minimum numbers of interviews, however the Research Approach for this thesis was designed to accommodate the small numbers of interviewees and retain acceptable integrity. The Research Approach compensated for the relatively small interview numbers by expanding the focus on secondary data. This expanded focus firstly identified themes and patterns from emails (Case Study A), and then linked those with the subsequent issues identified from detailed document analyses (Case Study A and Case Study B).

This research comprised case studies of two Queensland GOCs. Because of the large number of operational change initiatives underway at any one time in the twelve (12) Queensland GOCs, additional criteria were needed to define the sample and unit of analysis for the research. The criteria used were:

- a. Decision-making for the project should be entirely within the organization, e.g. no external agency decision-making involvement or undue influence, e.g. the need for approval of project outcomes by the ACCC or the need to comply with Federal Government mandates on the specific project
- b. Must include an implementation phase, e.g. not a strategy project that may create numerous, subsequent operational projects
- c. Must be an organization-wide initiative; not restricted to one function or department

These criteria eliminated many of the large number of potential case studies, and also refined the potential sample size. A number of the GOCs were conducting projects that were primarily in response to Federal or State Government directives, and decision-making was therefore focussed on compliance. Two of the known operational change initiatives that would have satisfied the criteria were under review as a result of the highly visible media inquiry into the failed Queensland Health payroll systems implementation project. This inquiry caused Queensland State Government Departments and Agencies to be extremely sensitive to the integrity of all change initiatives. Consequently, two GOCs were identified as satisfying all criteria.

The results, findings and discussions are pertinent to the two Case Study organisations only. These cases were selected on a non-probability, purposive and typical basis (Saunders et al. 2009). The two organizations are representative, as all GOCs in Queensland are constituted

## Chapter 1.0 Introduction

by common Acts (*Government Owned Corporations Act 1993*; *Public Sector Ethics Act 1994*; *Corporate Governance Guidelines for Government Owned Corporations 2009*), which define accountabilities and other requirements. Moreover, although it is also very likely that the findings of this research may be generalizable to all GOCs, further research is required.

### 1.9 Further research

This thesis generates a number of continuing research opportunities, in two main groups. The first areas of opportunity are in the generalisation of this research to other GOCs and, potentially, other organisations. The second group of opportunities are focussed on the Q.L.D. model specifically. Firstly, as stated earlier, this research is the first step in a planned program. The next step would be a quantitative analysis of the impact of the Q.L.D. model on factors contributing to failure rates of change initiatives. Secondly, the research justifies further development of the Q.L.D. model for improving quality of LDM in change initiatives. A critical element of this research would be developing processes and templates for operationalizing the model. Thirdly, there is also opportunity for further research of the application of the Q.L.D. model to Corporate Social Responsibility (CSR), and as a tool for increasing ethical clarity in managerial decision making. Fourth, there is potential research in the relationship between the changing nature of leadership and leadership theory, particularly in the area of strategic leadership. More generally, there is also potential relevance of this research to areas including Organisational Resilience, Organisational and Leadership Development and Workforce Transformation. Finally, there is an identified opportunity to research the role of the Q.L.D. model as a core element of change management methodologies.

### 1.10 Ethical considerations

This research has been endorsed by the USQ Human Research Ethics Committee and full clearance, according to the appropriate processes, has been granted on 5<sup>th</sup> July, 2012. The approved Ethics Committee Approval is attached as [Appendix 2](#). The researcher was an employee of one of the Case Study (Case Study A) organisations. Researcher bias, and the steps taken to address it, is discussed in [Section 5.2.1.2](#). Finally, all documents collected and included in this thesis have been sanitised for confidentiality.

### 1.11 Summary

This Chapter outlined the structure and foundations for the thesis. The background of the research was described, including the relationships between the relevant research areas. The status of current, relevant research was described and the potential research gap identified. Subsequently, the Research Problem and Question was defined. Both theoretical and practical justifications were presented for the research. The Research Methodology was described, including the Research Process, supported by the underlying philosophy, paradigm and assumptions. The thesis structure was described, and delimitations identified. Finally, this Chapter outlined the potential opportunities for further research. The next Chapter provides the details of the Literature Review from which the Research Problem was defined.

## **2.0 LITERATURE REVIEW**

## Chapter 2.0 Literature Review

Chapter 1 introduced the continuing failure rates of change initiatives as the context of this research. While change initiatives in both the public and private sectors continue to grow in volume, pace and complexity (By et al. 2012; Keller & Aiken 2008), failure rates remain high. Two major groups of reasons for these failure rates have been identified, the first being the lack of attention to the “human” aspects of change (*Chaos, The Standish Group Report* 1995; Burnes 1996, 2004; OASIG 1995), and the second being the lack of knowledge of change processes (Armenakis & Bedeian 1999). Notwithstanding some ratings differences between the varying studies in the first group of reasons, the most consistently highest rated factors contributing to these failure rates were employee engagement, unrealistic expectations and lack of adequate leadership support (*Chaos, The Standish Group Report* 1995; Burnes 1996, 2004; OASIG 1995). Research related to the second group of reasons (Karp & Helgo 2008) suggested that organisational leadership plays a significant role in this lack of knowledge by making, or influencing, decisions about change methodologies, tools and processes driven by a perceived sense of urgency to get things done, rather than fully understanding the underlying change needs and relevant processes for their organisation. In both groups of reasons, “leadership”, particularly LDM, plays a role as a contributor to change initiative failure rates.

Leadership is also central to two related and emerging themes, converging with the issue of change initiative failure rates. Firstly, the nature of leadership is changing as a result of the growing pressure for organisations to be concerned with more than simply making profit or providing services (Coldwell 2010). Secondly, there is growing concern about the ethics of leaders in both the private and public sectors, including the LDM environment in which they operate (King 2004; Milkman et al. 2008), as a consequence of the recent controversies in the business and government sectors. For example, the Global Financial Crisis precipitated by unbalanced, greed-driven decision-making; or the Queensland Health payroll system’s replacement project which, as a result of a number of questionable decisions, resulted in a formal Commission of Inquiry into the software selection and implementation process, the roles of vendors and consultants, and of the estimated \$1.2 Billion cost to taxpayers (Madigan 2013b). Whether it be selection of a change methodology or model, identification of what information to communicate to employees during a change initiative, and when, or a decision to implement a new payroll system, LDM is a consequential activity and a core leadership task (Lipshitz & Mann 2004; Rilling & Sanfey 2011; Woiceshyn 2009). Consequently, the objectives of this Chapter were to a) review research of the factors contributing to change initiative failure rates, and b) identify and discuss the role of LDM in change management.

This Chapter begins by focusing on objective a) review research of the factors contributing to change initiative failure rates. Firstly, a brief history of the development of change management is presented, which concludes with a discussion of the call for an increase in ethics in change management (By et al. 2012). This review identifies the significance of “leadership” as a contributing factor, and reviews the role of LDM as an element of that leadership. Further, this review identifies ethics as an element of LDM. Then, current models of change are analysed to identify how they address the identified issues of LDM and ethics, and of the shortcomings of current models in these areas.

Following this, the Chapter focusses on objective b) identify and discuss the role of LDM in change management. The Section begins with a brief historical overview of the influence of philosophy on leadership, followed by discussion of the changing nature of leadership driven by society’s perceptions and expectations of its institutions. Specifically, the impacts of these

## Chapter 2.0 Literature Review

pressures on the issues inherent in LDM, including morality, rationality, justice, truthfulness and altruism are identified and discussed. The three major philosophical views of deontology, teleology and virtue ethics are presented, particularly focusing on how they define and address leadership and LDM. Then, Normative, Descriptive and Prescriptive theories of decision-making are briefly described. Next, the concepts of uncertainty and equivocality are presented as conditions under which humans make decisions (Sonenshein 2007). Finally, this Section introduces the potential role of ethics in LDM. Throughout this Chapter, the interdependencies between ethics, logic, leadership decision-making, organisational learning and change management are identified and discussed.

Each Section concludes with a summary of key observations from the literature. These key observations are collated at the end of the Chapter, and are used to define and contextualize the Research Problem. Specific sub-sections also identify suggested characteristics of a model for improving the quality of LDM, which are used in Chapter 3, Model Development.

### 2.1 Objective a) - Change Initiative Failure Rates

The objective of this Section is to review the research of the factors contributing to change initiative failure rates. The Section begins with a brief history of the development of change management, including models and methodologies. Next, there is a discussion of classifications of models, followed by an analysis of current change models. Following this, research of failure rates of change initiatives is reviewed, and of specific factors contributing to these rates. This Section is concerned with change models but, where appropriate, the term “change approach” is used to encompass both change models and methodologies. Whereas the focus of this research is on LDM in change initiatives in GOCs, this Section provides a general overview of the literature related to change initiative failure rates, which includes both the private and public sectors.

#### 2.1.1 Historical development of change management

There is no commonly accepted definition of “change management” (Armenakis & Bedeian 1999; Awal et al. 2006; Kezar 2001). In Australia, for example, in 2009, only 13% of respondents to an annual survey of perceptions of change management agreed that there was a common definition (*Challenge of Change: Australia* 2010). Part of the difficulty in defining the discipline of change management may be related to its multi-disciplinary roots.

The predecessors of contemporary change management have included Taylor’s Scientific Management, the Hawthorn Studies, Industrial Psychology and Organisational Development (OD) (Burke 2008). Burke (2008) further suggests that the consulting firm, McKinsey, contributed to the emergence of organisation change when, in 1932, it began to apply engineering principles to organisation improvement. Two concepts were introduced in 1978 which also had an influence on the development of change management, “transformational” and “transactional” leadership, which would be later used to describe ways in which change is influenced (Burns 1978). This work was expanded by research of the links between transformational leadership, organisational effectiveness and change (Bass 1985; Bass & Avolio 1994). Also contributing to the evolution of change management during this time was research of the relationship of OD processes to organisational change by Sashkin and Burke (1987), Woodman (1989) and Pasmore and Fagans (1992). Throughout the 1990s, there was discussion and debate about the nature of change (Burnes 1996; By et al. 2012), which resulted in two major trends. Firstly, a number of theories of change, and of its nature, emerged. Secondly, and based on these theories, a large number of models and methodologies were developed.

## Chapter 2.0 Literature Review

### 2.1.2 Classifications and theories of the nature of change

Early discussions about the nature of change centred on whether change could be planned and managed or whether it was an organic process based on continuous learning (Burnes 1996, 2004). These views and beliefs were blended into contingency theory, which proposed that there is no one best way to address change as the drivers, scope, political environment and other influencing factors for change are different in each situation (Dunphy & Stace 1993). There have been a number of varying classifications of change, including “first-, second- and third-order change” (Bartunek & Moch 1987; Levy 1986), “transactional and transformational” (Bass 1985; Bass & Avolio 1994; Burns 1978) and “organic and planned” (Burnes 1996). The first of these, “first-, second- and third-order change”, delineated between “incremental” (first-order) and “transformational” (second-order) change, sometimes called “punctuated equilibrium”, and the ability of an organization to change its schemata as required (third-order) (Bartunek & Moch 1987). Other authors and researchers have classified types of change as strategic, tactical or operational, based on the identified drivers of the change (Jick 1991; Mento et al. 2002; Pettigrew & Whipp 1993; Whipp et al. 1988). This three-tiered classification accommodates other types of descriptions, such as “transformational” and “transactional” and, therefore, is most appropriate for this thesis. Consequently, the following sub-section describes the characteristics of strategic, tactical and operational change.

Strategic change is driven by industry, market, competitive and other forces and requires change activities including culture change, leadership and strategy alignment, stakeholder management, and cultural assimilation (Pettigrew & Whipp 1993). These kinds of activities are less suited to the project management structure common in tactical or operational change initiatives, as the expected outcomes are more difficult to define and measure. For example, estimating the time and resources required to analyse, design and implement a new set of values, attitudes and behaviours (culture) resulting from a new strategy is significantly more difficult than estimating the effort required to conduct a tactical training needs analysis of fifty accounts payable clerks impacted by increased functionality of an existing computer system. Further, as these strategic activities tend to be situation-specific, they likely require consideration of culturally acceptable and appropriate change tools and processes. As an example, a cultural analysis of a specific leadership group in the light rail construction industry to identify competitive capability resulting from a revised strategic plan would be very situation-specific. In contrast, a tactical activity such as a job task analysis to minimize or delete work approvals and handovers in payroll processing by implementing an Enterprise Resource Planning (ERP) system may be similar within a range of like industries such as banking and insurance, and may accommodate a generic approach.

Tactical change is concerned with the implementation of strategy initiatives (Whipp et al. 1988), such as the implementation of productivity enhancing manufacturing principles and processes to decrease time to market of products, as a result of change in strategy. The implementation process may include identification of excess waste in raw materials, unacceptable idle time of machinery and wait times for required inventory from vendors. Tactical change initiatives have characteristics that are consistent with a planned, structured approach. Firstly, they focus on improving current processes and systems. Secondly, they are quantifiably measurable, e.g. decrease in costs, decrease in production times, decrease in lost time. Operational change is similar to tactical change in that it is focused on quantifiable outcomes, but at a lower task-level, and on changes to individual people and their tasks (Jick 1991). For example, an update to an existing computer system may delete a number of manual tasks for a small number of clerical staff. The operational change required would

## Chapter 2.0 Literature Review

include training of these clerical staff in the use of the specific functions of the new system that replaces their manual processes.

In one study, 6 of the 15 factors reported as change drivers could be classified as operational or tactical (Increasing Efficiency, Cost Reduction, Quality Improvement, Emergence of New Technology, Improve Customer Experience, Drive to Increase Sales) (*Challenge of Change: Australia* 2010). Further, 3 of these 6 were listed as the top drivers (Increase Efficiency, 74%; Cost Reduction, 63%; and Quality Improvement, 53%). The characteristics of operational and tactical change could position change management as being reactive, and as a set of activities within a larger project structure. For example, a change practitioner working in a process improvement project which has a defined implementation schedule to achieve expected efficiency benefits would be required to integrate change tasks with process improvement analysis and design activities and outcomes, and to commit to “delivering” change management outcomes according to the overall project management schedule. The consequence of this may be selection of a less than adequate change tool, but one which can be applied in the time allowed by the project schedule.

Based on the characteristics of strategic, tactical and operational change described above, and supporting Dunphy and Stace (1993), combined with the increasing complexity and scope of change initiatives, the legislative and politically-driven change drivers described in [Section 1.1](#), this thesis supports a contingency approach to change management. A contingency model of change would include the organisation’s a) definition of change, b) include organic and emergent aspects and, c) accommodate strategic, tactical and operational change initiatives (Burnes 2004; Dunphy & Stace 1993; Moran & Brightman 2001; Shanley 2007; Turner et al. 2009). Subsequently, this thesis adopts a definition of change management which encompasses the strategic, tactical and operational aspects of the discipline, “*a process for continually renewing the direction, structure, and capabilities of an organisation to serve stakeholders*” (Moran & Brightman 2001).

In summary, change management is a continually evolving discipline, which emerged from a blending of OD, Industrial Psychology and Management. As the discipline matured, various theories of change developed based on differing views of what change was, and of how it occurred. A number of classification schemes for these theories also developed. One classification of change was as strategic, tactical or operational (Jick 1991; Mento et al. 2002; Pettigrew & Whipp 1993; Whipp et al. 1988). Another classification was based on the differing views of whether change could be planned and managed or whether it was an organic process based on continuous learning (Burnes 1996, 2004). These beliefs were blended into contingency theory, which proposed that there is no one best way to address change (Dunphy & Stace 1993) because of the increasing volume, complexity and scope of change initiatives driven by an increasing range of drivers. Consequently, this thesis adopts a contingency approach to change management (Dunphy & Stace 1993). One consequence of adopting a contingency approach is that it requires greater understanding of available models, processes, tools and techniques, and how they support the requirements of a particular change initiative.

The following sub-section uses current research to describe the various types and classifications of change models, and describes their potential applications (Armenakis & Bedeian 1999). This research was chosen because it is regularly updated, it is frequently referenced in the literature, and because it facilitates the analysis of the strengths and weaknesses of change models necessary to address the Research Question of this thesis.

## Chapter 2.0 Literature Review

### 2.1.3 Models, methodologies, characteristics and classifications

Change management is characterized by many varied philosophies, models and methodologies which may be confusing or misleading for inexperienced individuals or organisations. For example, a search on Google for books on “*change management models*” produced Kotter’s 8 Step Model (1995) as well as the Prosci Methodology (1999). The relationship between change models and methodologies should be understood as there is a relationship between selection of the most appropriate change approach and success of a change initiative (Zhu et al. 2004).

Notwithstanding the influences of fads, fashions and effective marketing, a change model is based on a sound philosophical foundation, and provides a framework for understanding why and how change occurs (Turner et al. 2009). A model should include the organisation’s a) definition and philosophy of change, b) define the change as organic, emergent or contingent and, c) accommodate strategic, operational and tactical change (Burnes 2004; Dunphy & Stace 1993; Moran & Brightman 2001; Shanley 2007; Turner et al. 2009). Adoption of a change model also assists with the identification and selection of an appropriate change methodology. Understanding the above helps define the specific requirements of a methodology for the change initiative. For example, it would assist with identifying the level of planning and management required for the change tasks and activities, including integrating them into project schedules. A change methodology also helps identify specific tools and processes for tasks. The significance of this distinction is that dominant leadership behaviour influences the choice of change approach which, in turn, is related to success or failure of the initiative (Zhu et al. 2004). Consequently, there may be potential for an organisation to select a change approach, either model or methodology, based on no other criteria than the personal preference of a leader based on a reading of the latest business or academic book, or on the marketing and selling capability of consultants and other vendors of change management services. The contingency theory acknowledges the shortcomings of this approach by suggesting that selection of a change model should be based on a disciplined analysis of the organisation’s needs, including an understanding of the context of the change (Turner et al. 2009). This analysis would include an understanding of the core requirements of organisational change, and of how available models address them. For example, one study identified six common elements necessary to achieve organisational change by reviewing six of the more commonly available and used models, 1) Kotter’s 8 Step Model, 2) Deming’s Total Quality Management, 3) Lewin’s Three Step Model, 4) Mento et al’s Twelve Step Change Framework, 5) DEAM and, 6) IMPLEMENT (Kezar 2001). The six core requirements identified were a) Need for change, b) Define the outcome, c) Effective leadership, d) Create a plan, e) Enable commitment and f) Create the environment (Turner et al. 2009). Selection of a model without such disciplined analysis could result in one or more of these core elements being ignored or inadequately addressed. At a minimum, this may increase the risk of a change initiative being unsuccessful as demonstrated by the following example.

A U.S. academic institution had identified a need for change in its competitive strategy, driven by evolving population and enrolment demographics (Awal et al. 2006). The institution appointed a new Dean, and charged him with managing the changes. The operational and tactical changes included new technology, revised faculty reward systems, modified class sizes and significantly upgraded recruiting programs. In spite of these, and the program success, there was parallel decrease in faculty support and, significantly, in staff performance levels. Although the initiative was successful on an operational and tactical

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level, the cultural consequences, not adequately addressed, included increased staff dissatisfaction, withdrawal and faculty alienation resulting in decreased faculty performance. There was also noted visible negativity in attitudes at all levels. Subsequent internal review and analysis identified the core issue as a feeling of loss of a historically collegiate and inclusive culture. The analysis identified that these reactions and consequences may have been the result of the new Dean not being sufficiently sensitive to the strength of the old culture, and his focus on the operational and tactical changes only. This case may also have reflected the new Dean's inaccurate assumptions about staff values (Awal et al. 2006). Further, this case study demonstrates the criticality of adopting a change model appropriate to the context of the initiative, and to the culture of the organisation. Further, it highlights the importance of clearly identifying the strategic, operational and tactical aspects of the change initiative as criteria for selecting an appropriate model. Understanding how change models can be classified may also assist with the detailed analysis required in selecting the most appropriate model.

A common classification of change models is by major themes of *content*, *contextual* and *process* issues (Armenakis & Bedeian 1999; Burke 2002; Latta 2006). Table 2-A presents representative models from each classification, including the major themes, focus factors, major researchers, and other key concepts (Armenakis & Bedeian 1999).

Table 2-A. Summary of research of Armenakis & Bedeian, 1999

| Theme   | Factors                           | Models              | Concepts                       |
|---------|-----------------------------------|---------------------|--------------------------------|
| Content | a. strategic dynamics orientation | Burke & Litwin      | transformational/transactional |
|         | b. structures                     | Vollman             | eight change considerations    |
|         | c. performance systems            |                     |                                |
| Context | a. internal responses             | Meyer et al         | healthcare industry focus      |
|         | b. external responses             | Kelly & Amburgey    | inertia & momentum             |
|         |                                   | Haveman             | legislative & technological    |
|         |                                   | Fox-Wolfgramm et al | resistance based in image      |
|         |                                   | Miles & Snow        | adaptive strategy typology     |
|         |                                   | Damanpour           | congruency between themes      |
|         |                                   | Gresov et al        | mathematical models            |
|         |                                   | Huff et al          | mathematical models            |
|         |                                   | Sastry              | mathematical models            |
| Process | a. Multi-phased models            | Judson              | 5 phases                       |
|         |                                   | Kotter              | 8 steps                        |
|         |                                   | Galpin              | 9 wedges                       |
|         |                                   | Armenakis et al     | readiness assessment/culture   |

### 2.1.3.1 Content models – classification of models that focus on specific content

Content models are concerned with the targets of change programs including, for instance, organisation structures, incentive systems and work allocations (Armenakis & Bedeian 1999). They focus on performance of these targets as factors in change. For example, a content model of change may be concerned with how a new incentive system contributes to achieving a revised organisational strategy. The Burke and Litwin (1992) model tries to do this by attempting to predict individual and organisational performance during and after change

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(Armenakis & Bedeian 1999). The Vollman (1996) model is concerned with the overall size and complexity of a change initiative, and tries to analyse the range of factors involved. The predictive nature of content models makes them appropriate for both transactional and transformational change initiatives. These types of models accommodate project management requirements effectively, and would be most applicable to operational change initiatives. However, the converse is that these models may support a view of change as a series of planned, defined, self-contained activities that produce a ‘deliverable’. Where change practitioners are part of a larger project team, this is likely to subject them to pressure to conform to pre-determined timelines and schedules. This pressure, in turn, would impact LDM. LDM in these types of models would favour the use of diagnostic results as an input. Further, by their design, these types of models focus on the rational aspects of LDM as their concern is with operationalizing measurable changes. The diagnostics in these models would focus, for instance, on predicting and measuring individual performance changes related to the introduction of the new incentive system mentioned above. These types of models may be partially planned and structured, but would also require flexibility to react to diagnostic results. The strength of content models is in 1) their ability to accommodate both transformational and transactional change, 2) their use of diagnostics in an operational change environment, and 3) their compatibility with project management structures. The challenge with these types of models could be their pressure on decision-makers to comply with project plan schedules and deadlines. For example, change readiness assessments provide valuable insights into the willingness and ability of particular groups to accept all or part of the change. They also identify specific issues that are perceived as problematic by a particular group, or the organisation as a whole. Conceptually, they identify where additional support or effort is required, or indicate where a specific type of intervention may be appropriate. Depending on the experience of the user, however, they may indicate little more than an overall “readiness for change” score, with the assessment repeated regularly throughout the project and providing only a progressive “readiness for change” indicator.

LDM in content models of change relies on diagnostics as a major input to the process, and could also be pressured by the time and scope strictures of project management. Consequently, this sub-section suggests that any model for improving the quality of LDM in change initiatives should include the following characteristics. A model needs to 1) accommodate both transactional and transformational change, 2) accommodate the use of diagnostics and 3) be able to comply with project management requirements. Further, LDM in change initiatives should not be unnecessarily and unreasonably constrained by artificial project deadlines and schedules.

### 2.1.3.2 Context models – classification of models that focus on specific contexts

Context models of change are concerned with the drivers of a change initiative, and the environment in which they are operating (Armenakis & Bedeian 1999). The external environment includes those issues outside of the control of the organisation, such as government regulations. Internal conditions are within the control of the organisation, such as strategy. By their nature, context models of change are most suitable for strategic change initiatives. For example, Meyer et al (1990) researched the external and internal factors influencing change initiatives in the U.S. healthcare industry, within the context of the rapid growth opportunities of the 1970s (Armenakis & Bedeian 1999). One of the external factors driving change was the new government regulations about cost containment. These types of change models may be partially planned and structured, and would require some flexibility in researching external factors. For example, in the private sector, response to external change

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needs to be rapid to maintain market position, to capitalize on unforeseen opportunity or remain competitive. In these situations, the reliance of context change models on understanding consequences in detail may require more time than the change drivers permit, resulting in a potential over-reliance on the experience of senior organisational leaders. Moreover, in a rapid transformational environment, context models of change do not adequately accommodate the engagement and buy-in of all stakeholders. The strengths of context models are in 1) their focus on strategic issues, and 2) their requirement to understand consequences of external forces.

The weaknesses in context models of change are in the area of LDM, or, more specifically, the potential pressures and requirements placed on LDM. For example, the detailed understanding of the consequences of external forces, such as government legislation, required by context models may have the potential to extend periods of analysis and research of the consequences of external drivers. Further, in competitive market situations, LDM may be subject to market and competitive pressures that require rapid response which could inhibit the research and analysis requirements of context models. These characteristics require LDM processes that intentionally and efficiently define and understand context, and that accommodate reasonable and adequate analysis of consequences.

### **2.1.3.3 Process models – classification of models that focus on specific processes**

Process change models are concerned with the detailed tasks and actions taken by an organisation during the change process, and include external, organisational and individual elements (Armenakis & Bedeian 1999). These types of models can be planned and structured, and allow flexibility for specific targeted situations as they are identified. These models tend to have specific phases or steps: Judson (1991) - 5 phases; Kotter (1995) - 8 steps; Galpin (1996) – 9 wedges in a wheel (Armenakis & Bedeian 1999). Examples of the activities in the phases or steps include communications, setting vision, cultural acceptance, leadership support, measuring progress and results. Whereas these types of models are designed to be iterative, inexperienced organisations or individuals may try to apply these models by implementing the phases or steps linearly. Some process models focus on specific aspects of change more strongly than on others. For example, the OC3 model focuses on culture (Latta 2006). This model emphasizes six (6) issues; a) by including cultural analysis in change readiness assessment, resistance factors can be more readily identified; b) a focus on aligning current culture with the vision for change can increase broad initial support for the change; c) change initiatives that are sensitive to culture allow design of effective interventions; d) cultural norms can directly impact success of change initiatives; e) effects of change initiatives will either reinforce or change existing cultural tenets, and should be managed carefully; f) any cultural issues not directly addressed during a change initiative can impact the effects of the change. This thesis suggests that the strength of process models includes a) their phase or step structure, b) their iterative design, c) their identification and focus on specific change factors, such as culture. One concern with process models is that their phase or step structure supports a visual representation that is reflective of a structured methodology, and which may create inaccurate expectations of the model. For example, Kotter's 8 Step Model has been extensively supported by, and marketed through, numerous best-selling books, web sites and other avenues. Notwithstanding the strengths of Kotter's model, the result may have been that the 8 Step Model is perceived as a methodology in competition with, for example, the Prosci methodology. An additional potential weakness of process models is that their visual representations may be interpreted as linear, as opposed to iterative. An unintended consequence of the structure of process models may be that they

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inhibit the iterative nature of LDM, by being perceived as restricting LDM within phases, rather than between them.

In summary, classification of change models highlights the different environments and situations in which change might occur. It also highlights the potential for organisations or individuals to select or implement an inappropriate approach (Zhu et al. 2004). A common classification of change models is by content, context or process (Armenakis & Bedeian 1999). The models in each classification have strengths and weaknesses which may be a reflection of the purpose for which they were designed, their presentation and of their particular focus. This thesis is concerned with LDM in change initiatives. Consequently, the following sub-section describes a high-level review and analysis of how selected current change models address the issues of leadership and LDM.

### 2.1.4 Analysis of current change models

The purpose of this sub-section is to review available change models to identify how they address or incorporate leadership and LDM processes. The first step in this activity was to search multiple databases to develop an initial list of relevant change models. The databases used were *Business Source Complete*, *Academic Source Complete*, *SAGE Management & Organisation Studies*, *Emerald Management eJournals* and *Webofknowledge.com*. An additional list of change management models and change tools was obtained from *Values Based Management.com*. The search criteria used were; *change management and models and methodologies*; *organisation change and models and methodologies*; *change models and methodologies and change leadership*. These searches delivered 294 initial results, presented in [Appendix 3](#). The initial results list included not only a wide range of models, but also tools and processes, supporting the argument that there is confusion between what is a change model and a methodology or tool. The list also included applications and processes that had been developed for applications other than change management, but had been used in some change context. For example, Deming's Total Quality Management (TQM) process was listed as a change management process, although it was designed for an entirely different purpose. Consequently, the next step was to review the initial list to separate those items. The review used five filters: a) is this item a tool or process only, b) is this item specifically designed for change management, c) is this a study or analysis only, with no model presented, and d) is this item freely available publicly, or is it copyrighted to an organisation which restricts its use. The result of this review was a final list of 16 items, listed in Table 2-B, which represents defined, available change models. Next, the final 16 were assessed against the elements of "leadership" and "LDM".

Each of the 16 models was rated on a 5 item Likert scale for each of the two elements, as follows:

- a. Specifically defined activity
- b. Described activity; within a related task
- c. Implied activity, within a related task
- d. Unclear, with no identifiable related activity
- e. Not included or not identifiable.

The scoring for the analysis was from a low of 5 to a high of 1, for each of the items in the scale. An approach that specifically addressed the element through defined activity scored 1. The Totals represent the combined score for both elements. Table 2-B presents the results of this analysis.

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**Table 2-B. Analysis of current change models**

| Model                 | Characteristics            | Focus                        | Classification | Leadership | Decision Making | Total |
|-----------------------|----------------------------|------------------------------|----------------|------------|-----------------|-------|
| Armenakis & Bedeian   | 2 models by same authors   | focus on change messages     | Process        | 3          | 1               | 4     |
| Bridges               | Transition model           | change v transition; people  | Process        | 1          | 3               | 4     |
| Burke & Litwin        | Predictive of performance  | diagnostic                   | Content        | 1          | 2               | 3     |
| Pettigrew Whip        | 3 dimensions; 5 factors    | 5 change factors             | Congruence     | 1          | 4               | 5     |
| Change Iceberg        | strategic                  | power, politics, perceptions | Process        | 3          | 3               | 6     |
| Kotter 8 Step Model   | 8 steps                    | 8 steps                      | Process        | 1          | 3               | 4     |
| Denison               | 12 indices                 | strong research base         | Process        | 1          | 3               | 4     |
| DeVries               | 4 stage leadership process | leadership acceptance        | Process        | 1          | 3               | 4     |
| Galpin                | 9 wedges in a wheel        | culture                      | Process        | 3          | 3               | 6     |
| Judson                | 5 phases                   | 5 phases                     | Process        | 3          | 3               | 6     |
| Mento et al           | uses GE & Jick's model     | 12 steps, story telling      | Process        | 1          | 3               | 4     |
| Queensland Government | 5 success factors          | Best practices               | Process        | 1          | 4               | 5     |
| Sastry                | Simulation model           | Mathematical modelling       | Context        | 3          | 4               | 7     |
| Vollman               | 8 x 6 matrix               | Transformation imperative    | Content        | 3          | 5               | 8     |
| Kolodny               | OC process model           | High performing org's        | Process        | 2          | 2               | 4     |
| Latta                 | OC3 model                  | Culture                      | Process        | 3          | 3               | 6     |

1. Specifically defined activity
2. Described activity, within a related task
3. Implied activity, within a related task
4. Unclear, with no identifiable related activity
5. Not included, or not identifiable

Table 2-B indicates that none of the analysed models intentionally, consistently and equally addressed each of the two elements of leadership and LDM. Further, the Table highlights that some common models focused on one element more than the other. This review does not suggest that the models did not address each element. Rather, it suggests that varying elements within the models did not have clearly identified, specific activities assigned to them. Eight of the sixteen models addressed “leadership” within a specifically defined activity, with an additional one model addressing it as a defined activity within a related task. That is, approximately 56% of the models clearly and definitively addressed “leadership”. None of these nine models addressed “LDM” as a clearly defined activity within a related task. Moreover, the review may indicate that a specific approach may address an element in a limited or specific way. For example, Kotter’s 8 Step Model (1995) clearly addressed “Leadership Alignment”, but it was not clear how it addressed other leadership issues. The potential result is that, depending on the experience of the practitioner, these elements may or may not be adequately addressed. The results are, however, consistent with the contention that existing change models may be deficient in how they address factors contributing to change initiative failure rates, including LDM (Brown et al. 2012; Burnes & By 2011).

In summary, current change models exhibit a variety of deficiencies in how they address leadership and LDM. Consequently, this thesis contends that there is a need for a model of

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change that intentionally and clearly incorporates a defined “leadership” activity. Further, such a model should also incorporate a specific LDM process that is integrated with the leadership activity.

Notwithstanding the continuous evolution and increasing sophistication of the discipline of change management, including the development of various models and methodologies, change initiative failure rates remain high. Introduction of new change models and approaches does not appear to have had any sustained impact on identified failure rates. During the years 1995 to 2010, the identified range of failure rates of change initiatives was 40% to 85% (*Chaos, The Standish Group Report* 1995; *Challenge of Change: Australia* 2010; Eser et al. 2007; Keller & Aiken 2008; KPMG 1997; OASIG 1995; Qassim 2010). During that same period, a number of change approaches, models and methodologies were introduced; for example, Kotter’s 8 Step Model, 1995; Galpin’s model, 1996; Vollman’s approach, 1996; the PCI methodology, 1997; Denison’s framework and methodology, 1998; Kolodny, 1999; Armenakis & Beddeian, 1999; the PROSCI methodology, 2000; Mento et al, 2001; Bridge’s model, 2002; Latta’s OC3 methodology, 2006. There is no identifiable research of the impact of any particular approach or model on failure rates, but it is likely that there is no relationship between new approaches and models and identified ranges of failure rates for the period 1995 to 2010.

### 2.1.5 Failure rates and factors

Failure rates of change initiatives remain persistently high (*Chaos, The Standish Group Report* 1995; *A guide to ERP Success* 2001; Cooke et al. 2001; Eser et al. 2007; KPMG 1997; Qassim 2010). Despite high rates of failure, change initiatives continue to grow in size, complexity and volume, as do the consequences of their failures (Keller & Aiken 2008). The consequences of change initiative failure may include lost investment, cost overruns, decreased productivity and lowered employee morale. For customers, they could include lost savings or investments, increased costs or disruption to service. Change initiatives in the public sector seem to be more numerous than in the private sector, as a result of changing governments, legislation, government restructuring and demands for increased efficiency and effectiveness in delivery of public services, each of which potentially requires changes to policy, strategy, systems, structures, processes and/or people to varying degrees. It is likely that the consequences of failure rates in public sector change initiatives would be more visible and have greater social impact than those in the private sector. For example, the recent high profile inquiry into the failed Queensland Health payroll system project was told that the failed system would cost taxpayers in excess of \$1 Billion, rather than the initial budgeted cost of \$6 to \$10 Million. The inquiry was further told by an expert hired to investigate the causes of the failure that, “...poor decisions were made under the continual and intense time pressures to deliver.”(Madigan 2013b). The additional consequences of the failure have included strikes by public service employees, expensive lawsuits against the State Government, an additional \$5 Million for an inquiry, loss of jobs and continuing inaccuracies in wages to employees (Madigan 2013b, 2013c, 2013a). Most recently, the State Government has terminated the employment of a number of public servants who were involved in the tendering process, and is still considering a law suit against IBM (Ironsides 2013a).

Research of the factors contributing to change initiative failure rates intensified during the 1990s and has been on-going. The initial studies focused on change initiatives generally and tried to identify and rank factors contributing to failure rates (*Chaos, The Standish Group Report* 1995; *A guide to ERP Success* 2001; *Challenge of Change: Australia* 2010; Cooke et al. 2001; Eser et al. 2007; Keller & Aiken 2008; KPMG 1997; OASIG 1995; Qassim

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2010). These studies identified a range of “human” and “organisational” factors as being the major contributors to change initiative failure rates. A second group of studies focused on specific identified factors, including leadership, LDM and resistance (Beer et al. 1990; Bridgeforth 2009; Lehner 2004; Macmillan 2000). The scope and definition of these contributors, however, varies by study (Decker et al. 2012), which could affect the identification of overall patterns. Boal and Meckler (2010) expand on the leadership decision making factor by classifying decision errors as 4<sup>th</sup>, 5<sup>th</sup> or 6<sup>th</sup> kind (Boal & Meckler 2010). These authors build on the statistical concepts of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> kind errors, and link these with Clawson’s (2009) “leadership point of view” framework (Clawson 2009). They present six kinds of decision error across three levels of decision. Type I and II errors are the “correlation” kinds that occur in the middle level decision type. Type III is the “visioning” error that occurs when the wrong problem is worked on. Types IV and V errors are the “action errors” that occur when deciding whether or not to act. A Type VI error is the most serious, being a combination of all Types (Boal & Meckler 2010). The framework suggested by these authors provides a structure for further research of the relationship of these error types with change failure rates. This thesis adopts the view that, while lack of a consistent definition may impact specific studies and their results in comparison with others, it does not materially change the overall pattern of consistency in failure rates in change initiatives generally. To maintain consistency, this thesis adopts the definition of a change initiative failure as “...either a new project that is formulated and not implemented, or one that was implemented but with poor results (e.g. missed schedules, expected value not reached)”(Decker et al. 2012).

### 2.1.5.1 General Studies of Change

In 1995, OASIG, a UK-based organisation focused on the organisation issues surrounding Information Technology (IT), interviewed 45 UK-based IT professionals from universities and consultancies for their views on the issues impacting change initiative failures. This study concluded that roughly 70% of IT projects fail (OASIG 1995). The top reason cited for failure was lack of attention to human and organisational aspects of IT. In the same year, The Standish Group’s Chaos Report found that 48% of IT executives felt that more projects were failing than five years previously (*Chaos, The Standish Group Report* 1995). The Group’s research sample comprised 365 IT executive managers from large, medium, and small companies from banking, securities, manufacturing, retail, wholesale, health care, insurance, services, and local, state, and federal organisations. Again, this Report listed 1) Lack of User Involvement, 2) Lack of Executive Support and 3) Unrealistic Expectations in the top five reasons for project failure. What this, and other, studies may not adequately clarify are the definitions of each of these factors. This issue is further discussed at the end of this section. The Report presented a number of other results. Firstly, only 16.2% IT projects were completed on-time, on-budget, with approx. 42% of original functionality being delivered. Secondly, 31.1% of IT projects would be cancelled. Thirdly, 52.7% of similar projects would require 189% of planned budget to be completed. Fourthly, the total spending on IT projects in 1995 would be approximately \$81 Billion. Fifthly, of completed projects, an additional \$59 Billion would be required for budget overruns. Finally, 80,000 IT projects would be cancelled in 1996. Similarly, in its 1997 Canada survey of 1450 public and private organisations, KPMG, the international consulting and advisory firm, found that 61% of IT projects were viewed as unsuccessful, with the highest rated factor being Lack of Top Management Support (KPMG 1997). One of the major findings was that 61% of organisations reported some failures of IT projects. These failures involved unmet schedules (30% or more) and significant budget overruns (50% or more). KPMG estimated that approximately \$25 Billion

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was spent in Canada annually on IT projects, indicating the potential size of any decrease in change initiative failure rates.

In 2001, the Robbins-Gioia company surveyed 232 organisations in government, information technology, communications, financial, utilities, and healthcare that had implemented Enterprise Resource Planning (ERP) systems (*A guide to ERP Success* 2001). Their research found that 51% of respondents considered their initiatives to be unsuccessful, while 46% felt that their ERP systems had not improved their business operations. In 2001, a Conference Board study of executives of 117 companies that had attempted ERP implementations found that 40% of the projects had not delivered expected benefits, within one year (Cooke et al. 2001). Researchers also found that only 34% of these executives were satisfied with the results. Contributing to these results were the findings that, of the 34% who were satisfied, all said the benefits took 6 months longer than planned. Other significant findings were that final project budgets were, on average, 25% over plan, and that on-going support costs for the post-implementation year were generally underestimated by approx. 20%. In Australia, recent research identified that only 2% of respondents to a national survey felt that organisations managed change quite well (*Challenge of Change: Australia* 2010). 79% of the participants stated that organisations managed change average to quite poorly. While these studies identified a general and consistent pattern of high failure rates and related issues, another group of researchers focused attention on the individual factors that may have contributed to these failure rates.

### 2.1.5.2 Factor-specific Studies of Change Failure

In one review (Decker et al. 2012) thirty one (31) studies of change implementation success factors were summarised. These thirty one studies focused on topics and factors including, for example, leadership (Karp & Helgo 2008; Lehner 2004), LDM (Macmillan 2000), and resistance to change (Weiner et al. 2008). Macmillan's (2000) research was predominantly survey-based and focused on the effectiveness of decision analysis (DA) in organisational change. Decision analysis uses statistical analysis to assess risk, uncertainty and new information within the decision process in a change environment (Decker et al. 2012). There is, however, limited published research of the effectiveness of decision analysis in reducing failure in a change environment.

Research of "leadership" showed that it may contribute to failure rates of change initiatives in a number of ways (Karp & Helgo 2008; Lehner 2004). For example, leaders set and manage employee expectations of a change initiative which, in turn, impacts on employees' readiness to accept the change (Weiner et al. 2008). "Readiness" is defined as the "*extent to which organisational members are psychologically and behaviourally prepared to implement organisational change*" (Weiner et al. 2008). One argument is that leaders generally underestimate the complexity of change, and focus primarily on implementing change through tools, structures and strategies as opposed to relevant processes (Karp & Helgo 2008). By demonstrating this attitude of minimising attention to the human values and belief aspects of change, leaders may be increasing resistance and lowering the effectiveness of change management. While the research does not quantify the contribution of "leadership", or of any factors, to change initiative failure rates, it does indicate a relationship between leadership and other identified factors.

In their review of the thirty one (31) studies of change initiatives, Decker et al (2012) identified approximately seventy three (73) "Critical Failure Factors (CFF)". The researchers classified these factors into four (4) groups of: a) Process, b) Organisational, c)

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Communication Culture, and d) People, which were further classified into fifteen (15) sub-groups. The fifteen sub-groups were:

1. Goals, Metrics and Rewards
2. Decision Making and Planning
3. Culture
4. Initiative Overload
5. Alignment
6. Bureaucracy and Politics
7. Knowledge Transfer
8. Process
9. Poor Community for Change
10. Infrastructure/structure
11. Leadership
12. Low care Horizon
13. Low Motivation to Change
14. Low Ability to Change
15. Poor Communication Culture

The complete summary is attached as [Appendix 4](#).

An analysis of these CFFs, attached as [Appendix 5](#), identified three general groups of leadership (general), LDM and leadership behaviour. Of the seventy three (73) CFFs, 5 had a relationship with “leadership (general)” (6.8%), fourteen (14) had a link with “LDM” (19.2%) and twenty nine (29) had a link with “leadership behaviour” (39.7%). Of the seventy three (73) CFFs, 48 had a relationship with one of the three antecedents (65.8%). Based on this high level analysis, this thesis contends that “leadership” has a relationship with a number of other identified factors contributing to change initiative failure. For example, leadership affects employees’ perceptions of, and attitudes to, a change initiative (Zhu et al. 2004). Further, these perceptions and attitudes affect expectations and levels of engagement. For example, a change in government legislation regarding electricity distribution reporting would result in significant changes to existing control and monitoring systems. As this decision would be beyond the control of electricity distribution agency executives, the impact of the mandated requirement on existing strategy and business plans would potentially affect the leaders’ levels of visible commitment and support. The visible demonstration of decreased commitment and support would, in turn, affect employees’ perceptions of the change initiative (Zhu et al. 2004). Consequently, this thesis contends that “leadership” as a factor contributing to change initiative failure rates is related to other identified contributing factors, and is impacted by external and internal pressures. Moreover, leadership behaviour, resulting from their decisions, impacts employees and other stakeholders. This contention supports the view that LDM is a core leadership competency (Woiceshyn 2011), and that LDM is a consequential activity (Lipshitz & Mann 2004; Rilling & Sanfey 2011; Woiceshyn 2011).

### 2.1.6 Section Summary – Objective a) - Change initiative failure rates

These two groups of studies highlight two major themes. Firstly, failure rates of change initiatives, however they are defined, remain persistently high (Keller & Aiken 2008). Secondly, human and organisational factors are consistently identified among the top five contributors to these failure rates (*Chaos, The Standish Group Report* 1995; *A guide to ERP Success* 2001; *Challenge of Change: Australia* 2010; Cooke et al. 2001; Eser et al. 2007;

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KPMG 1997; OASIG 1995). The lack of consistent definitions of the specific factors in and between the various studies makes it difficult to identify specific patterns and trends. Notwithstanding this difficulty, however, there are identifiable general trends. Firstly, “human” or “people-related” factors are consistently rated among the top five contributors throughout all the studies. Secondly, of these “people” factors, “leadership” is consistently rated among the top three identified contributors. Thirdly, where “leadership” is more clearly defined, it includes “Executive Support” and “Top Management Support”. The consistency with which leadership is identified as a contributor to change initiative failure rates suggests that it is a significant factor. Further, this significance indicates a relationship between “leadership” and other factors. For example research shows that there is a relationship between LDM and employee perceptions of change (Zhu et al. 2004) Employee perceptions of change, in turn, affect levels of user involvement and also expectations of the change. These patterns and relationships may explain why the role of leadership in change management has become of increasing interest to researchers (Higgs & Rowland 2011; Uday Bhaskar et al. 2003; Zhu et al. 2004). The consistency of change initiative failure rates also suggests that change models are not adequately addressing the identified factors and, therefore, are deficient in some aspects.

The key observations (KO) from this Section are that, *K.O.1 change models are not adequately addressing the factors contributing to change initiative failure rates, and K.O. 2: leadership is a significant factor contributing to change initiative failure rates.*

### 2.2 Objective b) - LDM in change management

Recent scandals in both private and public sectors have highlighted the consequential nature of LDM, and have focused interest on, and raised questions about, the ethical environments in which leaders have operated and made decisions (King 2013). The impacts of these scandals, combined with the convergence of the two themes of change initiative failure rates and ethics in LDM, has created a need to understand how LDM may be improved generally, and in change initiatives specifically.

The objective of this Section is to identify and discuss the role of LDM in change management. The Section begins by presenting a brief historical overview of the philosophical interest in leadership, and of the progression of leadership research. Next, the changing nature of leadership is discussed. This discussion includes the changing perceptions and expectations of business and government by society, and how these may impact leadership and LDM. Following this, the relationship between leadership, ethics and change management is reviewed, particularly focusing on the growing call for an increase in ethics in change management. Finally, this Section introduces the potential role of ethics in LDM.

#### 2.2.1 Leadership – Philosophy and Theory

##### 2.2.1.1 Philosophy

Philosophers such as Aristotle, Confucius, Cicero, Seneca, Epictetus, Kant, Smith, Mill, Locke, Husserl, Heidegger and Nietzsche, amongst others, have concerned themselves with questions of how we should live our lives, including how leaders should behave. Understanding this philosophical background of leadership not only demonstrates the interest it has historically created, but also provides a sound foundation for subsequent, more detailed analysis of the topic. For example, in his “Nicomachean Ethics”, Aristotle describes five intellectual virtues - technical knowledge, philosophical wisdom, scientific knowledge, intuitive reasoning and practical wisdom - provide a valuable framework for discussion and

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analyses of leadership issues (Kodish 2006). Intuition (*intuitive reasoning*), as an example, is one element of descriptive decision making theory (Rogerson et al. 2011). Similarly, Cicero's categories of the *honorable* and the *beneficial* ways to live our lives suggest a model of ideal leadership behaviour (Bragues 2010). The *honorable* category is concerned with our moral worth, while the *beneficial* focuses on our personal happiness. These categories are particularly useful in discussion of the tension between morality and self-interest as factors in LDM. This tension has been described as a moral and ethical crisis (Uday Bhaskar et al. 2003). Locke's empiricist Moral Philosophy emphasizes the rational or reasoning aspect of human nature as a factor in understanding moral obligation to comply with moral rules (Sheridan 2012). Compliance with moral rules may be an element of LDM. Husserl's phenomenology describes intuition, sense and perception as crucial elements of achieving logically consistent meaning. His *epoche*, or bracketing, assumptions align with the more contemporary "worldview" concept as a factor in ethical leadership (Beyer 2011). Regardless of their differing views and beliefs these theories and philosophies help us understand more fully the moral, ethical and rational bases for how we do or should behave, including how our leaders should conduct themselves. The issues, concepts and ideas developed through this philosophical interest in leadership evolved, with society, into leadership theories and schools of thought.

### 2.2.1.2 Society's expectations of its organisations

In 1776, Adam Smith suggested that, when organisations set up to benefit society fail to do that, the consequence is that society has to contribute to those benefits (Smith 1776). This position has been formalized in stakeholder theory, which contends that the legitimacy of business can only be achieved through the support of stakeholders, and this is possible only when those stakeholder expectations are met (Brown & Fraser 2006; Carroll & Buchholtz 2000; Carter & Burritt 2007; Fulmer 2005; McMurtrie 2005; O'Donovan 2002; Rosenthal 2009). These expectations include right, just and fair treatment (McManus 2011). For Government Owned Corporations (GOCs) there are added expectations by, and obligations to, government, community, customers, employees and shareholders (*Corporate Governance Guidelines for Government Owned Corporations* 2009). These obligations are driven by the stated purpose of a GOC to be commercially successful and to efficiently deliver community services (*Government Owned Corporations Act* 1993). Commercial success is defined as meeting financial and non-financial targets. The Queensland Government expects that business practices, including ethical LDM, reflect the "significant public responsibility" of GOCs. The recent Queensland Health payroll system implementation and South East Queensland Water (SEQW) dam management and flood mitigation situations are examples that suggest that government organisations did not meet these expectations. These situations exemplify the concept of a "moral crisis", being that truth and good, logic and ethics, may not have been aligned in the LDM processes (Rosenthal 2009). A private sector example can be found in the case of HSBC Bank, (Green 2009) and its initiative to provide sub-prime mortgages to allow poorer people to purchase homes. In this example, truth (logic), i.e. profit, was not aligned with good (ethics), i.e. the provision of homes to poorer people, because many who got these mortgages were actually unemployed and, so, couldn't pay. At the core of the maze of issues surrounding these situations are questions about business purpose and leadership behaviour, and the presence or lack of the moral element. The stated goals of corporatization clearly define GOCs as businesses, therefore this thesis argues that these questions apply equally to GOCs as to the private sector (*Government Owned Corporations Act* 1993). These changing expectations, combined with society's reaction to the continuing scandals and failures, suggest that the nature of leadership may be changing (Coldwell 2010).

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### **2.2.1.3 The changing nature of leadership**

There are growing perceptions and points of view that business is not only about profit (Coldwell 2010) and, in light of the many scandals and related issues, business cannot continue to operate as it has done in the past. Coldwell (2010) further suggests that, to revolutionize its operating models, business has to put the public good before profits. Public good is not simply profit that creates jobs, but includes social, economic, environmental and other elements. In terms of GOCs, the public good may include reduced costs for, or more effective delivery of, services including electricity, transport, water and ports. It is likely that consequences of leadership decisions may be more intensely scrutinized as a result of the recent government and private sector failures. This scrutiny could include questions about the consequences on the public good, which may change the nature of LDM. For example, insurance organisations involved in the Queensland floods situation of 2011 (Robertson & Solomons 2011) may be required to increase transparency regarding the related policy restrictions. Further, they are likely to be more sensitive in future situations to public reaction to, and perceptions of their, commitment to support and protection of policy holders. These factors require a revised view on the part of insurance leaders of their expected role and purpose; a revised world view. This revised view may, in turn, change the nature of leadership in insurance organisations. There are two groups of consequences of the changing nature of leadership. The first group includes issues related to the type of leadership required to accommodate this expanded world view.

#### **2.2.1.3.1 Leadership theory**

The literature on leadership is vast and widely varied, and it is not in the scope of this research to provide a comprehensive discussion or analysis of leadership theory. Rather, the aim of this section is to discuss the relevance of current range of leadership theory to the changing nature of leadership. Consequently, the discussion will focus on New Theories, Emergent Theories and integrated theory (Boal & Hooijberg 2001).

##### **2.2.1.3.1.1 New Theories**

According to Boal and Hooijberg (2001), new theories of leadership include charismatic, transformational and visionary theories (Boal & Hooijberg 2001). “New Leadership” was suggested by Bryman (1992) to include the three theories mentioned (Bryman 1992). Charismatic leadership theory is a behavioural theory that evolved from Weber’s early work, and focusses on the inspirational and influential qualities of leaders, and the relationship with followers through these emotional aspects (Conger & Kanungo 1987). Transformational leadership is, according to Bass and Steidlmeier (1999), based on moral foundations, and has four pillars of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration (Bass & Steidlmeier 1999). There are differing points of view about the differences between charismatic and transformational leadership but discussion of those is beyond the scope of this research. Visionary leadership theory focusses on the leader’s ability to develop, articulate and communicate a vision, and to empower followers to implement that vision (Westley & Mintzberg 1989). There are variations to the theory, but the core characteristics are that visionary leadership is a dynamic and interactive process, that visionary style is varied and that “visioning” includes content and context.

##### **2.2.1.3.1.2 Emergent Theories**

The emergent theories focus on behavioural and cognitive complexity, and on social intelligence, and include path-goal, LMX and contingency theory (Bass & Steidlmeier 1999). The differentiating theme in emergent leadership theories is the interdependency of leaders and followers, moving leadership from a cause-effect process to a more complex and

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dynamic process (Marion & Uhl-Bien 2007). According to House (1996) path-goal theory states that effectiveness of leaders is impacted by their ability to ensure employees achieve work goals and associated rewards (House 1996) Saha (1979) defines contingency theories of leadership as focusing on the appropriate leadership style for the specific environmental situation (Saha 1979). Leader-member exchange (LMX) theory is a relationship-based theory concerned with the three leadership domains of “leader”, “follower” and “relationship” (Graen & Uhl-Bien 1995). Boal and Hooijberg (2001) suggest that these two groups of leadership theory can be integrated into an expanded theory of strategic leadership.

### 2.2.1.3.1.3 Strategic Leadership

The evolution of leadership theory basically follows a path from “supervisory” to “strategic” which mirrors a move from leadership “in” an organisation to leadership “of” the organisation (Boal & Hooijberg 2001). These authors describe three elements of strategic leadership as “absorptive capacity”, “adaptive capacity” and “managerial wisdom”. Absorptive capacity is the ability to learn. Adaptive capacity is the ability to change. Managerial wisdom is the combination of sensitivity to the environment (external and internal) and the relationships of the actors in the situation. Strategic leadership shares a common challenge with the other theories described here. The challenge is that the effectiveness of any leadership theory is, in large part, driven by the character of the leader, that is, there is an ethical component of leadership. Bass and Steidlmeier (1999) define three pillars of the ethics of leadership as, “(1) *the moral character of the leader*; (2) *the ethical legitimacy of the values embedded in the leader’s vision, articulation, and program which followers either embrace or reject*; and (3) *the morality of the processes of social ethical choice and action that leaders and followers engage in and collectively pursue*” (p.3). These elements are likely success factors for strategic leadership in terms of its relevance to the changing nature of leadership. Another identified factor is organisation culture.

Denis et al. (2000) discuss the concepts of leadership constellations as part of an organisation’s social system, and of its dominant interpretive scheme (Denis et al. 2000). In the former, the patterns of individual roles combine to form a collective leadership group. The effectiveness of that leadership group is affected by the complementarity of the individual leaders and of how their roles integrate. While these researchers are concerned primarily with new leader integration and socialization, their work has relevance to this thesis. They refer to the “dominant logic” of an organisation (p.1067) as including the accepted and expected principles for managing and leading, which are widely shared. Prahalad and Bettis (1986) define dominant logic as the combination of the values, beliefs and assumptions commonly shared by the organisational leadership for strategic decision-making, [that is, the culture](#) (Prahalad & Bettis 1986). Both these works indicate that leadership behaviour, including decision-making, is affected by principles, values, beliefs and assumptions which can be interpreted according to a dominant interpretive scheme. This interpretation may create challenges for LDM, particularly when the decision maker is presented with ethical conflicts.

### 2.2.1.3.2 Impacts on LDM

A second consequence of this changing nature of leadership is the impact on LDM. The changing nature of business, and the resultant demands on leaders, creates additional considerations which must be reflected in the decision-making process (Coldwell 2010). Decisions, however, are made under conditions of equivocality and uncertainty (Sonenshein 2007), therefore the additional considerations mentioned above would potentially increase the levels of uncertainty and equivocality. Sonenshein (2007) defines equivocality as the

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potential for differing or multiple interpretations of issues, factors, outcomes and other elements. Further, that uncertainty is related to the lack of information on which to make decisions. The changing nature of leadership could impact both levels and areas of uncertainty and equivocality as a result of the changing or expanded view of the world. An expanded view of the world that acknowledges that decisions should be based on more than profit or business cases alone requires a moral dimension not previously expected (Coldwell 2010). This expanded leadership moral dimension suggests that moral leadership occurs when the truth is told, when promises are kept, when negotiations are fair and when choices are free (Hollander 1995). It is also this expanded world view and moral dimension that will affect the [dominant logic](#) of an organisation and its interpretive scheme. It is this range of responsibilities that makes leadership distinctive, as each of the decisions in each of these areas has consequences for a larger number of people, their families, their lives and society; every decision a leader makes has a ripple effect. For GOC leaders, the consequences of decisions could potentially include the loss of vital services that affect communities and lives. Consequently, this thesis suggests that the changing nature of leadership increases the need to understand the consequential nature of LDM through greater consideration and integration of moral and ethical issues. Further, that these increased considerations emphasize the need for more strategic leadership capability in our organisations.

In summary, philosophers have been concerned with leadership as an element of how humans should live their lives, including the way we should treat others. These concerns include morality and moral worth, rationality, ethics and LDM. As society evolved, it developed expectations of its institutions, and of its leaders. Leadership theory evolved with these expectations. Recent scandals, which seem to have, at least in part, resulted from poor ethical decisions, have added to the changing expectations of business and of its leaders. The changing nature of leadership has also increased the scrutiny of LDM, in particular on the consideration of ethical issues in the LDM process. Perhaps not coincidentally, as the discipline of change management, including its models, methodologies and tools, has matured, there has been a growing call for an increase in ethics in its practice and application (By et al. 2012).

### 2.2.1.4 Leadership, Change Management and Ethics

There is a call for increased research into ethics in change management (Burnes & By 2011), and for change to be managed more ethically (By et al. 2012). The call for change to be managed more ethically demands the inclusion of a leadership process that includes ethics as an integral element (By et al. 2012). Increasing the consideration of ethics in change management would require understanding of the related research of the various relationships between leadership, culture, employee commitment and change (Higgs & Rowland 2011; Uday Bhaskar et al. 2003; Zhu et al. 2004). It may also require consideration of relevant leadership theory. Boal and Hooijberg's (1999) three elements of [strategic leadership](#) (absorptive capacity, adaptive capacity and managerial wisdom) support the call for ethics in change through their focus on learning, ability to change and understanding stakeholder relationships.

Organisational culture is developed around the original materiality of an organisation (Uday Bhaskar et al. 2003). When that materiality changes so also does the supporting culture. For example, new products, strategy or technology may challenge existing beliefs, values and behaviours of employees and leaders. Further, this situation may create conflict between opposing organisational, group and individual values and beliefs, which leaders must address. These conflicting factors are likely to result in questions from employees and other

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stakeholders about the organisation's agenda, leadership goals and true purposes of the change initiative. Consequently, if these questions are not addressed, successfully embedding the required changes culturally could result in moral and ethical challenges for both groups. In this environment, ethical leadership becomes critical as leadership behaviour, including ethical considerations, has positive impacts on change initiatives (Higgs & Rowland 2011). As an example, a qualitative study of 33 leaders who had managed a change initiative attempted to identify leadership behaviour sets, and how they contributed to change initiative success or failure (Zhu et al. 2004). The research provided evidence that dominant leadership behaviours influence the choice of change approach which, in turn, is related to success or failure of the initiative. Ethical leadership behaviours positively impact employees' commitment to the organisation, which is one of the six (6) core factors identified for successful change (Kezar 2001). This research also suggested that organisational commitment is in part driven by trust in leadership which, in turn, influences conformity to culture and, ultimately, participation in organisational change (Zhu et al. 2004). Moreover, the identified relationships between leadership behaviour, employee commitment, trust in leadership and culture suggest that LDM is a key element of leadership as a contributing factor to change initiative failure rates (*Chaos, The Standish Group Report 1995; A guide to ERP Success 2001; Challenge of Change: Australia 2010; Cooke et al. 2001; Eser et al. 2007; Higgs & Rowland 2011; Keller & Aiken 2008; KPMG 1997; OASIG 1995; Zhu et al. 2004*). Further, the role of ethics in creating trust and commitment, sustaining a supporting culture and on leadership behaviour suggest that ethics is a critical element of LDM. Finally, these studies may also support the contention that mechanisms for addressing ethical LDM may be deficient in current change models (Brown et al. 2012).

In summary, the increasing call for ethics in change management requires an ethics-based leadership process intentionally built into any selected change model. A change initiative may create moral and ethical challenges for leaders and employees by creating conflicts between organisational and personal values (Uday Bhaskar et al. 2003). This type of situation demands ethical leadership behaviour to create and sustain employee engagement and acceptance of the change (Zhu et al. 2004).

The key observations from this sub-section are that, *K.O.3: LDM is a critical element of leadership as a contributing factor to change initiative failure rates, K.O.4: ethics is a critical element of that LDM and, K.O.5: human beings make decisions under conditions of equivocality and uncertainty*. Based on the key observations from the previous two sub-sections, the first Research Proposition of this thesis is that:

### ***R.P.1 LDM is a significant factor contributing to change initiative failure rates***

The next sub-section explores in more detail the topic of LDM.

#### **2.2.2 Leadership Decision-Making (LDM)**

The purpose of this sub-section is to discuss the topic of LDM. The discussion begins with an overview of the philosophical foundation of logic and ethics, and their relevance to LDM. Following this, the major LDM theories are summarized.

Humans do not always make rational decisions, even if they follow a logical process (Freeman et al. 2009; Peirce 1905). This phenomenon has interested researchers in areas including leadership, LDM, ethics, psychology and philosophy (Sonenshein 2007). One driver of this research interest has been the potential consequences of LDM on employees,

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businesses, families, governments and society (Milkman et al. 2008). Recent, high profile situations, such as the 2009 Queensland Health Payroll System situation, highlight the potential range of consequences (Madigan 2013a). Queensland Health decided to replace an outdated and cumbersome payroll system with the SAP enterprise resource system, supplemented with an untested third-party software module. The software vendors, the technology consultants and various external experts advised Queensland Health against their proposed implementation approach. One example of their concerns was the plan to convert to the new system overnight without running parallel transactions on the old system. Running parallel systems has long been a well-accepted and documented risk management process in systems implementation projects. The implementation failed and the consequences have been disastrous. The range of consequences has included 1) employees were not paid, or were overpaid, 2) some overpaid amounts were unrecoverable, 3) some employees could not pay bills, and 4) governments were, and are, embroiled in expensive and damaging legal processes (Madigan 2013a; Robertson & Solomons 2011). The decision to replace the old system may have been rational, but the process did not seem logical and the decisions may have been ethically sub-optimal. Firstly, the decisions to ignore external expert advice and lessons learned from numerous, similar implementations demonstrated the potential impacts of not considering all available input to a decision. Secondly, the potential consequences of discarding years, if not decades, of implementation experience by not running parallel processes during conversion to a new system likely contributed to the disastrous consequences. The consequences of these decisions, on such a wide range of stakeholders, supports the call for improving the quality of LDM (Rausch 2007). Quality of LDM, however, encompasses a number of elements. Research of the relationships between these elements, for instance leadership, ethics and LDM, is evolving, but more work is required (Lipshitz & Mann 2004).

The changing nature of leadership, and its impact on LDM, requires leaders to have an increased awareness of society's moral standards. It also reinforces the contention that leaders need to be more successful at achieving the same moral standards as the rest of society (Ciulla 2005). To achieve this greater success, leaders must have, and do have, the ability and freedom to make the necessary choices. Human beings have the free will to make choices about what we believe and how we act, and it is this free will that demands an ethical foundation which allows us to accept or reject the consequences of decisions ('Ethical Reflections: Ethics & logic' 2011). Consequently, organisations also require an ethical foundation to their LDM that requires an understanding of the ethical consequences of relevant available alternative options as well as an understanding of the logical drivers of the decision. The insurance organisations involved in the Queensland floods situation may have raised concerns about their ethical foundations by potentially creating moral crises for some of their leaders and decision-makers by limiting or restricting their free will in their LDM about claims. Discussion of free will, morality and freedom requires an understanding of the philosophical foundations of ethics, and of logic.

### 2.2.2.1 Logic

Logic is concerned with the relationship between the premises and conclusions of valid arguments (Hannah 2006), and is prescriptive. Logic is the process of evaluating the premises and conclusions of arguments, of structuring our thinking, and of defining meanings (*Routledge Encyclopedia of Philosophy* 1998). Logic is the set of laws, principles and commands that govern our beliefs and actions, and on which we should reason soundly

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(Hannah 2006). The relevance of logic to LDM in a change initiative is that it helps identify rational drivers, logical cases and valid benefits.

Two key concepts in logic are rationality and conscious activity. Rationality, reasoning soundly, is the ability to consciously consider, analyse and make decisions. Rationality may be viewed as extrinsic to logic (Husserl 1970) or as intrinsic (Kant 1785; Weininger 1906). The argument that rationality is extrinsic to logic suggests that we should be able to reason soundly, governed by external laws, rules and principles (Husserl 1970). Moreover, we should comply with these laws because they exist. The opposing argument is that rationality is intrinsic to logic. This view contends that humans should comply with laws of logic because of our moral duties to ourselves (Kant 1785; Weininger 1906). In this view, external laws place restrictions on behaviour. Moreover, we have a moral duty to respect these laws. However, this respect exists only as far as those laws do not conflict with our values and principles (Johnson 2008). Consequently, rationality requires a free will based on our values and principles, and that free will is self-regulated or self-governing (Kant 1785). This self-regulation implies conscious activity, driven by values and principles, which prohibit us from acting on emotions. These values and principles are integral to logic. Consequently, this thesis adopts the view that rationality is intrinsic to logic, and logic is an integral element of morality, therefore rationality is integral to morality (Kant 1785).

There are two classifications of rationality, the “mentalistic” and the “procedural” (Hannah 2006). The “mentalistic” classification includes the ability to consciously and practically consider, analyse and make decisions, and gain insights, whereas the “procedural” classification is more mathematical, mechanical and provable, and not necessarily a conscious activity (Hannah 2006). The “mentalistic” classification of rationality supports the assertion that logic is having the knowledge to do the right thing, and doing it in the right way (Ciulla 2005). The right way, however, needs to be defined. The premises and conclusions of an argument may be rational and logical, but the outcomes may not always be perceived as the right, or ethical, use of the conclusions.

The recent controversy over the insurance industry’s handling of the 2010 Queensland flood disaster provides an example of the relationship between the right thing and the right way (Robertson & Solomons 2011). The case also helps highlight the different views of logic and morality described above. The publicized stories have a common theme; people bought insurance in good faith, believing they were covered for natural flood disasters. After the fact it became clear that there were differences between the expectations of the insurance organisations and of their customers. The controversy flared not about insurance coverage, but about the reactions and responses of the insurance companies. From failure to attend well-publicized and critical meetings in Ipswich, to insensitive and inappropriate internal e-mails, the behaviours created a perception of lack of social commitment and lack of integrity. From the industry’s teleological perspective, decisions were rational and based on sound reasoning. Insurance companies complied with existing external laws and business principles. Their actions could be described as being consistent with the view that rationality is extrinsic to logic (Husserl 1970). From the policy holders’ and the community’s deontological perspective, the morality of the decisions may have been seen as questionable. The expectations of the community were consistent with the view that rationality is integral to logic (Kant 1785). The perceived lack of morality of the rational decisions taken by the insurance organisations suggests that compliance with external laws does not necessarily result in ethical decisions. Moreover, these conflicting views highlight the emerging view that business should be about more than profit (Coldwell 2010). Coldwell’s argument does not

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suggest that profit should not be a focus of business, but that it should not be the only focus. The impact on LDM is that there is a need for a set of considerations in addition to the logical business focus dominant to date. Further, those considerations, while providing a moral aspect to business and service provision, may require an equal focus to the heretofore dominant logical focus. Questions of lack of morality and of the purpose of business beyond profit raise the issue of ethics inherent in these discussions.

### 2.2.2.2 Ethics

Ethics is concerned with what we *ought* to do (Preston 2001), and is descriptive. Consequently, arguments and conclusions may be valid, but still may not be ethical. A decision based on logical considerations only may not provide the moral aspects discussed in Section 1.2.6., above. The relevance of ethics to LDM may be that it provides that moral aspect for decision making. This Section describes three philosophical views of ethics: - the deontological, teleological and virtue ethics views, each of which contributes to the discussion of the role of ethics in leadership and LDM. This thesis adopts the view of Ciulla (2006) that the most appropriate analysis of leadership and ethics is one that encompasses all three philosophical views. She suggests that ethics is concerned with right, wrong, good, evil, virtue, duty and obligation, amongst others, and includes the greatest good in human relationships. These characteristics and concerns play a role, individually and collectively, in LDM. Specifically, the concept of “the greatest good” creates further challenges for LDM. Consequently, the most appropriate philosophical foundation for a process for improving the quality of LDM incorporates all three views.

### 2.2.2.3 Philosophical views

There are multiple definitions of ethics (Rosenthal 2009; Velasquez et al. 2009), and classifications of its study (*Routledge Encyclopedia of Philosophy* 1998; *Encyclopedia Britannica* 2011). Singer (1985) defines ethics as “*the discipline concerned with what is morally good and bad, right and wrong*” (Singer 1985, pp.627), and contends that ethics is equivalent to moral philosophy. He further describes the content of ethics as the central issues in practical decision-making, and includes the form of the resulting value of a decision and the standards by which the actions can be judged. Another view is presented by Etzioni (1990), who argues that we should focus on maintaining society’s moral standards rather than our own individual standards, if we expect society to respect our autonomy (Etzioni 1990). He further suggests that people make choices affected by normative and affective factors, and not on rational factors. Moreover, decisions are impacted by values and emotions. In this sense, people do not focus on achieving one utility, but on the twin utilities of pleasure and morality. Labelled “communitarianism”, Etzioni’s view emphasizes community or social standards or values as opposed to individual values (Etzioni 1990). Notwithstanding the theoretical and philosophical points of view presented, this thesis adopts the definition that ethics are the behavioural standards according to which we should act (Velasquez et al. 2009), because this definition is consistent with the behavioural focus of the following discussion of the classifications of ethics. A common classification of theories of ethics is by the three major frameworks of the deontological, the teleological and virtue ethics (*Encyclopedia Britannica* 2011; Hursthouse 2007). Deontological ethics contends that standards of behaviour for being morally right are separate from the good or evil resulting from that behaviour. The teleological view suggests that moral obligation is driven by the outcomes of behaviour. The interaction between logic and ethics is firmly rooted in deontological ethics, which is primarily concerned with duty, moral reasoning or the logic of normative reasoning. There is, however, debate between the schools of philosophy regarding the concepts of morality and duty. An understanding of these differences assists with defining

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a philosophical foundation of a process for improving the quality of LDM. The following sub-sections present an overview of the philosophical views of ethics.

### 2.2.2.3.1 The deontological view

The deontological view is supported by the proponents of Immanuel Kant. Kant's Moral Philosophy is concerned with the question of what a person ought to do, and is based on his view of good will as being the only thing good without qualification (Johnson 2008). There are two characteristics of this concept of good will. Firstly, a good will must be good by itself and not because of its relationship to something else. Secondly, a good will is motivated by the thought of duty, meaning that considerations of duty take priority over all other motivators or interests (Johnson 2008). Decisions made with a good will are made purely on the basis of moral demands; decisions driven by a perception of duty. It is duty that overcomes human desires, to allow us to make decisions that we might otherwise prefer not to. In the absence of this moral duty, this constraint, we might decide according to our desires. Constraints on behaviours and decisions exist in the form of laws, and moral duty must encompass respect for these laws. However, this respect exists only as far as those laws do not conflict with our values and principles (Johnson 2008). The core concept of Kant's philosophy is that good will must be of itself, and not a means to an end. A decision made solely to achieve desired ends or consequences, without consideration of moral duty, does not have moral worth (Kant 1785) From this perspective, the decisions of the insurance organisations in the [Queensland floods](#) situation to not pay or restrict payments may be perceived as lacking moral worth. Moreover, the insurance organisations may have demonstrated a perception of duty as being to optimize profits for their shareholders which is in opposition to the concept of good will taking priority over other interests (Johnson 2008).

A purely deontological view of ethics is not appropriate for improving the quality of LDM. There may be potential for a LDM process based on a deontological view to be predominantly concerned with the ethical and moral aspects of the decision. For example, in the Queensland floods situation discussed above, a deontological based decision process could have suggested payments to all impacted policy holders, irrespective of coverage. Although this is an admittedly simplistic example, it demonstrates the need to balance the ethical and logical considerations in a LDM process. The logical aspect may be best described in the following discussion of the teleological view of ethics.

### 2.2.2.3.2 The teleological view

The teleological view is proposed by the Consequentialists. In fact, according to Singer (1985), the term "teleological" has been largely replaced by "consequentialism" (Singer 1985). Consequentialists see outcomes of actions as valid motivators of decisions (Shaw 2005). Although all schools of philosophical theory to some degree believe that the consequences of actions affect their rightness or wrongness, Consequentialists contend that the results of actions are the only measures of rightness or wrongness (Shaw 2005). There are, however, a number of varieties of consequentialism (Singer 1985). It is beyond the scope of this thesis to present a detailed discussion of the various theories and points of view of consequentialism, however an understanding of the bases for the differing views is helpful. The critical issue, according to Springer (1985), is whether actions should be viewed as right or wrong simply by their consequences. Classical utilitarianism contends that judgement should be made according to whether an action's consequences are greater than any alternative. Moore's ideal Utilitarianism (Singer 1985) suggested that actions be judged by their consequences but not solely by the pleasure produced. Hare's preference Utilitarianism (Singer 1985), argues that satisfaction of the preferences of those affected by the action is

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what makes that action good. Rule-Utilitarianism proposes that general rules for behaviour are justified, and that individual actions can be judged according to those rules. Standard Consequentialism proposes that the morally right thing for a person to do is what results in the most good. Additionally, Standard Consequentialism requires leaders to maximize good by their decisions. This view may provide a supporting argument for the actions of the insurance companies in the [Queensland floods](#) situation that they maximized the most good by their decisions. This differentiates Standard Consequentialism from other teleological theories in that those require only that an action has good consequences, as opposed to most good.

The teleological view is not an appropriate foundation for improving the quality of LDM, as its focus on outcomes encourages and supports a primarily logical focus. This focus may simply assist with maintaining the status quo of businesses being solely about profits or service delivery. The teleological view could be a contributor to LDM, but, by itself, is inadequate.

### 2.2.2.3.3 Virtue Ethics

A third view is that of virtue ethics, which suggests that a person's character is the motivator of right action (Crossan et al. 2013; Shafer-Landau 2007). The basic question of virtue ethics is 'What sort of person should one be?', whereas the Kantian concern is 'What should one do?' (Hursthouse 2007). The major difference between virtue ethics and deontology is that the former is agent-centred and the latter act-centred. They both, however, are concerned with defining a right action. One challenge to virtue ethics is that it cannot account for the rightness of actions, or evaluate those actions (Swanton 2007). The virtue ethics response to this is that the definition of a right action involves the description of the targets of virtue ethics. An action is a right action if it hits the target of the virtue of the action. For instance, an action would be honest if it hit the target of the virtue of honesty; if the aim of the virtue was to achieve honesty in society, it would only be a virtuous action by hitting the target of promoting that honesty. This approach to virtue ethics is a target-centred view (Swanton 2007). One point of view is that virtue ethics may be a viable and attractive alternative to the more prescriptive Consequentialist theory (Annas 2004). An alternate view is that virtue ethics augments the consequentialist and deontological views by incorporating the character of the decision-maker as a balancing factor between the two views (Crossan et al. 2013). This alternate view suggests that one way in which virtue ethics plays this balancing role is by facilitating values-based reflection by the decision-maker. The authors suggest that values-based self-reflection in the LDM process strengthens the leader's ability to withstand the negative political and other pressures inherent in LDM. Virtue ethics, then, is concerned with the character of the decision-maker, the agent, as the motivator of right action. Virtue ethics would suggest that some of the leaders and decision-makers of the insurance companies described in Section 2.3. were faced with a moral crisis (Rosenthal 2009) resulting from conflict between their personal values and those of their organisations. The relevance of virtue ethics to LDM is that it highlights and focuses on the character of the decision-maker, and facilitates self-reflection. The difficulty with virtue ethics in the context of LDM in change initiatives may be in defining the target of a right action. Consequently, this thesis contends that virtue ethics is a valuable contributor to LDM, in conjunction with a combined consequentialist and deontological view.

In summary, the deontological view is that decisions should be made on the basis of moral duty alone, and not for the potential outcomes (Johnson 2008). The deontological view of ethics, by itself, is not appropriate for improving the quality of LDM, as there may be

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potential for a LDM process based on a deontological view to be predominantly concerned with the ethical and moral aspects of the decision. The teleological view is that decisions must be made on the basis of the required outcomes (Shaw 2005). The teleological view, by itself, is not an appropriate foundation for improving the quality of LDM, as its focus on outcomes encourages and supports a primarily logical focus. This focus may simply assist with maintaining the status quo of businesses being solely about profits or service delivery. Virtue ethicists argue that decisions must be made on the basis of the character of the person making them (Shafer-Landau 2007). The difficulty with virtue ethics in the context of LDM in change initiatives may be in defining the target of a right action. Consequently, virtue ethics is a valuable contributor to LDM, as part of a combined consequentialist and deontological view. Each of these three views begins to define the role of ethics in leadership and, subsequently, LDM. Appropriate analysis of leadership and ethics is one that encompasses all three philosophical views (Ciulla 2005). Ciulla (2005) suggests that ethics is concerned with right, wrong, good, evil, virtue, duty and obligation, amongst others, and includes the greatest good in human relationships. These characteristics and concerns play a role, individually and collectively, in LDM.

This sub-section identified two potential characteristics of a model for improving the quality of LDM. Firstly, the most appropriate philosophical foundation for a process for improving the quality of LDM would incorporate the deontological, teleological and virtue ethics views. Secondly, consideration of ethics in LDM can be enhanced by self-reflection therefore a model should include a self-reflection process.

The key observations from this sub-section are that, *K.O.6: ethics provide the moral reasoning required to ensure that the rational and logical outcomes of an argument are used for the greatest good, and K.O.7: consideration of ethical issues in LDM can be enhanced by self-reflection.*

The ethical issues inherent in the key observation, above, include justice, truthfulness and altruism. Consequently, the next sub-section presents a discussion of these issues.

### 2.2.2.4 Justice

The concept of justice is a critical one in LDM, and has had significant research attention (Ambrose 2002; Bernerth et al. 2007; Cropanzano et al. ; Eberlin & Tatum 2008; McManus 2011; Rausch 2007; Shah 2011). The scope of this research does not include an analysis of organisational justice theory. Rather, this thesis focuses on justice as one element of LDM. Stakeholders may have expectations of fair and just treatment in the LDM process (McManus 2011), and justice has been suggested as one of the key guidelines for ethical LDM (Rausch 2007). Various authors have described types of organisational justice as being distributive, procedural, informational and interpersonal (Ambrose 2002; Cropanzano et al. ; Eberlin & Tatum 2008; Shah 2011). Distributive justice is the perceived fairness of the distribution of outcomes decisions. As an example, perceptions of the fairness of decisions related to pay or layoffs are of distributive justice. Similarly, procedural justice is the perception of the fairness or equity of decisions related to promotion or performance appraisal, for example. One of the key points in both distributive and procedural justice is that they create perceptions of fairness. Employees may not necessarily like the outcomes of the decision, but would likely perceive it as fair. On a more individual level, interactional justice refers to the perception of the individual treatment received by the recipient of a decision (Ambrose 2002). Finally, informational justice refers to the communication provided to the recipients of a decision by the decision maker (Bernerth et al. 2007). In each type, outcomes of leadership

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decisions that are seen as just generate employee perceptions of the fairness of the decision. Employees develop positive or negative attitudes and behaviours based on their perceptions of the justness of their treatment (Shah 2011). Further, these perceptions also affect employees' readiness for, or resistance to, change. (Bernerth et al. 2007; Cropanzano et al. ; Shah 2011) Justice, and perceptions of justice, in this context, then, may be a critical element in the success, or otherwise, of change initiatives. This thesis contends that ethics facilitates the incorporation of justice into LDM. Consequently, this thesis suggests that ethics should be a core element of any proposed process for improving the quality of LDM in change initiatives. Justice, however, is only one element of ethical LDM. Another element is the attitude of the leader to those impacted by the decision, which includes truthfulness and the moral standards applied (Preston 2001).

### 2.2.2.5 Truthfulness and Altruism

This thesis supports the view that a moral crisis occurs when truth and good are not aligned (Rosenthal 2009). In this context, this requires leaders to be truthful and to apply truth in their LDM. In Rosenthal's (2009) view, "truth" includes the identification and use of facts, unbiased by politics or personal feelings. For example, a truthful leader may support the claim of an employee that she is being discriminated against regarding allocation of available overtime, based on the available facts, even though his allocation decisions may have created the discrimination originally. A moral crisis may occur if the leader elects to allow his personal bias to influence his decision, and abides by his original overtime allocation. In this scenario, truth and good are not aligned. The finding from this analysis is that truthfulness may be a critical leadership requirement in avoiding moral crises, therefore would be a key factor in LDM. This requirement for "truth" constitutes one part of the case for leadership truthfulness. A second part of the argument is that, particularly in the context of change, a truthful leader creates trust, which subsequently increases employee commitment to that change (Zhu et al. 2004). Truthfulness is an underlying principle of all normative views of ethics (Preston 2001), and lack of truthfulness implies lack of respect for those involved. This thesis has contended that employees develop positive or negative attitudes and behaviours based on their perceptions of the justice of their treatment (Bernerth et al. 2007; Cropanzano et al. ; Shah 2011). Consequently, this thesis further suggests that perceptions of justice are influenced by perceptions of leadership truthfulness.

According to Kanungo and Mendonca (1996), the highest moral standard for a leader is altruism; making the best decisions for others even at the expense of the leader. The scope of "others" may be the whole world, the whole organisation or a defined group or function. Although leadership actions do potentially impact large numbers of people and groups, most are focused on a specific group or function (Ciulla 2005). Leaders, however, have the same family, financial and other commitments and obligations as those whom they lead, and some degree of self-interest would be reasonable. Altruism, however, doesn't guarantee a moral leader (Ciulla 2005). Ciulla (2005) explains that altruism is a driver for acting, but that does not automatically confer morality on the action. As a motivator for taking a specific set of actions, the greatest good of the group may be laudable and admirable, but the means to achieve that good may be morally reprehensible. A leader of an emerging, third world country may sincerely wish to alleviate hunger and poverty for his people, and their tireless efforts to achieve this may impact their personal health and family relationships. Alleviating the hunger, however, by raiding UN food trains destined for an adjoining country in similar circumstances would clearly not be ethical. Consequently, this research suggests that altruism may not be a relevant element of the greatest good for human relationships.

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### 2.2.2.6 Organisation politics

An additional factor in the LDM process, when groups are involved, is politics. Change is political in nature (Buchanan 2008). Consequently, change can introduce additional political pressures and influences on leaders that challenge free will and the decision process. A study of 250 British managers found that political behaviour was viewed as a necessary evil, but most respondents had little, if any, concerns about using political tactics to achieve their ends (Buchanan 2008). These findings complement and enhance related studies, with one of the main outcomes being that politics became more common and more accepted, expected and practiced in higher positions in organisations (Drory 1993; Drory & Romm 1990, 1998; Ferris et al. 2002; Ferris & Kacmar 1992; Vigoda 2003). A number of organisational and business issues are influenced by perceptions of politics which, in turn, are driven by a range of factors including organisational, economic and personality issues (Ferris et al. 2002). It has also been argued that Boards must intentionally develop a corporate ethic or else it will be done for them through office politics (Young 2006). The patterns throughout these studies are that politics is accepted, it impacts LDM and the impacts are influenced by values-based factors such as self-interest, personal power and protectionism amongst others. Consequently, organisational politics has both negative and positive impacts on LDM and on change (Dawson 2003; Frost & Egri 1991). Moreover, any process for improving the quality of LDM must be able to address organisational politics as a decision factor, in terms of decreasing the uncertainty and equivocality that such politics may create.

Related to organisational politics is the concept of administrative evil (Adams & Balfour 2009). The authors' contention was that the phenomenon of administrative evil facilitates people participating in actions and situations that harm others. Moreover, they do so in contradiction to their normal moral convictions, and justify this because it is work-related. Further, Reed (2005) argues that today's environment may actually inhibit moral considerations in the work environment and that the modern organisation environment may contribute to a perception that people are separated from the consequences of their actions. In simpler terms, administrative evil suggests that people act differently at work than they do elsewhere, and this behaviour is justified (Reed 2012). Administrative evil is a valuable and relevant concept, and somewhat contributes to the Research Problem of this thesis. As a theory, it suggests that ethics may decrease the effects of administrative evil by increasing the moral awareness of the leader (Ryan 2005). While this may be true, it does not specifically address the issue of LDM. Further, it does not address the issues of uncertainty and equivocality in the LDM process. Consequently, the theory of administrative evil may potentially contribute to the understanding of the role of ethics in LDM, but does not provide a complete definition.

In summary, LDM is a consequential activity that occurs under conditions of uncertainty and equivocality (Lipshitz & Mann 2004; Sonenshein 2007). The consequences of decisions can have wide-ranging impacts on a number of stakeholders, and beyond the profit or service provision goals of the organisation. These constituencies include employees, families, society, products and services, vendors, suppliers and customers. This range of consequences and constituencies suggests a need for the best possible quality of decision. Quality of decisions can be improved by making sure that all relevant considerations, including ethical ones, are identified and addressed (Rausch & Anderson 2011). The consequential nature of LDM, particularly of the ethical factors involved, has been highlighted in recent years by the high profile scandals and crises in the government and business worlds. These events support the contention that ethical judgment doesn't necessarily result in moral reasoning (Haidt 2001). Included in this challenge was the issue of organisational politics, and its demands on

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leadership. In parallel with these events, there has been an increasing research focus on ethics in the LDM process (Lipshitz & Mann 2004; Ncube & Wasburn 2006; Woiceshyn 2011).

The findings from this sub-section contribute to defining the research gap addressed by this thesis. These findings are that research of the relationships between leadership, ethics and decision-making, is evolving, but more work is required (Lipshitz & Mann 2004; Ncube & Wasburn 2006; Woiceshyn 2011). This sub-section also identifies a potential characteristic of a model for improving the quality of LDM. That characteristic is that organisations require an ethical foundation to their LDM that requires an understanding of the ethical consequences of relevant available alternative options as well as an understanding of the logical drivers of the decision.

The key observations from this sub-section are that, *K.O.8: The consequential nature of LDM suggests that quality of decisions can be improved by making sure that all relevant considerations and consequences, including ethical ones, are identified and addressed and, K.O.9: Understanding of the consequences of decisions can be increased by decreasing the levels of uncertainty and equivocality in the process.*

Based on the key observation from this sub-section, the second and third Research Propositions of this thesis are that:

***R.P.1.1 Quality of LDM may be improved by decreasing the levels of uncertainty and equivocality in the process***

***R.P.1.1.1 Levels of uncertainty and equivocality may be decreased through consideration of ethical issues in the process***

The next sub-section builds on this philosophical foundation by reviewing general decision-making theories, and specifically focusing on how they address the issues raised in the previous discussion of LDM.

### 2.2.3 Decision-Making Theories

Decision-making is a consequential activity that involves choosing between alternatives (Lipshitz & Mann 2004; Rilling & Sanfey 2011). The decision-making process involves identifying and accessing required information, analysing alternatives, considering influencing factors and selecting an option, within the context of human limitations. Organisational leaders may be expected to manage the process in a perfect and ideal way, which involves accessing and using all available information, analysing it and making decisions based on a rational, objective process, and by applying ethical and moral principles (Dhami 2003). Human beings, however, make decisions, or make sense of things, under conditions of equivocality and uncertainty (Sonenshein 2007). Sonenshein (2007) defines equivocality as the potential for differing or multiple interpretations of issues, factors, outcomes and other elements. Uncertainty is related to the lack of information on which to make decisions. How humans perceive ethical issues and decision-making is affected by our motivations and expectations. These, in turn, affect these two conditions of uncertainty and equivocality. There are three major classifications of theory of how the decision-making process works, including dealing with uncertainty and equivocality; normative, descriptive and prescriptive (Dillon 1998; Resnick 1987).

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### **2.2.3.1.1 Normative theories**

Normative theories are concerned with how decisions should be made, and are based on the use of rationality and reason (Gigerenzer & Gaissmaier 2011). Normative, or Rationalist, theories contend that decision makers can deal with the uncertainty of decision making by understanding available alternatives, their consequences and their predictability or probability. They do this by applying statistical, economic and logical models to maximize the outcomes of a decision. Rationalist theories include Bayesian decision theory, Utility Theory, Prospect theory, Game Theory and decision analysis amongst others (Doyle 1997). The focus on the outcomes of a decision, combined with the reliance on logical models, suggests that normative decision theories may be restricted in their ability to improve the quality of decision-making.

### **2.2.3.1.2 Descriptive theories**

Descriptive theories, also termed behavioural theories, emerged from perceptions of limitations of rationalist theories, primarily that rationality in humans is finite (Rogerson et al. 2011). These limitations included acknowledgment that decision makers are influenced by a number of personal and interpersonal factors (Cottone 2001), and that human behaviour is subject to bias (Kahneman & Kline 2009) and cognitive limitations. A further driver for descriptive theories is the belief that the conditions for rational decision making, including maximizing outcomes, are difficult to meet (Gigerenzer & Gaissmaier 2011). A contribution to descriptive theory was the concern that normative theories suggested that our responses to ethical issues are based on moral reasoning (Sonenshein 2007). Descriptive theories attempt to address these concerns by acknowledging the limitations of the human decision maker (Larichev 1999). Descriptive theories include Bounded Rationality, Satisficing models, Image theory, Additive theory, Recognition Primed Decisions, Conjunctive/Disjunctive theory, and Heuristics amongst others (Dillon 1998).

#### **2.2.3.1.2.1 Heuristics**

Heuristics are a class of non-rational decision-making theory. Heuristics are mental processes that allow humans to decrease the complexity of decision-making by filtering inputs, reducing uncertainty and increasing the efficiency of the process (Gigerenzer & Gaissmaier 2011; Rilling & Sanfey 2011). The study of heuristics offers insight into how human decision makers use cues, experience and intuition to make decisions under individual, social and organisational constraints. Heuristics allow greater understanding of how decision makers deal with uncertainty, the trade-offs required for decisions to be made under pressure, time restrictions, emotional factors and situations, and the influence of other actors (Rilling & Sanfey 2011). The focus on decreasing uncertainty through experience and filtering inputs may make heuristics particularly relevant to this research. Examples of heuristics include “availability” (the ease of recalling examples) and “representativeness” (tendency to classify things) (Aldag 2012). Notwithstanding that descriptive theories may decrease levels of uncertainty and equivocality, their reliance on the experience and intuition on the decision-maker suggests potential for bias and other human limitations.

#### **2.2.3.1.3 Prescriptive theories**

Prescriptive theories also attempt to address the issue of human limitations by combining the strongly rational foundation of normative theories with the human behaviour focus of descriptive theories (Dillon 1998). A prescriptive model is one which can and should be used by a real decision-maker. It is specific to the situation and to the decision-maker. This thesis

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suggests that prescriptive theories may combine the rational and non-rational elements required to improve the quality of leadership decision making.

### 2.2.3.1.4 An alternative theory

An alternative theory of ethical decision-making may be that of “ethical blindness” (Palazzo et al. 2011), which builds on the sense-making approach (Sonenshein 2007). Arguing against both the Kantian and the Utilitarian philosophies, this theory proposes that ethical decision-making is more intuitive and automatic, as opposed to rational and, as a result, decision-makers are often unaware of the ethical dimensions of the decision; they are ethically blind (Palazzo et al. 2011). Consequently, decision-makers can often make decisions that are contrary to their own values and beliefs. The theory posits that context pressures, both institutional (distal) and situational/organisational (proximal), combine with either rigid or flexible “frames”, which actors construct during interaction with their environment to create levels or degrees of ethical blindness. The theory suggests that the greater the rigidity of the frame, the higher the degree and risk of ethical blindness. It follows, according to the authors, that organisational and situational pressures and the organisation culture, may provide the rationale and justification for decisions contrary to the individual’s values system. These pressures include, amongst others, managers’ world views, leader influence, peer expectations, organisation history and prioritization of decision factors. The theory suggests that flexible frames facilitate increased moral responsibility for decisions and, consequently, decrease ethical blindness.

The theory of ethical blindness may contribute to and complement that of administrative evil (Adams & Balfour 2009), in that it provides potential justification for leaders behaving contrary to their own values. In that context, this thesis accepts that it may be a valuable addition to the discussion of decision-making theories. The strength of the ethical blindness theory is that it further highlights the potential for leaders to be unaware of their “blindness”. However, this thesis suggests that the theory may not adequately address the issue of decreasing equivocality. Further, this thesis suggest that the theory of ethical blindness may actually sustain or increase levels of equivocality as it proposes that leaders are often unaware of their ethical blindness. Such unawareness does not contribute to decreasing levels of equivocality. Consequently, ethical blindness does not present a valid alternative theory of ethical decision-making.

In summary, rationalist theories propose that humans use moral reasoning to make ethical and moral judgments (Sonenshein 2007). Descriptive theories contend that humans make ethical and moral judgments intuitively, or at least partly through intuition (Rogerson et al. 2011). Intuition, in this context, is another way of processing available information (Patton 2003). Descriptive theory suggests that humans store information in groups. Remembering and accessing these information groups is a function of the decision-maker’s experience, ignoring irrelevant patterns, long-term memory and criteria or rules of thumb. Descriptive theories attempt to provide frameworks for managing this process, such as heuristics. Concern that descriptive theories were more open to human error and bias were dispelled through research demonstrating that heuristics were as reliable and accurate as statistical methods; the less-is-more effect (Gigerenzer & Gaissmaier 2011).

The findings from this sub-section contribute to defining the research gap addressed by this thesis. These findings are that, a) current decision-making theories may not adequately address the issue of decreasing equivocality in LDM, and b) there is no identifiable research linking ethics and logic, and equivocality and uncertainty. Consequently, there is a need for a

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framework which begins to define and describe these relationships. This sub-section also identifies a potential characteristic of a model for improving the quality of LDM. That characteristic is that prescriptive LDM theories may combine the rational and non-rational elements required to improve the quality of LDM.

The next sub-section discusses one factor that may contribute to decreasing both uncertainty and equivocality in LDM, organisational learning (OL).

### 2.2.4 Organisational Learning (OL)

The purpose of this sub-section is to present the major concepts of organisational learning (OL), and their role in the LDM process. The previous section discussed LDM, and raised the issue of the quality of those decisions. One factor in LDM is the historical context in which it occurs. OL is the series of activities, experiences and knowledge which, combined and used effectively, allows an organisation's past to affect its present and future (Argote 2011). In the context of a change initiative, an organisation's past includes records of lessons learned in similar projects, successes or failures with particular change methodologies or tools, observations regarding accuracy of estimating factors for similar projects, and sponsorship time commitments, amongst others. These records may provide valuable insight into the design and management of a pending project, including achieving the expected business benefits. In terms of LDM, OL can provide valuable input to the decision process, if it is identified and accessed appropriately. Research of the relationship between OL and initiative failures is lacking, but the relationship of leadership and OL has been identified as a critical factor in successful change programs (Stewart & O'Donnell 2007). There are examples of where application of lessons learned may have prevented some, or part of, a change initiative failure. For example, in the [Queensland Health](#) payroll system case previously referred to, the lessons learned regarding running parallel processes during conversion, as well as the experience of other organisations trying to supplement the SAP system with a third-party module, was ignored (Madigan 2013d, 2013a). This situation suggests that leadership has a role in encouraging, facilitating and driving lessons learned from failures. One aspect of this relationship is the need for leaders to facilitate the double-loop learning necessary for a learning organisation. Double-loop learning is the process of identifying, correcting and learning from errors and failures, and requires the questioning of policies, strategies, objectives, values and assumptions of the organisation (Argyris 1977). Part of the leadership role in this process is to understand and address the issue of the dominant logic of the organisation.

Dominant logic is the combination of the values, beliefs and assumptions commonly shared by the organisational leadership for strategic LDM (Prahalad & Bettis 1986). Double-loop learning challenges this dominant logic and, therefore, requires a leader capable and willing to create and sustain the environment conducive to this. The importance of this ability is that learning from mistakes and failures requires an openness and honesty that, in turn, demands a safe environment. The demands on leadership in creating this culture include being accessible, inviting input, modelling openness and fallibility and discouraging blame (Edmondson 2004; Reason 2000). These leadership behaviours not only challenge the dominant logic, but also create a foundation for addressing the natural organisational resistance at all levels to change (Prasad et al. 2001; Sammut-Bonnici & McGee 2002; Vera & Crossan 2003). Finally, these behaviours can assist in addressing the phenomenon of interpretation, or misinterpretation, of the findings and the evaluation, of organisational learning. This phenomenon is where organisational actors and stakeholders, can interpret

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learning findings, misuses, misinterpret or otherwise inappropriately use the findings (Mark & Henry 2004; Thoenig 2000).

Another aspect of the relationship between leadership and OL may be that of *espoused theory* and *theory in action* (Argyris & Schon 1974). Research demonstrated that how a leader states that they would act under certain circumstances: - espoused theory, is different from how they actually act - theory in action. In terms of identifying and applying OL, leaders should be practicing espoused theory, and aligning it with theory in action. Specifically, leaders should be acknowledging the importance of OL, and actually applying it in their projects. Boal ((2007) focusses on the role of strategic leadership in organizational learning, and suggests that, to effectively apply organizational learning, a degree of humility is required of a leader (Hooijberg et al. 2007) as that learning was acquired through the mistakes and learnings of others. This author also emphasises the leader's role in providing access to information and sharing the knowledge gained.

In summary, OL contributes to LDM in a number of ways. It provides the lessons available from the history of successes and failures, and facilitates these as critical inputs to the decision process. It facilitates organisation-wide review and input to these lessons, and progressively increases organisational history and knowledge to be available as input. It challenges the dominant logic of the organisation, which helps overcome leadership resistance. It creates a safe environment for all levels of the organisation to continuously assess and question, based on evaluations of findings from OL processes. One critical success factor in creating such an environment would be leadership behaviour and modelling. OL becomes not only input to change, but a significant part of the change process.

The key observations from this section are that, *K.O.10: organisational learning (OL) is a critical factor in change management* (Stewart & O'Donnell 2007), and that, *K.O.11 leadership willingness, and organisational culture, influence the identification and application of OL in change initiatives*. Based on the key observations from this sub-section, the fourth Research Proposition of this thesis is that:

### ***R.P.1.2 Quality of LDM may be improved by applying organisational learning (OL) processes***

#### **2.2.5 Section Summary – Objective b) - LDM in change management**

The purpose of this Section was to discuss the major factors in the relationship between leadership and LDM. These factors included the changing perceptions and expectations of business and government by society, and their impacts on leadership and LDM. Specifically, these changing perceptions increased the need for leaders to consider ethical and moral elements of LDM. The consequential nature of LDM further defined the relationship between leadership and LDM, as leaders need to understand the impacts of their decisions, and of the available alternative options, on a range of constituents. This Section identified ten (10) key observations related to leadership and LDM in the context of change initiatives. These observations were that a) change models are not adequately addressing the factors contributing to change initiative failure rates, b) leadership is a primary factor contributing to change initiative failure rates, c) LDM is a critical element of leadership as a primary contributor to change initiative failure rates, d) ethics is a critical element of LDM, e) human beings make decisions under conditions of equivocality and uncertainty, f) ethics provide the moral reasoning required to ensure that the rational and logical outcomes of an argument are used for the greatest good, g) the consequential nature of LDM suggests that quality of

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decisions can be improved by making sure that all relevant considerations and consequences, including ethical ones, are identified and addressed, h) understanding of the consequences of decisions may be increased by decreasing the levels of uncertainty and equivocality in the process, i) OL may be a critical factor in change management, and j) leadership willingness, and organisational culture, may influence the identification and application of OL in change initiatives

### 2.3 The Research Problem

The research gap for this thesis has a number of defining factors. Firstly, there is no identifiable research of the relationship between ethics and logic, and equivocality and uncertainty. Secondly, research of the relationships between leadership, ethics and LDM is evolving but more work is required. Thirdly, there is no consolidated research of the interdependence of ethics, logic, OL and change management in LDM. Finally, there may be a relationship between ethics and the interdependence of each of these areas but that relationship has not been clearly defined.

Contributing to the research gap was a number of key observations from this Chapter that helped define the Research Problem. These key observations were:

- K.O.1 Change models are not adequately addressing the factors contributing to change initiative failure rates,*
- K.O.2 Leadership is a significant factor contributing to change initiative failure rates.*
- K.O.3 LDM is a critical element of the role of leadership as a significant contributor to change initiative failure rates*
- K.O.4 Ethics is a critical element of LDM*
- K.O.5 Human beings make decisions under conditions of equivocality and uncertainty*
- K.O.6 Ethics provide the moral reasoning required to ensure that the rational and logical outcomes of an argument are used for the greatest good*
- K.O.7 Consideration of ethical issues in LDM may be enhanced by self-reflection*
- K.O.8 The consequential nature of LDM suggests that quality of decisions may be improved by making sure that all relevant considerations and consequences, including ethical ones, are identified and addressed*
- K.O.9 Understanding of the consequences of decisions may be increased by decreasing the levels of uncertainty and equivocality in the process*
- K.O.10 Organisational learning is a critical factor in change management*
- K.O.11 Leadership willingness, and organisational culture, influences the identification and application of organisational learning in change initiatives*

Based on the defined research gap, and the key observations, the Research Problem identified was:

*There is a lack of understanding of the role of ethics in LDM in change initiatives.*

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The Research Question was:

*What is the role of ethics in LDM in change initiatives?*

The Research Propositions were:

*R.P.1 LDM is a primary factor contributing to change initiative failure rates*

*R.P.1.1 Quality of LDM may be improved by decreasing the levels of uncertainty and equivocality in the process*

*R.P.1.1.1 Levels of uncertainty and equivocality may be decreased through consideration of ethical issues in the process*

*R.P.1.2 Quality of LDM may be improved by applying organisational learning processes*

The research problem and related issues identified in this Chapter are also consistent with the researcher's personal experience of over thirty years' designing and managing change initiatives internationally. Figure 2-A shows the Research Design with the links between the Research Problem, Research Questions, Research Propositions, Key Themes and Observations, and Key Variables.

Figure 2-A. Research Design

**Research Problem:** There is a lack of understanding of the role of ethics in LDM in change initiatives.



| Research Question  | # | #     | #       | Research Propositions  | Themes/Observations   | Key Variables   |
|--|---|-------|---------|--|---|---|
| What is the role of ethics in LDM in change initiatives? | 1 |       |         | LDM is a primary factor contributing to change initiative failure rates  | Change models are not adequately addressing the factors contributing to change initiative failure rates,  | i. Change failure rates<br>ii. Contributing factors   |
|  |   |       |         |  | Leadership is a significant factor contributing to change initiative failure rates  | i. Leadership   |
|  |   |       |         |  | LDM is a critical element of the role of leadership as a significant contributor to change initiative failure rates   | i. Leadership Decision Making   |
|  |   | → 1.1 |         | Quality of LDM may be improved by decreasing the levels of uncertainty and equivocality in the process         | Human beings make decisions under conditions of equivocality and uncertainty  | i. Quality of LDM<br>ii. Uncertainty<br>iii. Equivocality   |
|  |   |       |         |  | Understanding of the consequences of decisions may be increased by decreasing the levels of uncertainty and equivocality in the process   | i. Understanding of consequences<br>ii. Uncertainty<br>iii. Equivocality                                    |
|  |   |       | ↘ 1.1.1 | Levels of uncertainty and equivocality may be decreased through consideration of ethical issues in the process | Consideration of ethical issues in LDM may be enhanced by self-reflection   | i. Ethics<br>ii. Self-Reflection<br>iii. Uncertainty<br>iv. Equivocality                                    |
|  |   |       |         |  | The consequential nature of LDM suggests that quality of decisions may be improved by making sure that all relevant considerations and consequences, including ethical ones, are identified and addressed | i. Quality of LDM<br>ii. Uncertainty<br>iii. Equivocality<br>iv. Consequence Identification & Understanding |
|  |   | → 1.2 |         | Quality of LDM may be improved by applying organizational learning processes                                   | Organizational learning is a critical factor in change management   | i. Organisational Learning  |
|  |   |       |         |  | Leadership willingness, and organizational culture, influences the identification and application of organisational learning in change initiatives  | i. Organisational Culture<br>ii. Leadership attitude  |

## Chapter 2.0 Literature Review

### 2.3.1 Chapter Summary – Literature review

This Chapter had two main objectives. The first objective was to review research of change initiative failure rates. The second objective was to identify and discuss the role of LDM in change management. The Chapter suggested that there are two converging themes of failure rates of change initiatives and ethics in LDM.

The Chapter achieved the first objective by presenting a range of research into the failure rates of change initiatives, and of the factors contributing to these rates. There has been an increase in, and intensification of, the volume and pace of change and change initiatives (Keller & Aiken 2008). There were two main groups of research of change initiative failure rates identified. The first group focused on the general aspects of change initiatives, and identified that “human” and “organisational” issues were the main causes of change initiative failure rates (*Chaos, The Standish Group Report* 1995; *A guide to ERP Success* 2001; *Challenge of Change: Australia* 2010; Brown et al. 2012; Cooke et al. 2001; Eser et al. 2007; Keller & Aiken 2008; KPMG 1997). A second group of research focused on specific factors contributing to failure rates (Decker et al. 2012). These individual studies focused on, for example, factors including “leadership” (Karp & Helgo 2008) and “LDM” (Macmillan 2000). Both groups of research identified “leadership” as one of the top contributors to change initiative failure rates. The Chapter concluded discussion of the first objective by observing that current change management models may be deficient in how they address LDM (Brown et al. 2012).

The Chapter achieved the second objective, to identify and discuss the role of LDM in change management, by discussing the changing nature of leadership and its impact on LDM (Coldwell 2010). LDM was identified as a core leadership activity (Woiceshyn 2011), and consequential activity, requiring analysis of available alternatives (Lipshitz & Mann 2004; Rilling & Sanfey 2011). The literature suggested that quality of LDM can be improved by how the available input is collected and analysed (Rausch & Anderson 2011). Further, decisions are made under conditions of uncertainty and equivocality (Sonenshein 2007), and analysis of available input may decrease these conditions. One consequence of decreasing these conditions could be a decrease in the moral crisis that leaders may face when truth and good, ethics and logic, are not aligned (Rosenthal 2009). The Chapter identified the four areas of ethics, logic, OL and change management as elements of LDM in change initiatives. It also observed that research of the inter-dependency of these areas is increasing but is generally still limited (Carmeli & Sheaffer 2008; Garcia-Morales et al. 2009; Gronn 1997; Higgs & Rowland 2011; Lipshitz & Mann 2004; Patzer & Voegtlin 2010; Pham & Swierczek 2006; Uday Bhaskar et al. 2003; Zhu et al. 2004). Moreover, there is an increasing call for more research into ethics in change management (Burnes & By 2011), and for change to be managed more ethically (By et al. 2012).

The next Chapter describes the development of a process for improving the quality of LDM, the Q.L.D. model.

## **3.0 MODEL DEVELOPMENT**

## Chapter 3.0 Model Development

The previous Chapter, Literature Review, addressed the first Research Purpose of this thesis, which is to explore the role of ethics in LDM in change initiatives in Queensland Government Owned Corporations. One of the findings of the Literature Review was that there is a need for a process for improving the quality of LDM in change initiatives. The Literature Review identified relevant research of two main themes; failure rates of change initiatives and ethics in LDM. The research showed that the volume and pace of change and change initiatives is increasing (Keller & Aiken 2008), including in Government Owned Corporations (GOCs). Moreover, “leadership” was identified as one of the most consistent contributing factors to those rates (*Chaos, The Standish Group Report 1995; A guide to ERP Success 2001; Challenge of Change: Australia 2010; Brown et al. 2012; Cooke et al. 2001; Eser et al. 2007; Keller & Aiken 2008; KPMG 1997*). LDM was identified as a core leadership activity (Woiceshyn 2009). It was asserted that current change management models may be deficient in how they address leadership, including LDM (Brown et al. 2012). Further, the selection of change models may not be always be based on the organisation’s needs.

Recent scandals that highlight the failures in ethics and LDM have raised concerns about the ethical climate in which business and government leaders operate. LDM was described as a consequential activity, requiring analysis of available alternatives (Lipshitz & Mann 2004; Rilling & Sanfey 2011), and the quality of the decision may be improved by how the available input is collected and analysed (Rausch & Anderson 2011). Selection and analysis of input decreases the conditions of uncertainty and equivocality (Sonenshein 2007). Decreasing these conditions is likely to decrease the moral crisis that leaders may face when truth and good, ethics and logic, are not aligned (Rosenthal 2009).

Research of these identified areas of change management, LDM, ethics, logic and OL is increasing but is generally still limited (Carmeli & Sheaffer 2008; Garcia-Morales et al. 2009; Gronn 1997; Higgs & Rowland 2011; Lipshitz & Mann 2004; Patzer & Voegtlin 2010; Pham & Swierczek 2006; Uday Bhaskar et al. 2003; Zhu et al. 2004). There is a call for more research into ethics in change management (Burnes & By 2011), and for change to be managed more ethically (By et al. 2012). The identified research gap was that there is no consolidated research of the interdependence of ethics, logic, OL and change management in LDM. Further, there may be a relationship between ethics and the interdependence of each of these areas but that relationship has not been clearly defined. Consequently, the Research Problem identified was:

***There is a lack of understanding of the role of ethics in LDM in change initiatives.***

This Chapter addresses the second Research Purpose of this thesis, which is to use the research findings to develop a conceptual model for improving the quality of LDM in change initiatives.

The first step in developing a conceptual process for improving the quality of LDM was to define the desired situation. Table 3-A summarizes the ‘as-is’ situation from the Literature Review, and presents a proposed desired environment.

## Chapter 3.0 Model Development

**Table 3-A. "As-Is" and "Desired" decision environments**

| High Risk Decision Environment  | High Potential Quality Decision Environment  |
|---|--|
| <ul style="list-style-type: none"><li>• Elements not integrated</li><li>• Ethics applied inconsistently, or over-ridden by logic</li><li>• Logic applied selectively, or inconsistently</li><li>• Zero, or selective, organizational learning</li><li>• Potentially inappropriate change approach</li><li>• High potential for moral crises in leaders</li><li>• Potential for high impact organizational politics</li><li>• Consequences difficult to define</li></ul> | <ul style="list-style-type: none"><li>• Elements integrated</li><li>• Ethics applied consistently, interdependently with logic</li><li>• Logic defined &amp; validated</li><li>• Organisational learning applied</li><li>• Appropriate change approach</li><li>• Low moral crises</li><li>• Organisational politics managed</li><li>• Consequences defined</li></ul> |
| <p>&gt; uncertainty<br/>&gt; equivocality</p>   | <p>&lt; uncertainty<br/>&lt; equivocality</p>  |

(from Literature Review)

The issues identified in the Literature Review defined a potential high risk decision environment, characterised by high levels of uncertainty and equivocality. The identified elements of ethics, logic, OL and change management, have not been integrated or have been inconsistently applied. Consequently, the potential for leaders to be faced with moral crises may be higher in this environment. Further, this situation would likely have made it more difficult to manage organisational politics, and to clearly define expected consequences of decisions. A LDM environment which supports quality LDM could be characterized by low levels of uncertainty and equivocality. Table 3-A defines such an environment as having the elements integrated, and consistently applied. Organisational politics would be proactively addressed, and leaders should be faced with minimal moral crises. Further, consequences are clearly defined and understood. The Q.L.D. model was designed to achieve the High Potential Quality Decision Environment described in Table 3-A, above. The design process for the proposed model was:

- a. Confirm the list of key observations from Chapter 2, [Literature Review](#)
- b. Develop a list of expected outcomes or benefits of the proposed model
- c. Using the key observations and identified expected benefits, develop a set of required characteristics for the proposed model
- d. Using these characteristics, develop a set of critical design criteria (CDC)
- e. Use the CDCs to design the model

## Chapter 3.0 Model Development

### 3.1 Expected outcomes and benefits of the proposed model

The expected outcomes and benefits of the proposed model were developed from the elements in the desired High Quality Decision Environment defined in Table 3-A. Table 3-B, below, describes the expected benefits:

Table 3-B. Expected outcomes and benefits of proposed model

| High Potential Quality Decision environment                | Expected outcomes and benefits  |
|--|---|
| • Elements integrated                                      | All elements acknowledged and considered in the decision-making process   |
| • Ethics applied consistently, interdependently with logic | All relevant ethical issues and considerations clearly identified, defined and addressed  |
| • Logic defined & validated                                | All logic issues clearly defined and tested against the drivers of the decision   |
| • Organisational learning applied                          | Available, relevant organizational history and learnings accessed, acknowledged and used as appropriate                                   |
| • Appropriate change approach                              | Selection of any change approach or tool(s) is based on identified context and parameters   |
| • Low moral crises   | Potential moral crises are identified early and addressed   |
| • Organisational politics                                  | Organizational political issues are identified, acknowledged and addressed  |
| • Consequences defined                                     | Anticipated outcomes and consequences of available alternative decisions are identified, understood and their acceptability is determined |
| < uncertainty<br>< equivocality                            |   |

### 3.2 Characteristics of the proposed model

The key observations from Chapter 2 were reviewed to identify what was required to address them. The result is a list of required characteristics of the proposed model:

1. *A model should incorporate the identified elements of ethics, logic, organisational learning and change management*
2. *A model needs to accommodate the use of diagnostics*
3. *A model needs to be able to comply with project management requirements*
4. *A model needs to include processes for acknowledging and defining context*
5. *A model for improving the quality of LDM in change initiatives should accommodate LDM within and between phases*
6. *A model should include processes for clearly and efficiently defining consequences of decision alternatives and drivers*

## Chapter 3.0 Model Development

7. *LDM in change initiatives should not be unnecessarily and unreasonably subject to artificial project deadlines and schedules*
8. *A mechanism to at least partially address equivocality and uncertainty may be the interdependence of logic and ethics as a driver of quality of leadership LDM*
9. *Prescriptive LDM theories may combine the rational and non -rational elements required to improve the quality of leadership decision-making*
10. *Organisations may require an ethical foundation to their LDM that is based on an understanding of the ethical consequences of relevant available alternative options as well as an understanding of the logical drivers of the decision*
11. *The most appropriate philosophical foundation for a process for improving the Quality of LDM may incorporate the deontological, teleological and virtue ethics views*
12. *Ethics may be a core element of improving the quality of leadership decision-making in change initiatives*
13. *Consideration of ethics in leadership can be LDM may be enhanced by self - reflection, therefore a model should include a self-reflection process.*

### 3.1.1 Developing Critical Design Criteria

At this stage, the expected outcomes and benefits and the required characteristics were analysed to identify a list of Critical Design Criteria (CDC) for a proposed model. Table 3-C presents the key observations, expected benefits, required characteristics and resultant CDCs. Table 3-C attempts to align these analysis factors where possible, and identifies relationships where appropriate. The aim of the Table is to demonstrate a logical progression from key observations from the Literature Review in Chapter 2 to a defensible set of design criteria for a proposed model.

## Chapter 3.0 Model Development

Table 3-C. Characteristics and Critical Design Criteria

| #  | Key observation   | Expected benefit  | Characteristic  | Critical Design Criteria   |
|----|---|---|---|--|
| 1  | Change models are not adequately addressing the factors contributing to change initiative failure rates,  | All elements acknowledged and considered in the decision-making process   | A model should incorporate the identified elements of ethics, logic, organizational learning and change management  | All elements incorporated  |
|    |   | Selection of any change approach or tool(s) is based on identified context and parameters                                     | A mechanism to at least partially address equivocality and uncertainty may be the interdependence of logic and ethics as a driver of quality of leadership decision-making  | Interdependence of elements  |
|    |   |   | A model needs to include processes for acknowledging and defining context   |  |
|    |   |   | A model needs to be able to comply with project management requirements   | Can accommodate project requirements as required, but identifies where these need to be flexible   |
|    |   |   | A model needs to accommodate the use of diagnostics   | Allows use of diagnostics  |
| 2  | Leadership is a significant factor contributing to change initiative failure rates.   |   |   |  |
| 3  | LDM is a critical element of the role of leadership as a significant contributor to change initiative failure rates   |   | Leadership decision-making in change initiatives should not be unnecessarily and unreasonably subject to artificial project deadlines and schedules   |  |
| 4  | Ethics is a critical element of LDM   | All relevant ethical issues and considerations clearly identified, defined and addressed                                      | Ethics may be a core element of improving the quality of leadership decision-making in change initiatives   | ethics should be a core element  |
| 5  | Human beings make decisions under conditions of equivocality and uncertainty  |   |   | Address equivocality and uncertainty   |
| 6  | Ethics provide the moral reasoning required to ensure that the rational and logical outcomes of an argument are used for the greatest good  | Potential moral crises are identified early and addressed   | Organizations may require an ethical foundation to their decision-making that is based on an understanding of the ethical consequences of relevant available alternative options as well as an understanding of the logical drivers of the decision | Logic should be a core element   |
|    |   |   | The most appropriate philosophical foundation for a process for improving the quality of leadership decision-making would incorporate the deontological, teleological and virtue ethics views   |  |
| 7  | Consideration of ethical issues in LDM may be enhanced by self-reflection   |   | Consideration of ethics in leadership decision-making can be enhanced by self-reflection, therefore a model should include a self-reflection process.   | Process or identified activity for self-reflection   |
| 8  | The consequential nature of LDM suggests that quality of decisions may be improved by making sure that all relevant considerations and consequences, including ethical ones, are identified and addressed | Anticipated outcomes and consequences of available alternatives are identified, understood and their acceptability determined | A model should include processes for clearly and efficiently defining consequences of decision alternatives and drivers   | Process for identifying and understanding consequences   |
| 9  | Understanding of the consequences of decisions may be increased by decreasing the levels of uncertainty and equivocality in the process   | All logic issues clearly defined and tested against the drivers of the decision   | A model for improving the quality of decision-making in change initiatives should accommodate decision-making within and between phases   | A prescriptive decision-making process   |
|    |   |   | Prescriptive decision-making theories may combine the rational and non-rational elements required to improve the quality of leadership decision-making  |  |
| 10 | Organisational learning is a critical factor in change management   | Available, relevant organizational history and learnings accessed, acknowledged and used as appropriate                       |   | Accessing and applying organizational learning needs to be an intentional activity                 |
| 11 | Leadership willingness, and organisational culture, influences the identification and application of organisational learning in change initiatives  | Organizational political issues identified, acknowledged and addressed  |   | Organizational politics needs to be identified as an input to the model, within the ethics element |

## Chapter 3.0 Model Development

The next step was to develop a conceptual model, using these CDCs.

### 3.1.2 Integrating the elements

#### 3.1.2.1 Ethics

The first step in the process is “integration”. The integrating element is ethics. There are ethical issues relevant to selection and application of OL and change management, and ethics plays a balancing role with logic. Consequently, ethics should be the first consideration in the LDM process, highlighted in Figure 3-A, below.

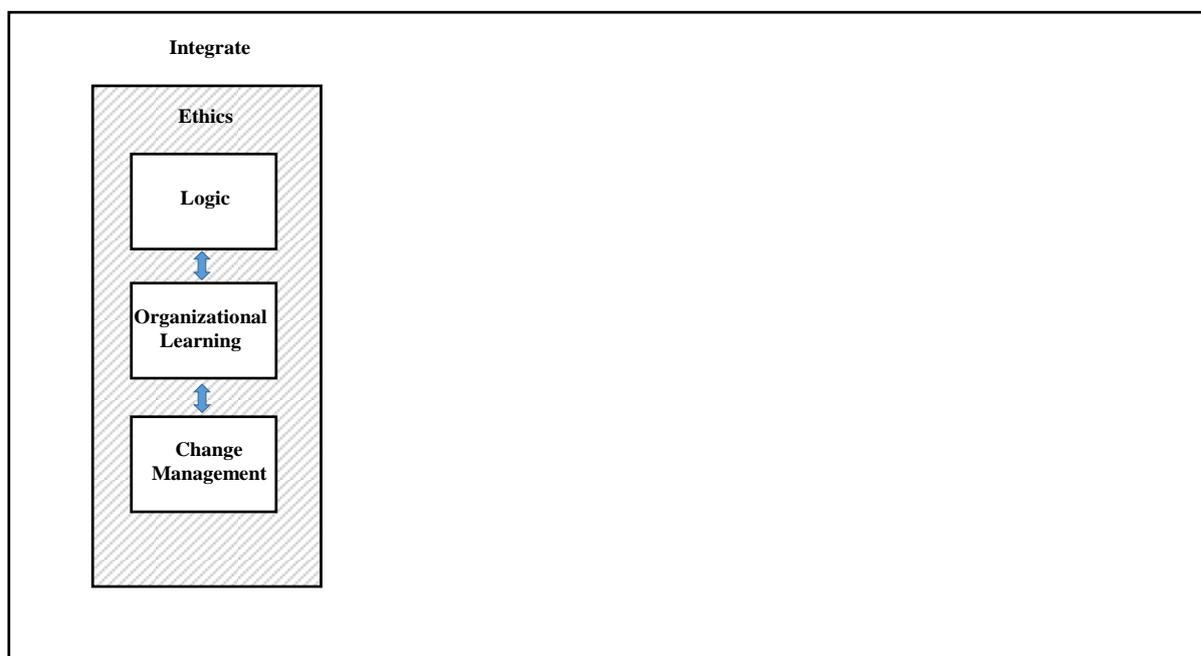


Figure 3-A. The Q.L.D. model - Ethics

This is the first opportunity for self-reflection in the model. As the decision-maker identifies and reviews the range of ethical considerations, they have an opportunity to reflect on, for example, potential moral crises this decision may create for them (Rosenthal 2009). The self-reflection might also include early consideration of potential political issues, and how these may be managed.

#### 3.1.2.2 Logic

In a change situation, logic comprises the original business driver or other rationale for an initiative. Logic may also contribute to the initial change context. For example, changing technology may make a particular product redundant. This may subsequently require an exit from a specific geographic market, resulting in a short-term profitability and cash flow issue. The logic for the change initiative comprises loss of product competitiveness and profitability which, in turn, creates the change context of strategic market redefinition. The relationship between ethics and logic may assist with validating the logic, highlighted in Figure 3-B,

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below. For example, the continuing investigations into the Queensland Health payroll system situation may have identified a bias on the part of the primary tender manager for a particular vendor (Madigan 2013d). In the absence of adequate ethical processes, such a bias may be difficult to identify.

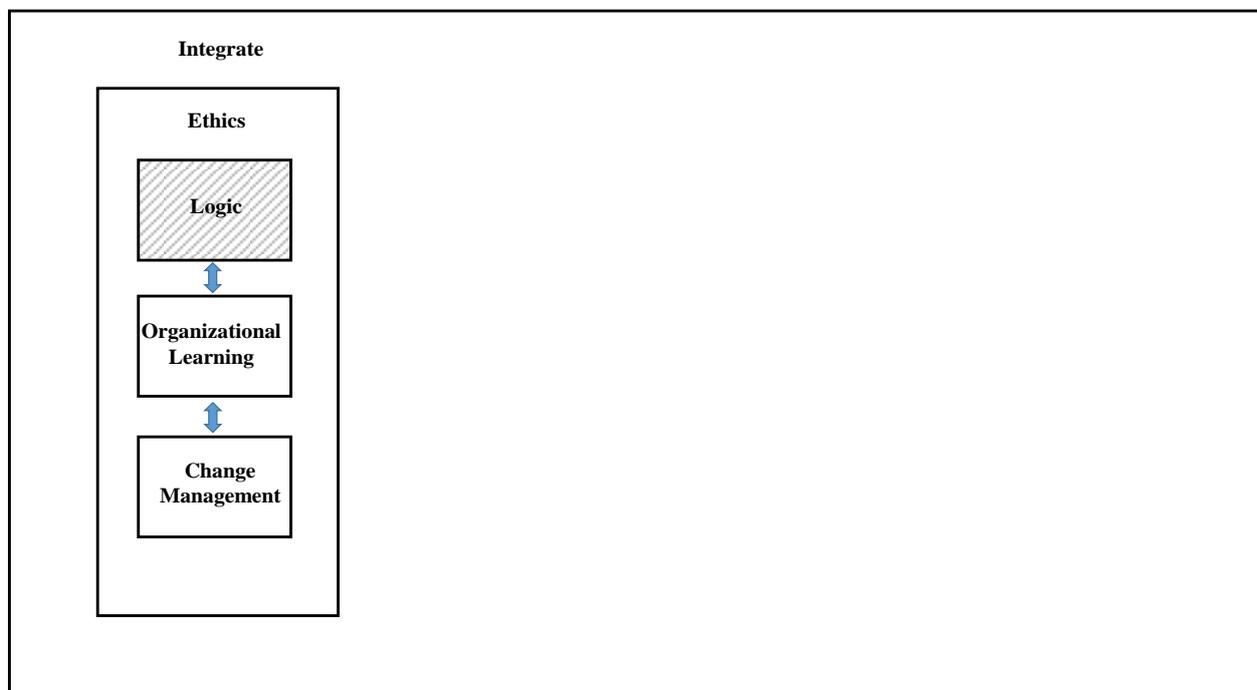


Figure 3-B. The Q.L.D. model - Logic

### 3.1.2.3 Organisational Learning (OL)

Organisational learning provides input to each of the other three elements in the form of specific lessons learned from previous relevant projects, as well as from general learnings throughout the organisation. Lessons learned from previous projects, and from other organisational activities, may help decrease levels of uncertainty and equivocality. Ethics may also assist decision-makers to identify and apply available OL. Project-related learnings may come from post-completion reviews or from lessons learned logs in project documentation. Where these don't exist, they can also be taken from project risk mitigation documents. Further, the learnings can be either positive or negative. Experience with what models, techniques and other items that worked well, or didn't work all provide valuable input to the LDM process. The purpose of isolating OL as a specific source of input is to address the contention that quality of LDM can be improved by how the relevant information is collected and analysed (Rausch & Anderson 2011). The Q.L.D. model specifies what information should be collected (lesson learned) and from where (post-completion reviews, lesson learned logs). Specifying these as decision inputs also contributes to how the information may be analysed. As an example, in one of the Case Studies for this research, a [documented lesson learned](#) was to use experienced implementation partners for future initiatives. This information could have been further analysed to identify specifically what

## Chapter 3.0 Model Development

issues arose with previous implementation partners, and to identify particular competencies or experience required for this project.

Figure 3-C, below, highlights the addition of OL to the process.

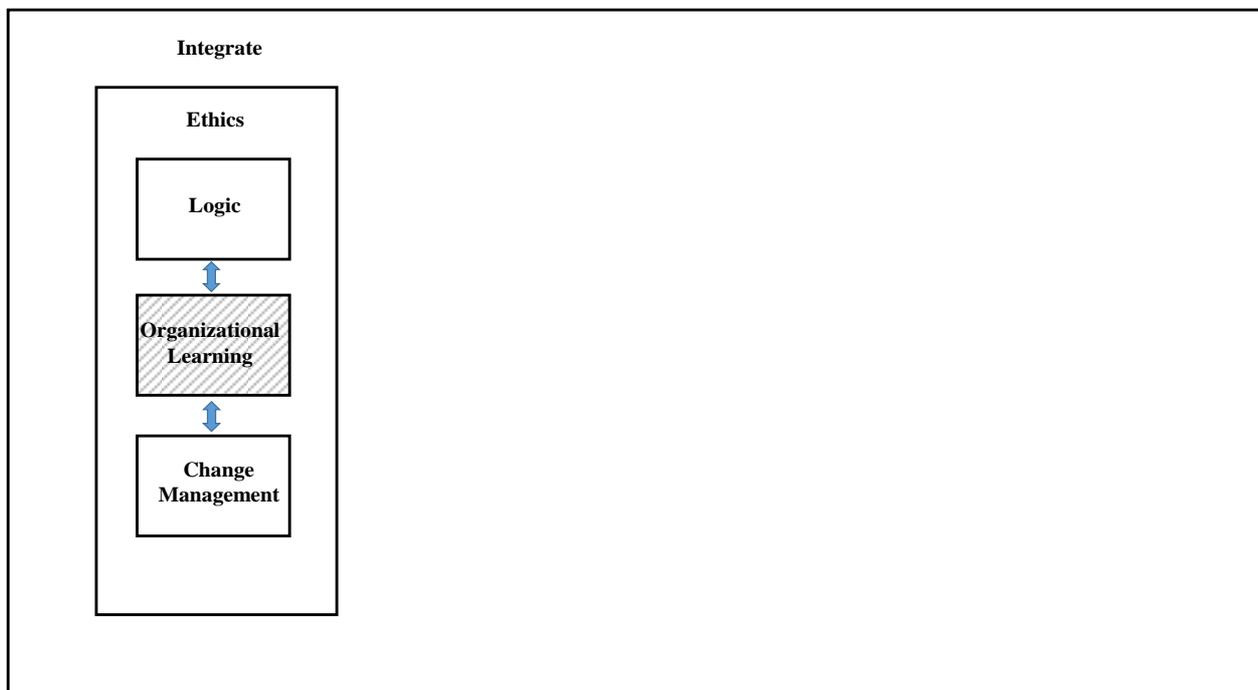


Figure 3-C. The Q.L.D. model – Organisational learning

### 3.1.2.4 Change Management

Change Management is the final element to be integrated. Change management may provide a range of valuable input, insight and context that contributes to the quality of a decision. Change Management can provide input in the form of current culture analysis, current status of employee readiness for change, areas of potential resistance, leadership or political barriers or issues, amongst others. More specifically, it can identify particular areas of impact and the degree of those impacts. The analysis of these inputs is likely to increase understanding of Consequence Specificity. Moreover, it may identify areas or issues requiring attention and the urgency of those issues. The Q.L.D. model again isolates change leadership as an input source, and, at a minimum, encourages the decision-maker to acknowledge it as part of the process.

The integration step in the Q.L.D. model addresses the call for increased ethics in change management (By et al. 2012). Change management can assist with the alignment of leaders with the logic driving the initiative, and may also assist leaders manage any potential moral crises they may face. Further, change management assists with identifying the context of the initiative. Figure 3-D highlights the addition of change management to the process.

## Chapter 3.0 Model Development



Figure 3-D. The Q.L.D. model - Change Management

The integration step coordinates and collates required inputs, and attempts to ensure that all available and necessary information is available and known to decision-makers. The next step is to use that information to identify and analyse alternatives, and to make a decision that is ethically aligned.

### 3.1.2.5 Consequence Specificity (CS)

Consequence Specificity (CS) is the process of decreasing uncertainty and equivocality by defining and understanding potential impacts and consequences of available alternatives. The CS step is the first activity in the “align” step of the process, highlighted in Figure 3-E.

## Chapter 3.0 Model Development

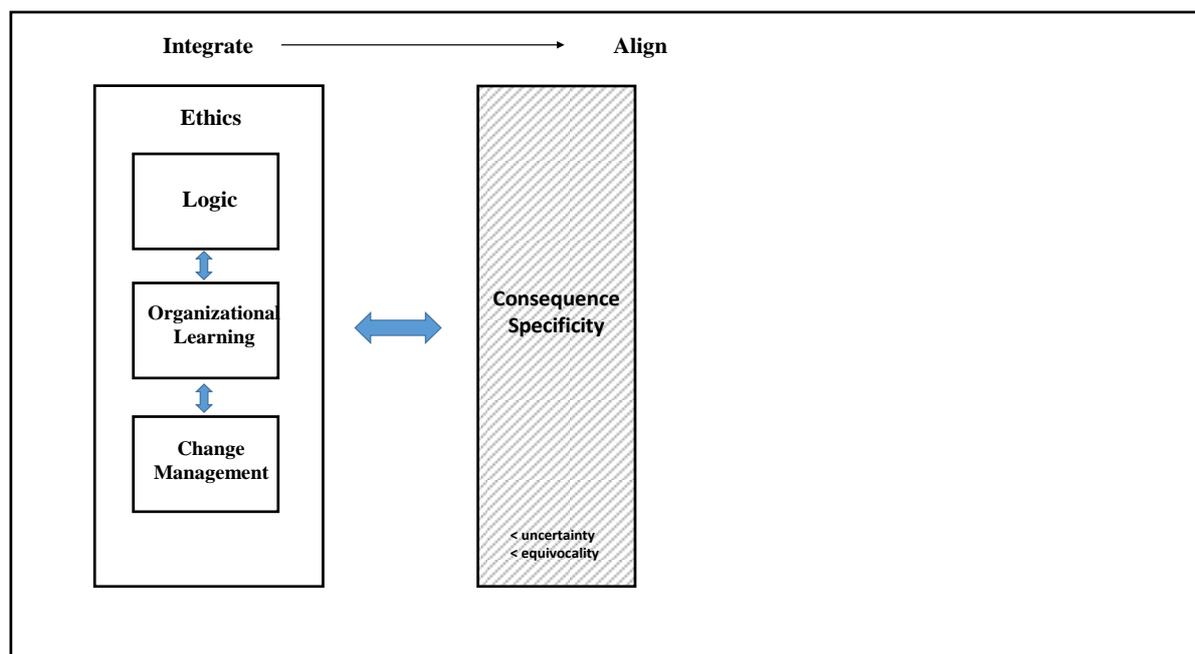


Figure 3-E. The Q.L.D. model - Consequence Specificity

Equivocality is defined as the potential for misinterpretation or multiple interpretations of issues, factors and other elements, while uncertainty is caused by lack of relevant information (Sonenshein 2007). The potential for different interpretations of an issue regarding a decision is likely to decrease the level of understanding of the possible consequences of that decision. Similarly, the degree of understanding of potential consequences of a decision is likely to increase with the level of accurate and relevant information. Research suggests that predicting and understanding potential consequences of a decision can help improve the ethicality of that decision (Thiel et al. 2012). Consequently, this thesis suggests that equivocality and uncertainty contribute to increased understanding of consequences of a decision, and, thereby, to the ethicality of that decision. Thiele et al (2012) further propose that sense-making is a central element of ethical decision making, and suggest four tactics to improve the effectiveness of sense-making. These strategies are emotion regulation, self-reflection, forecasting and information integration, and each, to some degree, decreases the conditions of equivocality and uncertainty. Forecasting helps leaders more accurately predict potential decision outcomes (Thiel et al. 2012). It also contributes to the identification of the criticality of consequences, which was shown to predict decision ethicality (Stenmark et al. 2010) Information integration, and how it is achieved, impacts the alternatives considered by a decision maker (Caughton et al. 2011). Impacts are the major areas or groups affected by a decision. These impact group areas could include the social, political, people, personal, environmental and work environments. Consequences are the specific outcomes for each impact area. For example, a decision to outsource a call centre overseas might have social impacts in that it affects local employment. The consequences of this might include an increase in unemployment rates for that geographical area, an increase in mortgage defaults and a decrease in property values. Emotion regulation and self-reflection are leadership characteristics that may have a relationship with the ability and willingness to consider ethical issues. Once the consequences of available alternatives are understood the next step is

## Chapter 3.0 Model Development

to decide if these are ethically acceptable, which presents another opportunity for self-reflection.

### 3.1.2.6 Ethical Alignment (EA)

The Ethical Alignment (EA) activity allows the decision maker to decide if the consequences are ethically acceptable to them, and to the organisation. Assessing EA is the second activity in the “align” step of the Q.L.D. model, highlighted in Figure 3-F, below.

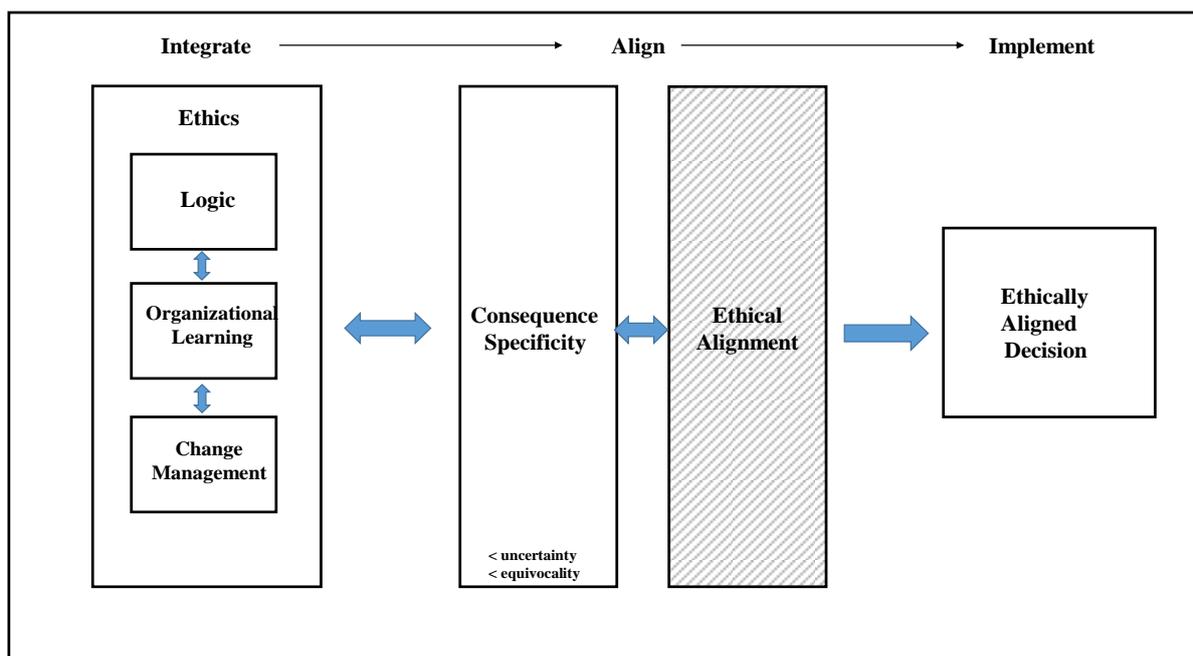


Figure 3-F. The Q.L.D. model – Ethical Alignment

EA is the operationalizing of the concept of a LDM moral compass (Paine 2006). This concept proposes that LDM must pass an ethical as well as an economic analysis, and leaders must develop this analytical skill, placing their decisions in a *zone of acceptability* between ethics and other considerations. This is consistent with the concept of a moral crisis where truth and good are not aligned (Rosenthal 2009). The EA process assists with avoiding or diminishing any potential moral crisis. An example of how this may be operationalized is the use of a mental or physical checklist. Each identifiable consequence can be classified as 1) Predictable, 2) Highly Likely or 3) Unknown. Following this classification, the decision maker identifies the level of acceptability of each consequence, both personally and organisationally. Consideration of the level of acceptability would again involve self-reflection. In the case of operational change projects, it may be preferable to have the process recorded as part of the project management documentation. The outcome of the “align” step in the Q.L.D. model is an ethically aligned decision that may be implemented.

The Q.L.D. model is completed by feeding the decision, and lessons learned in the process, back into the “integration” process, as shown in Figure 3-G.

## Chapter 3.0 Model Development

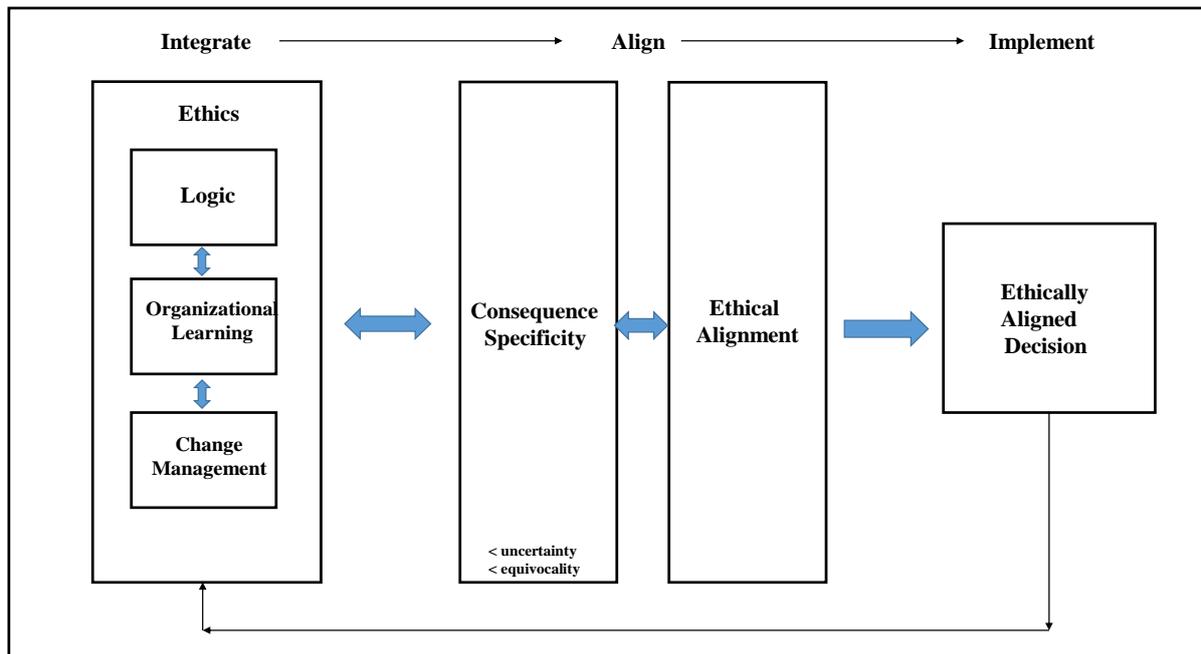


Figure 3-G. The Q.L.D. model for improving the quality of leadership decision-making in change initiatives

The Q.L.D. model is designed for use in change initiatives, but this thesis contends that it is equally applicable to LDM in general.

### 3.2 Summary

The purpose of this Chapter was to describe the development of a proposed model for improving the quality of LDM, the Q.L.D. model. A list of Critical Design Criteria (CDC) for a LDM model was created using the Literature Review and the researcher's experience, and a conceptual process presented. The elements and processes of the Q.L.D. model were discussed in detail, including Consequence Specificity (CS), Ethical Alignment (EA), uncertainty and equivocality. The remaining Chapters of this thesis describe the research of two case studies, including a discussion of how the Q.L.D. model may have affected the outcomes. The next Chapter outlines the selected Research Methodology.

## **4.0      METHODOLOGY**

## Chapter 4.0 Methodology

This research has two purposes. The first is to explore the role of ethics in LDM in change initiatives in Queensland Government Owned Corporations. The second purpose is to use the research findings to develop a model for improving the quality of LDM in change initiatives. Chapter 2, Literature Review, addressed the first purpose, and defined the Research Problem Question and Propositions. Chapter 3, Model Development, addressed the second purpose. This Chapter describes the Research Methodology selected to address the Research Purposes, Problem, Question and Propositions. Two Analysis Goals are defined, which assist with design of the Research Methodology:

- a. Investigate whether the data supported the Research Propositions.
- b. Establish whether the data provided support for, and thereby confirmed, the [elements of the Q.L.D. model](#).

The Chapter is in three sections. Section 1 discusses the philosophical and theoretical foundations for the selected Research Approach, and includes a description of the standards of rigor required for qualitative research. Section 2 describes the Research Approach, including how the quality criteria for research design were addressed. Section 3 describes the specific Research Process in task-level detail. This thesis was a multi-method, qualitative study, using multiple case studies (Saunders et al. 2009). The research methodology adopted a Pragmatist philosophy, applying a Radical Humanist paradigm, and combined inductive and deductive approaches. The Research Process used Yin's (2011) Five Phase Data Analysis process, supported by template analysis (King 2004) and the Universal Semantic Relationship Model (Spradley 1979). NVivo qualitative analysis software was used for data coding, filing, management and analysis.

### 4.1 Section 1 - Research Methodology

This section firstly outlines the methodological and philosophical base for the research, then defines the Research Paradigm and assumptions.

#### 4.1.1 Standards of rigor

There are a number of approaches and standards for enhancing the rigor of qualitative research (Ryan 2005). Firstly, appropriate tools must be selected to meet the research objectives. Second, the research must be transparent and explicit. Third, there should be evidence of familiarity with a wide range of methodologies and techniques. Fourth, matching of reviewers' experience with the research approach selected. Fifth, there should be increased research on the effectiveness of different approaches to theme identification under various situations. This research attempts to address the first three of these standards. The fourth and fifth were outside of the researcher's control. The following sections describe how these standards were applied in this research.

#### 4.1.2 Research Philosophy

Discussion and questions of method should be driven by the research paradigm (Guba & Lincoln 1994). The paradigm is the basic belief system guiding the research, and is based on the adopted research philosophy. Research philosophies include Positivism, Realism, Interpretivism and Pragmatism (Cavana et al. 2001; Guba & Lincoln 1994; Healy & Perry 2000; Perry 1998b; Saunders et al. 2009). Positivism focuses on observable facts which

## Chapter 4.0 Methodology

deliver quantifiable data. Realism also adopts a scientific approach, and contends that objects are independent of our mind. Our senses show us what is real. Realism is similar to Positivism in that it also attempts to derive definitive rules and laws or generalizations. Realism, however, has two forms. Direct Realism contends that what our senses tell us is true. Critical Realism argues that knowledge is a result of social conditioning and we must understand the actors' motivations and interpretations to accurately understand reality (Dobson 2002). Interpretivism contends that understanding the meanings that motivate us is necessary to understand our actions. Pragmatism suggests that a mix of methods and approaches is most applicable, particularly when the research question does not clearly dictate a specific philosophy (Saunders et al. 2009). The Research Question of this thesis could potentially suggest a Critical Realist philosophy as it may have been necessary to understand a leader's motivation regarding consideration of ethical issues in LDM. Equally, an interpretive philosophy may also have been appropriate as an understanding of the meanings a leader may attribute to their motivations may have assisted with analysis of the role of ethics in their LDM process. Consequently, the perceived appropriateness of a number of methods resulted in the adoption of a Pragmatist philosophy.

### 4.1.3 Research Paradigm

Developing a paradigm requires the researcher to articulate their view of the world in context of the research. One way of achieving this is through developing assumptions about the research (Saunders et al. 2009). Assumptions, in the context of research, are about our view of the world. Assumptions are an indication of how we see reality, our ontology. Ontology has two classifications of objectivism and subjectivism (Saunders et al. 2009). Objectivism views reality as separate from the actors in it, and that the actors are directed by the structure, laws and procedures of the reality. Subjectivism argues that social phenomena result from peoples' perceptions which drive actions. Subjectivism is more concerned with how people, actors, interpret and assign meaning which motivate their actions. Subjectivism also suggests that social constructs are fluid, and are constantly reshaping based on interaction of actors. An example can be found in leaders' attitudes to organisational politics. One study showed that respondent managers viewed politics as a necessary evil, but had few concerns about using politics to their benefit (Buchanan 2008). A common perception was that practicing politics became more expected and institutionalized as one progressed higher in their organisations. This subjectivist example highlights the role of ontology (politics was a necessary evil) in developing assumptions (practicing politics was expected).

### 4.1.4 Assumptions

The assumptions of the research paradigm of this thesis were:

- a. The quality of LDM in organisations needs to be improved
- b. The decisions made in the early stages of an operational project, in the Set-Up and Initiation phases, have on-going implications throughout the remainder of the initiative
- c. Leaders have a number of responsibilities, including to the people they lead, all of which have equal weighting
- d. Leaders are influenced by, and pressured to conform to, the culture of their organisations, which may emphasize one responsibility over others
- e. Organisations have responsibilities beyond provision of services and products, which are equal in importance to profits and service provision.

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The first of these assumptions, that *the quality of LDM in organisations needs to be improved* (pp.49), helped define the research paradigm. Four research paradigms are defined as a) Radical Humanist; b) Interpretive; c) Functionalist and d) Radical Structuralist (Burrell & Morgan 1982). Each of these has a specific focus and perspective. The Radical Humanist paradigm takes a subjectivist, critical view of organisations, concerned with significantly changing the status quo. The research assumption above suggests that the status quo of LDM in organisations needs to change. Consequently, this thesis adopted a Radical Humanist paradigm.

In summary, this thesis took a Pragmatic philosophy to the research, adopting a subjective, Radical Humanist paradigm. The following section describes the specific approach and design details for this research.

### 4.2 Section 2 - Research Approach

This research adopted a qualitative, multiple case study approach combining both deductive and inductive processes. There are two research approaches, deductive and inductive (Saunders et al. 2009). Deduction applies a structured methodology to develop a hypothesis or testable proposition, define controls and test the hypothesis. A deductive approach uses existing theory to help define the research approach, while an inductive approach develops theory through qualitative data gathering and analysis (Saunders et al. 2009). Induction creates research questions requiring descriptive answers (Perry 1998a). The aim of this thesis was to use existing theory to explore relationships between factors affecting LDM, and how they might be related to change initiative failure rates. Some elements of both inductive and deductive approaches are applicable if the research intends to develop a theoretical framework and test it through analysis (Saunders et al. 2009). This thesis developed a proposed conceptual model for improving the quality of LDM based on a Literature Review which identified an initial set of elements and their interdependency. Consequently, this thesis combined elements of both a deductive and inductive research approach.

The research approach was based primarily on Yin (2003, 2009, 2011). Alternative approaches were considered, including Mayring's (2000) Step Model of deductive category application. The alternative approaches were reviewed and were considered sound and appropriate for this research. Yin (2011), however, provided relevant and consistent guidance and approaches to qualitative analysis in general, as well as specific research on case study as a qualitative analysis method. His processes and approaches provided consistency, specificity and completeness. Further, he provided a detailed data analysis process (Yin 2011). Moreover, Yin's approaches allowed selection of specific, appropriate tools and processes where necessary. Consequently, this research approach supplemented Yin's processes with template analysis (King 2004) to develop coding structures and the Universal Semantic Relationship Model (Spradley 1979) to define relationship types. NVivo qualitative analysis software was used to file, code, manage and analyse data.

#### 4.2.1 Research variables

The dependent variable of this research was the quality of LDM. The independent variables were logic, ethics, equivocality and uncertainty. The mediating variables were organisational learning and change management.

#### 4.2.2 Research Design

Research, particularly the data collection and analysis components, should be able to be replicated by another "reasonably knowledgeable colleague" (Perry 1998b). This research

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was supported by a detailed work plan for data collection and analysis, which would assist another researcher to replicate the process of this thesis. Further, this research adopted the core elements of case study research design (Yin 2009). These elements, described in the following sub-sections, include the unit of analysis, the criteria of quality (internal validity, external validity, construct validity and reliability), and numbers of cases selected. This research used a combination of manual and computer-based analysis. The NVivo qualitative analysis software package was used.

### 4.2.2.1 Unit of analysis

The unit of analysis defines what the case is studying (Yin 2009), and can be an individual, small group or organisation. The population for the research was GOCs in Queensland, of which there are twelve (12). A GOC is a legal entity, created under Queensland Government (Australia) legislation, to operate as a corporation to provide services to the community on a commercial basis, while remaining under public ownership (*Government Owned Corporations Act 1993*). A list of GOCs is presented in [Appendix 6](#). The sample for the research, two GOCs, was selected on a non-probability, purposive, typical sampling basis (Patton 2003; Saunders et al. 2009). Yin (2009) also states that they can be events within organisations. The unit of analysis of this research was operational change initiatives in Queensland Government Owned Corporations (GOCs). Specifically, the unit of analysis was the Project Set-Up and Initiation Phases of operational change initiatives, using either the PMBOK or Prince2 project management methodologies, in Queensland GOCs. More specifically, the research is concerned with the leadership decision making processes up to and including the “Initiation” stage of a project, which involves the activities up to formal approval to start a new initiative. Project initiation includes financial and budget approval, resource allocation approval and Sponsor appointment. Operational change initiatives include changes to processes, work flows, systems, job roles, accountabilities and work structures. The target population comprised all project team members involved in activities up to and including project initiation.

This research comprised case studies of two Queensland GOCs. Because of the large number of operational change initiatives underway at any one time in the twelve (12) Queensland GOCs, additional criteria were needed to define the sample and unit of analysis for the research. The criteria used were:

- a. Decision-making for the project should be entirely within the organization, e.g. no external agency decision-making involvement or influence, e.g. the need for approval of project outcomes by the ACCC or the need to comply with Federal Government mandates on the specific project
- b. Must include an implementation phase, e.g. not a strategy project that may create numerous, subsequent operational projects
- c. Must be an organization-wide initiative; not restricted to one function or department

These criteria eliminated many of the large number of potential case studies, and also refined the potential sample size. A number of the GOCs were conducting projects that were primarily in response to Federal or State Government directives, and decision-making was therefore focussed on compliance. Two of the known operational change initiatives that would have satisfied the criteria were under review as a result of the highly visible media inquiry into the failed Queensland Health payroll systems implementation project. This inquiry caused Queensland State Government Departments and Agencies to be extremely

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sensitive to the integrity of all change initiatives. Consequently, two GOCs were identified as satisfying all criteria.

There were a number of characteristics common to both selected organizations:

- a. each GOC had recently completed an operational change initiative, involving systems and processes which impacted all work groups
- b. each provided critical public services, water and electricity
- c. each involved software vendors and external consultants
- d. each faced software version and compatibility issues
- e. each had significant software functionality challenges, which drove a major part of the Business Case
- f. each had similar project governance structures (Executive Team, Project Steering Committee, external Project Director)
- g. each had some a degree of external political pressure applied
- h. each resulted in cost and/or scope increases
- i. each resulted in senior leadership turnover

The results, findings and discussions are pertinent to the two Case Study organisations only. The two organizations were selected on a non-probability, purposeful and typical basis. It is likely that the two cases are representative of Queensland GOCs generally, as all GOCs in Queensland are constituted by common Acts (*Government Owned Corporations Act 1993*; *Public Sector Ethics Act 1994*; *Corporate Governance Guidelines for Government Owned Corporations 2009*), which define accountabilities and other requirements. Moreover, although it is also very likely that the findings of this research may be generalizable to all GOCs, further research is required.

### 4.2.3 Quality

Four criteria for the quality of case studies have been suggested (Yin 2009). These criteria are Construct validity, Internal validity, External validity and Reliability.

#### 4.2.3.1 Construct validity

Construct validity tests that the measurements used in the study actually address the theory being tested (Cavana et al. 2001). A common method of increasing construct validity is using multiple data sources (Yin 2009). This research used data from preliminary and semi-structured interviews, project management documentation and other organization documents, including relevant emails, presentations and reports. Preliminary interviews are an appropriate way of identifying and confirming question groups for inclusion in subsequent semi-structured interviews and for secondary data collection (Saunders et al. 2009).

Triangulation of these multiple sources was achieved by a combination of manual and electronic analysis. Firstly, commonality of themes and patterns between the sources was identified using Word Frequency Analysis and Text Search Queries in NVivo. Secondly, specific linkages between interviews and documents were identified using Decision Point Analysis and Relationship Type Analysis. For example, the lessons learned items from the available lessons learned report in Case Study A were linked to specific comments and observations from relevant interviews. The process used template analysis concepts and process to define coding structures which were used in the above exercises (King 2004).

One consideration of construct validity in qualitative analysis is the number of interviews, however here is limited agreement between qualitative researchers about acceptable

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minimum numbers of interviews (Baker & Edwards 2012). The range of opinions varies from specific numbers to the concept of “saturation”, which is the point at which additional interviews would not add any further value or information. The number of potential interviewees for this research was limited by the defined scope, therefore the Research Approach was designed to accommodate this limitation while retaining construct validity. The defined scope of this research was the Set-Up and Initiation phases of operational change projects in Queensland GOCs. In each of the case studies, the number of participants involved in these phases was limited, nine (9) in Case Study A and seven (7) in Case Study B. In each of the Case Studies, two of the original team members had left the organisation and were unavailable for interviews. Of the relevant seven (7) remaining members in Case Study A, five (5) were interviewed. The two who were not interviewed had no exposure or involvement in any of the decision-making processes, therefore were excluded as interviewees. Of the relevant five (5) remaining members in Case Study B, all were interviewed. Consequently, saturation was achieved as the deciding factor in interview numbers.

The Research Approach compensated for the limited interviewee numbers by expanding the focus on secondary data. For Case Study A, a total of forty (40) documents was collected [Appendix 14](#), comprising:

- a. 22 emails
- b. 7 Word documents (4 as attachments to emails)
- c. 6 Power Point presentations
- d. 1 spreadsheet (as attachment to email)
- e. 9 meetings/conference calls

Subsequent filtering for duplication and coding resulted in a total of thirty-six (36) documents used in analysis for Case Study A [Appendix 17](#). The total number of pages of documentation collected and analysed for Case Study A was approximately 300.

The organization in Case Study B discouraged excessive use of emails. Consequently, there were no identifiable or accessible emails relevant to the project of the Case Study. There was a total of sixteen (16) documents collected for Case Study B [Appendix 14](#) comprising:

- a. 9 spreadsheets
- b. 7 Word documents

The total number of pages of documentation collected and analysed for Case Study B was approximately 200.

This expanded focus firstly identified themes and patterns from emails and other communications, and then linked those with the subsequent issues identified from detailed document analyses. The triangulation process confirmed the thematic themes from the interviews and thereby supported the validity of the Research Approach.

### 4.2.3.2 Internal validity

Internal validity is primarily concerned with the rigor with which the research was conducted. It includes the design and measurement strategy. This research was conducted using a detailed, task based work plan, which identified all tasks, their interdependencies, their start and end dates and their outcomes. This work plan was based on Yin's (2011) Five Phase

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Analysis process. Further, the first step in the analysis process was to confirm if the elements of the initial model were supported. The process was a combination of initial manual processing, followed by detailed analysis in NVivo. All analysis was done by the researcher. A colleague was used to review coding structures. The results of both processes were compared to identify commonality and confirm the support of the elements. This support allowed the elements to be used as the initial parent nodes for classification in NVivo. Further, where appropriate, relevant alternate theories or explanations were proposed and described (see Chapter 5).

### **4.2.3.3 External validity**

External validity focuses on the generalizability of the study findings to a larger environment (Yin 2009). This research is expected to be generalizable to the Start-Up and Initiation phases of operational change initiatives in GOCs and Queensland Government Departments using either PMBOK or Prince2 project management methodologies. Each of these approaches includes a formal Project Initiation phase, requiring specific decisions to be made before proceeding with approval. Moreover, based on the research cited in this thesis that LDM is a core leadership activity, there may also be a degree of applicability to other organisations using the same, or similar, methodologies. Further, the Q.L.D. model ([See Section 3.1.3.6](#)) may be generalizable to all LDM situations. Notwithstanding these expectations, further research is required to confirm the applicability and generalizability of the Q.L.D. model to other organisations and situations than those described in this thesis.

### **4.2.3.4 Reliability**

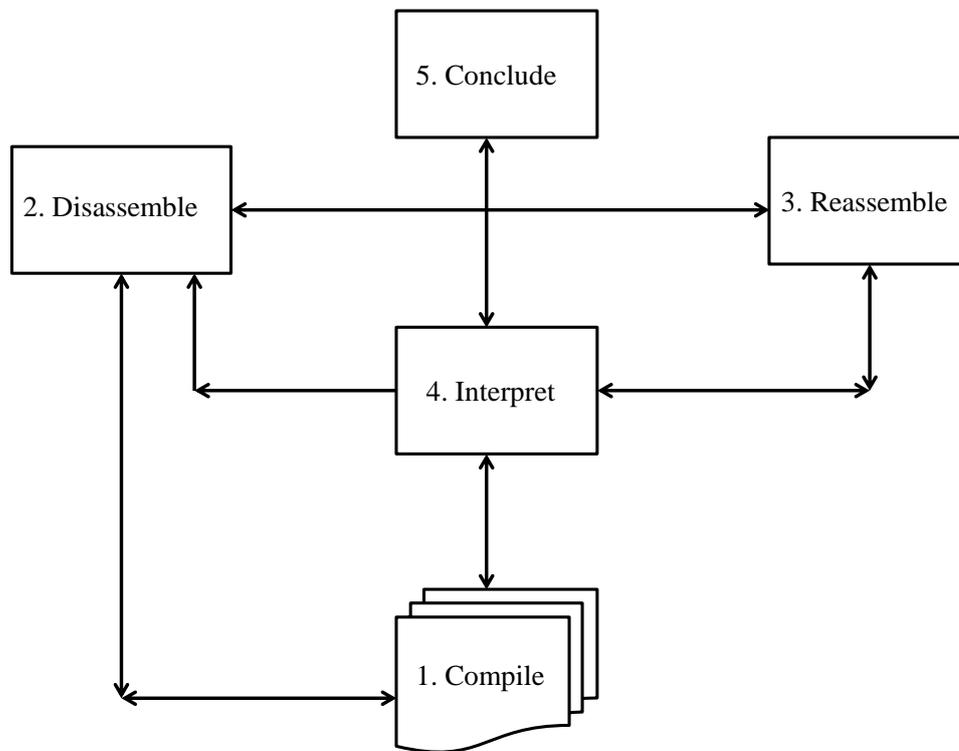
Reliability is the ability of the study to deliver the same findings, given the same methodology and unit of analysis, consistently (Yin 2009). One factor contributing to the reliability of this research was the application of Yin's (2011) Five Phase Data Analysis approach to qualitative content analysis. This process was used to develop coding and category definitions and criteria which were then used as parameters in the NVivo qualitative analysis software package. These parameters could be used by subsequent researchers, and would contribute to reliability. A second factor was the development of a detailed, task-level work plan showing the chronology, tasks, tools, inputs and expected outcomes of each task. The reliability of this research was increased by applying this work plan to the defined unit of analysis, Start-Up and Initiation Phases of operational change initiatives using PMBOK or Prince2 methodologies in Queensland Government Owned Corporations.

## **4.3 Section 3 - Research Process**

The Research Process was based on Yin's (2011) Five Phase Data Analysis process, with an additional Administration & Preparation phase. This approach is a highly iterative process, shown in Figure 4-A.

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Figure 4-A. Yin's Five Phase Data Analysis process (adapted)



Source: Adapted from Yin (2011)

This approach comprises:

1. Administration & Preparation
2. Compile database
  - a. Sorting and ordering collected data
3. Disassemble data
  - a. Grouping and classifying database into smaller data sets
4. Reassemble data
  - a. Rearranging data groups using a detailed coding structure
5. Interpret data
  - a. Developing and presenting the narrative from the data
6. Conclusions (Chapter 5, Discussion, Conclusions and Implications)
  - a. Developing and presenting conclusions

An important characteristic of this approach is its highly iterative process, with the “Interpret” task at the centre. In qualitative analysis, early analysis and interpretation is critical, and this should result in continuous disassembling and reassembling (Yin 2011).

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Yin's fifth phase, Conclusions, is incorporated into Chapter 5 of this thesis. A detailed task-based work plan for these Phases is attached as [Appendix 7](#).

### 4.3.1 Template analysis

Template analysis is a process for thematically coding qualitative textual data (King 2004). The template is a tool for presenting and managing relevant identified themes in the data. Grouping of meaningful themes is achieved through the development of a hierarchical coding structure. A characteristic of template analysis is that a priori codes can be used in conjunction with emerging, discovered codes. Template analysis was appropriate for this research as the elements identified in the Literature Review provided a form of a priori coding.

### 4.3.2 Spradley's Universal Semantic Relationship Model (1979)

In his ethnographic work, Spradley (1979) defined nine types of semantic relationships between data. Figure 4-B, below, lists these relationship types. For this research, only five of the nine were appropriate; *Cause-Effect*; *Rationale*; *Means-End*; *Sequence and Attribute*.

| Relationship Type | Description                           | Representative Terms  |
|-------------------|---------------------------------------|-----------------------|
| Strict Inclusion  | x is a kind of y                      | is                    |
| Spatial           | x is a place in y, x is a part of y   | in, within, part of   |
| Cause-Effect      | x is a result of y; x is a cause of y | because, so           |
| Rationale         | x is a reason for doing y             | therefore, because of |
| Location          | x is a place for doing y              | where                 |
| Function          | x is used for y                       | does                  |
| Means-End         | x is a way to do y                    | do                    |
| Sequence          | x is a step/stage in y                | next                  |
| Attribution       | x is an attribute/characteristic of y | type, kind of         |

Figure 4-B. Spradley's Universal Semantic Relationship Model

### 4.3.3 NVivo

NVivo is a qualitative analysis software package, supported by The University of Southern Queensland. The software allows entry of research data from interviews, documents, video and other software applications. Data can be filed in "nodes", by specified characteristics such as topic, participant and location. Data within nodes can be coded and cross-referenced. Hierarchical node structures can be developed based on a "parent" and "child" relationship concept. Template analysis process was used to develop this hierarchical structure (King 2004). The node structure for this thesis is attached as [Appendix 8](#). The software also allows relationship types to be defined, and used in analysis. In this research, Spradley's Universal Semantic Relationship (1979) model was adapted to define relationships (see Figure 10). NVivo uses analysis functions including text search, word frequency analysis, cluster analysis, data trees and relationship analysis, amongst others, to run pattern matching, relationship, theme identification, contextual analysis and other required approaches.

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### 4.3.4 Administration & Preparation

- a. Obtain Ethics Approval from The University of Southern Queensland:
  - i. Ethics Approval was confirmed on 5 July, 2012, Approval Number H12REA105 (Appendix 2)
- b. Obtain approval from each of the Case Studies, including completing any required Confidentiality or Non-Disclosure Statements:
  - i. Confidentiality Agreement was signed with Case Study B on 3 July, 2010 ([Appendix 9](#))
- c. Obtain Informed Consent approvals and signatures from participants:
  - i. Informed Consent approvals attached as [Appendix 10](#)
- d. Schedule interviews
- e. Prepare NVivo
  - i. Define initial nodes:
    - i. Preliminary interviews
    - ii. Semi-structured interviews
    - iii. Documents
    - iv. Case Study A
    - v. Case Study B

### 4.3.5 Yin's Five Phase Data Analysis process – Phase 1 - Compile Database

Compiling the database involved defining the sample, describing the cases, identifying data sources and collection processes, and collecting, storing and classifying the data.

The sampling for this thesis was on a non-probability, purposive, typical sampling basis (Saunders et al. 2009). The sample for the research was two GOCs, based on their recent implementation of similar operational change initiatives using PMBOK or Prince2 project management methodologies.

#### 4.3.5.1 Primary Data

Primary Data was collected from both organisations through:

- a. Preliminary interviews to assist with development of a structured interview protocol
- b. Semi-structured interviews

As part of a multi-method research approach, preliminary interviews are an appropriate way of identifying and confirming question groups for inclusion in subsequent semi-structured interviews and for secondary data collection (Saunders et al. 2009). This approach was selected because:

- a. The general areas of issues and topics were already defined by the Literature Review
- b. The controversial nature of the project in Case Study A may have created negative perceptions with the employees of the organisation. The concern was that these perceptions may have resulted in some bias. Consequently, the preliminary interviews were used to clearly define specific issues and identify potential areas of bias
- c. The limited number of relevant and available interviewees indicated an approach that would optimize the input of these participants as one part of a triangulation strategy

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Five (5) individuals from each organisation were identified as interviewees based on their known role(s) in the case study projects. One participant from each case, the nominated Business Owner, was selected to participate in a Preliminary Interview. The Business Owner is defined as the executive accountable for the implementation of the project. The remaining four (4) participants in each case participated in semi-structured interviews. There were a range of factors affecting numbers of interview participants. Primarily, and most critically, the scope of the research was the Set-up and Initiation stages of the projects. These stages, by definition, involved only a small number of team members. In Case Study A, the total number of people involved in these two phases was nine (9). In Case Study B, the number involved was seven (7). The situation in Case Study B was that the original Project Sponsor had left, as had the original Business Owner. Neither was available for interviews. One remaining person had been involved from the start of the process, and an additional four had been subsequently involved in various roles during Initiation. A second factor influencing the small number of participants was that both organisations had undergone significant restructures, resulting in the loss of key project members. A list of these interviewees is attached as [Appendix 11](#). The following sub-section describes the specific tasks involved in collecting Primary Data.

- a. Conduct preliminary interviews:
  - i. Preliminary interview protocol attached as [Appendix 12](#)
  - ii. Participants were given the Protocol in advance
  - iii. All interviews were recorded with participants' consent
  - iv. In Case Study A, participants from Rockhampton and Townsville were interviewed by conference call, using available Cisco MeetingPlace
  - v. Transcribe interviews and enter into appropriate NVivo node
  - vi. Develop semi-structured interview protocol
- b. Conduct semi-structured interviews:
  - i. Semi-structured Interview protocol attached as [Appendix 13](#)
  - ii. Participants were given the Protocol in advance
  - iii. All interviews were recorded with participants' consent
  - iv. In Case Study A, participants from Rockhampton and Townsville were interviewed by conference call, using available Cisco MeetingPlace
  - v. Transcribe interviews and enter into appropriate NVivo node

### 4.3.5.2 Secondary Data

[Section 4.6.2.1](#) described the significance of secondary data in this thesis. Secondary data collected from both organisations comprised:

- a. document reviews, using:
  - i. project papers, presentations and submissions
  - ii. emails and conference call notes, where available
  - iii. other relevant organization documents, e.g. lessons learned report

The complete list of documents collected is attached as [Appendix 14](#). The following sub-section describes the specific tasks for collecting Secondary Data.

### 4.3.6 Yin's Five Phase Data Analysis process – Phase 2 - Disassemble Data

Disassembling data is the process of grouping data into smaller data sets or files. This Phase involves classifying and coding the collected data for ease of access, manipulation and tracking.

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### 4.3.6.1 Open coding

This Phase comprised a combination of manual and computer-assisted techniques to initially classify and code primary and secondary data. Initial open coding of the preliminary interviews was conducted manually. Next, the preliminary interviews were transcribed and entered into NVivo. In the Administration & Preparation Phase, initial “parent” nodes had been created in NVivo under the general headings of 1) preliminary interviews, 2) secondary interviews, 3) Case Studies and 4) Documents. The NVivo node structure is attached as [Appendix 8](#). The open coding created from the manual review of the preliminary interviews was used to develop an initial coding structure under the parent nodes. It was expected that this structure would be temporary, and would evolve during analysis.

Next, all collected documents were entered into NVivo, and classified according to the initial coding structure. At this point, a colleague reviewed the coding independently to check the grouping and classification logic. There were questions about the naming of some of the “child” nodes. However, as these were based on initial open coding, they were not changed. Master lists of interviews and documents were created as Reports within NVivo.

### 4.3.7 Yin’s Five Phase Data Analysis process – Phase 3 - Reassemble Data

Reassembling is the process of classifying and analysing data. In the interests of clarity of reporting, Phases 3 and 4 of Yin’s process were combined during the final writing of this thesis. Specific analysis techniques were selected and applied for each of the research goals, and included “Key Words in Context”, “Compare and Contrast”, “Connector Analysis”, “Relationship Mapping” and “Pattern/Theme Identification” (King 2004; Ryan & Bernard 2003; Saunders et al. 2009; Yin 2009). A “Decision Point” analysis process, designed by the author, was applied. The Reassemble phase of the analysis was conducted for each of the Research Goals.

#### 4.3.7.1 Analysis Goal 1 – Investigate whether the data supported the Research Propositions

The focus of this Goal was to investigate whether the data provided support for the Research Propositions of this research. The first step was to identify major differences or similarities between the two Case Studies.

##### 4.3.7.1.1 Thematic Contextual Analysis

The initial reading and transcribing of the interviews indicated a potential difference in overall attitudes to, and perceptions of, the relative Cases. Consequently, a thematic contextual analysis was conducted (Ryan & Bernard 2003). Text Search Query was run on each of the five elements of the Q.L.D. model, by Case Study. The Word Tree report format was used to present the results. The results for each Case Study were then summarized and comments classified as positive or negative. A [High Level Thematic Contextual Analysis](#) was conducted. Next, the major themes were identified. A Word Frequency Analysis was run on all interviews for both Case Studies, using the “Exact” match parameter in NVivo. Next, a “Key Words in Context” analysis was done (Ryan & Bernard 2003), using the Text Search Query function in NVivo. This analysis identified the positive or negative context of each of the major themes. A table was produced comparing the positive and negative contexts of each Case Study.

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### 4.3.7.1.2 Relationship Type Analysis

Relationship Type analysis was adapted and applied to identify relationships between items and themes in interviews. Relationship types define the relationship between items by identifying the “connectors” linking them. The “connectors” for this research were based on Spradley’s Universal Semantic Relationship Model (Spradley 1979). Spradley’s model was selected because of its longevity, robustness and validity. Relationship types were defined in NVivo by entering the connector terms from Spradley’s model as parameters. Examples of connector terms include “*so, because, as a result*”. NVivo Text Search Queries were run on each Case Study. The resultant report identified all instances of the defined relationship types. This report was then reviewed and the data grouped by major theme, producing a set of Relationship Analysis tables, which were analysed and discussed in Phase 4.

### 4.3.7.1.3 Decision Point Analysis

The purpose of Decision Point Analysis was to identify what decisions were made, when and what their consequences were in relation to levels of uncertainty and equivocality. Decision points were identified in each Case Study. A matrix was developed showing each decision point, and known outcomes. Each outcome was further analysed to identify any decrease in levels of uncertainty or equivocality. Next, a more detailed analysis of uncertainty and equivocality was conducted for each Case Study. The results were presented in a set of tables, and the results by Case were compared.

A separate analysis of lessons learned was conducted for each Case study. There were no available lessons learned from Case Study B. There was an available Post Implementation Review (PIR) (lessons learned) report available in Case Study A, of a previous, similar project called JET. This report listed fifteen (15) lessons learned. A matrix was developed listing these lessons learned and identifying any specific, identifiable related actions from the current project. The purpose of this matrix was to identify where, if any, specific actions had been taken to address these lessons learned in the current project.

### 4.3.7.2 Analysis Goal 2 – Establish whether the data provided support for, and thereby confirmed, the elements of the [Q.L.D. model](#)

The focus of this Goal was to investigate whether the data provided support for the five elements of the Q.L.D. model. The first step in this Phase was the development of a hierarchical coding structure. This required creation of consistent definitions, codes and classifications of data, as well as iterative reliability checks. The template analysis process was used to develop coding structures and hierarchy (King 2004). Template analysis was selected as it was designed to code and analyse data specifically to explore themes, patterns and relationships (Saunders et al. 2009). Further, the template analysis approach was consistent with the Five Step Analysis process. The initial coding template developed in Phase 1, Compile Database, was reviewed and used to create Relationship Maps for each Case Study. Developing the Relationship Map was a three-step process. Firstly, the preliminary interview was reviewed and the predecessor and successor items of each open coded item were identified. Next, a matrix was created showing the open coded item, its predecessors and successors, and classifying it as an input or consequence item. Next, the Relationship Map was developed. The Relationship Map presented the open coded items in chronological sequence, marked T1, T2 etc. and showed the relationships between the items in and between these sequences.

Next, an NVivo “Coding by Node” query was run on each preliminary interview. The result of this query was a table showing the major themes for the node. The next step was to collate

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the initial open coding used to create Relationship Maps with the major themes from the “Coding by Node” query to identify commonality. Finally, a matrix was developed that showed the commonality of the NVivo themes and the open coded items, by Case Study. The Y axis of the matrix used the five elements of the Q.L.D. model; link the X axis showed the groupings of the themes and items by Case Study. This matrix was used to confirm that the themes and open coded items could be grouped into the five elements of the Q.L.D. model.

Next, each decision was reviewed against the proposed Q.L.D. model. Each decision was analysed by identifying how it may have had a different outcome or consequence if it had been made using the Q.L.D. model. The purpose of this task was to provide support for the design and processes of the Q.L.D. model.

### 4.3.8 Yin’s Five Phase Data Analysis process – Phase 4 - Interpret & Confirm Findings

Yin’s process is highly iterative, particularly between Phases 3 and 4. In this thesis, these Phases were combined in the write-up of the research. This was in the interests of clarity and to avoid unnecessary duplication in analysis, interpretation and conclusions. The focus in this Phase was to identify themes, patterns and other data that supported the Q.L.D. model and the Research Propositions, or otherwise. Specific conclusions or implications of these findings were discussed in Chapter 5.

### 4.3.9 Yin’s Five Phase Data Analysis process – Phase 5 – Conclusions

This Phase was incorporated into Chapter 5 of the thesis, Discussions, Conclusions and Implications. Yin’s original Phase involved discussion of the findings and interpretations of Phases 3 and 4, and presentation of conclusions and implications. To avoid unnecessary duplication, Yin’s Phase 5 was incorporated into Chapter 5 of this thesis.

This Chapter described the Research Methodology, in three Sections. Section 1 described the philosophical and theoretical foundations, and key concepts, of the selected methodology. Based on the characteristics and purpose of this research, a Pragmatist philosophy was adopted within a subjective, Radical Humanist paradigm. Section 2 described the Research Approach as a qualitative, multiple case study combining both deductive and inductive processes. Section 3 described the detailed, task-level Research Process including the steps taken to achieve the quality criteria for qualitative analysis. The focus on secondary data was emphasised as part of the Research Approach, to address the limited number of relevant interviewees. The two goals of this analysis were described; 1) confirming the elements of the Q.L.D. model and 2) supporting the Research Propositions. A task-based [work plan](#) was presented, to assist with replicability. Yin’s (2011) Five Phase Data Analysis process was described as the framework for the analysis. Specific tools were described including template analysis (King 2004) and the Universal Semantic Relationship Model (Spradley 1979). The NVivo qualitative analysis software package was described. The next Chapter describes the Data Analysis process.

## **5.0 ANALYSIS OF DATA**



The previous chapter outlined the Research Methodology, including the underlying philosophy and paradigm, of this thesis. It presented the justification for the selected research approach, and described the research process in detail. The selected approach was based on a Pragmatist philosophy within a subjective, Radical Humanist paradigm. Specifically, the research approach was a qualitative analysis of two case studies combining both deductive and inductive processes. This Chapter presents the analysis of the data, and discusses its relevance to the Research Question and Propositions. The focus on secondary data is described. The analysis of data is based on two Analysis Goals. The first Analysis Goal is to investigate whether the data provided support for the Research Propositions. The second Analysis Goal is to establish whether the data provides support for the elements of the Q.L.D. model. Data analysis was done using Yin's (2011) Five Phase Data Analysis process. This process was supported by a detailed, task based work plan ([Appendix 7](#)), which facilitated replicability by defining tasks in chronological order, identifying precedents and defining outcomes. The work plan also identified specific tools and processes for each task, including template analysis (King 2004) and the Universal Semantic Relationship Model (Spradley 1979). These tools provided data as input to the NVivo qualitative analysis software package. Processes and protocols for data coding and classification using NVivo are described. The initial themes and patterns identified in NVivo are linked to specific, relevant Research Propositions. Yin's (2011) first Phase, Compile Database, was common to both Analysis Goals, and is presented first. Next, discussion of the two Analysis Goals is presented. However, in the interests of clarity and to avoid unnecessary duplication, the discussion of the findings combines the Reassemble and Interpret phases. More detailed discussions about conclusions and implications of the findings are presented in Chapter 6.

### **5.1 Analysis Goal 1–Investigate whether the data provided support for the Research Propositions.**

#### **5.1.1 Yin's Data Analysis model – Phase 1 - Compile Database**

Compiling the database involves defining the sample, describing the cases, identifying data sources and collection processes, and collecting and storing the data. It also involves initial sorting and classifying of data.

Initially, based on the identified commonality between the two cases, an expectation of the research was that Case Study B would complement and support patterns and issues identified in Case Study A. As the research progressed, however, it became clear that the analysis was highlighting some important differences between the cases. Subsequently, while there were some common patterns and issues, the strength of the multi-case approach, in this instance, was in the use of Case Study B to highlight some attitudinal and contextual differences from Case Study A and which may have had some impact or influence on the outcomes of the project in Case Study A. Consequently, the expectation became that Case Study B would identify and clarify some important differences in the cases, their processes, approaches and outcomes. Moreover, it was expected that Case Study B would provide important data relative to the Research Propositions.

##### **5.1.1.1 Case Descriptions - Case Study A**

Case Study A is of a Queensland Government Owned Corporation (GOC), involved in electricity distribution. Headquartered in North Queensland, the organisation has around 4600 employees supporting almost 680,000 customers. The asset base is \$8.7 Billion. The organisation evolved from a government decision to decentralize electricity services in the State, and to create two regional-based entities; one in the Brisbane-centric South-East and

the other for the remainder of the State. The latter entity is the subject of this Case Study A. A third entity was created, which was an ICT organisation to provide information technology infrastructure and services exclusively to both GOCs. Each of the three organisations has its own Board, as required by legislation (*Corporate Governance Guidelines for Government Owned Corporations* 2009). The CEOs of each of the three organisations serve on all three Boards.

The subject of this research was a project to upgrade an existing ERP system, common to both GOCs and the ICT provider. The scope of this research was the set of activities up to and including Project Initiation, as defined in the PMBOK methodology (Project Management Institute 2004). The major LDM milestones for this project were:

- a. Late 2010 – decision to develop an “ICT Blueprint” detailing the ICT strategy for both GOCs
- b. Early 2011 – decision to upgrade existing version of ERP software
- c. March – August, 2011 – ICT provider led a Start-up process for replacement project
- d. December 2011 – Set-up process complete
- e. February 2012 – Kick-off meetings for Initiation
- f. June 2012 – Project cancelled

There were two distinct phases involved in this project, Project Set-up & Business Case Preparation, and Project Initiation. These are standard phases identified in project management methodologies such as PMBOK (2004). The general timeline and activities for each phase are shown in Table 5-A, below.

**Table 5-A. Case Study A - Tasks in project Start-Up and Initiation Phases**

| Project Set-up & Business Case Preparation  |         | Project Initiation  |         | Kick-off                              |
|---|---------|---|---------|---------------------------------------|
| 6/11  | 9/22/11 | 10/9/11   | 30/1/12 | 1/2/2012                              |
| Review ICT Blueprint report and confirm Ellipse 8 upgrade   |         | 1. Confirm Project Governance structure and assign internal resources |         | Two day Project Team Kick-off Meeting |
| Prepare briefing documents for approval to develop Business Case  |         | 2. Identify and select required external resources                    |         |                                       |
| Develop draft Business Case   |         | 2. Confirm resources required from each business unit, and schedule   |         |                                       |
| Identify high-level resource requirements   |         | 4. Confirm logistics re travel, accommodation, location, etc          |         |                                       |
| Begin discussions with specialist groups, e.g. Change Management, Corporate Communications re resource requirements for project |         | 4. Confirm methodologies, standards and approaches                    |         |                                       |
| Develop initial project approaches, methodologies, standards  |         | 4. Confirm vendor contracts   |         |                                       |
| Identify external vs internal resource availability and update resource requirements plan                                       |         | 4. Confirm specific schedules, timelines and milestones for reporting |         |                                       |
| Develop overall draft Project Management Plan   |         | 8. Confirm identified benefits and sources                            |         |                                       |
| Socialise Business Case with relevant stakeholders  |         | 8. Prepare Program Risk and Reporting processes                       |         |                                       |
| Finalise Business Case and submit for approval  |         |   |         |                                       |

In late 2010, a decision was made to develop a combined ICT strategy, the ICT Blueprint, based on the combined forecasted strategic information technology requirements of each of the two GOCs. The ICT Blueprint identified the pending redundancy of the existing ERP system, which would be no longer supported by the vendor after September, 2013.

Subsequently, in early 2011, the executive leadership of both GOCs decided to replace the existing ERP system. There was no documented consideration or discussion of replacing the current vendor or the system; simply to install the upgraded version of the same software. The justification for this decision was the contention by the ICT provider that the vendor would no longer support the current version of the ERP software, and it would be too expensive to convert to a new system. Between March and August, 2011, the centralized ICT organisation combined with two external vendors to define and scope a project to upgrade to the latest version of the software. This document would be used to gain approval to initiate the defined project ([see Table 5-A](#)). This team completed its work in December, 2011. The project was approved, at double the original estimated cost, and Project Kick-off meetings were scheduled to be held with the complete Project Team, over the two days of February 1 and 2, 2012. The governance structure for the Initiation and Design phases of the project was:

- a. 1 Steering Committee
  - each GOC also had separate oversight committees, which were consulted before any discussion with the central Steering Committee
- b. 1 Sponsor (CEO of the ICT provider)
- c. 2 Business Owners/Representatives (one from each GOC)
- d. 1 Project Director

The following section highlights some of the major issues that emerged in the early stages of the Set-Up of this initiative, and that may have contributed to the thematic context of this Case Study. In August, 2011, managers from both GOCs obtained a document that had been presented to the respective executive teams by the vendors and consultants ([see CS3, Appendix 15](#)). This document stated that an initial change impact assessment had been conducted with relevant users and change managers, who had been involved in the data gathering for the change impact assessment. The data gathering process, according to the document, was part of a series of workshops conducted by the consultants and vendors. None of the participants in those workshops supported the claim that change impact assessment data was gathered in the sessions. Additionally, contrary to the claims of the consultants, there were no internal change leadership practitioners present at these workshops. On August 16, 2011, a conference call was held between relevant change managers, business unit managers and general managers from each GOC where significant concerns were raised about this issue. Included in these issues was the belief that the senior change leadership analyst from the consulting organisation had agreed that the data gathering template would be reviewed with senior change practitioners from both GOCs before being used. It was subsequently shown that that had not occurred ([see CS4, Appendix 15](#)). In fact, a later document presented by the consultants stated clearly that the impact assessment was based on their experience. On August 18, a senior manager from Agency A raised the issue directly with the senior consultant managing the project ([see CS6, Appendix 15](#)). The response was that the analysis at this stage was at a very high level, and there was no need for concern ([see CS7, Appendix 15](#)). The consultants were also very clear that their analysis would be what was presented to the executive teams.

Between August 20 and 28, there were a number of discussions about the estimating numbers presented by the consultants to the executive teams for the internal staff requirements for the project ([see CS10, 11, 14, 15, 17, Appendix 15](#)). [link35](#) Experienced project managers, systems implementation and change leadership specialists from each GOC all expressed

serious concerns about the accuracy and validity of the presented numbers. Between August 24 and September 2, there were six (6) conference calls and a large number of emails between staff of both GOCs to prepare internal estimates for the project staffing. These estimates differed significantly from those provided by the consultants and vendors. On the 6 September, an official scoping document for the project was submitted to the executive teams of both GOCs by the consultants, for approval ([CS26, Appendix 15](#)). None of the concerns of internal staff, or any revised staffing estimates were included or acknowledged. Based on this document, a detailed business case was prepared by the consultants for budget and initiating approval ([see CS27, Appendix 15](#)). This document did not reflect any of the internal concerns or estimates. Approval to initiate the project was given on September 11, 2011, and the ICT organisation brought together a small Project Initiation and Planning Team comprising GOC representatives, ICT staff and vendor consultants. On September 16, the Chief Executive of the centralized ICT organisation issued an email directive to all managers of both organisations that there should be no further discussions with the consultants about estimating, processes or financial arrangements related to the project. All communications had to be directed through the assigned ICT Project Sponsor. On September 22, at 7.33 pm in the evening, selected senior executives received an email from the ICT organisation, with an attached final business case ([see CS36, Appendix 15](#)). The timing of this raised questions and concerns about the process, and about the intent of the email. The email explained that the next morning the document would be officially presented to the investment sub-committees of each GOC. Recipients were asked to read the document, and there was apology for the lateness of delivery and acknowledgement of the inadequate time to prepare for the meeting. By November, 2011 staff remained vocally concerned with the lack of inclusion or acknowledgement of their experience. There were continued discussions and communications regarding concerns about the project. There was also, as observed and discussed with staff by this researcher, a sense of resignation with staff. With some, based on personal conversations, there were indications of hope for a failure of the project.

There remained concern from the end users and business units in both GOCs. These concerns included lack of consultation, potential decrease of functionality in the upgraded system, concern with previous experiences with the vendor, the role of the ICT organisation and lack of acknowledgment of lessons learned from previous projects (see Primary Data analysis). Two consistent concerns raised were the attitude shown to change management by project management, and the lack of involvement of change management practitioners from each organisation. Although a comprehensive Post Completion Review ([Appendix 16](#)) of a previous project was available and accessible, current project documentation did not identify any reference to this prior project or to any planned lessons learned processes or activities. The project was cancelled on 18 June, 2012, when it was acknowledged that the original benefits in the Business Case would not be achieved. Estimated unrecoverable sunk costs to that date were \$7.7 Million (unpublished Investment Review Committee paper, June 2012).

### **5.1.1.2 Researcher bias**

At the time of this research, the researcher was an employee of the organisation of Case Study A. He was employed as a mid-level Manager in the Program Delivery group, and was responsible for all Change Management activities in projects in the organisation. At the time of this research, he had been employed in that role for 19 months. He had moved from a CEO role in the United States to this mid-level management role in Australia, and was sensitive to the pressures of this transition, as well as to the different requirements of the new role. He was, however, concerned with the leadership and management attitudes he encountered. The Executive Leadership Team was generally perceived as dysfunctional by most employees,

and this was openly discussed. Further, there was a pervasive view that the organisation was actually run by the separate ICT provider who was seen as having a different agenda to its customers. Finally, there was a commonly discussed view that the organisation's leadership was less competent and trustworthy than that of the "sister" GOC involved in the project. The researcher was aware of these issues and perceptions, and their potential to bias the research, and discussed them with his Supervisor. The agreed strategies for addressing this bias are outlined in Section 4.5., Data Analysis.

### 5.1.1.3 Case Descriptions - Case Study B

Case Study B is of a Queensland GOC, Agency B, involved in designing, developing, managing and operating water infrastructure. Established as a GOC in 2000 and based in Brisbane, Agency B supports 5000 customers approximately and manages over \$7 Billion in assets. Agency B is rated amongst the most successful water infrastructure companies in Australia.

The project which was the subject of this research was the replacement of a system that managed customer information, water transactions, billing and compliance reporting, the Strategic Water Information Management System (SWIMS). The SWIMS system had been installed in 2001. In 2008 a consultant report recommended replacing SWIMS with a more modern and highly integrated application. The primary driver for the recommendation was that key elements of the SWIMS technical environment were either no longer compatible or were no longer supported. These key elements included 1) the OC4J middleware connecting JAVA and Oracle was no longer compatible, 2) the OC4J version would not support an updated Oracle, 3) the latest JAVA would not support the OC4J that the organisation had. Consequently, before any major upgrade project, the existing OC4J had to be replaced, which also required rewriting a large amount of in-house generated code. The combined costs of these individual initiatives prompted the consultants' report and recommendations. The project was temporarily suspended in 2009, pending a Federal National Water Market System (NWMS) project, which was expected to provide all required functionality. Further, this NWMS project initially included Federal funding and grants. After six (6) months' of investigation of the NWMS initiative, the organisation identified that the expected functionality would not be provided, and that they did not qualify for the funding. Based on these discoveries, the SWIMS replacement project was recommenced in 2010. It was decided to conduct a "Concept Briefing" exercise to further develop process definition and requirements analyses to encompass recent cost models instituted by the Water Accounts Group in the organisation. The major LDM milestones for this project were:

- a. Late 2008 – decision to replace existing water accounting system (SWIMS)
- b. Late 2009 - temporary suspension of project to investigate participation in Federal Government's National Water Marketing System (NWMS)
- c. Early 2010 – decision to withdraw from NWMS and continue with SWIMS project
- d. Mid 2010 – decision to develop a "Concept Brief" to revalidate original project scope
- e. Late 2010 – recommencement of revised SWIMS project
- f. Early 2011 – Discovery Phase complete (Set-Up Phase complete)
- g. Mid 2011 – Initiation Phase started
- h. Late 2011 – Decision to terminate contractors and complete project internally (BILL)

In September, 2011, the new project was renamed BILL (Business Intelligence Liquid Ledger) to more clearly reflect the scope which had been refined and expanded during Discovery Phase. BILL was sponsored by the General Manager, Infrastructure Management.

## Chapter 5. Analysis of data

Case Study B comprises the decision making activities up to and including Preliminary Design (completion of Initiation) of the SWIMS project. The process allowed final approval of the Business Case to be completed during Preliminary Design. The general timeline and activities for each phase are shown in Table 5-B, below.

**Table 5-B. Case Study B - Tasks in project Start-Up and Initiation Phases**

|   |      | SWIMS/BILL  |   |  |
|---|------|---|---|--|
|   |      | Set-Up  | Initiation  |  |
| 2009<br>National Water Marketing System Project | 2010 |   | Mar – May 2011  | Apr – Jul 2011   |
|   |      | Consultants' review & recommendation to continue SWIMS project  | Discovery   | Preliminary Design   |
|   |      | <ol style="list-style-type: none"> <li>1. Review of National Water Marketing System project</li> <li>1. Decision to re-start SWIMS</li> </ol> | <ol style="list-style-type: none"> <li>1. Identify process changes &amp; benefits</li> <li>2. Conduct best practices review</li> <li>3. Identify systems &amp; other changes</li> </ol> | <ol style="list-style-type: none"> <li>1. Initial As Is documentation</li> <li>2. Initial To Be process design</li> <li>3. Develop Draft Business Requirements</li> <li>1. Develop initial Business Options</li> </ol> |

The project team for this initiative was located in Brisbane, in one office. Consequently, there were no emails as all communication was verbal or by telephone. Additionally, there was a culture of calling informal meetings spontaneously to address issues. Where consensus was difficult to reach, the accountability was clearly with the Sponsor. The CEO was also actively involved. The governance structure for the project was:

- a. 1 Steering Committee
- b. 1 Sponsor
- c. 1 Business Owner
- d. 1 Project Director

## 5.2 Data Sources

### 5.2.1 Primary Data

Primary data was collected through a preliminary interview and four (4) subsequent semi-structured interviews for each Case Study. Five (5) individuals from each organisation were identified as interviewees based on their known role(s) in the Case Study projects. One participant from each Case, the nominated Business Owner, was selected to participate in the preliminary interview. The Business Owner was defined as the executive accountable for the implementation of the project. The remaining four (4) participants in each case participated in semi-structured interviews. There were a number of factors affecting numbers of interview participants. Primarily, and most critically, the scope of the research was the Set-up and Initiation stages of the projects. These stages, by definition, involved only a small number of team members. A second factor influencing the small number of participants was that both organisations had undergone significant restructures, resulting in the loss of key original project members. The participants in Case Study A were representative of the organisation's regional locations; 2 from Townsville, 2 from Rockhampton and 1 from Brisbane. Case Study B was, however, Brisbane based and all participants were located in the Brisbane office. The original Project Sponsor had left, as had the original Business Owner. Neither was available for interviews. One remaining person had been involved from the start of the process, and an additional four had been subsequently involved in various roles during Initiation. All participants were sent the Interview Protocol in advance, and interviews were recorded with the participants' permission. Participants, their roles and tenures, are presented below in Table 5-C.

**Table 5-C. List of interview participants - both Case Studies**

| Case Study | Interview Type  | Participant | Tenure | Organisation Role         | Project Role            |
|------------|-----------------|-------------|--------|---------------------------|-------------------------|
| A          | Preliminary     | CSAP1       | 12     | Senior Business Analyst   | Business Representative |
| A          | Semi-Structured | CSAP2       | 20     | General Manager           | Business Owner          |
| A          | Semi-Structured | CSAP3       | 25     | Executive General Manager | Business Sponsor        |
| A          | Semi-Structured | CSAP4       | 21     | General Manager           | Business Representative |
| A          | Semi-Structured | CSAP5       | 17     | IT Release Manager        | Subject Matter Expert   |
|            |                 |             |        |                           |                         |
| B          | Preliminary     | CSBP1       | 10     | ICT Director              | Project Manager         |
| B          | Semi-Structured | CSBP2       | 13     | General Manager           | Business Owner          |
| B          | Semi-Structured | CSBP3       | 5      | ICT Release Manager       | ICT Support Lead        |
| B          | Semi-Structured | CSBP4       | 15     | General Manager           | Business Representative |
| B          | Semi-Structured | CSBP5       | 1      | Program Director          | Program Director        |

The general tenure of participants from Case Study A was longer than that of Case Study B. The average tenure in Case Study A was 19 years. The average in Case Study B was 8.8 years. However, Case Study B included an external contractor. Removing him from the calculation raised the average tenure in Case Study B to 10.7 years. In both cases, tenure included time with the organisation preceding the creation of the respective GOC. With the exception of the external Program Director in Case Study B, all participants had been employed with their respective GOCs long enough to be assimilated into the organisational culture or to be very familiar with it. Further, each participant had had experience of at least

one previous project with the organisation. Finally, participants were all in a management level role which involved influencing, if not making, decisions.

## **5.2.2 Secondary Data**

### **5.2.2.1 Document Review**

Documents collected for each case included:

- a. Reports
- b. Emails (if available)
- c. Presentations
- d. Project management documents
- e. Notes from conference calls (if available)

A complete list of secondary data collected, by Case Study, is attached as [Appendix 14](#).

#### **5.2.2.1.1 Case Study A – Document Management**

Emails, reports, presentations and submissions were collected for the period 16<sup>th</sup> August, 2011 to 22<sup>nd</sup>. September, 2011. There was a total of forty (40) documents collected, comprising:

- a. 22 emails
- b. 7 Word documents (4 as attachments to emails)
- c. 6 Power Point presentations
- d. 1 spreadsheet (as attachment to email)
- e. 9 meetings/conference calls

The total number of pages of documentation collected and analysed for Case Study A was approximately 300. Items were entered into NVivo, where they were sorted by date, coded and decision points identified. A specific node was created in Nvivo for these items (see [Appendix 8. Nvivo Node Structure](#)). A complete list of sorted and coded items is attached as [Appendix 17](#).

#### **5.2.2.1.2 Case Study B – Document Management**

Reports, presentations and submissions were collected for the period 1<sup>st</sup> September, 2010 to 17<sup>th</sup>. July, 2012. There was a total of sixteen (16) documents collected for Case Study B [Appendix14](#) comprising:

- a. 9 spreadsheets
- b. 7 Word documents

The total number of pages of documentation collected and analysed for Case Study B was approximately 200. Items were entered into NVivo, where they were sorted by date, coded and decision points identified. A specific node was created in Nvivo for these items (see [Appendix 8. Nvivo Node Structure](#)). A complete list of sorted and coded items is attached as [Appendix 18](#). There were no available emails for this project that were relevant to this research. At this stage, it was possible to make an initial observation based on the differences in the available, relevant documentation from each Case Study.

The use of emails as a project communication medium suggested a willingness of the organization in Case Study A to allow significant, and potentially critical, issues to be addressed through a protracted and difficult process. Emails were not consistently distributed to appropriate participants, and, in some cases, were sent at times that restricted timely input or appropriate response. For example, Item 36, Code CS36, in [Appendix 15](#), shows that a critical document to be presented at an Investment Review Committee was sent out at 7.33 p.m. on the night before the meeting, which was scheduled for 8 a.m. the following morning. In contrast, email was not a preferred communication medium in Case Study B. In fact, the organization in Case Study B seemed to encourage and facilitate prior discussion of issues before important meetings, as demonstrated by [one interviewee](#), “..there were opportunities there to raise any of these issues well in advance of the Steering Group, and that would help the group trying to direct the project towards issues, risks...”.

### 5.3 Yin’s Data Analysis Model – Phase 3 – Reassemble Data (Coding)

Reassembling is the process of classifying and analysing data. NVivo nodes were the primary classification mechanism used. A node is a file in Nvivo, where data sources for a specified group, classification or category can be stored and accessed for analysis. Detailed, structured coding of the nodes involved confirming their structure, identifying relationships between content and developing models and reports based on these relationships. Next, data categories were aggregated, and arranged hierarchically. The node structure for this research is attached as Appendix 8. The contents of the nodes were then analysed, using Nvivo, to identify patterns, themes and relationships. Relationship types were constructed using the Universal Semantic Relationships model (Spradley 1979). Spradley’s Universal Semantic Relationships Model, including representative connector terms, is attached as [Appendix 19](#). Specifically, 5 of the nine relationship types in Spradley’s model were used, i.e. 1) Cause-effect, 2) Rationale, 3) Means-end, 4) Sequence and 5) Attribution, shown in Figure 5-A, below. The analysis rules involved identifying connectors (because, since, as a result, etc.), co-occurring codes and pattern-matching. This Phase was highly iterative.

| Relationship Type | Description                           | Representative Terms  |
|-------------------|---------------------------------------|-----------------------|
| Cause-Effect      | x is a result of y; x is a cause of y | because, so           |
| Rationale         | x is a reason for doing y             | therefore, because of |
| Means-End         | x is a way to do y                    | do                    |
| Sequence          | x is a step/stage in y                | next                  |
| Attribution       | x is an attribute/characteristic of y | type, kind of         |

Adapted from Spradley, 1979

Figure 5-A. Spradley’s Universal Semantic Relationship Model (adapted)

Chapter 4, Methodology, discussed the requirement for thematic contextual analysis in this research. This section focuses on identifying those major, high level contextual themes, using the functionality of Nvivo. Contextual thematic analysis was conducted in two areas:

- a. the five elements of the Q.L.D. model (high level pattern identification), and,
- b. major themes

The review of the elements of the Q.L.D. process was intentionally high level, and designed to identify any thematic patterns only before continuing with more detailed analysis. A Text Search Query was run on each of the five elements, by Case Study. The Word Tree report format was used to present the results. These Word Tree reports are attached as [Appendix 20](#). Each report was further reviewed, and manually filtered. The filters used were 1) general statements, 2) formal and proper names, 3) terms used in a different context, and 4) questions from researcher. The results for each Case Study were then summarized and comments classified as positive or negative. Table 5-D, below, presents the summary of these results.

**Table 5-D. Contextual Thematic Analysis**

| Element                 | Case Study A |    | Case Study B |    |
|-------------------------|--------------|----|--------------|----|
|                         | +            | -  | +            | -  |
| Logic                   | 0            | 0  | 0            | 0  |
| Ethics                  | 0            | 0  | 0            | 0  |
| Decision-Making         | 21           | 54 | 82           | 14 |
| Organisational Learning | 0            | 18 | 6            | 10 |
| Change Management       | 18           | 29 | 93           | 14 |

Table 5-D presents evidence of contextual thematic differences between the two Case Studies, which supported more detailed analysis. In Case Study A, 3 of the elements recorded more negative contexts than positive (Decision Making 54:21; Organisational Learning 18:0; Change Management 29:18). The pattern suggests the general thematic context of Case Study A was negative. In contrast, Case Study B recorded more positive responses than negative (Decision Making 82:14; Organisational Learning 6:10; Change Management 93:14). This pattern suggests a general positive context. Based on these patterns, a more detailed analysis was conducted.

Next, the major themes were identified. A Word Frequency Analysis was run on all interviews for both Case Studies, using the “Exact” match parameter in Nvivo. The Word Frequency Analysis results table is attached as [Appendix 21](#). This table was reviewed using two filters:

- a. The first filter was the default “Stop Words” function in Nvivo
- b. The second filter was an identification of all occurrences where the item was mentioned as part of the interview question, or in a generic context. For example, where “business” was used in the context of “...the water accounting business...” or, “...the energy business...” it was deleted from the final analysis count.

Table 5-E shows the results of the Word Frequency Analysis of the most common items, by Case Study:

Table 5-E. Initial Word Frequency Analysis of all Interviews

| Case Study A  |       | Case Study B  |       |
|---------------|-------|---------------|-------|
| Item          | Freq. | Item          | Freq. |
| People        | 40    | project       | 58    |
| Project       | 35    | business      | 24    |
| Business      | 27    | decision      | 22    |
| Issues        | 23    | change        | 20    |
| Decision      | 18    | people        | 14    |
| Benefits      | 16    | functionality | 11    |
| Change        | 9     | issues        | 10    |
| Functionality | 6     | benefits      | 6     |

Table 5-E shows the commonality of major themes and terms between both Case Studies. The most frequent word groups were the same in each case, but the frequency order of the words was different. The complete initial themes analysis is attached as [Appendix 29](#). The interview transcripts, however, indicate that the contexts of the words may have been different in each Case. Consequently, a “Key Words in Context” analysis was done (Ryan & Bernard 2003). This analysis used the Text Search Query function in Nvivo. A Text Search Query was run for each of the words in Table 5-E, by Case. Then, each occurrence of each identified key word was read and classified as “negative” or “positive” in context. The results, from two perspectives, are presented below:

- a. Identification of attitudinal differences between both Cases
- b. Identification of specific areas of difference

### 5.3.1 Identifying attitudinal differences

This analysis indicates a possible difference in positive or negative attitudes towards the specific theme, project or to the relevant organisation. The positive or negative context in which each occurrence of each item was made is shown in Table 5-F.

**Table 5-F. Positive and Negative context of item occurrences in all Interviews**

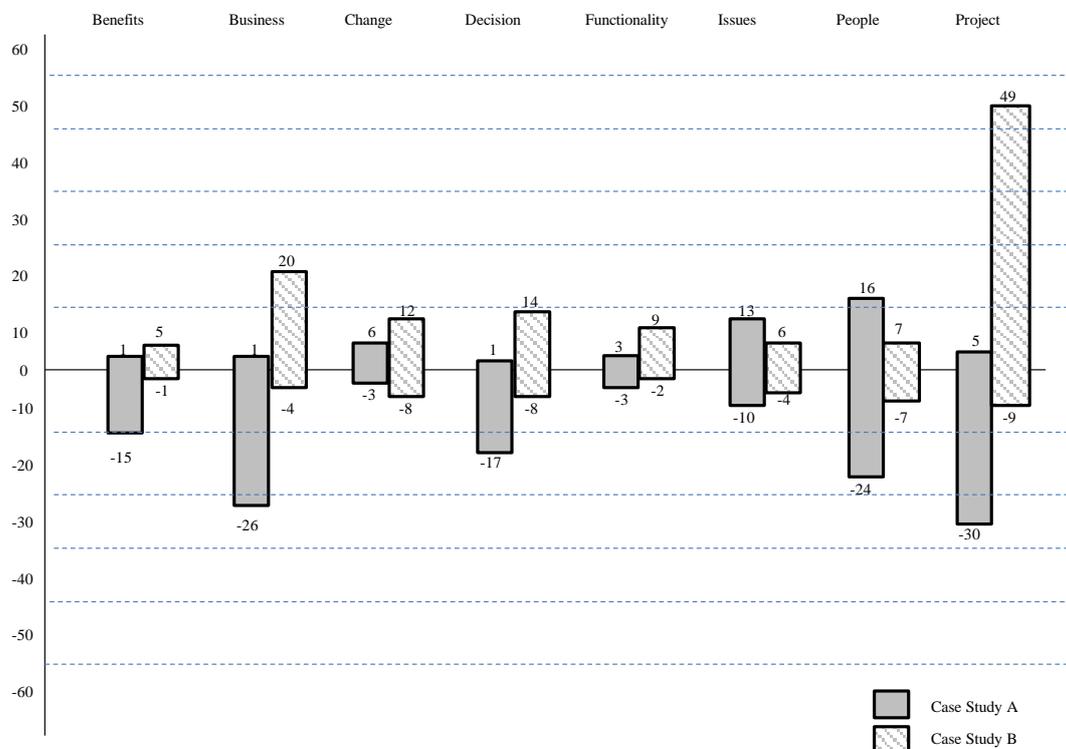


Table 5-F presents comparisons between the two Case Studies. The numbers at the top and bottom of each bar represent the positive and negative occurrences respectively. Firstly, overall, the general trend in Case Study A is that most occurrences of each item were in a negative context (73.6%; 128 negative comments from a total of 174), with the exception of “Issues”. In contrast, Case Study B shows a mostly positive context (73.9%; 122 positive comments from a total of 165). The issues in Case Study A were raised as concerns or problems, whereas the same issues were identified in Case Study B as positives or favourable perceptions. Selected items from this analysis are discussed in the following sub-section.

One of the participants in Case Study B, Participant 5, the external Program Director, made mostly negative comments and observations about the project. This was in contrast to the other participants in this Case. It doesn’t, however, automatically suggest his comments were biased or inaccurate. Firstly, he was an external contractor and was hired partially for his objectivity. Secondly, he was a very experienced Program Director, and was known for his straightforward communication. There were, however, some contextual issues that had to be considered in analysing this interview. Firstly, this contractor was removed from the project by the CEO. Secondly, the contractor’s wife had also been hired as a contractor and she was also terminated. These situations occurred approximately three weeks prior to the interview for this research. This participant had been hired for the project by the previous Business Owner, who had been terminated by the CEO for performance-related issues. Follow up

questions of two other participants about this situation elicited consistent responses. At that time, the State Government was requiring all Government Departments and GOCs to replace external contractors with internal resources. This was a directive, and agencies had little, if any, control over the requirement. The termination of Participant 5 and his wife was consistent with State Government directives and with all other Government Departments and GOCs at that time. The Participant's perception, however, was that he had been terminated because of his relationship with the previous Business Owner. Notwithstanding the potential bias of this Participant, the approach taken for this research was that this Participant had some valuable insights and observations to the project. Consequently, the interview was included in the research, but care was taken to identify, where possible, the context of his comments. Specifically, corroborating comments were identified in other interviews where possible. Additionally, the case comparisons shown in Table 5-F, above, include Participant 5. The degree of positivity reflected in Table 5-F for Case Study B would have been greater had Participant 5 been removed from the analysis. This, in turn, would have further highlighted the differences between the Cases.

The negative comments about benefits in Case Study A were about the lack of clearly defined benefits in the business case for the project. The significance of this result is that it was the lack of achievable benefits that eventually stopped the project. The observation was that leadership proceeded with the project, in spite of numerous concerns raised, and warnings about, the lack of defined and achievable benefits. Achievable benefits are one element only of a business case, and are not always able to be clearly defined. In the case of Case Study A the LDM issue was that of "making up" a benefits number. Anecdotally, the Project Sponsor stated in his opening presentation at the project kick-off that the documented \$8 mill. Benefit was "made up" to get approval for the project. In his interview for this research, he stated that, *"It was, sort of, put it in and the benefits'll come..."*, and that, *"ICT provider tried to drive it through, well, you know, we were conned"*. The benefits expected in the project in Case Study A were perceived as unclear. One comment from Interview 1 was, *"One of the big things that was lacking was the quantification of business benefits..."*. Similarly, in Interview 3, *"I had a lot of questions about the benefits, and they were never really clear."* In contrast, related comments about benefits in Case Study B were more positive. For example, from Interview 1, *"The benefits...realization of this...program is one of the major focusses ..that we have had through this."*

The negative comments in Case Study A regarding business were related to benefits and other elements of the business case. These included concerns about the overall quality of the business case, and the depth of analysis behind it. Comments in interviews included, *"...(ICT consultant) were skimming the surface..."* and, *"I don't think there was anyone who had any other opinion than that it (the business case) was severely lacking in content and the presentation was extremely poor"*. Supporting these comments was the action taken by the initial Business Owner, *"..we sent forward a paper (to the Executive Leadership Team) saying we did not endorse the business case..."*. In contrast, comments in Case Study B interviews about business were related to the inclusion of the various businesses in LDM, including how any concerns were managed. Representative comments included, *"..determining our business requirements and getting them out there in an intelligible form such that we could get sensible responses back..."* and, *"...a lot of people were involved in.. building up the business case..."*.

Another identified area of difference, related to "Business", shown in Table 5-F, is "Decision". Once again, Case Study A shows a generally negative perception. As an

example, a comment from Interview 1 was, *“It was very much, Well (ICT consultant) says we’re doing this, so you’ll go along with (ICT consultant).”* A comment from Interview 2 about the decision process was, *“So the process was again trying to, with limited understanding of both costs, capability and degree of change, asking them to say, “Well, how far do you really want to go on that spectrum?”* The LDM focus in Case Study B was clear. For example, from Interview 3, *“It’s interesting this focus on customer in the decision making process.”* And, from Interview 4, *“Everything’s based on the business case.”* The consequences of these issues included impacts on people.

The negative comments in Case Study A interviews related to people were focused on the impacts on employees of project decisions, and on their lack of involvement in the early stages of the project. Representative comments included, *“..people were considerably disengaged”*, and, *“As far as the impact on people you’ve created a fear, frustration, anxiety, disenfranchisement, disengagement in the way it was handled”*. In contrast, comments from Case Study B interviews included, *“..I’ve seen very frank and open (communications and culture) and people’s views are respected..”*.

The conclusion from this analysis is that participants in Case Study A may have been concerned about the uncertainties in the decision process, and the influence of external parties. In contrast, participants in Case Study B seemed to have had a clear understanding of the organisational focus for decision making.

### 5.3.2 Identifying specific differences

Table 5-G, below, compares the frequency of the major themes in Case Study A and in Case Study B. This analysis used the same Word Frequency Analysis report that produced Table 5-F, above, but isolated the most common themes unique to each Case.

**Table 5-G. Comparisons of Frequency of Major Themes, by Case Study**

| Case Study A |           | Case Study B |           |
|--------------|-----------|--------------|-----------|
| Item         | Frequency | Item         | Frequency |
| scoping      | 16        | executive    | 17        |
| consequences | 11        | requirements | 17        |
| accelerated  | 6         | responsible  | 13        |
| frustration  | 6         | governance   | 9         |
| leadership   | 6         | sponsor      | 9         |
|              |           | customers    | 8         |
|              |           | market       | 7         |

This analysis supports the findings shown in Table 5-F, highlighting the attitudinal differences in each organisation. Participants in Case Study B were very clear about the focus on customers, and on the market environment in which they operated. Comments included, *“...this was going to change ..our relationship to customers...and ..in the way we deliver our services”*. There were no comments from Case Study A regarding customers. Once again, however, the overall pattern was of a negative context in Case Study A and a positive one in Case Study B. “Scoping” was a top issue in Case Study A, but was rarely mentioned in Case Study B. An example from Interview A was, *“..it was only once we got into that design phase that we actually found out we weren’t getting what we were promised.. during that scoping, initiation and business case...”*. And, from Interview 2, *“So, quite a lot of*

*discussion around what were the executives agreeing to? What were they tasking the project team to go off and do?"*

Also in Case Study A, "Consequences" was the second most frequent item, but wasn't an issue in Case Study B. A comment from Interview 4 from Case Study A was, *"It was an adverse effect because they upset people"*. Again, from Case Study A, *"We've wasted another 6 months where we could have been doing continuous improvement...to the version we had"*. The comments in Case Study B suggested that the consequences were understood. For example, *"I think the consequences now will be more around the decisions around the cost-effectiveness...now we know the actual costs"*.

This early analysis was the catalyst for changing the initial expectation of the research. The interpretation of Tables 5-F and 5-G was that participants from Case Study B perceived the project as generally a positive experience. Further, the organisation and its leadership were viewed as positive. Consequently, the expectation of the research became that Case Study B would identify and clarify some important differences in the cases, their processes, approaches and outcomes. These comments and observations helped identify the general themes which differentiated the two organisations. This context analysis assisted with detailed analysis of each of the Research Propositions. It identified that a "compare and contrast" (Ryan 2005) approach to the two Case Studies may be appropriate.

#### **5.4 Research Propositions**

The following sub-section presents the findings specific to each Research Proposition. This discussion includes findings from Relationship Analyses and Decision Point Analyses of both primary and secondary data. The Research Propositions are fully supported. Table 5-H is a summary of the analysis. The Table shows how Relationship Analyses and Decision Point Analyses were used to support each Research Proposition.

Table 5-H. Summary of analysis of Research Propositions

| R.Q .# | Research Question   | Analysis Goal  | R.P # | Proposition   | Interpretation and proof   | Sources                         | Outcome   | Validated Y/N |
|--------|---|--|-------|---|--|---------------------------------|---|---------------|
| 1      | What is the role of ethics in leadership decision-making? | <b>Analysis Goal 2</b> - Support for Research Propositions | 1     | LDM is a significant factor contributing to change initiative failure rates   | 1. contextual thematic differences between Cases.  | 1. All interviews               | 1. Identification of thematic attitudinal, differences between Cases  |               |
|        |   |  | 1.1   | Quality of leadership decision-making may be improved by decreasing the levels of equivocality and uncertainty in the process | <b>1. Relationship Analyses</b> of major themes:<br>1.1 ICT provider/vendor relationship - showed relationship between perception of ICT provider and vendor, and negative view of project.<br>1.2 Showed relationship between ICT provider and leadership attitudes<br>1.3 . Relationship analysis of Business Case drivers - showed relationship between leadership willingness to consider alternative solutions and employee perceptions of project and leadership   | 1. All interviews               | 1. Contrast between Cases highlighted the different perceptions that may have been created in employees by leadership behaviour.<br>2. Lack of an ethical approach to understanding business drivers may have resulted in unsustainable decisions.<br>3. Lack of willingness to address organisational politics may have resulted in unsupportable decision | Yes           |
|        |   |  |       |   | <b>1. Relationship Analyses</b> of major themes:<br>1.1 Lack of clarity on part of executives about business case for project may have created potential for uncertainty & equivocality<br>1.2 Unwillingness to accept and/or address employee concerns may have created uncertainty & equivocality<br>1.3 Lack of openness re project drivers and agendas may have created uncertainty & equivocality<br>1.4 . Case Study B highlighted that a clear focus for decision-making (customer) may have decreased uncertainty & equivocality | 1. All interviews               |   |               |
|        |   |  |       |   | <b>1. Decision Point Analysis:</b><br>1.1 Decisions to avoid or ignore employee concerns may have resulted in increased levels of uncertainty & equivocality<br>1.2. Lack of leadership clarification of roles and accountabilities (ICT provider/vendors) may have increased levels of uncertainty & equivocality   | 1. All documents                | 1. The analyses showed that levels of uncertainty & equivocality may have been increased in Case Study A by leadership actions and behaviours. In contrast, Case Study B highlighted that uncertainty & equivocality may have been decreased by leadership actions and behaviours   | Yes           |
|        |   |  | 1.1.1 | Levels of uncertainty and equivocality in LDM may be decreased through consideration of ethical issues                        | <b>1. Lessons Learned Analysis:</b><br>1.1 Ignoring available lessons learned may have resulted in known mistakes being repeated<br>1.2 Ignoring available lessons learned may have increased uncertainty & equivocality<br>1.3 Informally applying lessons learned, through team members' experience, may have improved quality of leadership decision-making   | 1. All interviews and documents | 1. The analysis showed that applying lessons learned may have improved the quality of decision-making. However, Case Study B was successful and did not intentionally apply lessons learned, although they had a stated policy of using lessons learned.  | Partially     |
|        |   |  | 1.2   | Quality of leadership decision-making may be improved by applying organisational learning process                             | <b>1. Lessons Learned Analysis:</b><br>1.1 Willingness to apply available lessons learned may have contributed to improving the quality of decision-making<br>1.2 Leadership willingness to address ethical issues (use of available lessons learned; vendor information quality; lack of cooperation by vendors) may have increased the use of lessons learned  | 1. All interviews and documents | 1. The analysis showed that, in Case Study B, leader willingness to use available lesson learned may have resulted in a change in project governance, information clarity, clarifying roles and accountabilities and may have changed leader and employee attitudes.  | Yes           |

### 5.4.1 Relationship Analysis

Interviews were analysed using the relationship types that had been created in NVivo, using Spradley’s [Universal Semantic Relationship Model](#). The raw Relationship Analysis was refined by grouping the items. The search returned 89 items, from both Case Studies. Table 5-I, below, presents the breakdown of the results.

**Table 5-I. List of Occurrences of Relationship Types, by Case, using Spradley's Universal Semantic Relationship Model (5 items)**

| Spradley’s Relationship Type (5 types only) | Case Study A | Case Study B |
|---|--------------|--------------|
| Cause-effect                                | 29           | 36           |
| Rationale                                   | 9            | 11           |
| Means-end                                   | 2            |              |
| Sequence                                    |              | 1            |
| Attribute                                   | 1            |              |

The results show that “Cause-Effect” and “Rationale” were the two most common groups in both Case Studies. This suggests that participants may have been comfortable in assigning causes to issues and themes, and in discussing their understanding of the reasons for themes occurring. The “Cause-Effect” relationship type presented here does not imply a statistical cause and effect. It is the terminology of Spradley’s (1979) Model only. A complete list of results is attached as [Appendix 22](#).

#### 5.4.1.1 R. P.1 – LDM is a primary factor contributing to change initiative failure rates

The data supported Research Proposition 1.

There were a number of issues identified that were consequences of leadership decisions, and which raised questions about the related ethical considerations. A number of these were identified in the Relationship Analysis of the ICT provider/vendor relationship in Case Study A, presented in Table 5-J.

Table 5-J. Case Study A - ICT provider/vendor Relationship Analysis

| Issue   | R'ship type | Perceived consequence   |
|---|-------------|---|
| because of the pre-work   |             | the project was difficult   |
| because it began to be driven by IT                                   | C-E         | the project got a bit lost  |
| run by SPARQ  | C-E         | And that was the problem  |
| because with Greg Mc being employed by SPARQ                          | C-E         | it was very much a SPARQ flavour  |
| SPARQ said this thing is out of support                               | C-E         | so, ..the exec would say they've been misled by their ICT providers                           |
| Scoping and business case was very much reliant on ... IBM and Ventix | C-E         | IBM that and had a particular methodology - accelerated                                       |
| Because it was an accelerated program                                 | C-E         | The detail was skipped over...  |
| Because it was an accelerated program                                 | C-E         | Getting feedback was difficult  |
| Because it was an accelerated program it was decided not to do that   | R           | there could have been more participation  |
| It was done too quickly   | C-E         | That meant that IBM were skimming the surface   |
| Because the business didn't want this to be a hurry thing             | C-E         | accelerated process - made it worse   |
| Because in the early stages it was just being pushed through          | C-E         | ..and so people wouldn't look forward to the engagement meetings....It was all very defensive |
| they realised when people went "What about this person?"              | C-E         | they then started to invite people  |
| they made a statement as if it was fact                               | C-E         | So, that didn't go down well  |
|   | C-E         | So, there was disregard for our requirements  |
| because they upset people   | C-E         | it was an adverse effect  |
| We're not accepting the view from the vendor anymore                  | C-E         | And this aligns with me coming on to the S.C.   |
| requirements specification .... Would have helped immensely           | M-E         | because we ... they could have said" We can deliver this" or "We can't deliver that"          |

This analysis indicates that the decision to use these organisations, and the attitudes they adopted, may have contributed to the negative perceptions of the project. Firstly, the management and ownership of the initial phases of the project by ICT provider may have contributed to the perception that the project was difficult. Further, the decision may also have been perceived as contributing to a number of the problems and challenges which eventually led to the cancellation of the project. Although an earlier lessons learned report had recommended that this specific vendor not be used for future projects, the ICT provider selected the same vendor, contributing to perceptions about the relationship of ICT provider and the vendor. The rationale for this choice was not explained. This raised two ethical issues. Firstly, why was this decision allowed? Secondly, why was the lessons learned report ignored? The lack of justification for the decisions resulted in a level of equivocality about the agenda driving them. Secondly, the use of an accelerated methodology by the consultants may have contributed to the perception that they were skimming the surface of the data collection process, resulting in concerns about the quality of the business case. The perception seemed to be that this accelerated methodology may not have encouraged or facilitated SME engagement in the project. Thirdly, the perceived attitude of the consultants and the vendors, supported by ICT provider, may have contributed to the concern about low SME engagement. In contrast, there were no significant issues with either the selected vendor or the role of the ICT provider in Case Study B. Consequently, there was no identified uncertainty or equivocality about these issues.

The interviews from Case Study A highlighted the concerns about, and perceptions of, the role of ICT provider and the consultants. They also, however, may have indicated the reason why ICT provider adopted the approach it did. For example, Participant 1 stated, *“I remember the guy from (ICT consultant) saying this was a laid down mizaire; that this (the project) was a given. Peter E, (CEO of ICT provider) said this was going to happen”*. And, *“We’re out of support for the old system; we don’t really have a choice”*. These perceptions may have set the tone for the project. At a minimum, they may have influenced leadership concerns and attitudes. In contrast, the scope of work and accountability for the consultants and the vendor in Case Study B was clear. There were no issues or concerns raised about the vendors or consultants in interviews or documents. Further, the Relationship Analysis for Case Study B indicated a focus on leadership understanding of the drivers of the project. Moreover, the analysis shown in Table 5-K, below, suggests a willingness of this organisation to identify and assess alternative solutions, and to focus on the best approach for the organisation overall.

**Table 5-K. Case Study B – Business Case Drivers Relationship Analysis**

| Issue     | R'ship type | Perceived consequence   |
|-----------|-------------|---|
| (re NWMI) | R           | So, ...we soon realised we weren't going to get what we needed from that, but it had to be fully investigated       |
|           | C-E         | So, we went into an RTB brief   |
|           | R           | So, we just wanted to re-visit, to make sure we were going down the right track                                     |
|           | R           | So, there were all those things about how we can better look at...  |
|           | C-E         | And there was a lot of gnashing of teeth ...“Well, hang on, what is best for the organisation?”                     |
|           | C-E         | So, there were all those discussions  |
|           | C-E         | So, we did a couple of more months just to be certain of the assessment... Sunwater then withdrew from that project |
|           | C-E         | ...so the executive as a whole took that decision based on the assessment of likely outcomes                        |

Table 5-K presents evidence that the organisation from Case Study B was perceived as willing to acknowledge and analyse alternative solutions, including challenging its own policies (e.g. the policy of always considering SAP first as a solution). The effect of this perception may have been an understanding that decisions should always be for the best interests of the organisation. The combination of this focus with a clear direction from leadership about customer service may have contributed to the perception of an ethical leadership environment.

An example was, *“..we had a default position of using SAP unless there were sound reasons why not...”*. There was evidence that this organisation was willing to deal with uncertainty by extending research and analysis and by identifying alternatives. An example was, *“So, ... we then ..did a couple of more months just to be certain of that assessment...”*. Further, the evidence suggests that this organisation was prepared to make decisions based on the outcomes of the extended research. Moreover, as with the focus on customers, there was evidence that this organisation focused on the best interests of the company as a decision factor.

### 5.4.1.2 R.P.1.1 - Quality of LDM may be improved by decreasing the levels of uncertainty and equivocality in the process

#### R. P. 1.1.1 Levels of uncertainty and equivocality may be decreased through consideration of ethical issues in the process

The data supports Research Propositions 1.1 and 1.1.1.

There were a number of concerns raised about the role and involvement of executives and organisational leadership in Case Study A. Table 5-L, below, presents the Relationship Analysis of the executive and business unit leadership attitudes to the project.

**Table 5-L. Case Study A - Executive/Business Attitudes Relationship Analysis**

| Issue  | R'ship type | Perceived consequence  |
|--|-------------|--|
| So the executive were of the opinion that really the core was ERP, ...and it needed to be first off rank                               | R           | So, that was what actually went up first (push Ellipse to the back)  |
| perception that replacement would be way too expensive   | R           | And, so, it wasn't in the cycle for replacement  |
| So we were trying to explore how far to go, without knowing what the product could do  | R           | And that's where it was sort of decided to do a Design phase   |
| It took quite a bit of time for any of the execs to stand up   | R           | So we ended up having P.F. as sort of Chair  |
| because they actually had a business lead identified   | C-E         | business units were a little less concerned  |
|  | C-E         | So, there was a bit of structure   |
| Because why would you pay that amount of money and get no benefits?  | C-E         | the business didn't like that (unclear benefits)   |
| because we weren't allowed to do a proper socialisation  | C-E         | (exec attitudes) - they were at a bit of a loss  |
| Because it got hijacked into Blueprinting  | C-E         | (exec attitudes) - they were at a bit of a loss  |
| exec attitudes - Because of the amount of money  | C-E         | it started to ring alarm bells   |
| So they get to Ellipse 8 and they realise it's a waste of time   | C-E         | So that's what I was hearing from SMEs, ...how do we make these decisions, ...then realise this was all a waste of time? |
| there could have been more participation   | M-E         | so that they could identify specific impacts   |
| ... (the project).. was pulled   | R           | Because there was a lack of quantified benefits  |
| ...because there was the understanding, even at exec level, that this is something we're going to do                                   | C-E         | we don't need to worry a bout the detail   |
| As the project got underway, and they dug under the surface, and the impacts got clearer it was virtually a significant implementation | C-E         | And, so, once we got closer to it, ..... "Maybe we should be looking at another system" or "Maintaining the status quo"  |

The themes identified indicate that lack of clarity on the part of executives about the business case for the project created opportunity for equivocality. Specifically, the varying interpretations of whether the existing version of the software was supported by the vendor created confusion. An example of this was provided by Participant 4 in his interview, "So we had a number of issues, conflicting outcomes, ..no requirements specifications, ...so ..creating more confusion". These were in the areas of the actual support options available for the existing version of the software, the expected benefits of the upgrade to a new version, the scope of the process design elements of the project and of the phasing of the project. These interpretations may have influenced decisions which were difficult to justify and communicate clearly. Moreover, they may have added to the concerns of staff and SMEs, compounding the uncertainty and equivocality. Further, this situation may have compounded the perceptions of the ethical issues raised by Table 5-L, above. The question about the vendor may have been exacerbated by the lack of clarity about continuing support for the current version of the software. A second group of issues, related to the first, was the organisation leadership's willingness to initially accept ICT provider's arguments for their selected approach. Participant 3 explained this, "ICT provider told us that we had to do this,

*and this was the right solution*". Initially, questions or concerns raised were ignored or avoided. Thirdly, again related to the first two, there was evidence that SMEs and other employees had consistently raised concerns about the data gathering process, and about the assumptions driving the project. These included questions about the identified benefits of the project. There was also evidence that organisational leadership was aware of these concerns, but, guided by ICT provider, chose to initially ignore them. The consequences of the leadership attitudes may have contributed further to SME and employee disengagement.

In contrast, Table 5-M, below, from Case Study B, demonstrates that leadership decisions were seen as positive and contributing to addressing identified issues. Again, there were no identified related areas of uncertainty or equivocality indicated in Case Study B. Once again, the analysis of Case Study B identified more positive leadership issues. The data in Table 5-M, below, indicates a positive perception of leadership performance.

**Table 5-M. Case Study B - Leadership Relationship Analysis**

| Issue   | R'ship type | Perceived consequence  |
|---|-------------|--|
| ...the project sponsor took a much lower level...                                       | C-E         | So, ...Barry had a lot more input  |
|   | C-E         | ...there was tensions there  |
| I pulled myself out of the detail, we shifted another member of the team into that role | C-E         | So, its ended up that we've got implementaion leads from each of the different areas |

There may also have been evidence that the perceptions of executive/leadership roles and involvement were related to SME and employee engagement. Table 5-N, below, presents the analysis of the employee and subject matter expert relationship to, and perceptions of, the project. There was evidence that leadership was willing to restructure project governance to assist business unit involvement and buy-in. It is reasonably likely that this proactive attitude contributed to the positive perception of the project.

**Table 5-N. Case Study B - SME/Employee Relationship Analysis**

|                     | Issue   | R'ship type | Perceived consequence   |
|---------------------|---|-------------|---|
| employee engagement | They're involved with that (employees) ...they're down on the floor with Serviceworks | C-E         | ...so they're involved in testing   |
|                     | (re the decision making process)  | C-E         | I think it went pretty well, because they were involved                               |
|                     |   | C-E         | And the leadership direction has always been clear                                    |
|                     | re employee engagement (approval fatigue)   | C-E         | So, as long as there is something agreed that will start this process                 |
| SME involvement     | (re SME involvement)  | C-E         | .....it created debate. Cause there was lots of ...Well why should we do it that way? |

Table 5-N shows that, in Case Study B, staff and SMEs were perceived as being actively involved and engaged in the project. One participant stated, "*... the SMEs were all involved in this...activity*". Further, there was evidence of a perception that open discussion and questioning was encouraged and was safe to do. One project team member stated in his interview, "*...it's not personal interest, it's the interest of each group*". The perception that open communication was encouraged, and was "safe", may have contributed to the view that this organisation's leadership acted ethically. Table 5-N also acknowledges the existence of some political issues. The "effects", however, suggested that these were proactively

addressed and discussed. Moreover, the Table indicates a focus on “customer” as the foundation for addressing political and other issues. This may have provided a focusing mechanism for discussions of political issues, thereby decreasing equivocality. Again in contrast to Case Study A, the perception was that leadership direction was clear.

Further, this proactivity may also have impacted how any emerging political issues were addressed. An example of this was, “*..there were opportunities there to raise any of these issues well in advance of the Steering Group, and that would help the group trying to direct the project towards issues, risks...*”. Table 5-O, below, indicates the focus of this organisation on customers and their needs, and the role this may have played in LDM.

**Table 5-O. Case Study B – Politics Relationship Analysis**

| Issue   | R'ship type | Perceived consequence  |
|---|-------------|--|
| (re politics)   | C-E         | ..I think we identified the major areas,..So I think we'd already had those conversations                          |
|   | C-E         | So, possible sensitivities had been noted  |
| ... there were certainly undercurrents of resistance... | C-E         | So, the focus on improving our services to customers   |
| (Re make-up of PSG - adding Manager, Strategy)          | R           | ...being that this was going to change..our relationship to customers...changes to the way we deliver our services |

There was evidence that the focus on customers provided a mechanism for dealing with any resistance or other concerns. Further, there was evidence that there was acknowledgement of potential political issues and a willingness to proactively discuss them in the context of customer service. One participant stated, “*There were a number of occasions in which that occurred. ..and ..the approach was to ...understand the positions of each of the PSG, ...that was using a PSG member almost as a mediator...*”.

#### 5.4.1.2.1 Decision Point Analysis

The emails in Case Study A were analysed separately because of the initial volume and focus. Emails were mapped against decisions and issues. This mapping is attached as [Appendix 23](#). Decision points were further analysed and known outcomes identified. Each outcome was further analysed to identify any decrease in levels of uncertainty or equivocality. Table 5-P is a summary of this analysis. The complete analysis is attached as [Appendix 24](#).

## Chapter 5. Analysis of data

**Table 5-P. Case Study A - Decision Point Analysis**

| Date   | Code | Issues   | Decision point? | Uncertainty decreased? | Equivocality decreased? |
|--------|------|--|-----------------|------------------------|-------------------------|
| 16-Aug | CS1  | Concerns raised about data gathering process   |                 |                        |                         |
| 18-Aug | CS3  | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |
|        | CS4  | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |
| 23-Aug | CS5  | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |
| 23-Aug | CS6  | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |
|        | CS7  | Response from consultants to some issues raised  |                 |                        |                         |
| 24-Aug | CS10 | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |
| 29-Aug | CS11 | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |
|        | CS12 | Internal responses from organisation leadership re concerns raised                                 |                 |                        |                         |
|        | CS12 | <b>Decision made to continue irrespective</b>  | Yes             | No                     | No                      |
| 30-Aug | CS14 | Concerns raised about resourcing estimates   |                 |                        |                         |
| 31-Aug | CS16 | Concerns raised about resourcing estimates   |                 |                        |                         |
| 2-Sep  | CS17 | Concerns raised about resourcing estimates   |                 |                        |                         |
|        | CS18 | Reactions to business case being submitted without any acknowledgment of user concerns             |                 |                        |                         |
|        | CS19 | Concerns raised to leadership re process, estimates and lack of acknowledgement of user concerns   |                 |                        |                         |
| 5-Sep  | CS20 | Concerns raised; no changes made to documents  |                 |                        |                         |
|        | CS21 | <b>Business case submitted without changes</b>   | Yes             | No                     | No                      |
|        | CS22 | Submitted by consultants with no changes reflecting issues & concerns raised                       |                 |                        |                         |
|        | CS24 | Submitted without changes  |                 |                        |                         |
| 6-Sep  | CS25 | Concerns again raised  |                 |                        |                         |
|        | CS26 | Details from consultants re sources of estimates   |                 |                        |                         |
|        | CS27 | <b>Refined business case submitted; still no changes reflecting user concerns</b>                  | Yes             | No                     | No                      |
| 13-Sep | CS28 | <b>Business case doesn't reflect changes</b>   | Yes             | No                     | No                      |
|        | CS29 | Consultants confirmed no changes to be made  |                 |                        |                         |
|        | CS30 | Concerns collated from various sources in organisation   |                 |                        |                         |
| 14-Sep | CS31 | <b>Document submitted by consultants contrary to internal estimates</b>                            | Yes             | No                     | No                      |
| 15-Sep | CS34 | Official notice that document would be submitted without issues, concerns raised by internal staff |                 |                        |                         |
| 16-Sep | CS32 | <b>Submitted without changes from internal staff</b>   | Yes             | No                     | No                      |
| 19-Sep | CS36 | Message from CIO stopping all communications with consultants/vendors re business case             |                 |                        |                         |
| 21-Sep | CS35 | Vendor confirmed process was accepted by ELT/no changes  |                 |                        |                         |
| 22-Sep | CS36 | <b>Short notice of submission.</b>   | Yes             | No                     | No                      |

There were seven (7) decision points. The breakdown of the thirty-one (31) items was:

- |   |    |
|---|----|
| a. Concerns about data gathering and consulting processes | 14 |
| b. Responses to concerns – by consultants                 | 1  |
| c. Responses to concerns – internal                       | 4  |
| d. Concerns about resourcing                              | 3  |
| e. Concerns from leadership                               | 2  |
| f. Decision points  | 7  |

The pattern is that staff, project team members and some executives continually raised concerns, which may not have been adequately addressed by the ICT organisation or the

consultants/vendors. This was supported by documents and proposals being submitted for approval that did not include or acknowledge these concerns. Further, the lack of acknowledgement of concerns may not have decreased levels of uncertainty or equivocality in the decision processes for the project. This was supported by the consistency with which the same concerns were raised throughout the Set-Up and Initiation phases of the project. [Appendix 25](#) presents an analysis of the impacts on uncertainty and equivocality from each of the identified decision points, summarized in Table 5-Q.

Table 5-Q. Case Study A - Analysis of Uncertainty and Equivocality

| Date   | Code | Issues  | Decision point? | Uncertainty decreased? | Evidence   | Source   | Equivocality decreased? | Evidence   | Source                      |
|--------|------|---|-----------------|------------------------|--|--|-------------------------|--|-----------------------------|
|        | CS12 | <b>Decision made to continue irrespective</b>                                     | Yes             | No                     | The decision to continue with the current process was made without addressing any issues raised. These issues included the inadequacy and inaccuracy of the change impact assessment process; confusion about whether the process was actually carried out in the initial design workshops | CS2; CS3;CS4;CS5;CS7;CS9; CS29                                     | No                      | The scope of the vendor/consultant's change management tasks remained unclear. The input of project team members/SMEs to the impact analysis was not clarified adequately. These issues caused discussions and concerns and allowed interpretation by employees. For example, internal change management staff believed that the vendors had their own agenda and accelerated program which did not facilitate detailed employee involvement | CS3; CS4; CS5; CS7; CS9     |
|        | CS21 | <b>Business case submitted without changes</b>                                    | Yes             | No                     | Resourcing estimates did not clarify numbers of change management resources required. The Business Case did not include recommendations from internal experts, and did not address issues and concerns raised.   | CS1; CS4; CS7; CS9; CS10; CS11; CS12; CS14; CS15; CS16; CS17; CS18 | No                      | The perceived vagueness of the consultant resource estimates was open to interpretation. Equally, the scope of some internal functions, e.g. change management, was open to interpretation.  | CS9; CS10; CS11; CS16; CS18 |
|        | CS27 | <b>Refined business case submitted; still no changes reflecting user concerns</b> | Yes             | No                     | Resubmitted Business Case did not address any issues raised. The initial uncertainty about numbers, scope and resources remained   | CS19; CS21; CS25; CS26; CS27; CS28; CS30; CS32                     | No                      | The initial vagueness remained, and interpretations were being made  | CS32; CS34; CS36            |
| 13-Sep | CS28 | <b>Business case doesn't reflect changes</b>                                      | Yes             | No                     | Resubmitted Business Case did not address any issues raised. The initial uncertainty about numbers, scope and resources remained   | CS19; CS21; CS25; CS26; CS27; CS28; CS30; CS32                     | No                      | The initial vagueness remained, and interpretations were being made  | CS32; CS34; CS36            |
| 14-Sep | CS31 | <b>Document submitted by consultants contrary to internal estimates</b>           | Yes             | No                     | Project team members did not feel confident in the consultant estimates  | CS30; CS33; CS34; CS36   | No                      | The initial vagueness remained, and interpretations were being made  | CS32; CS34; CS36            |
| 16-Sep | CS32 | <b>Submitted without changes from internal staff</b>                              | Yes             | No                     | Project team members did not feel confident in the consultant estimates  | CS30; CS33; CS34; CS36   | No                      | The initial vagueness remained, and interpretations were being made  | CS32; CS34; CS36            |
| 22-Sep | CS36 | <b>Short notice of submission.</b>  | Yes             | No                     | Project team members were concerned about the short notice, particularly as their issues had not been addressed  | CS34; CS36   | No                      |  | CS32; CS34; CS36            |

Uncertainty is related to the lack of information on which to make decisions. Equivocality refers to the potential for differing interpretations of issues and factors to a decision. Where questions or issues are raised and no answer is provided, then interpretation, or misinterpretation, occurs. Neither organisational nor project leadership were perceived as providing adequate answers to questions raised. Neither were the consultants/vendors. Consequently, there was no evidence that the decisions made decreased the levels of uncertainty or equivocality. In fact, the analysis indicated the opposite. Decisions to ignore issues and concerns only supported the continuing uncertainty of SMEs and employees. Moreover, organisational leadership's perceived support of these decisions by the ICT organisation and the consultants/vendors may have contributed to the equivocality as, in the absence of clear communication, this was open to interpretation, or misinterpretation, by employees. Decision points were further analysed and known outcomes identified. Next, any decrease in levels of uncertainty and equivocality for each outcome was identified. Table 5-R, below, is a summary of this analysis. The complete analysis is attached as [Appendix 26](#).

Table 5-R. Case Study B - Decision Point Analysis

| Date   | Code  | Issues  | Decision Point | Uncertainty decreased? | Equivocality decreased? |
|--------|-------|---|----------------|------------------------|-------------------------|
|        |       | <b>Initial Set-up</b>                           |                |                        |                         |
| 1-Sep  | CSB1  | Project costs                                   | Yes            | Yes                    | Yes                     |
|        | CSB2  | Earned Value Graph                              |                |                        |                         |
|        | CSB3  | Issues & Objectives Register                    |                |                        |                         |
|        | CSB4  | Risk Register                                   |                |                        |                         |
|        | CSB5  | Costs   |                |                        |                         |
|        | CSB6  | Scope Change Assessment                         |                |                        |                         |
|        | CSB7  | Risks & Issues document                         |                |                        |                         |
|        | CSB10 | SWIM replacement Executive Summary              |                |                        |                         |
|        | CSB9  | SWIMS Systems replacement Director presentation |                |                        |                         |
| 1-Oct  | CSB8  | Project Charter                                 |                |                        |                         |
| 1-Dec  | CSB11 | SWIMS Project Management Plan                   | Yes            | Yes                    | Yes                     |
| 1-Dec  | CSB12 | BILL Project Management Plan                    |                |                        |                         |
|        |       | <b>Discovery</b>                                |                |                        |                         |
| 22-Mar | CSB13 | Work Plan Discovery stage                       | Yes            | Yes                    | Yes                     |
|        |       | <b>Preliminary Design</b>                       |                |                        |                         |
| 27-May | CSB14 | (ICT consultant) proposal                       | Yes            | Yes                    | Yes                     |
|        |       | <b>Detailed Design</b>                          |                |                        |                         |
| 16-Mar | CSB15 | BILL program Recommendations re Execution Phase | Yes            | Yes                    | Yes                     |
| 17-Sep | CSB16 | Project Summary                                 | Yes            | Yes                    | Yes                     |

There were six (6) decision points. There is evidence that the outcomes of these decision points may have decreased levels of uncertainty or equivocality in the decision processes for the project. [Appendix 27](#) presents an analysis of the impacts on uncertainty and equivocality from each of the identified decision points. Table 5-S is a summary of this analysis:

**Table 5-S. Case Study B - Analysis of Uncertainty & Equivocality**

| #  | Occurrence<br>Task                                    | Date      | Code  | Description       | Outcome   |
|----|---|-----------|-------|-------------------|---|
| 1  | Project costs   | 9/1/2010  | CSB1  | Excel spreadsheet | Board approval to initiate project                                      |
| 2  | Earned Value Graph                                    | 9/1/2010  | CSB2  | Excel spreadsheet |   |
| 3  | Issues & Objectives Register                          | 9/1/2010  | CSB3  | Excel spreadsheet |   |
| 4  | Risk Register   | 9/1/2010  | CSB4  | Excel spreadsheet |   |
| 5  | Costs   | 9/1/2010  | CSB5  | Excel spreadsheet |   |
| 6  | Scope Change Assessment                               | 9/1/2010  | CSB6  | Excel spreadsheet |   |
| 7  | Risks & Issues document                               | 9/1/2010  | CSB7  | Excel spreadsheet |   |
| 8  | Project Charter                                       | 10/1/2010 | CSB8  | Word document     |   |
| 9  | SWIMS Systems replacement<br>Director presentation    | 11/1/2010 | CSB9  | Word document     |   |
| 10 | SWIM replacement Executive<br>Summary                 | 11/1/2010 | CSB10 | Word document     |   |
| 11 | SWIMS Project Management<br>Plan                      | 12/1/2010 | CSB11 | Word document     | Approval to re-commence SWIMS after<br>review of NWM initiative options |
| 12 | BILL Project Program Plan                             | 12/1/2010 | CSB12 | Word document     | Decision to convert project to BILL format,<br>and continue             |
| 13 | Work Plan Discovery stage                             | 4/12/2011 | CSB13 | Excel spreadsheet | Approval for scope revisions and project<br>restructure                 |
| 14 | (ICT Consultant) proposal                             | 5/27/2011 | CSB14 | Word document     | Approval for (consultant) as consultant                                 |
| 15 | BILL program<br>Recommendations re<br>Execution Phase | 3/16/2012 | CSB15 | Word Document     | Approval to begin BILL execution phase                                  |
| 16 | Project Summary                                       | 7/17/2012 | CSB16 | Excel spreadsheet | Approval to continue BILL project                                       |

The analysis of decision points in Case Study B indicates that there was evidence to support the contention that decisions made did decrease levels of uncertainty and equivocality. Decisions made were cumulative, and based on progressive reviews and updates. Issues were addressed, and leadership communicated decisions clearly. Employees and SMEs in Case Study B were clear about the role of the vendors, the scope and business case of the project and the expected outcomes. Table 5-S shows the lack of repetition of any item throughout the period, which suggests that uncertainty was continually and progressively decreased as each issue was addressed. Scope, however, was the exception, in that this was being continually reviewed and confirmed throughout the project.

#### **5.4.1.3 R.P.1.2 Quality of LDM may be improved by applying organisational learning processes**

The data supports Research Proposition 1.2.

The organisation in Case Study A had a completed Post Completion Review (Appendix 16) of a previous project, Project JET. This Review identified fifteen (15) lessons learned, and provided recommendations for each. This Review was readily available and identifiable on

the company intranet. The project was highly controversial, and was anecdotally universally viewed as a disaster. This perception was supported by comments from interviews. For example, the initial business owner stated that he received numerous comments, such as, *“We’re just repeating history; we’ve done this before; this is just like JET; this is why we got into problems with JET. We’re doing it all again. We haven’t learnt from the past”* (Semi-structured Interview #1). Another example was, *“None of the executives were keen to do another JET”* (Preliminary interview # 1). And, from the same interview, *“Well, we’re just flogging another dead horse here”*. Table 5-T presents a summary of the analysis of each identified lesson learned. The complete analysis is attached as [Appendix 28](#).

Table 5-T. Case Study A - Lessons Learned Analysis

| #  | Lesson Learned  | Observation(s)  | Identified as an issue in interviews?   |
|----|---|---|---|
|    | (from Post Completion Review - Project J)   | Analysis  |   |
| 1  | In the future consider only experienced implementation partners for projects as large and complex as PROJECT JET.   | The same implementation partner was chosen for this project as for the JET project.   | Yes. (ICT consultant) and/or (software vendor) mentioned negatively xx instances.                           |
| 2  | In future have 1 organisation lead the implementation with input from the other in early project phases (planning and design) and utilise this as a template for the other organisation as they implement the solution.                     | The project structure is led by (ICT services provider),with Business Leads from each of the other two organisations. No one organisation has a "lead" role       | Yes. Project governance, accountability, lack of clear leadership mentioned xx instances as negative issues |
| 3  | Suggest Joint Governance requires additional overhead and time for the Project Team suggest joint governance be limited to design phase.  | Current project structure is presented as being relevant to all phases  |   |
| 4  | Need to define what common solution really means in some detail.  | Being addressed in early Design Workshops   |   |
| 5  | Free up demands on sponsors so they have the time and focus to deliver their sponsor role fully   | Identified as a Project Risk, and allocated to a business owner. No resultant action  | Yes. Project Governance mentioned xx instances as na issue  |
| 6  | Have an early clear strategy for what and how reporting will be delivered within an organisation  | Reporting included as a critical success factor   |   |
| 7  | Utilise proven technologies when implementing new reporting tools   | The software version being implemented is untested  | Yes. Software version mentioned xx instances as an issue  |
| 8  | Be pragmatic about common solutions when business rules are different EG Labour Utilisation calculated in different ways between YY and XX.   |   |   |
| 9  | Make reporting a key deliverable and monitor progress throughout project life   | Reporting included as a critical success factor   |   |
| 10 | Where processes have changed what people are required to do then significant attention and resources should be allocated to building an understanding - The principles of the new ways of working and how the system supports that new way. | It was initially stated that there would be no process design/redesign involved in the project.   |   |
| 11 | Where possible utilise staff for training and coaching and post go live support   | The tender briefing document for Change Management/Training services requires a "train the trainer" strategy, including provision of trainers                     |   |
| 12 | Where possible predict support demand, develop robust ways to capture, categorise and prioritise issues from all levels and areas in the organisation and agree with sponsors and staff prior to go live.                                   | There was continuous, visible lack of support for the project manifested in a large number of requests by staff to be removed; visible lack of leadership buy-in. |   |
| 13 | A Process Owner Forum will be established to provide self direction in relation to process ownership and for setting strategic direction for continuous improvement across all processes, aligned with Business Plans.                      | Identified as a Project Risk, and allocated to a business owner   |   |
| 14 | The practical application of applying process ownership approval through the Process Integration Managers has evolved outside of the CAB process.   | No Change Advisory Board exists. User acceptance identified as a Project Risk, and allocated to a business owner.   |   |
| 15 | Organisationally actively manage the transition of staff  | A number of staff assigned to the project did not have substantive positions to return to.  |   |

Table 5-T shows that issues that had been identified in the JET Post Implementation Review as lessons learned were also mentioned in interviews for this research as being challenges or risks to the Case Study A project. While the executives did not want “*another JET*”, they also didn’t apply available lessons learned.

A summary of the Lessons Learned Analysis was that, of the 15 identified lessons learned from the previous JET Project, only three (3) could be cross-referenced with a relevant action in the current project. Of these three (3), none were deliberately identified as a direct result of any lesson learned. A Text Search Query in NVivo of all project documents and presentations identified only one reference to previous lessons learned, and this was a suggestion by the vendor that there may be some lessons learned from the “sister” GOC in the area of software product selection.

There was no formal lessons learned report or other relevant documentation identified in Case Study B. An NVivo text search query for lesson learned returned twenty one (21) items, all of which confirmed that there were no formal lessons learned or organisational learning processes used. However, there were indications that these were informally used. For instance, one Participant stated, “*One of them (lesson learned) is our ability to disengage project people from the business....*”. And, following this, “*...they’re (employees) actually taken off line...they’re involved*”. There was also a stated expectation that project managers actually should develop a lessons learned report, “*It is customary for our internal project managers to ...write lessons learned documents*”.

The preceding analyses supports Research Proposition 1.1 - Quality of LDM may be improved by applying organisational learning processes. The application of organisational learning processes was one factor.

It was notable that, when the new Case Study A Business Lead was appointed, he immediately distributed the Project JET Post Implementation Review (lessons learned report) to all team members (Interview #4). It was even more notable that the new Business Lead was highly regarded by team members, and was perceived as making a significant leadership difference (Interview #5). Comments from the Business Lead’s interview highlighted his attitude to lessons learned, and how he eventually applied them. For instance, “*We had a look at what was learned from JET, and it became clear... we hadn’t ..utilised that information. ...I ..made sure that we were taking steps ... to ensure we didn’t end up in the same place.*” Those [steps included](#), “*Look, we’re not accepting the view from the vendor anymore, because this is not taking us on the path*”. And, following this, “*And this aligns with me coming on to the Steering Committee*”. This change of attitude coming from a new leader aligned with lessons learned 1, 2, 3, 4 and 12 from Table 5-T, above. Participant 4’s willingness to challenge the provided logic of the vendor-developed business case, and to belatedly apply lessons learned, was an ethical decision on his part.

In contrast, during his interview, the Project Director, Participant 5, stated, regarding lessons learned, “*They don’t exist. I was never able to find one inside the organisation. I did a search across virtually the entire Hummingbird, looking for examples of lessons learned, spelled learned, learnt, and could not find one example.*” The internal Project Manager, however, stated that project managers were expected to keep lessons learned logs. He further stated that there was a lessons learned task in their project management methodology. This analysis

suggested that, in Case Study B, organisational learning was an acknowledged and expected process which was not enforced.

### 5.4.2 Summary

The preceding analyses identified some differences between the Case Studies, presented in Table 5-U, below.

**Table 5-U. Case Study Comparison Summary**

| Case Study A                       | Case Study B                            |
|------------------------------------|---|
| Driven/managed by ICT              | Driven/managed by business              |
| Consultants/vendors managed by ICT | Consultants/vendors managed by business |
| Assumptions unchallenged (Ellipse) | Assumptions challenged                  |
| Business Case unclear              | Business Case clear                     |
| Lack of employee involvement       | Employees involved                      |
| Lack of leadership direction       | Leadership direction clear              |
| Lessons learned ignored            | Lesson learned not used                 |

Table 5-U presents the major differences between the two Case Studies. In the simplest terms, it indicates that the participant perceptions of Case Study A were predominantly negative, while participant perceptions of Case Study B were positive. The Relationship Analyses from which Table 5-U was developed (Tables 5-M – 5-Q) presented the specific areas and items related to these perceptions. These Relationship Analyses were mainly of the “Cause – Effect” type in Spradley’s Universal Semantic Relationship Model (1979), shown in Table 5-E.

The differences were clear, and were supported by the eventual outcomes of each of the projects. The project in Case Study A was eventually cancelled, primarily because of lack of identified benefits but also as a result of significant and increasing employee pressure. The project in Case Study B was successfully completed. Each of the differences highlighted in Table 5-U was a consequence, or was related to a consequence, of one or more decisions about its specific project.

The comment by the Project Director for Case Study B, Participant 5, about lesson learned, *“They don’t exist. I was never able to find one inside the organisation. I did a search across virtually the entire Hummingbird, looking for examples of lessons learned, spelled learned, learnt, and could not find one example.”* Seemed to contradict the stated and expected use of the process. The internal Project Manager stated that project managers were expected to keep lessons learned logs, according to their methodology.

In summary, uncertainty and equivocality is likely to be decreased by the provision of accurate, relevant and timely information. These analyses demonstrate, primarily through “cause-effect” analyses, how perceptions of decisions may contribute to levels of uncertainty and equivocality. Moreover, the eventual cancellation of the project in Case Study A suggests that the LDM process did not decrease levels of uncertainty or equivocality.

This sub-section addressed Analysis Goal 1, Investigate whether the data provided support for the Research Propositions. Data from both Case Studies was analysed using the Nvivo qualitative analysis software package. An initial thematic contextual analysis confirmed

attitudinal differences between participants in each Case Study, supporting further detailed analysis. Next, Word Frequency Analysis and Key Words in Context Analysis (Ryan & Bernard 2003) identified specific differences in attitudes and perceptions of the participants in each Case Study, which supported a “compare and contrast” approach to reviewing support for each Research Proposition. Spradley’s (1979) Universal Semantic Relationship Model was used to develop Relationship Analyses and Decision Point Analyses for each Research Proposition.

**5.5 Analysis Goal 2 – Establish whether the data provided support for, and thereby confirmed, the elements of the Q.L.D. model.**

This section describes how the data provides support for the use of the five elements of the Q.L.D. model as 1) question categories for detailed semi-structured interviews, and 2) parent coding nodes for further analysis. The analysis supports the elements of the Q.L.D. model for both purposes. Semantically, different terms could have been used for the elements, but the resultant grouping of themes would have remained consistent. Table 5-V, below, presents a summary of the process used to confirm the elements of the Q.L.D. model.

**Table 5-V. Summary of analysis process for elements of Q.L.D. model**

| R. Q. # | Research Question   | Analysis Goal   | Interpretation and proof  | Sources   | Outcome  | Validated Y/N |
|---------|---|---|---|---|--|---------------|
| 1       | What is the role of ethics in leadership decision-making? | <b>Analysis Goal 1</b> - Confirmation of elements of Q.L.D. model | 1. Relationship Map(s) showed the interdependency and linkages between major themes from Preliminary Interviews. They also showed a high-level chronology of theme occurrences. | 1. Primary Data: Preliminary Interviews                               |  |               |
|         |   |   | 2. Identification of major initial themes from Nvivo transcripts  | 1. Primary Data: Preliminary Interviews                               |  |               |
|         |   |   | 3. Collation of themes. Group themes from Relationship Map(s) and Nvivo, by Case, and align with elements of Descriptive Framework  | 1. Relationship Map(s) 2. Nvivo transcripts of Preliminary Interviews | Each identified theme could be listed under at least one of the elements of the Q.L.D. model | Yes           |

**5.5.1 Yin’s Data Analysis Model – Phase 2 - Disassemble Data**

Disassembling data is the process of grouping data into smaller data sets or files. As this research used Yin’s (2011) framework concept, the assumption was that the elements of the Q.L.D. model would be used as initial “parent” codes. The disassembly process needed to confirm support for the elements as initial parent codes. A combination of manual and electronic analysis was used to confirm this support. A template analysis approach was used to create initial coding structures (King 2004). The purpose of this high-level analysis was:

- a. to increase internal validity by supporting the elements of the Q.L.D. model, and their relationships and to use the elements:
  - i. to develop semi-structured interview protocols, and
  - ii. as primary, or parent, coding “nodes” in NVivo.

The first step in this process was to conduct a high-level, manual analysis of each preliminary interview. The manual analysis process for each preliminary interview involved developing a Relationship Map. A Relationship Map shows the major themes identified, and their relationship to other themes. The dependencies depicted in a Relationship Map are based on identified predecessors and successor relationships among the themes and items. The

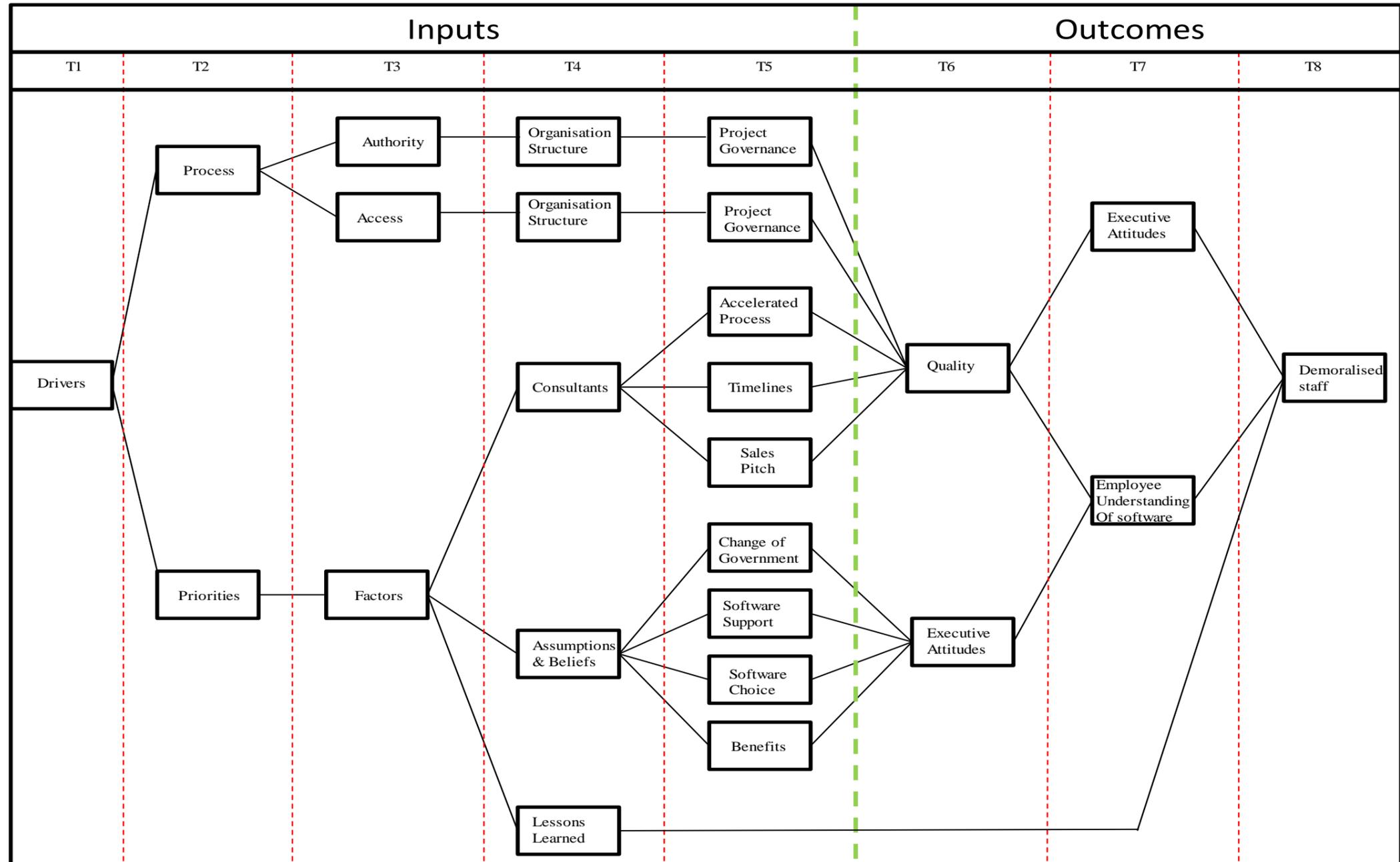
Relationship Maps developed in this research also identified items as inputs or drivers, and outputs or outcomes. The specific steps in creating these Maps were:

- a. 18 identifying major themes (see [Appendices 31 & 33](#))
- b. classifying themes as “drivers” or “outcomes” (see [Appendices 32 & 34](#))
- c. identifying the relationships between themes by indicating the predecessors and successors of each theme
- d. developing a Relationship Map for each Case Study preliminary interview

#### **5.5.1.1 Case Study A – Manual Analysis**

The data and tables used to develop the Relationship Map for Case Study A are attached as [Appendices 29](#) and [30](#). The “predecessor” and “successor” classifications in these tables indicated a chronological relationship. The Relationship Map reflects that relationship by using a time sequence, T1 through T8. The Relationship Map for Case Study A is shown in Table 5-W.

Table 5-W. Preliminary Interview A - Relationship Map



The Relationship Map identifies the initial relationships suggested in the preliminary interview.

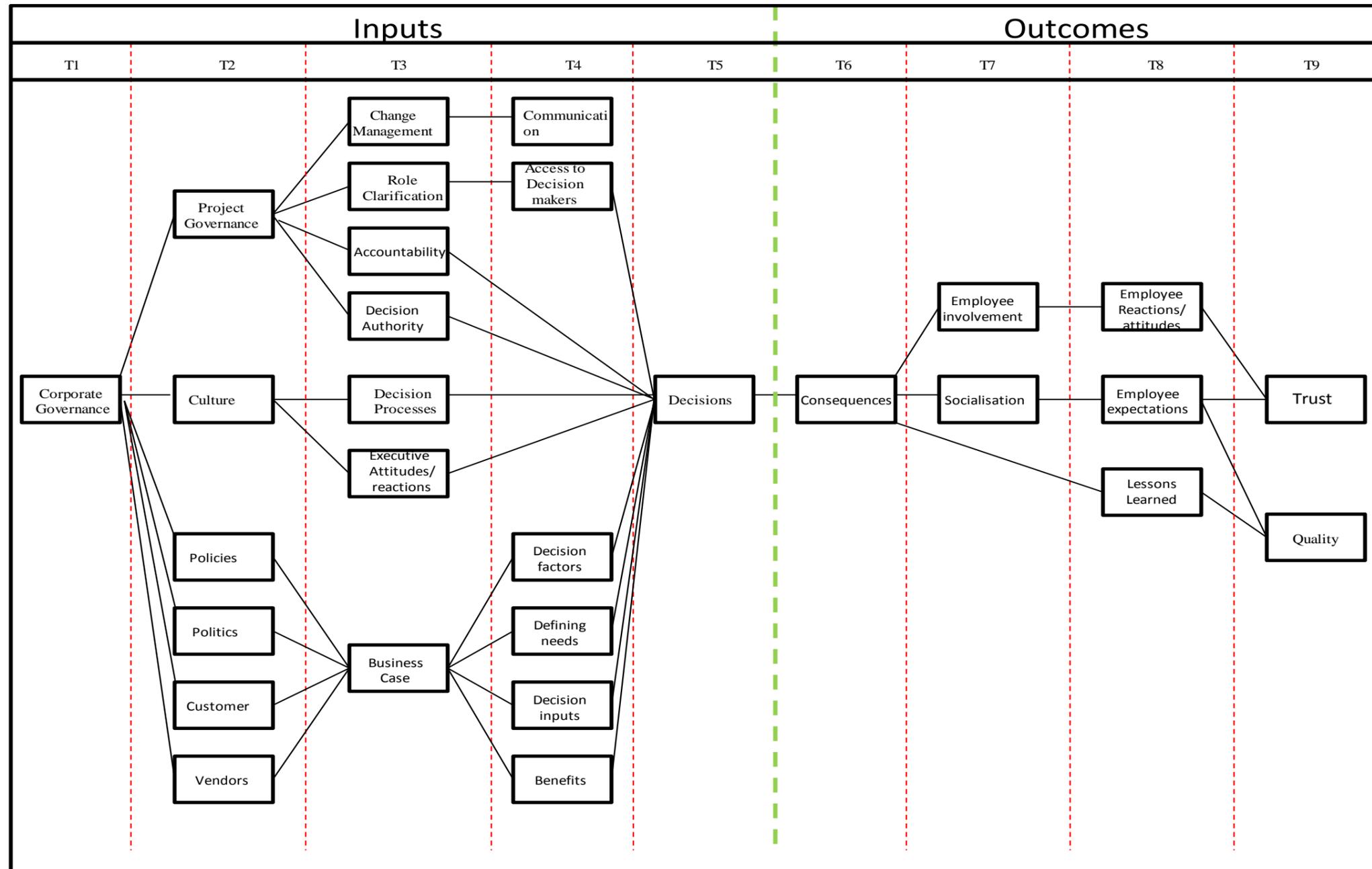
The “Drivers” in T1 were required as inputs to the “Process” and “Priorities” in T2. These, in turn, were required inputs to decisions about “Authority” and “Access” in T3. In Case Study A, predefined levels of authority and access preceded and helped define organisation structure. These processes may have included governance, reporting and other factors that, at a minimum, may have influenced decisions about structure. Organisational structure, in turn, preceded decisions and discussions about project governance. In Case Study A, project governance was initially driven by the role of the ICT provider in the overall governance structure. Additionally, the project governance structure also created initial difficulties with access to decision makers, as the internal change managers could not get their concerns included in project documents sent to organisational leaders. The Map also shows, in the outputs section on the right side, that decision authority and access may have influenced perceptions of quality. In Case Study A, quality was identified as an issue in the context of the Business Case submitted for approval. The perception was that the degree of influence the consultants had over the LDM process influenced the quality of the Business Case document submitted. The support received from project management to apply an accelerated process, resulting in perceptions of skimming the surface of data gathering and analysis, was perceived as contributing to the overall poor quality of the final document submitted. The quality of the Business Case, in turn, may have influenced employee understanding of the proposed software, as well as executive attitudes. Each of these would have had an impact on staff morale.

Similarly, organisational priorities likely influenced the decision factors of the project. In Case Study A, organisational priorities were defined by the ICT strategy, the ICT Blueprint. This strategy, previously approved and adopted, allowed a set of assumptions and beliefs to be developed. Included in these assumptions was the belief that the current version of the ERP software would not be supported by the vendor after 2013. Further, as the ICT Blueprint was prepared by the same consultants involved in this project, an attitude of “this is going to happen anyway” was evidenced. The combination of these assumptions and beliefs with the consultants’ attitude may have influenced the proposed timelines, processes and software choice. There was evidence that they also influenced attitudes towards definition of project benefits. Subsequently, these themes also may have influenced the outcomes of quality and of executive attitudes. Finally, the Map suggests that the decision not to use available lessons learned may have been influenced by the decision factors of the project described above.

### **5.5.1.2 Case Study B – Manual Analysis**

The data and tables used to develop the Relationship Map for Case Study B are attached as [Appendices 31](#) and [32](#). The “predecessor” and “successor” classifications in these tables indicate a chronological relationship. The Relationship Map reflects that relationship by using a time sequence, T1 through T9. The Relationship Map for Case Study B is shown in Table 5-X.

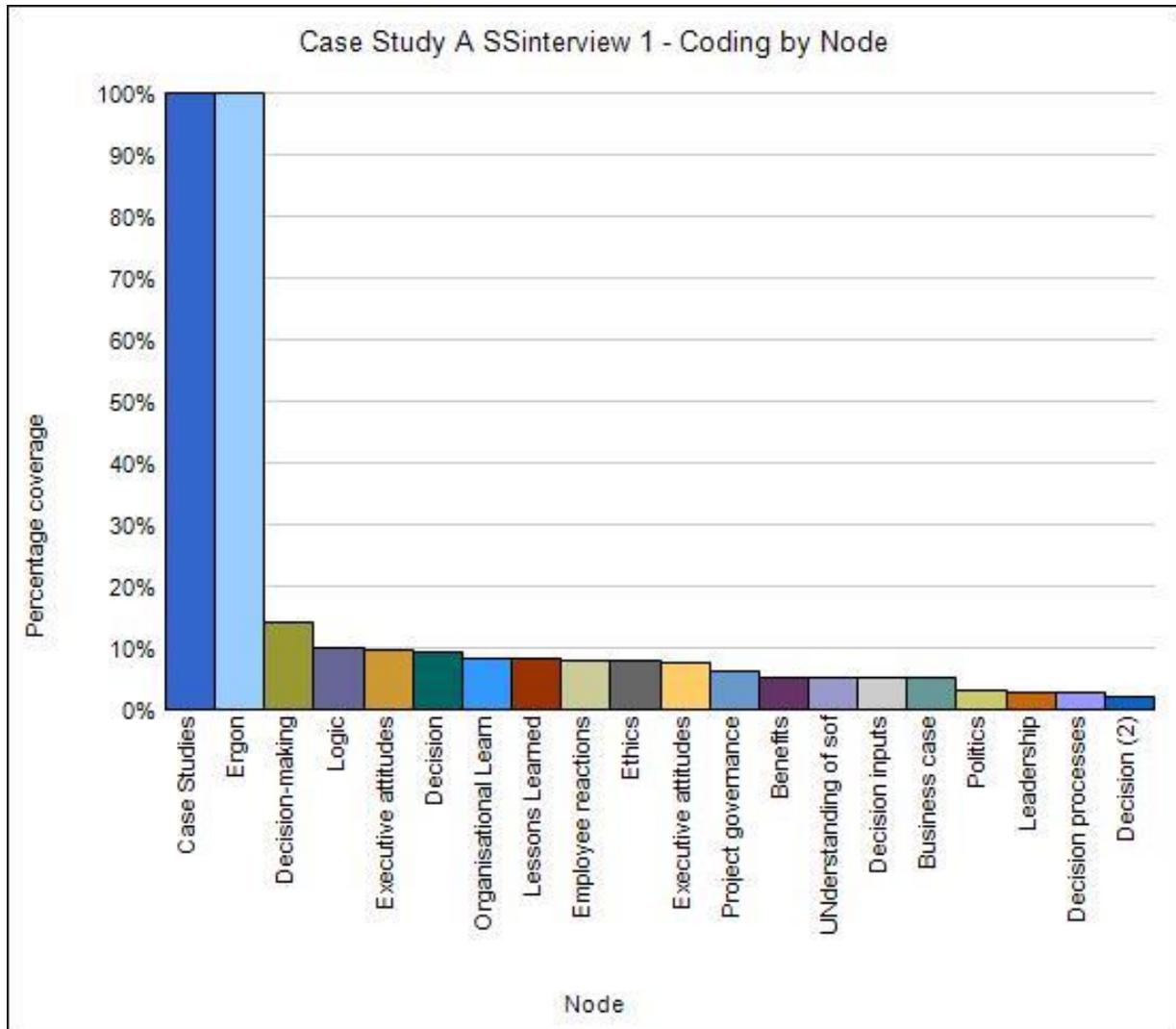
Table 5-X. Preliminary Interview B - Relationship Map



The Relationship Map identifies the initial relationships suggested in the preliminary interview. The Map indicates that, in this organisation, Corporate Governance, T1, was the predecessor of subsequent LDM factors, including policies, project governance, customer focus and others shown in T2. Further, project governance may have influenced decisions about accountability, application and role of change management and other relevant role clarification requirements in T3. Subsequently, these may have impacted access to decision makers, and project communications processes in T4. Moreover, corporate governance may have driven the focus on customers and customer service, as well as assisting the formulation of policies and organisational culture. Further, it may have influenced the selection and management of vendors. These themes all had some relationship to the development of the Business Case. This, in turn, may have driven the perceived required inputs, needs and factors for the LDM process, as well as assisting the identification of benefits expected from the project. The Map also indicates that organisational culture may have influenced decision processes, and executive attitudes. Finally, although lessons learned were not formally used, the Map indicates that informal use of these also contributed to the outcomes. On the right side of the Map, the outputs are identified. The Map suggests that the consequences of decisions, and their alternatives, were clearly defined and communicated. Further, this process assisted with employee involvement which, in turn, may have influenced employee reactions and expectations. The end result, T9, was identified as staff that trusted the project and its leadership, and a perception of a quality initiative.

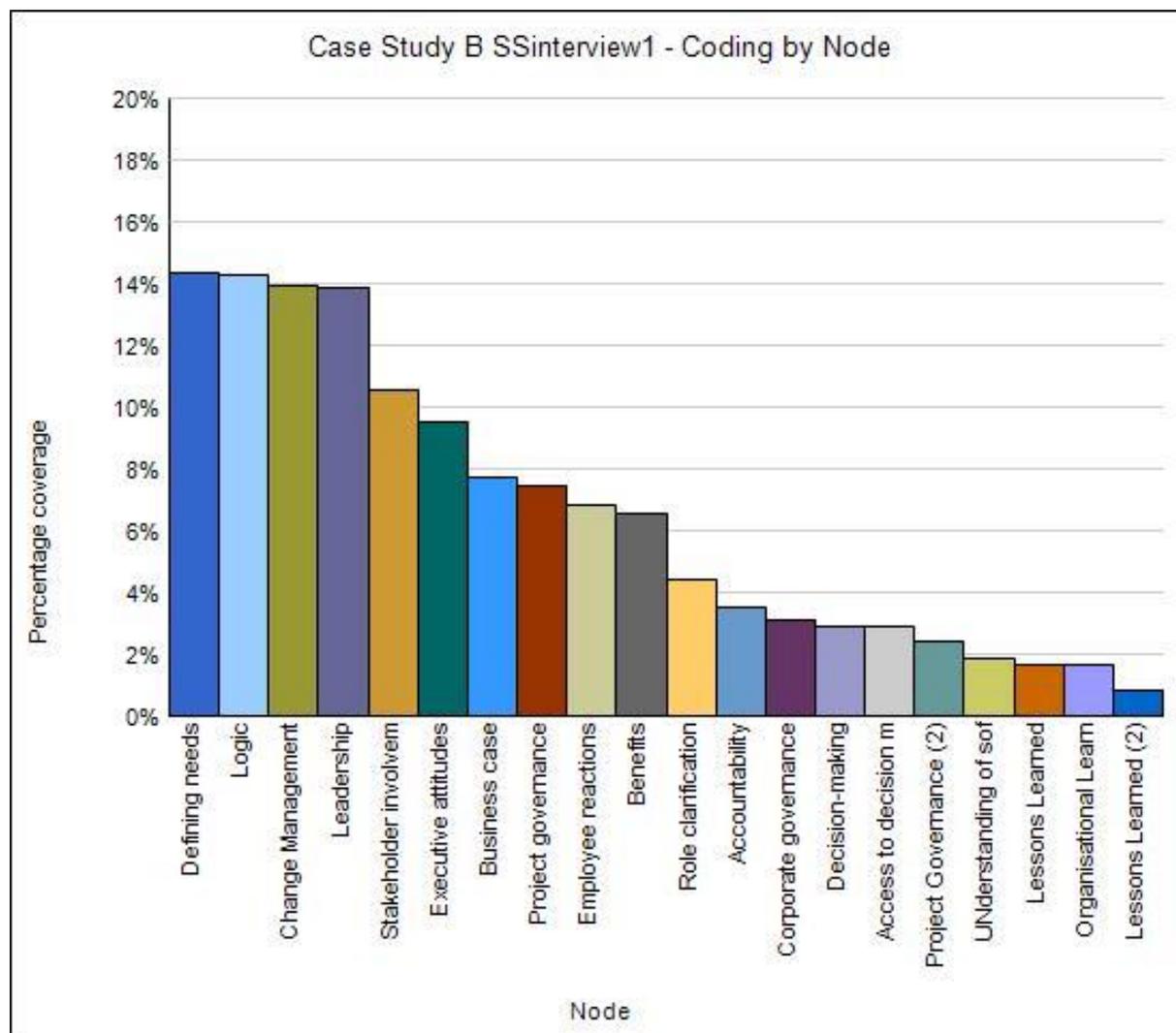
The next step was to confirm the results of the manual analyses, using NVivo. Each preliminary interview had previously been transcribed and entered into NVivo. Word Frequency Counts and Text Search Queries were run to identify major themes and patterns from the transcribed interviews. Table 5-Y presents the results for preliminary interview A:

Table 5-Y. Preliminary Interview A - Major Identified Initial Themes



The largest two items, Case Studies and Case Study A, can be eliminated as they were either part of questions, or formed part of answers to separate the other two organisations involved in the project. The process was repeated for Case Study B. Table 5-Z presents the results for preliminary interview B:

Table 5-Z. Preliminary Interview B - Major Identified Initial Themes



Next, these results were used as input to coding.

### 5.5.1.3 Coding structure and design

The final step was to compare and contrast the results of each manual analysis with the equivalent NVivo report, and collate these with the elements of the Q.L.D. model. Table 5-AA shows this analysis. Each of the themes identified was classified into one of the five elements of the Q.L.D. model, by Case Study. The resultant groups of themes for each of the elements were compared, and common items identified. Assignment of the items to a group was not necessarily exclusive. Some items could have been logically assigned to another element. This exercise, however, was a high level analysis of common themes to identify support, or otherwise, of the five elements as acceptable “parent” nodes for further coding. The labels in the far right hand column, “Proposed Parent Node”, could have been named differently. The naming convention would not, however, have changed the content of the groupings or the classifications. The degree of commonality of items in each of the Q.L.D. model elements supports the initial composition of the Q.L.D. model. Consequently, the

elements of the model were supported as appropriate initial data classifications for detailed analysis. This also supported their relevance as primary, or parent, nodes in NVivo.

**Table 5-AA. Analysis of Support for Q.L.D. model elements from Preliminary Interviews**

| LDM Element             | Case Study A   |  | Case Study B   |  | Proposed Parent Node    |
|-------------------------|--|--|--|--|-------------------------|
|                         | Manual   | Nvivo  | Manual   | Nvivo  |                         |
| Logic                   | <ul style="list-style-type: none"> <li>• Priorities</li> <li>• Organisation structure</li> <li>• Project Governance</li> <li>• Benefits</li> <li>• Timelines</li> </ul>  | <ul style="list-style-type: none"> <li>• Logic</li> <li>• Business Case</li> <li>• Benefits</li> <li>• Project Governance</li> </ul>   | <ul style="list-style-type: none"> <li>• Project Governance</li> <li>• Accountability</li> <li>• Corporate Governance</li> <li>• Defining Needs</li> <li>• Benefits</li> <li>• Policies</li> </ul>   | <ul style="list-style-type: none"> <li>• Defining needs</li> <li>• Logic</li> <li>• Business Case</li> <li>• Project Governance</li> <li>• Benefits</li> <li>• Accountability</li> <li>• Corporate Governance</li> </ul> | Logic                   |
| Ethics                  | <ul style="list-style-type: none"> <li>• Sales Pitch</li> <li>• Software Support/ Choice</li> <li>• Executive Attitudes</li> </ul>   | <ul style="list-style-type: none"> <li>• Ethics</li> </ul>   |  | <ul style="list-style-type: none"> <li>• Executive Attitudes</li> </ul>  | Ethics                  |
| Decision-Making         | <ul style="list-style-type: none"> <li>• Process</li> <li>• Factors</li> <li>• Authority</li> <li>• Access</li> <li>• Consultants</li> <li>• Assumptions &amp; Beliefs</li> <li>• Accelerated Process</li> <li>• Change of Government</li> </ul> | <ul style="list-style-type: none"> <li>• Decision-making</li> <li>• Decisions</li> <li>• Decision Inputs</li> <li>• Decision Processes</li> <li>• Decisions (2)</li> <li>• Leadership</li> <li>• Politics</li> </ul> | <ul style="list-style-type: none"> <li>• Decision Authority</li> <li>• Decision Making</li> <li>• Access to decision makers</li> <li>• Decision Processes</li> <li>• Decision Inputs</li> <li>• Politics</li> <li>• Understanding of software</li> <li>• Consequences</li> <li>• Decision Factors</li> </ul> | <ul style="list-style-type: none"> <li>• Leadership</li> <li>• Employee Reactions</li> <li>• Decision-making</li> <li>• Access to decision makers</li> <li>• Understanding of software</li> </ul>                        | Decision-making         |
| Organisational Learning | <ul style="list-style-type: none"> <li>• Lessons Learned</li> <li>• Quality</li> </ul>   | <ul style="list-style-type: none"> <li>• Organisation Learning</li> <li>• Lessons Learned</li> </ul>   | <ul style="list-style-type: none"> <li>• Lessons Learned</li> </ul>  | <ul style="list-style-type: none"> <li>• Lessons Learned</li> <li>• Organisational Learning</li> <li>• Lessons Learned (2)</li> </ul>  | Organisational Learning |
| Change Management       | <ul style="list-style-type: none"> <li>• Employee understanding of software</li> <li>• Demoralised Staff</li> </ul>  | <ul style="list-style-type: none"> <li>• Employee Reactions</li> <li>• Executive Attitudes</li> <li>• Employee Understanding of Software</li> </ul>  | <ul style="list-style-type: none"> <li>• Role Clarification</li> <li>• Communication</li> <li>• Socialisation</li> <li>• Employee reactions/ attitudes</li> <li>• Employee expectations</li> <li>• Culture</li> </ul>  | <ul style="list-style-type: none"> <li>• Change Management</li> <li>• Stakeholder Involvement</li> <li>• Role Clarification</li> </ul>   | Change Management       |

(Note: Decision-Making is included in this Table, although it is not an element of the Q.L.D. model. It is included as it was an identified node in NVivo).

Next, the five Q.L.D. model elements, and the related themes, were used in the Reassembly Phase to:

- a. develop protocols for detailed, semi-structured interviews
- b. develop a structured node hierarchy in NVivo, with parent and child nodes
- c. confirm initial defined relationship types in NVivo

### 5.6 Analysis of the Research Problem and Question

The context of this research was created by the perceived convergence of two themes; the high failure rates of change initiatives, and the increasing concern with leadership ethics resulting from recent business scandals. In that context, the research problem of concern to this thesis was:

*There is a lack of understanding of the role of ethics in LDM in change initiatives.*

The aim of this thesis was to investigate the role of ethics in LDM, within a change environment. The argument was made that the quality of LDM may be improved through the inclusion of ethics as a factor in the process. Further, the role of ethics in LDM may include decreasing the levels of uncertainty and equivocality in the process. Finally, ethics in LDM may also contribute to the application of organisational learning in change initiatives.

### 5.6.1 Research Purpose

This research had two purposes. The first was to explore the role of ethics in LDM in change initiatives in Queensland Government Owned Corporations. The second purpose was to use the research findings to develop a conceptual model for improving the quality of LDM in change initiatives.

### 5.6.2 Research Questions

The research question addressed was:

*What is the role of ethics in LDM in change initiatives?*

### 5.7 The Q.L.D. model for improving the quality of LDM

The aim of the Q.L.D. model was to provide a model for improving the quality of LDM. While the context was primarily in change initiatives in Queensland Government Owned Corporations, it was expected that the process would be applicable to LDM generally in both the public and private sectors. The Q.L.D. model was analysed firstly by identifying how each of the elements was addressed by the process, shown in Table 5-BB, below.

**Table 5-BB. Analysis of LDM elements against Q.L.D. model**

| LMD Element                | Support in Q.L.D. process  |
|----------------------------|--|
| Logic                      | Logic is one of the initial inputs to the process. It is represented by rational business cases and other facts.   |
| Ethics                     | Ethics is one of the inputs to the process. The Q.L.D. process provides the mechanism to ensure ethical issues are considered, or at least identified. Through the Consequence Specificity process, ethical alignment is high. |
| Organisational Learning    | The Q.L.D. process specifically and intentionally addresses organisational learning by identifying its role in decreasing uncertainty and equivocality and by contributing to the Consequence Specificity process.             |
| Leadership Decision-making | The Q.L.D. process is intentionally designed for leadership use, and is focussed on the consequential nature of decision-making. It provides a process for leaders to follow to improve the quality of their decision-making.  |
| Change Leadership          | Change leadership provides the context of the decision-making process. It also can provide tools and processes to assist with decision implementation and buy-in.  |

Table 5-BB shows that the Q.L.D. model incorporates and addresses each of the five elements of the LDM process. The process was then further analysed by identifying

how the process may have addressed the Research Propositions, presented in Table 5-CC, below.

**Table 5-CC. Analysis of Q.L.D. model against Research Propositions**

| Research Proposition  | Support in Q.L.D. process  |
|---|--|
| 1. LDM is a primary factor contributing to change initiative failure rates  | The Q.L.D. process identifies all sources of input to a decision. It also requires detailed identification and consideration of all possible, relevant consequences. Further, the Q.L.D. model requires consideration of ethical issues, which makes it difficult for leaders to ignore political or other difficult issues and factors. Consequently, the Q.L.D. model addresses and supports Research Proposition 1.               |
| 1.1 Quality of leadership decision-making may be improved by decreasing the levels of uncertainty and equivocality in the process | The Q.L.D. process specifically contributes to decreasing uncertainty and equivocality through the Consequence Specificity process. The model allows the decision-maker to describe, understand and address relevant consequences by identifying and providing any required additional information or explanation. This process subsequently decreases levels of uncertainty and equivocality.                                       |
| 1.1.1 Levels of uncertainty and equivocality may be decreased through consideration of ethical issues in the process              | The Q.L.D. process specifically contributes to decreasing uncertainty and equivocality through the Consequence Specificity process. Consideration of ethical issues results in identification and inclusion of input which may have been otherwise ignored. It also increases the level of consideration of potential consequences of decisions.   |
| 1.2 Quality of leadership decision-making may be improved by applying organizational learning processes                           | The Q.L.D. process identifies organisational learning as a major component of the process. The process shows a direct link between organisational learning and uncertainty and equivocality, indicating to users the need to access and apply available lessons learned. Additionally, ethical considerations as inputs to the process also include the leader's ability and willingness to apply organisational learning processes. |

Table 5-CC shows how the Q.L.D. model supports the Research Propositions. The Q.L.D. model, if applied in Case Study A, may have changed the decisions made or the process used. This contention was analysed by applying the Q.L.D. model to each of the decisions identified in the [Decision Point Analysis in Case Study A](#). The detailed analysis is attached as [Appendix 33](#). A summary of this analysis is presented in Table 5-DD.

Table 5-DD. Q.L.D. model Decision Point Analysis - Case Study A

| Code | Issues  | Decision point? | Uncertainty decreased? | Equivocality decreased? | Q.L.D. process  | Q.L.D. process - potential outcomes  |
|------|---|-----------------|------------------------|-------------------------|---|--|
| CS12 | <b>Decision made to continue irrespective</b>                                     | Yes             | No                     | No                      | 1. The requirement to include organisational learning may have identified Lesson Learned 1 from the JET Post Implementation Report, "In the future only experienced implementation partners for projects as large and complex as JET".<br>2. The consideration of ethical factors and issues would have identified the lack of response to the data gathering concerns raised.<br>3. The inclusion of organisational learning may have identified Lesson Learned 12 from the JET PIR, "Where possible predict support demand, develop robust ways to capture, categorise and prioritise issues from all levels and areas in the organisation and agree with sponsors and staff prior to go live". | 1. Implementation partners selected may have been different, with a different attitude.<br>2. The data gathering process may have been revised, potentially removing the perception that (ICT consultant) were "skimming the surface".<br>3. The issues and concerns process may have been more robust, and issues may have been addressed or, at a minimum, acknowledged. |
| CS21 | <b>Business case submitted without changes</b>                                    | Yes             | No                     | No                      | 1. The Q.L.D. processes may have decreased the levels of uncertainty and equivocality resulting from the perceptions of low quality of the submitted business case, by moving the decision to submit dfrom Decision Point 1 to Decision Point 2.<br>2. The ethical consideration element of the Q.L.D. process may have caused relevant leadership to review lack of adequate response to conerns about the quality of the business case<br>3. The change management element of the Q.L.D. process may have identified a need for increased stakeholder involvement, and user buy-in activities.  | 1. The business case may have been more strictly reviewed before submission, and areas of uncertainty and equivocality identified and addressed.<br>2. The business case may not have been submitted in its original form.<br>3. Internal resources may have been more involved and engaged, resulting in less resistance and demoralisation.                              |
| CS27 | <b>Refined business case submitted; still no changes reflecting user concerns</b> | Yes             | No                     | No                      | 1. The ethical consideration element of the Q.L.D. process may have caused relevant leadership to review lack of adequate response to conerns about the quality of the business case<br>2. The Q.L.D. processes may have decreased the levels of uncertainty and equivocality resulting from the perceptions of low quality of the submitted business case, by moving the decision to submit dfrom Decision Point 1 to Decision Point 2.  | 1. The business case may not have been re-submitted in its original form.<br>2. The business case may have been more strictly reviewed before submission, and areas of uncertainty and equivocality identified and addressed.  |
| CS28 | <b>Business case doesn't reflect changes</b>                                      | Yes             | No                     | No                      | 1. The use of organisational learning may have identified Lesson Learned 5 from the JET PIR, "Free up demands on sponsors so they have the time and focus to deliver their sponsor role fully".   | 1. The Sponsor may have had the time to protect the organisation by confirming internal resource estimates, and deciding which estimates would be used.  |
| CS31 | <b>Document submitted by consultants contrary to internal estimates</b>           | Yes             | No                     | No                      | 1. The use of organisational learning may have identified Lesson Learned 5 from the JET PIR, "Free up demands on sponsors so they have the time and focus to deliver their sponsor role fully".<br>2. The change management element of the Q.L.D. process may have identified a need for increased stakeholder involvement, and the need for ownership of the project to be internal  | 1. The Sponsor may have had the time to protect the organisation by confirming internal resource estimates, and deciding which estimates would be used.<br>2. Internal resources may have felt more ownership of the project, resulting in decreased equivocality about project politics, agendas and drivers.   |
| CS32 | <b>Submitted without changes from internal staff</b>                              | Yes             | No                     | No                      | 1. The use of organisational learning may have identified Lesson Learned 5 from the JET PIR, "Free up demands on sponsors so they have the time and focus to deliver their sponsor role fully".<br>2. The ethical consideration element of the Q.L.D. process may have caused relevant leadership to identify why changes from internal staff had not been acknowledged and included  | 1. The Sponsor may have had the time to identify why internal staff changes were ignored.<br>2. Recommended changes from internal staff may have been included   |
| CS36 | <b>Short notice of submission.</b>  | Yes             | No                     | No                      | 1. The ethical consideration element of the Q.L.D. process may have caused relevant project leadership to review the drivers of the short notice of submission.   | 1. The submission timing and schedule may have been changed to allow more review and input. This may have decreased concerns about the politics of the short notice.   |

Table 5-DD shows that the outcomes of decision points may have been different if the Q.L.D. model was applied. Consequently, this research supports the contention that the Q.L.D. model may contribute to improving the quality of LDM in change initiatives.

### **5.8 Summary**

This Chapter had two research goals; 1) to provide support for the Research Propositions, and 2) to identify and provide support for the elements and structure of the Q.L.D. model. Yin's (2011) Five Phase Analysis approach was described, and the use of the qualitative analysis software package, NVivo, was detailed. Processes and protocols for data coding and classification were described. Initial themes and patterns were also described. Primary and Secondary data collection processes were defined. The analysis processes were described, starting with the use of manual and NVivo analyses of preliminary interviews to confirm the initial data coding structures. Semi-structured interviews were analysed using the defined node hierarchy and pre-defined relationship types in NVivo. Documents were reviewed and analysed, as part of the triangulation process. Data and themes were linked to specific, relevant Research Propositions. This Chapter was supported by a detailed, task based work plan (Appendix 7), which assisted with replicability by defining tasks in chronological order, identifying precedents and defining outcomes. This Chapter followed Yin's Five Phase Data Analysis model. However, in the interests of clarity, the Findings section combined the Reassemble and Interpret phases.

There were a number of conclusions from the preceding analyses. Firstly, it was concluded that the initial, redefined expectation that Case Study B would identify and clarify some important differences in the cases, their processes, approaches and outcomes was supported. Case Study B highlighted differences in how information about the project was managed, and how decisions were progressively and cumulatively made. Secondly, it was also concluded that the data provided support for all Research Propositions, for the sample group for this research. Thirdly, the Q.L.D. model supported the Research Propositions. Further, the Q.L.D. model, if applied, would have impacted the outcomes of the decisions made, specifically in Case Study A. The next Chapter presents detailed discussion of the research findings, and outlines conclusions and implications for theory and practice.

**6.0 DISCUSSION, CONCLUSIONS AND  
IMPLICATIONS**

## Chapter 6.0 Discussion, Conclusions and Implications

This research makes two unique contributions to theory and practice; it identifies the interdependence of four elements of leadership decision-making (LDM) in change initiatives, and it applies the research findings to develop the Q.L.D. model for improving the quality of leadership decision-making (LDM) in change initiatives in Queensland GOCs. The Literature Review identified four major elements that were relevant to LDM in change initiatives; ethics, logic, organisational learning and change management. There was, however, no research of the relationship between these four elements. There was research of the relationship between some of the elements. For example, By and Burnes (2011) discuss the relationship between [ethics and change management](#). Similarly, Ciulla (2005) addresses the relationships between [ethics, logic and decision-making](#). Moreover, research demonstrates a relationship between [ethics and the quality of decision-making](#) (Rausch & Anderson 2011; Woiceshyn 2011). The literature did not, however, clearly identify the role of ethics as an interdependent element in LDM. Consequently, the first purpose of this thesis was, “**To explore the role of ethics in LDM in change initiatives in Queensland Government Owned Corporations**”.

A second major theme from the Literature Review was that current change management models and methodologies are not adequately addressing the quality of leadership decision-making. Further, that this potential deficiency is likely to be contributing to the [failure rates of change initiatives](#). Consequently, the second purpose of this thesis was, “**To develop a model for improving the quality of LDM in change initiatives**”.

Based on the findings from the Literature Review, the structure of the research for this thesis was:

**Research Problem:** *There is a lack of understanding of the role of ethics in leadership decision-making (LDM) in change initiatives.*

**Research Question:** *What is the role of ethics in LDM in change initiatives?*

**Research Propositions:** *R.P.1 LDM is a significant factor contributing to change initiative failure rates*

*R.P.1.1 Quality of LDM may be improved by decreasing the levels of uncertainty and equivocality in the process*

*R.P.1.1.1 Levels of uncertainty and equivocality may be decreased through consideration of ethical issues in the process*

*R.P.1.2 Quality of LDM may be improved by applying organisational learning processes*

This Chapter presents a discussion of the impacts of this research on theory and practice, and specifically addresses the Research Propositions and Analysis Goals. Particular focus is put

## Chapter 6.0 Discussion, Conclusions and Implications

on the development of the Q.L.D. model as a practical outcome of the research, and its benefits.

This research evolved from an initial interest in the interdependency of ethics and logic, and how that might affect change initiative failure rates. The themes identified in the literature review refined this interest, and eventually defined the research gap and problem. A core theme that emerged from the literature was the relationship of the four identified elements, ethics, logic, organisational learning and change management, to the quality of LDM. The research indicated that the quality of LDM can be improved by how relevant information is collected and analysed (Rausch & Anderson 2011). Further, in the context of a change initiative, these categories of relevant information could include ethics, logic, organisational learning and change management. A complementary theme to the collection and analysis of information was the role of the leader in the process. Research suggests that the application of ethics by a leader in the decision-making process would likely decrease that leader's levels of [uncertainty and equivocality](#). Moreover, how information is collected and analysed is potentially related to the application of ethics by leaders in their decision-making process (Rausch & Anderson 2011). Whereas the scope of the research did not include leadership theory specifically, there were two issues related to leadership that were identified.

Firstly, the role of leadership as a contributing factor to change initiative failure rates requires some clarification. Some of the research identified "[Lack of leadership support](#)" as one of the top three contributing factors to change failure rates (*Chaos, The Standish Group Report* 1995; *Challenge of Change: Australia* 2010; Cooke et al. 2001; Eser et al. 2007; KPMG 1997; OASIG 1995). There is, however, no consistent and clear definition of what constitutes "lack of leadership support". The data from the Case Studies used in this thesis did, however, suggest a relationship between perceptions of leadership support and employee attitudes to the project. For example, in Case Study A, one interviewee commented that, in relation to accepting responsibility for the project, "*it took quite a bit of time for any of the execs to stand up*", which resulted in, "*So, we had P.F. as sort of Chair*". "P.F." was the head of the ICT function which, as the data shows, was [not fully trusted](#). For example, the statement was made that the project was, "*run by SPARQ*" and "*that was the problem*". The willingness of the executives to allow P.F. to assume the project leadership likely exacerbated the perception that leadership support for the project was not strong. Employee perceptions of the change initiative in Case Study A were generally negative, as presented in [Table 5-F](#). It is reasonably likely that the perceptions of low levels of leadership support identified from the data contributed to the strong negative perceptions of the project in Case Study A, shown in [Table 5-F](#). In contrast the data showed that the perceptions of Case Study B were positive, shown in [Table 5-F](#). Perceptions of leadership support in Case Study B were also positive. For example, one interviewee observed, regarding the decision-making of the executives, "*so the executive as a whole took that decision based on assessment of likely outcomes.*" Similarly, and again indicating the willingness of executives in Case Study B to make hard decisions, "*So, ... we then ..did a couple of more months just to be certain of that assessment...*". It is likely that the perceptions of employees about their leadership contributed to the positive perceptions of the project shown in [Table 5-F](#).

The second issue is the changing nature of leadership. In business generally, and in the context of change initiatives, the demands on leadership are [both increasing and expanding](#). The combination of the impacts of situations such as the Global Financial Crisis on [society's expectations of businesses and governments](#), and the growing demand for business to be about [more than profit](#), has changed the nature of leadership. Boal and Hooijberg's (2000)

## Chapter 6.0 Discussion, Conclusions and Implications

approach of integrating the New Leadership Theories with the Emerging Leadership Theories to create a revised approach to strategic leadership was analysed. The three elements identified correlated with those of the Q.L.D. model for improving the quality of leadership decision-making in change initiatives. The first element, absorptive capacity (the capacity to learn) encompasses the OL and Ethics elements of the Q.L.D. model. The second element, adaptive capacity (ability to change) encompasses the Change Management and OL elements of the Q.L.D. model. The third element of Boal and Hooijberg's (2000) approach is managerial wisdom. This encompasses the Ethics, Logic and OL elements of the Q.L.D. model. The Boal and Hooijberg (2000) approach is also consistent with the demands on leadership resulting from the changing nature of business and leadership. The growing demand for an expanded world view from business and government leaders requires a more strategic orientation, capacity and competency. Consequently, the work of Boal and Hooijberg (2000) on the re-emergence of strategic leadership is consistent with the findings of this thesis. The Q.L.D. model for improving the quality of leadership decision making contains components that are consistent with their three respective elements of absorptive capacity, adaptive capacity and managerial wisdom,

The data from the two case studies provided further support for the research purposes by highlighting the consequences of LDM in a change initiative. The data provided specific instances of leadership decisions made with inadequate or inaccurate information, or without the benefit of available, relevant lessons learned.

The next sub-section will discuss the findings from Chapter 5, Data Analysis. There were two Analysis Goals:

**Analysis Goal 1 - Investigate whether the data provided support for the Research Propositions.**

**Analysis Goal 2 - Establish whether the data provided support for, and thereby confirmed, the elements of the [Q.L.D. model](#).**

### **6.1 Analysis Goal 1 - Investigate whether the data provided support for the Research Propositions.**

The purpose of this goal was to analyse collected data against the Research Propositions to identify if, and to what degree, the data supported one or more of the Propositions.

#### **6.1.1 R.P.1 LDM is a primary factor contributing to change initiative failure rates**

The data analysis in Chapter 5 supported Research Proposition 1.

Existing research of change initiative failure rates was substantial and consistent (*Chaos, The Standish Group Report* 1995; *A guide to ERP Success* 2001; *Challenge of Change: Australia* 2010; Cooke et al. 2001; Eser et al. 2007; KPMG 1997; OASIG 1995), and there were identifiable trends. Firstly, "human" or "people-related" factors were consistently rated among the top five contributors throughout all the studies. Secondly, of these "people" factors, "leadership" was consistently rated among the top three identified contributors, and has received specific research attention (Higgs & Rowland 2011; Karp & Helgo 2008; Lehner 2004; Uday Bhaskar et al. 2003; Zhu et al. 2004). For example research showed that there is a relationship between LDM and employee perceptions of change (Zhu et al. 2004). Employee perceptions of change, in turn, affect levels of user involvement and also

## Chapter 6.0 Discussion, Conclusions and Implications

expectations of the change. User engagement and user expectations are the two other top rated contributing factors to change initiative failure rates, and there was clearly a relationship between leadership and these factors.

The findings of this research in Sections 5.2.1.1, 5.2.1.2 and 5.2.2.1 were consistent with the literature on factors contributing to change [initiative failure rates](#). [Section 5.2.1.1, Table 5-F](#), demonstrated significant overall attitudinal differences between the two case studies by highlighting the predominantly negative attitudes in Case Study A and the largely positive in Case Study B. The data indicated that the negativity in Case Study A was a result of leadership willingness to ignore repeated warnings, to proceed without clearly defined benefits and to minimise the need for user engagement. [Table 5-P](#), the Decision Point Analysis for Case Study A, identifies decisions made contrary to repeated and consistent concerns and questions from employees and stakeholders. The Table also shows that levels of uncertainty and equivocality were not decreased by these decisions. The consequences of these leadership decisions likely contributed to employee perceptions of lack of leadership support, unrealistic expectations of the project and levels of user involvement as described in [Section 2.2.6](#). For example, one interviewee commented about the business units' responses to the lack of clearly defined benefits, "*...why would you pay that amount of money and get no benefits?*" and, "*the business didn't like that (unclear benefits).*" The initial concerns from employees in Case Study A about the scope and outcomes of the project were confirmed during the design phase and this contributed to the negative perceptions. In the area of unrealistic expectations, one interviewee explained that, "*it was only once we got into that design phase that we actually found out we weren't getting what we were promised.. during that scoping, initiation and business case...*". In contrast, the data for Case Study B demonstrated positive consequences of leadership decisions. For example, the data in [Table 5-F](#) showed a very high positive perception of the project generally. [Table 5-R](#), Decision Point Analysis for Case Study B, showed clear decision points which decreased levels of uncertainty and equivocality. The data for Case Study B also showed positive perceptions to, and observations, of the leadership. For example, one interviewee commented that, "*..the leadership direction has always been clear.*" The decision by leaders in Case Study B to strongly involve users also contributed to the positive perceptions. One interviewee noted regarding employee engagement, "[I think it went pretty well because they were involved.](#)"

Whereas the data, combined with [Brown et al's \(2012\)](#) contention that current change models are deficient in how they address LDM, support Research Proposition 1, they do not, by themselves, explain why the leadership behaviours described in Case Study A happened. The ICT group did not have a positive image or reputation within the organisation and, in fact, were viewed as untrustworthy and manipulative ([Section 5.2.2.1, Tables 5-K, 5-L & 5-M, Table 5L](#)). It remains unclear why organisational leadership, then, allowed the ICT group to control the initial stages of the project, against continued concerns from other staff. Similarly, it is unclear why the ICT group stated that the software decision was based on the fact that the vendor would not continue to support the current version, when, in fact, there was an opportunity to extend the existing contract with the vendor. In fact, the final solution that was implemented, when the project was cancelled, was to continue using the current software version and explore its existing functionality in greater detail. An interviewee in Case study A observed, "*ICT provider tried to drive it through, well, you know, we were conned*". A third question that remains is why the organisation initially decided to ignore relevant lessons learned from a previous project which was universally accepted as a failure. In fact, organisational leadership stated that they did not want "*...another JET (the previous project)*" ([Section 5.2.2.4](#)).

## Chapter 6.0 Discussion, Conclusions and Implications

The concept of administrative evil (Adams & Balfour 2009) may partially explain the behaviours of the leaders in Case Study A because, as a group, they had created a culture wherein there seemed to be few consequences of questionable decisions (Section 5.2.2.1). For example, at the time of completion of this thesis, there were no consequences on the ICT group who, it was strongly felt, had misled the organisation leadership ([Table5J](#) & [Table5L](#)). This is, however, consistent with Reed's (2005) argument that today's environment may actually inhibit moral considerations in the work environment and that the modern organisation environment may contribute to a perception that people are separated from the consequences of their actions. More importantly, perhaps, Reed (2012) contends that this type of behaviour is justified and accepted. In the context of this thesis, the perception of being separate from consequences of decisions is likely to have contributed to the behaviours of the leaders in Case Study A. The ICT leaders were willing to withhold relevant information, misrepresent business case facts and ignore internal experts. The organisation leaders were willing to accept unsubstantiated rationale for investments, to ignore their own recent bad experiences with a similar situation and to [discard significant and persistent advice from employees \(Section 5.2.2.1\)](#).

Administrative evil is a valuable and relevant concept, and somewhat contributes to the Research Problem of this thesis. As a theory, it suggests that ethics may decrease the effects of administrative evil by increasing the moral awareness of the leader (Reed 2012). While this may be true, it does not specifically address the issue of LDM. Further, it does not address the issues of uncertainty and equivocality in the LDM process. Nevertheless, this research expands on the concept of administrative evil by proposing that the inclusion of ethics in LDM may decrease the potential for administrative evil as an influencer of the decision process. Consequently, the theory of administrative evil is a valuable and promising contributor to the understanding of the role of ethics in LDM, but does not provide a complete explanation.

This analysis brought together three of the theories and concepts from the literature, and demonstrated how they are consistent with this thesis. This thesis incorporates Woiceshyn's (2011) view that the consequential nature of LDM makes the decision process critical, and demonstrates the applicability of this view to change initiative failure rates. Further, this thesis is consistent with Rausch and Andersen's (2011) argument that how information for LDM is collected and analysed can impact the consequences, the outcomes, of the decision, and thence the quality. Moreover, this thesis demonstrates the potential significance and impact of consequences of decisions, thereby supporting Lipshitz and Mann's (2004) argument that LDM is a core leadership activity.

This sub-section demonstrated that the data collected for this thesis provides support for Research Proposition 1, that LDM is a primary factor contributing to change initiative failure rates. Consequently, this sub-section expands existing research into the factors contributing to failure rates (Beer et al. 1990; Bridgeforth 2009; Decker et al. 2012; Lehner 2004; Macmillan 2000). Further, it contributes to the future development of change models by demonstrating the need for LDM processes to be part of their design (Brown et al. 2012).

### **6.1.2 R.P.1.1 Quality of LDM may be improved by decreasing the levels of uncertainty and equivocality in the process**

The analysis in Chapter 5 supported Research Proposition 1.1.

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Whereas the previous sub-section identified the need for an improvement in the quality of LDM, this sub-section discusses the role of uncertainty and equivocality in improving that quality. The findings of this research are consistent with, and expand upon, Sonenshein's (2007) contention that human beings make decisions under conditions of uncertainty and equivocality. Further, the findings demonstrate that the quality of decision making can be improved by decreasing the levels of these two conditions. In Section 5.2.2.3.1., [Tables 5-Q](#), an analysis was presented of the impacts of decision points on levels of uncertainty and equivocality in Case Study A. There was no evidence that the decisions made decreased the levels of uncertainty or equivocality. In fact, the analysis indicated the opposite. As an example, an interviewee in Case Study A stated that, regarding SME and user levels of equivocality as the project progressed, the thought was that, "[Maybe we should be looking at another system](#)". Decisions to ignore issues and concerns, as demonstrated in [Table 5-P](#), only supported the continuing uncertainty of SMEs and employees. Moreover, organisational leadership's perceived support of these decisions by the ICT organisation and the consultants/vendors likely contributed to the equivocality as, in the absence of clear communication, this was open to interpretation by employees ([Section 5.2.2.2., Table 5-J](#)). There were concerns raised, continuously, about how information was being collected. As one interviewee suggested, "*The detail was being skipped over.*" The resultant questions and concerns about the quality of the Business Case may have been partially a result of the quality of the information collected in the change impact assessment process. Nevertheless, the decision to continue with the project was made.

The role of the ICT provider in this Case Study A was a major theme. The description of the Case Study A in [Section 5.1.1.1](#) defines the role of the ICT provider as to provide, exclusively, information and telecommunications infrastructure and services to the two GOCs, Case Study A and a sister organisation. The provision of these services was to support the business requirements of the GOCs. The ICT provider adopted what seemed to be a Consequentialist view of the world with regard to this project ([Section 2.3.2.3.2](#)). In their view, the ICT Blueprint had been approved, and provided the driver for the ERP upgrade project of this research. The perception of employees was that the project was, "[..hijacked in Blueprinting](#)". The outcome, an upgraded ERP system, provided the "rightness" of the decision. Based on this, they were perceived as taking "ownership" of the project, and made decisions regarding scope, structure, vendors, and other items incorporated into the Business Case. They also drove the approval process for the [Business Case](#). Further, they were responsible for the relationship with the consultants and vendors. [Section 5.2.2.3](#) identified that the consequences of decisions made on the basis of the Business Case included the eventual closure of the project at a significant cost. Although there were continual concerns raised regarding the quality of the data collected by the consultants, the process and data were supported by the ICT provider. This supports the view that quality of decision making may be improved by how relevant information is collected and analysed (Rausch & Anderson 2011). In this case, questionable data collection resulted in negative consequences of decisions. The ethical issues in this situation are related to the GOC leadership's willingness to initially allow the ICT provider to control the Set-up and Initiation phases of the project. That decision contributed to levels of uncertainty and equivocality that eventually resulted in the new Business Representative changing the initial project governance structure. The Business Representative stated in his interview, "*Look, we're not accepting the view from the vendor anymore, because this is not taking us on the path*". And that consequently, "*.. this aligns with me coming on to the [Steering Committee](#)*". In Case Study A, the internal perception of, and reputation of, the ICT provider, created concerns about their "agenda" and drivers. These perceptions were compounded by revelations that the software could indeed continue to be

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supported by the vendor. Consequently, the levels of equivocality with staff were high as the information was contradictory and confusing. Moreover, levels of uncertainty were high because of a general lack of trust in the information. Consequently, this Case demonstrates the view that arguments may be valid, but still might not be ethical (Hannah 2006).

In contrast, the data for Case Study B indicated that decisions contributed to a decrease in uncertainty and equivocality (Table 5-S). There was little, if any, repetition of issues, indicating that these were dealt with at each stage. Leadership decisions were communicated clearly with detailed explanations. For example, as stated earlier, one interviewee pointed out that, “*..the leadership direction has always been clear.*” Additionally, one interviewee stated that “*So, ... we then ..did a couple of more months just to be certain of that assessment...*”, indicating a willingness on the part of leadership to increase levels of certainty through additional assessment and reviews. Further, leadership created an environment where open discussion and questioning were encouraged, and where required analysis to decrease uncertainty was supported. For example, one interviewee observed, “*..I’ve seen very frank and open (communications and culture) and people’s views are respected..*”. This extended analysis provided additional information that decreased uncertainty and equivocality. As an example, Table 5-R shows that the levels of uncertainty and equivocality were decreased with each decision point. Eventually, this project was completed on time, on budget and all benefits were achieved.

The data from Case Study A and Case Study B supports the contention that the decisions made, and the way in which they were made, contributed to the outcomes of the projects. This was consistent with a number of arguments and issues identified in the Literature Review. Firstly, the data supports the contention that LDM impacts employee engagement and perceptions of a project (Zhu et al. 2004). Secondly, it supports the view that quality of decision making can be improved by how relevant information is collected and analysed (Rausch & Anderson 2011). Thirdly, it supports Woiceshyn’s (2011) view that how leadership decisions are made matters.

There are a number of implications from this analysis. Firstly, LDM in change initiatives is critical in the Set-up and Initiation phases. Consequently, change management models and methodologies should incorporate LDM processes and tools specifically in these phases. Secondly, business leadership is responsible for addressing any identified uncertainty or potential for equivocality. The consequences of a new or updated ERP system are, or should be, most visible in business units and functions in the form of new or updated functionality, processes, reports and work accountabilities. LDM in change initiatives should be focused on decreasing uncertainty and equivocality in these areas. Thirdly, and related to the second, the LDM process should support and facilitate a decision to suspend or cancel a project when uncertainty and equivocality levels cannot be adequately addressed. Moreover, the LDM process should also facilitate extended research and data collection about issues that are creating uncertainty and opportunity for equivocality.

This sub-section demonstrates that the data collected for this thesis provided support for Research Proposition 1.1., ***Quality of LDM may be improved by decreasing the levels of uncertainty and equivocality in the process.*** While the analysis does not identify the specific leadership behaviours required to decrease levels of uncertainty and equivocality, it does highlight how leaders can create the environment for achieving this. In this sense, this research expands upon the work of Rausch and Anderson (2011) by defining more clearly the

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types of “relevant information” required, being data that would help to decrease equivocality and uncertainty.

### 6.1.3 R.P.1.1.1 Levels of uncertainty and equivocality may be decreased through consideration of ethical issues in the process

The data analysis in Chapter 5 supported Research Proposition 1.1.1.

Data from Case Study A and Case Study B supports the contention that the inclusion of ethical considerations in the LDM process impacts the data collected and how it was collected. For example, in Case Study A, one participant [observed that](#), “...*(ICT consultant) were skimming the surface...*” and, “*I don’t think there was anyone who had any other opinion than that it (the business case) was severely lacking in content and the presentation was extremely poor*”. In another interview, the participant commented that, “*ICT provider tried to drive it through, well, you know, [we were conned](#)*”. In contrast, participants in [Case Study B were more comfortable with the data collection process](#). For example, one interviewee commented that, “*..determining our business requirements and getting them out there in an intelligible form such that we could get sensible responses back...*” and, “*...a lot of people were involved in.. building up the business case...*”.

Further, ethical considerations are likely to expand the range of data collected to include information that is not part of the “logic” group of data. Consequently, this additional data would have a reasonable probability of decreasing the levels of uncertainty present in the process. Similarly, and separately, it may decrease the levels of equivocality. In each of the Case Studies, this would likely have been as a result of additional, specific information obtained by asking ethics-based questions, or by identifying ethical issues. Moreover, it is likely that it would have provided an expanded or modified context from the same sources. Finally, ethical considerations would probably have prompted the application of organisational learning processes. In each of the organisations in the Case Studies, applying the definition that the quality of LDM may be improved by how the data is collected and analysed (Rausch & Anderson 2011) could have improved the quality of the LDM process. Additionally, the consequences of the decisions made highlight the view that LDM is a core leadership activity (Woiceshyn 2011). Any activity that has visible and significant consequences on a range of constituencies must be treated seriously. Moreover, the responsibility for these consequences suggests a requirement for a core competence in managing the process. This core competence, this thesis suggests, should include the alignment of ethics and logic as equal inputs to the decision process. This would avoid the “moral crisis” situation where ethics and logic are not aligned, which presents leaders with a moral challenge (Rosenthal 2009).

This sub-section demonstrates that the data collected for this thesis provided support for Research Proposition 1.1.1., ***Levels of uncertainty and equivocality may be decreased through consideration of ethical issues in the process***. This thesis expands on the work of Woiceshyn (2011) by more clearly defining “LDM” as a core leadership activity. Specifically, this thesis suggest that the core “LDM” activity in Woiceshyn’s (2011) work should be that of decreasing levels of uncertainty and equivocality by incorporating both ethical and logical inputs. This thesis further supports Rosenthal’s (2009) argument that a moral crisis occurs when ethics and logic are not aligned. In particular, the [Q.L.D. model](#) for improving the quality of LDM creates an “ethically aligned” decision.

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### 6.1.4 R.P.1.2 Quality of LDM may be improved by applying organisational learning processes

The data analysis in Chapter 5 supported Research Proposition 1.2.

This research shows that eleven (11) of the lessons learned listed in the available Post Implementation Report ([Appendix 16](#)) for Case Study A were directly relevant to the current project ([Section 5.2.2.4, Table 5-T](#)). Further, this research indicates that application of those lessons learned would likely have decreased levels of uncertainty or equivocality about specific issues. Nevertheless, project and organisational leadership initially decided not to use the available PIR report. The interviews for Case Study A, however, indicated that the project of the PIR, Project JET, was continually referred to in discussions. For example, one interviewee stated that, *“We’re just repeating history; we’ve done this before; this is just like JET; this is why we got into problems with JET. We’re doing it all again. We haven’t learnt from the past”*. Another interviewee observed that, *“None of the executives were keen to do another [JET](#)”*. The data indicates that the previous project, JET, was in the minds of the organisation leaders and that the problems were acknowledged. The existence of the JET Post Implementation Review was also known, as demonstrated by the Business Representative, *“We had a look at what was learned [from JET](#), and it became clear... we hadn’t ..utilised that information. ...I ..made sure that we were taking steps ... to ensure we didn’t end up in the same place.”* The [lesson learned analysis](#) for Case Study A resulted in four conclusions:

- a. Organisation leadership and project management demonstrated an initial willingness to ignore or avoid known, available, relevant lessons learned (Project JET PIR)
- b. The organisation had a formal process for scheduling, managing and conducting lessons learned (the Post Implementation Review), which was part of its project management methodology ([see Appendix 16](#))
- c. Of the fifteen (15) lessons learned from the previous project, eleven (11) of the related issues were identified by interviewees as being of concern to the Case Study A project of this research
- d. Of the fifteen (15) lessons learned from the previous project, seven (7), if addressed, may have changed significant decisions, including stopping the project.

The first implication of this situation is that, even when there is a stated organisational policy of being a learning organisation, the LDM process in change initiatives should not assume automatic use of organisational learning processes.

This research has reported that humans do not always make rational decisions, even if they follow a logical process (Peirce 1905). Further, that, although lessons learned were clearly available and accessible, the decision to apply them was not initially made ([Section 5.2.3.4](#)). Moreover, the research indicated that consideration of the ethical issues may have resulted in the use of the available lessons learned report in Case Study A ([Section 5.2.3.4](#)). In fact, the report was ultimately used by a newly appointed Business Representative. Although Case Study B was perceived as a more positive project than that in Case Study A, there was acknowledgement that the organisation’s policy of producing lessons learned reports was not enforced. The Project Director for Case Study B stated that, *“[They don’t exist](#). I was never able to find one inside the organisation. I did a search across virtually the entire Hummingbird, looking for examples of lessons learned, spelled learned, learnt, and could not find one example.”* Further, it was not perceived [as an issue](#). An implication of this situation is that the existence of a policy of applying organisational learning does not guarantee compliance. A second implication is that availability of, and access to, lessons learned does

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not automatically imply they will be used. The conscious decision to access and apply organisational learning processes is a leadership responsibility. Perception of this responsibility, however, may be affected by motivations and expectations (Sonenshein 2007). In Case Study A, the role of the ICT Blueprint as a driver for the ICT provider may have created a perception that lesson learned were irrelevant to this project. An understanding of the potential consequences, including benefits, of applying lessons learned implies an ethical responsibility to use them. In this scenario, Sonenshein's (2007) view may challenge that of Lipshitz and Mann (2011) who maintain that LDM is a consequential activity requiring identifying and analysing all alternative options. This research is consistent with the contention that motivation and expectation drive perception of LDM responsibility (Sonenshein 2007).

An alternative explanation for not applying available lessons learned may involve organisational politics (Buchanan 2008). This thesis acknowledges and contributes to Buchanan's (2008) research. His research indicates that leaders view organisational politics as damaging and dangerous but necessary. Whilst they did not see politics as positive, they did agree that it was necessary and that they needed to practice it in their roles. The concept of organisational politics may explain the behaviours of the leaders in Case Study A. The project from which lessons learned were available was an acknowledged failure, to the point where it was becoming part of organisational legend. It was also viewed as a political disaster, as it was high profile, expensive and generally not supported by employees. The project which was the subject of Case Study A was compared to JET by one interviewee, "*Well, we're just flogging another dead [horse here](#)".* While the concept of organisational politics as discussed by Buchanan (2008) may contribute to an explanation of the leadership behaviours in this research, it does not address the issue of how to challenge the behaviours. A decision not to apply available lessons learned, based on political considerations, may be as a result of a lack of moral courage on the part of the leader. While Buchanan's (2008) research contributes partly to this thesis, it does not adequately explain the role of ethics in challenging organisational politics as a factor in the LDM process.

This sub-section demonstrated that the data collected for this thesis provided support for Research Proposition 1.2 *Quality of LDM may be improved by applying organisational learning processes.*

In summary, the discussion and analysis in the previous sub-sections of this Chapter demonstrate that **Analysis Goal 1 - Investigate whether the data provided support for the Research Propositions**, was achieved.

### **6.2 Analysis Goal 2 - Establish whether the data provided support for, and thereby confirmed, the elements of the [Q.L.D. model](#).**

The purpose of this Goal was to investigate and establish whether the data provided support for the elements and design of the Q.L.D. model for improving the quality of leadership decision-making in change initiatives. The data supported the elements of the Q.L.D. model.

The aim of the Q.L.D. model is to provide a process for improving the quality of LDM in change initiatives. The Q.L.D. model achieves this by decreasing levels of uncertainty and equivocality, through the intentional inclusion of ethical considerations in the process. [Table 5-V](#) in Chapter 5, Analysis of Data, is a summary of the analysis which described how the

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Q.L.D. model supported the Research Propositions. Table 5-V summarises the data and findings from the Relationship Maps for each Case Study ([Table 5W](#) & [Table 5X](#)). The Relationship Maps demonstrate the inter-connectedness of issues and factors identified in Preliminary Interviews. In Case Study A, for example, the analysis of the data identified that the decisions made up to and including T5 used input from the previous level. T1 was the foundation and antecedent for all subsequent decisions. The data indicated that the initial business drivers and business case were not fully clarified nor accepted by the Project Team, nor by employees. For example, one interviewee commented about the [drivers of the project](#), “*So we had a number of issues, conflicting outcomes, ..no requirements specifications, ...so ..creating more confusion*”. Another interviewee observed, regarding the drivers and business [case for Case Study A](#), “*It was very much, Well (ICT consultant) says we’re doing this, so you’ll go along with (ICT consultant).*” And, “*So the process was again trying to, with limited understanding of both costs, capability and degree of change, asking them to say, “Well, how far do you really want to go on that spectrum?”*” As was discussed previously in [Section 6.1.1.2](#), the decisions made by leadership in Case Study A contributed to levels of uncertainty and equivocality in the project members and employees. Relationship Map A further confirms that finding. The “Outputs” (T6 - T8) section of [Relationship Map A](#) indicates that perceptions of quality and of executive attitudes were consequences of the decisions made in T1 through to T5. Consequently, Relationship Map A demonstrates that levels of uncertainty and equivocality contribute to quality of consequences of decision-making.

Similarly, the [Relationship Map for Case Study B](#) indicates that the clarity of the project direction and the other issues in T1 through T5, resulted in positive perceptions of the business case, and of the subsequent decisions made by organisational and project leadership. Additionally, the analysis presented in [Table 5-S](#) indicates that levels of uncertainty and equivocality contributed to the positive perceptions of the project. The comparisons between the outcomes and perceptions of the Case Studies suggest that a process which decreases uncertainty and equivocality in the decision-making process is likely to impact consequences and perceptions of that process and, subsequently, will improve the quality of the decision-making process. The Q.L.D. model for improving the quality of leadership decision-making in change initiatives was designed to decrease levels of uncertainty and equivocality in the decision-making process. Further, the model incorporated and integrated the four elements identified in the Literature Review required to improve the quality of leadership decision-making in change initiatives.

The four elements of the Q.L.D. model were supported by the data, as presented in [Table-AA](#). The Table indicates that the initial data classifications of the major items identified in the Preliminary Interviews for each Case Study were consistent with the elements of the Q.L.D. model. [Table-BB](#) describes how each of the identified elements is incorporated into the Q.L.D. model. The Table also describes the role of each element in the model. [Table-CC](#) describes how the Q.L.D. model addresses each of the Research Propositions of this thesis. A summary of the main points in Table-CC is:

- a. R.P.1 LDM is a primary factor contributing to change initiative failure rates**  
R.P.1 is supported by the identification of all possible input sources, and by the identification and consideration of relevant consequences.
- b. R.P.1.1 Quality of LDM may be improved by decreasing the levels of uncertainty and equivocality in the process**

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R.P.1.1 is supported by the ability of the Q.L.D. model to decrease levels of uncertainty and equivocality through the identification of all areas of input, as well as the increased understanding of potential consequences through the Consequence Specificity process.

**c. R.P.1.1.1 Levels of uncertainty and equivocality may be decreased through consideration of ethical issues in the process**

R.P.1.1.1 is supported as the consideration of ethical issues increases identification and acknowledgement of all areas of input and understanding.

**d. R.P.1.2 Quality of LDM may be improved by applying organisational learning processes**

R.P.1.2 is supported through the identified relationship between organisational learning and levels of uncertainty and equivocality. The identification and application of available lessons learned and other organisational knowledge decreases levels of uncertainty and equivocality.

The analysis presented in Table-AA, Table-BB, Table-CC and Table-DD support the four Research Propositions of this thesis. Consequently, **Analysis Goal 2, Establish whether the data provided support for, and thereby confirmed, the elements of the Q.L.D. model,** was achieved.

[Table-DD](#) also describes how the Q.L.D. model may have impacted specific decisions in Case Study A. In each of the identified decision points for Case Study A, application of the Q.L.D. model is likely to have impacted the decision made. For example, if the organisation had accessed and applied known lessons learned from a previous project it would have, at a minimum, understood that the selected implementation partner for the current project was the subject of adverse comments in the [lessons learned analysis of the Post Implementation Review](#) of that previous project. This would have at least resulted in a review of that selection. An additional example is the concerns raised about the quality of the data collection process for the development of the [business case for the project](#). Application of the Q.L.D. model is likely to have, at a minimum, resulted in acknowledgment of those concerns and responses to them. Instead, the perception was that the concerns were continually ignored, which increased levels of mistrust and raised more concerns. Table-DD presented fourteen (14) instances where the outcomes of decisions may have been different if the Q.L.D. model was applied to the process.

### **6.3 Conclusions about the Q.L.D. model for improving the quality of LDM in change initiatives**

The Q.L.D. model is a supportable and potentially beneficial process for improving the quality of leadership decision making in change initiatives. While the context is primarily in change initiatives, it is expected that the process would be applicable to LDM in general. There are a number of implications of this conclusion. Firstly, although the context of this research is operational change initiatives in Queensland Government Owned Corporations, the Q.L.D. model may also be applicable to LDM generally, in both private and public sectors. Secondly, the impact of the inclusion of ethics in the LDM process, demonstrated by this research, highlights potential business and operational benefits. The implication is that the potential benefits of the process support an investment in “operationalizing” it for each user organisation. The operationalizing of the Q.L.D. model would include development of

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specific tasks, tools and processes for each element with supporting reporting and measurement procedures. Moreover, specific leadership training in the process would be required. From an organisational perspective, successful implementation of the Q.L.D. model would require a supportive culture, leadership performance management program and the integration of the process into any program and project management methodologies used. Thirdly, the Q.L.D. model requires definition and implementation of organisational learning policies and processes. This would preferably be a central part of organisational strategy. Fourthly, the Q.L.D. model would ideally be integrated into any change management or change leadership model or methodology designed or adopted. Inclusion of the Q.L.D. model into a change methodology would necessitate identification of tasks, processes and tools which would be entered into project management work plans. At a minimum, this would require project leadership to monitor and report on the progress of these tasks, making it difficult for leaders to avoid the LDM processes.

### 6.4 Conclusions about the Research Problem

*There is a lack of understanding of the role of ethics in LDM in change initiatives.*

The research indicates a number of conclusions about this Research Problem.

1. Although there has been growing interest in, and research of, the related areas of leadership, ethics, decision making, organisational learning and change management, there has been no identifiable research to identify the interdependencies of these elements (Carmeli & Sheaffer 2008; Garcia-Morales et al. 2009; Gronn 1997; Higgs & Rowland 2011; Lipshitz & Mann 2004; Patzer & Voegtlin 2010; Pham & Swierczek 2006; Uday Bhaskar et al. 2003; Zhu et al. 2004). Consequently, the role of ethics in LDM in change initiatives has not been fully understood.
2. Change management models and methodologies have been deficient in how they address LDM processes, including an ethical element. Consequently, it is probable that the relationship of ethics and LDM to change initiative failure rates has not been fully understood.
3. The lack of focus on the ethical element of LDM may have been supported by a dominant pressure for leaders to focus on logic-based decisions. Further, this may have been a consequence of the historical perception that business is about profits only (Coldwell 2010). Consequently, the Research Problem of this thesis, that there is a lack of understanding of the role of ethics in LDM in change initiatives was validated, and the accompanying Research Question was answered. This thesis has, in part, provided some clarity and direction regarding the research problem, but further work is still needed.

### 6.5 Conclusions about the Research Question

*What is the role of ethics in LDM in change initiatives?*

This research supports the contention that the role of ethics, in the context of this research, is to improve the quality of LDM in change initiatives. It achieves this by:

- a. decreasing the amount of uncertainty about the decision

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- b. decreasing the degree of equivocality about the decision, and
- c. facilitating organisational learning processes.

### 6.6 Implications for theory

This thesis builds on existing and emerging research in leadership ethics, ethical LDM, organisational learning and change. The thesis adds value to the existing body of knowledge by consolidating interdependent elements from relevant research into a unified approach to improving the quality of leadership decision-making in change initiatives. Additionally, the relationship between strategic leadership, the changing nature of business and leadership and the failure rates of change initiatives was detailed, and potential theoretical links identified. The recent and current business environment suggests there is a need to understand how the quality of business decisions can be improved. Perceptions of lack of ethics, and other personal qualities of leaders, resulting from the Global Financial Crisis, the Queensland Floods insurance situation, the Queensland Health payroll case and others have highlighted a potential opportunity to improve the quality of LDM. In particular, these situations have raised questions about the role of ethics in the LDM process. Consequently, this thesis contributes to an increase in the understanding of the role of ethics in LDM. Further, this thesis identifies potential opportunities to more fully integrate the major theories and research presented by analysing the interdependence of ethics, logic, LDM, organisational learning, and change leadership.

In the Introduction to this thesis, a sample of the major research used was presented ([Section 1.3.1, Table 1-A](#)). This sample indicated a lack of identifiable research that addressed these issues in an integrated way. The diagram is reproduced below as Table 6-A.

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Table 6-0-A. List of sample research used in this thesis

| Research                     | Authors              | Year | Ethics | Logic | Organisational Learning | Decision Making | Change |
|------------------------------|----------------------|------|--------|-------|-------------------------|-----------------|--------|
| Quality of decision making   | Rausch & Andersen    | 2011 | X      | X     |                         | X               |        |
|                              | Woiceshyn            | 2011 | X      |       |                         | X               |        |
| Decision Making              | Lipshitz & Mann      | 2004 | X      |       |                         | X               |        |
|                              | Sonenshein           | 2007 | X      | X     |                         | X               |        |
|                              | Patzer & Voegtlin    | 2010 | X      | X     |                         | X               | X      |
| Leadership and Ethics        | Boal & Hooijberg     | 2000 | X      | X     | X                       | X               | X      |
|                              | Rosenthal            | 2009 | X      |       |                         | X               |        |
|                              | Peretz et al         | 2011 | X      |       |                         | X               |        |
|                              | Ciulla               | 2006 | X      | X     |                         | X               |        |
|                              | Zhu et al            | 2004 | X      |       |                         | X               |        |
| Ethics and Change Leadership | Higgs & Rowland      | 2011 | X      |       |                         |                 | X      |
|                              | Uday Bhaskar         | 2003 | X      |       |                         |                 | X      |
|                              | By & Burnes          | 2012 | X      |       |                         |                 | X      |
| Organisational Learning      | Garcia-Morales et al | 2009 |        |       | X                       |                 |        |
|                              | Gronn                | 1997 |        |       | X                       |                 |        |
|                              | Carmeli & Sheaffer   | 2008 |        |       | X                       |                 |        |
| Change Management            | Armenakis & Bedeian  | 1999 |        |       |                         |                 | X      |
| Leadership & Decision-Making | Coldwell             | 2010 | X      | X     |                         |                 | X      |
|                              | Buchanan             | 2008 |        |       |                         | X               | X      |

This sample of the literature researched indicates that, although the research areas seem interdependent, there is no current theory or research that addresses all of the elements. Consequently, this thesis suggests that researchers should consider the interdependent nature of these areas and develop a stronger, more integrative research focus in future research. A complete analysis of how this thesis contributes to existing research is attached as [Appendix 34](#).

### 6.7 Implications for practice

The practical implications of this thesis are:

1. it provides “uniqueness” in the form of a model that incorporates the consolidated research, and which specifically and intentionally provides a process for improving the quality of leadership decision-making in change initiatives. Failures in change initiatives are expensive, and have potentially damaging impacts on employees and organisations and, in some cases, society (KPMG 1997). LDM contributes to the success or failure of an initiative, and, consequently, needs to be of the highest quality (*Chaos, The Standish Group Report 1995; A guide to ERP Success 2001; Challenge of Change: Australia 2010; Cooke et al. 2001; Eser et al. 2007; Keller & Aiken 2008; KPMG 1997; OASIG 1995*).
2. it begins to develop a process for improving the quality of LDM. There are a number of specific implications of implementing this process. Firstly, leaders would be required, at a minimum, to acknowledge ethical issues and considerations. By identifying the Consequence Specificity (CS) of these, decision outcomes may be

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more deeply understood. Secondly, leaders would put more emphasis on identifying factors and issues that impact levels of uncertainty and equivocality and address them proactively. Consequently, facilitating employee engagement may increase. As this is one of the top three factors contributing to change initiative failure rates (*Chaos, The Standish Group Report 1995; A guide to ERP Success 2001; Challenge of Change: Australia 2010; Cooke et al. 2001; Eser et al. 2007; Keller & Aiken 2008; KPMG 1997; OASIG 1995*), there is likely to be a subsequent impact on these rates.

3. this thesis suggested that organisations may have to increase their strategic leadership capability to address both the changing nature of business, and the continuing failure rates of change initiatives.
4. The Q.L.D. model, while focusing primarily on the two GOC organisations, may be applicable to all public and private sector organisations. LDM is a core leadership competence, requiring inputs, consideration of alternatives, analysis of consequences and final decision. While the context, complexity and other factors may vary, the core elements remain. Consequently, the Q.L.D. model may be applicable to all LDM situations.

### 6.8 GOC/Public Sector implications

Continuing demands and programs to decrease the public sector by privatization, efficiency and effectiveness programs and restructuring, such as those being conducted by Premier Newman in Queensland in 2012/2013, is likely to maintain the levels of change initiatives suggested in the introduction to this thesis. Consequently, with a decrease in available employees, resourcing these change initiatives will be an increasing challenge. Moreover, employee concerns about further staff reductions may impact their attitude to these change initiatives. As a result, LDM in GOCs is likely to be further complicated and under-resourced. Issues of trust are likely to become even more relevant than they currently are given the pressure on the psychological contract created by staff reductions and procedural issues. The impacts on GOC/public sector leaders are likely to include increased pressure to continue to deliver services efficiently and to be commercially successful, while conforming to business practices, including ethical LDM, that reflect the “significant public responsibility” of GOCs (Introduction, pp. 3) (*Government Owned Corporations Act 1993; Public Sector Ethics Act 1994; Corporate Governance Guidelines for Government Owned Corporations 2009*). In this kind of situation processes that help improve the quality of LDM, such as the Q.L.D. model, may be beneficial in integrating elements contributing to decision making and providing processual frameworks to guide decisions, promote accountability and increase transparency.

### 6.9 Related publishing and applications

This thesis has generated both related publishing and practical applications.

#### 6.9.1 Publishing

Research and concepts from this thesis were used to develop the article by Brown et al (2011), 'The BGR Model for Leading Change', published in the *International Journal of Learning and Change*, vol. 6, no. ½ (Brown et al. 2012). This article presented a change model based on the initial research for this thesis. Further, the BGR Model incorporated a specified and mandatory leadership decision-making task.

Additionally, a more comprehensive and larger article has been written, which expands the initial BGR Model and also presents the Q.L.D. Model for improving the quality of

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leadership decision-making in change initiatives, as described in this thesis. This article will be submitted to The Journal of Organizational Change Management in 2014.

### 6.9.2 Practical Application

Some of the key concepts in thesis have been applied in a change initiative in the author's employment as a Senior Change Manager. The initial BGR Model was modified and used as the change framework for a significant change initiative in WorldVision, the international aid agency. The WV Change Framework incorporated a mandatory leadership decision-making point. [Appendix 35, Slide 1](#), shows the WV Change Framework. Additionally, the concepts of "equivocality" and "uncertainty" were applied in a senior leadership workshop to define both the current status of the initiative and the outstanding challenges and risks. Participants were asked to work in small groups to identify what information they felt was still lacking (uncertainty) and what they were still unclear about (equivocality). [Appendix 35, Slide 2](#), presents the slide that was used to facilitate that discussion. Finally, participants were provided with a decision-making worksheet that incorporated the concepts of "consequence", "equivocality" and "uncertainty". [Appendix 35, Slide 3](#), presents that decision-making worksheet.

### 6.10 Limitations

Qualitative research has general limitations and shortcomings. The key limitations include:

- a. Generally, a narrow focus and small sample
- b. Difficulty in generalizing results and findings
- c. Difficulty in developing definitive conclusions
- d. Difficult to replicate

Consequently, in the case of this thesis, further longitudinal, quantitative research is suggested. This thesis addresses the above limitations through the application of [standards of rigor](#) and [quality](#), as described in Chapter 4, Methodology. Additionally, the scope of this research was clearly defined.

#### 6.10.1 Scope of the Literature Review

There were two major areas of scope that defined the limitations of this thesis. Firstly, the number of research areas and related topics was large and complex. Each identified research area potentially justified a thesis on its own. For example, the topic of "leadership" alone has generated extensive and wide-ranging research and literature including leadership philosophy, theories and styles, and ranges from Aristotle's early ruminations on leadership to Taylor's Scientific Management to Leader-Member Exchange. Consequently, it was necessary to refine the scope of review of the identified disciplines, and focus the research on the topics within each area that were relevant to the core of this thesis, i.e. the quality of leadership decision-making.

For each of the major disciplines being reviewed, sub-topics were identified that were likely to have particular relevance to either leadership decision-making generally, or to quality of leadership decision-making. This filtering was addressed within the context of change management. For example, to refine the scope of the major area of "leadership", the criteria applied was "the current environment of leadership and leadership decision-making". This refined scope identified, from the Literature, that the changing nature of business, and society's changing expectations, likely affected leadership decision-making. Similarly, the topic of "ethics" has generated a vast and diverse literature, as well as a number of schools of

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thought. Consequently, the criterion applied was “the relationship of ethics to leadership and to decision-making”. The resultant Literature Review was intentionally and specifically focussed by a clearly defined and relevant set of criteria on sub-topics and issues related to the area of leadership decision-making and/or quality of leadership decision-making.

### 6.10.2 The scope of the research

The scope of this research is the Start-Up and Initiation Phases of operational change initiatives in Queensland Government Owned Corporations (GOCs). Operational change initiatives include changes to processes, work flows, systems, job roles, accountabilities and work structures. Specifically, the research is concerned with the decision making processes up to, and including, the “initiation” stage of a project, which involves the activities up to formal approval to start a new initiative. These activities are critical as the decisions made here continue throughout the project, and impact subsequent decisions and activities. The research assumes a standard PMBOK (Project Management Institute 2004) or the Prince2 (ILX 2013) methodology; Initiation, Executing, Monitoring & Controlling, Close. Organisations in the two case studies customized the terms and some of the Phase content, but complied with the overall phase structures. Project initiation includes financial and budget approval, resource allocation approval and Sponsor appointment. Each organisation had a specific set of activities, culminating in a Business Case which was the foundation document for Initiation. The target population comprised project team members who were involved in activities up to and including initiation. Consequently, this limited available and relevant participants as, generally, there are few people involved in these tasks. There is limited agreement between qualitative researchers about acceptable minimum numbers of interviews (Baker & Edwards 2012), however the Research Approach for this thesis was designed to accommodate the small numbers of interviewees and retain acceptable integrity. The Research Approach compensated for the relatively small interview numbers by expanding the focus on secondary data. This expanded focus firstly identified themes and patterns from emails (Case Study A), and then linked those with the subsequent issues identified from detailed document analyses (Case Study A and Case Study B).

This research comprised case studies of two Queensland GOCs. Because of the large number of operational change initiatives underway at any one time in the twelve (12) Queensland GOCs, additional criteria were needed to define the sample and unit of analysis for the research. The criteria used were:

- a. Decision-making for the project should be entirely within the organization, e.g. no external agency decision-making involvement or undue influence, e.g. the need for approval of project outcomes by the ACCC or the need to comply with Federal Government mandates on the specific project
- b. Must include an implementation phase, e.g. not a strategy project that may create numerous, subsequent operational projects
- c. Must be an organization-wide initiative; not restricted to one function or department

These criteria eliminated many of the large number of potential case studies, and also refined the potential sample size. A number of the GOCs were conducting projects that were primarily in response to Federal or State Government directives, and decision-making was encumbered by compliance, timeframe and political factors. For example, one GOC was conducting a project to review its pricing structure. The project was requested by the Queensland Competition Authority, and deadlines and required outcomes were imposed by that Authority. Two of the known operational change initiatives that would have satisfied the

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criteria were under review as a result of the highly visible media inquiry into the failed Queensland Health payroll systems implementation project (Madigan 2013b). This inquiry caused other Queensland State Government Departments and Agencies to be extremely sensitive to the integrity of all their current change initiatives. Consequently, two GOCs were identified as satisfying all criteria.

The results, findings and discussions are pertinent to those two organisations only. These cases were selected on a non-probability, purposive and typical basis (Saunders et al. 2009). It is likely that the two organizations are representative, as all GOCs in Queensland are constituted by common Acts (*Government Owned Corporations Act 1993*; *Public Sector Ethics Act 1994*; *Corporate Governance Guidelines for Government Owned Corporations 2009*), which define accountabilities and other requirements.. Moreover, although it is also likely that the findings of this research may be generalizable to all GOCs, further research is required.

### 6.11 Further research

This thesis generates a number of continuing research opportunities, in two main groups. The first areas of opportunity are in the generalisation of this research to other GOCs and, potentially, other organisations. The second group of opportunities are focussed on the Q.L.D. model specifically. Firstly, and critically, as stated earlier, this research is the first step in a planned program. The next step would be a longitudinal, quantitative analysis of the impact of the Q.L.D. model on factors contributing to failure rates of change initiatives. Secondly, the research justifies further development of the Q.L.D. model for improving quality of LDM in change initiatives. A critical element of this research would be developing processes and templates for operationalizing the model. Thirdly, there is also opportunity for further research of the application of the Q.L.D. model to Corporate Social Responsibility (CSR), and as a tool for increasing ethical clarity in managerial decision making. Fourth, there is potential research in the relationship between the changing nature of leadership and leadership theory, particularly in the area of strategic leadership. More generally, there is also potential relevance of this research to areas including Organisational Resilience, Organisational and Leadership Development and Workforce Transformation. Finally, there is an identified opportunity to research the role of the Q.L.D. model as a core element of change management methodologies.

### 6.12 Summary & Conclusions

This thesis was concerned with the role of ethics in LDM in change initiatives within GOCs. The context of the research was the continuing high failure rates of change initiatives. Business operates in an increasingly complex and demanding environment, in which public perception is created and maintained by high profile scandals, failures and perceived incompetence, and this focus is intensifying (*Corporate Governance Guidelines for Government Owned Corporations* ; Benson & Soldo 2010; Drucker 2009). One outcome has been a re-visit of the purpose of business by a number of researchers. Philosophically, the purpose of business to make profit, without moral guidance, has been questioned (Green 2009). Contributing to this assertion, the global financial crisis has highlighted the influence of greed and selfishness within our corporations (Bakan 2004; Benson & Soldo 2010; Fulmer 2005; Richoltz 2009). Society and, subsequently, politicians are demanding business responses to issues including global warming, environment and resources sustainability, fraud and identity security, globalization, new and emerging technologies, complexity and diversity and increasingly sophisticated consumer needs (Dassah 2010; Patzer & Voegtlin 2010). These demands are not being easily satisfied by references to organisational codes of ethics

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or conduct; the consequences of the scandals have been too significant (Hitt et al. 2005). One example is The Wall Street bailout process and the ensuing financial oversight legislative reviews which indicated society's unwillingness to accept the status quo and, consequently, politicians' inability to ignore the public demand for action (2008; Richoltz 2009). Another example is the increasing scrutiny of corporate reporting following some high profile scandals such as Enron, which resulted in a decrease in public confidence leading to the capital market crises (Koestenbaum et al. 2004).

The responses have been both internal and external. Internal responses by businesses include leadership changes, organisation restructures, Board revisions, intense marketing and public relations campaigns, new systems and processes, strategic redirections and operations reviews. External responses by governments and the public, driven by the unprecedented consequences of these situations, have been intrusive and encompassing (Benson & Soldo 2010; Drucker 2009). Both types of responses, in the form of change initiatives, cover the gamut of philosophy, policy, legislative and regulatory, strategy, performance and attitudes. Change initiatives, strategic, operational and tactical, however, have a historically high failure rate for which research shows a predominance of people-related issues as the major contributors. This phenomenon is irrespective of the scope and context of the change initiative. Information technology-related change is perhaps the most researched area (*Chaos, The Standish Group Report 1995; A guide to ERP Success 2001; Cooke et al. 2001; KPMG 1997*), but other initiatives suffer the same problem. It is with the operational and functional change initiatives, however, where success rates are lowest, budgets are highest, over-runs are common and benefits are rarely delivered (*Chaos, The Standish Group Report 1995; A guide to ERP Success 2001; Cooke et al. 2001; KPMG 1997; OASIG 1995; Petouhoff et al. 2006*). The validity of some of these studies has been questioned, particularly their reliance on early, subjective assessments (Hughes 2011). Subsequent, and continuing, empirical research mirrors these findings.

A common pattern in the research is the incidence of leadership as a contributing factor. In parallel, leadership ethics has become of increasing interest as a major practical and theoretical issue (*A guide to ERP Success 2001; Brown & Trevino 2005; Ciulla 2006; Coldwell 2010; Ferris et al. 2002; Green 2009; Koestenbaum et al. 2004; Lynham & Naidoo 2010; Sims*). The case for this increasing focus on leadership ethics is perhaps best stated as, because leadership is by its very nature compromise-ridden, ethics is more than a luxury; it is central to however we define leadership (Rosenthal 2009).

LDM requires a moral compass, and it must pass an ethical as well as an economic analysis, and leaders must develop this analytical skill, placing their decisions in a *zone of acceptability* between ethics and other considerations (Paine 2006). Other researchers are concerned with the moral dilemmas which leaders face resulting from the actual question groups they must address (Alexander & Wilson 2005). These discussions lead to analysis of which factors most influence leaders facing these dilemmas, and these factors range from altruism to self-interest (Alexander & Wilson 2005; Ciulla 2005). At the core of these analyses and discussions lies the question of whether or not there is free will to any extent in today's business environment (Gentile 2005). It may be free will, or lack of it, that influences the extent to which leaders are willing to challenge the organisational status quo; to do what is good as opposed to what is right.

This research has highlighted that a decision based on logic alone might not always result in ethical consequences. When logic and ethics are aligned then the right things get done in the

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right way and for the right reasons. When they are not aligned, then there is a form of moral crisis, and it is generally a political issue that creates the misalignment (Rosenthal 2009). This misalignment manifests itself as an ethical challenge to a leader between what is good and what is politically expected. Research showed that managers clearly perceived organisational politics negatively, but actively used them anyway (Buchanan 2008). That being the case, there was tacit acceptance of the misalignment of logic and ethics. Using examples of the recent Queensland floods, the Queensland Health Payroll Systems implementation project, and of the global financial crisis, the contention was made that the current business crisis was a result of a breakdown of the interdependency of logic and ethics, with the focus on profit/economics being the political factor.

This thesis presents a process for improving the quality of LDM in change initiatives, the Q.L.D. model, based on design characteristics identified from a Literature Review. A core characteristic of the Q.L.D. model is the inclusion of ethical considerations as input. The role of ethics in the process was defined as being to increase the quality of the decision making, by decreasing the levels of uncertainty and equivocality. Further, it was to facilitate the inclusion of organisational learning in the process. Through the analysis of two Case Studies, it was suggested that the Q.L.D. model, if it had been applied, may have contributed to better outcomes from the relevant projects.

The Q.L.D. model for improving the quality of leadership decision-making in change initiatives could potentially assist leaders to respond to the increasing pressures resulting from the changing nature of business, and provide researchers and change practitioners with a tool that may improve the quality of leadership decision-making in future change efforts.

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## Appendices

### Appendix 1. Queensland Government. Government Owned Corporations Act, 1993

[s 15]

Chapter 1 Preliminary

Part 5 Outline of Act and its background and objectives

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#### Meaning of corporatisation

**Corporatisation** is a structural reform process for nominated government entities that—

- (a) changes the conditions and (where required) the structure under which the entities operate so that they operate, as far as practicable, on a commercial basis and in a competitive environment; and
- (b) provides for the continued public ownership of the entities as part of the process; and
- (c) allows the State, as owner on behalf of the people of Queensland, to provide strategic direction to the entities by setting financial and non-financial performance targets and community service obligations.

#### 14 Objectives of corporatisation

The objectives of corporatisation are to improve Queensland's overall economic performance, and the ability of the Government to achieve social objectives, by—

- (a) improving the efficiency and effectiveness of GOCs; and
- (b) improving the accountability of GOCs.

#### 15 How objectives of corporatisation are to be achieved—key principles and their elements

The objectives of corporatisation are to be achieved through application of the key principles of corporatisation and their elements.

#### 16 Meaning of key principles of corporatisation

The 4 *key principles of corporatisation*, and their elements, are as follows—

##### (a) Principle 1—Clarity of objectives

The elements of this principle are that—

- each GOC will have clear, non-conflicting objectives;
- each GOC will be set specific financial and non-financial performance targets for its commercial activities;
- any activities of a governmental policy formulation or regulatory nature will be transferred from the

GOC

to a department, separate regulatory authority or other agency;

- any community service obligations of the GOC will be clearly identified in the GOC's statement of corporate intent; and separately costed;
- the GOC will be appropriately compensated for its community service obligations and any funding

will be

made apparent;

- the GOC will be set performance targets for its community service obligations;

##### (b) Principle 2—Management autonomy and authority

The elements of this principle are that—

- each GOC will have a board of directors;
- the board will be required to use its best endeavours to ensure that the GOC meets its performance

targets;

- the board will be given the autonomy and authority to make commercial decisions within areas of responsibility defined by the corporatisation framework;
- existing detailed controls over management decision making will be replaced with Strategic

monitoring

procedures;

- the role of Ministers in relation to the GOC will be clearly defined;
- Ministerial reserve powers will be required to be exercised in an open way;

##### (c) Principle 3—Strict accountability for performance

The elements of this principle are that—

- the GOC's board will be accountable to the shareholding Ministers for the GOC's performance;
- the GOC's statement of corporate intent will form the basis for accountability;
- performance will be monitored by the Government against performance targets specified in the

statement

## Appendices

of corporate intent;

- Government monitoring of the GOC is intended to compensate for the absence of the wide range of monitoring to which listed corporations are subject by, for example, the sharemarket and

Commonwealth

regulatory agencies;

### **(d) Principle 4—Competitive neutrality**

The elements of this principle are that—

- the efficiency of overall resource use in the State is promoted by ensuring that markets are not unnecessarily distorted;
- in order to ensure, wherever possible, that each GOC competes on equal terms with other entities

carrying

on business, any special advantages or disadvantages of the GOC because of its public ownership or

its

market power will be removed, minimised or made apparent;

- in circumstances where a GOC has excessive market power structural reform may be necessary to increase competition; and
- special monitoring may be necessary to prevent market abuse.

### **17 Key objectives of GOC under corporatisation**

- Under corporatisation the key objectives of a GOC are to be commercially successful in the conduct of its activities and efficient in the delivery of its community service obligations.
- The commercial success and efficiency of a GOC are to be measured against its financial and non-financial performance targets.

## Appendices

### Appendix 2. USQ Ethics Approval



University of Southern Queensland

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Thursday, 5 July 2012

Derek Brown  
Email: [Derek.Brown@ergon.com.au](mailto:Derek.Brown@ergon.com.au)

CC: Ray Gordon (Supervisor)

Dear Derek

The Chair of the USQ Human Research Ethics Committee (HREC) recently reviewed your responses to the HREC's conditions placed upon the ethical approval for the below project. Your proposal now meets the requirements of the *National Statement on Ethical Conduct in Human Research (2007)* and full ethics approval has been granted.

|                  |  |
|------------------|--|
| Project Title    | Leading change ethically: quality in leadership decision-making as a foundation for leading change |
| Approval no.     | H12REA105  |
| Expiry date      | 14.12.2012   |
| FT-HREC Decision | Approved   |

The standard conditions of this approval are:

- (e) conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal required by the HREC
- (f) advise (email: [ethics@usq.edu.au](mailto:ethics@usq.edu.au)) immediately of any complaints or other issues in relation to the project which may warrant review of the ethical approval of the project
- (g) make submission for approval of amendments to the approved project before implementing such changes
- (d) provide a 'progress report' for every year of approval
- (e) provide a 'final report' when the project is complete
- (f) advise in writing if the project has been discontinued.

For (c) to (g) forms are available on the USQ ethics website: <http://www.usq.edu.au/research/ethics/ethics>

Please note that failure to comply with the conditions of approval and the *National Statement (2007)* may result in withdrawal of approval for the project.

You may now commence your project. I wish you all the best for the conduct of the project

Melissa McKain  
Ethics Committee Support Officer  
Office of Research and Higher Degrees

## Appendices

### Appendix 3. Initial List of Results of Database Searches

|  |                                      |   |  |                                       |  |
|--|--------------------------------------|---|--|---------------------------------------|--|
| Accenture Model                            | Contingency Theory Vroom             | Gravenhorst et al                           | Lewis et al                              | Planned Behaviour Theory Ajzen        | Spiral Dynamics Graves                         |
| ADL Matrix Arthur D. Little                | Conway et al                         | Gresov et al                                | Liljegre et al                           | Plausibility Theory                   | Stakeholder Management                         |
| Albrecht                                   | Core Competence Hamel Prahalad       | Groupthink Janis                            | Litz                                     | Points of Management Deming           | Strategic Alignment Venkatraman                |
| Allen                                      | Core Groups Kleiner                  | Growth Phases Greiner                       | Liquidation value                        | Porter competitive advantage          | Strategic Intent Hamel Prahalad                |
| Andersen et al                             | Corporate Governance OECD            | Growth Share Matrix BCG                     | Lucas Jr et al                           | Porter Value Chain                    | Strategic Stakeholder Management               |
| Ansannejad et al                           | Crane                                | Grzybowska                                  | Lyra et al                               | Portfolio Analysis                    | Strategy Map Kaplan Norton                     |
| Ansoff product/market grid                 | Cranston                             | Gumus et al                                 | Mack et al                               | Positioning Trout                     | STRATPORT Larreche                             |
| Acquisition Integration Approach           | Crisis Management tips               | Halliday                                    | MAGIC QPR                                | Power Bases French Raven              | Strategic Triangle Ohmae                       |
| Argent et al                               | Culture Change Trice Beyer           | Hannagan                                    | Maklebust                                | Product Life Process                  | Swailles                                       |
| ARIMA Box and Jenkins                      | Cultural Dimensions Hofstede         | Harkness et al                              | Malone & Belady                          | Product/market grid Ansoff            | System Dynamics / Thinking Forrester           |
| ARIMA Time Series Analysis                 | Cultural Intelligence Early          | Haveman                                     | Management buy-out                       | Profit Pools Gadiesh, Gilbert         | TDC matrix Internet value                      |
| Armenakis & Bedeian Models                 | Culture Levels Schein                | Henderson & McAdam                          | Management by Objectives                 | ProSci                                | Ten Principles of Reinvention Osborne          |
| Attributes of Management Excellence Peters | Currie                               | Hierarchic Organization Burns               | M&A approaches                           | PRVit                                 | Thebodeau                                      |
| Balanced Scorecard Kaplan Norton           | Damanpour                            | Hill & McNulty                              | Managing for Value MfV Insead            | PwC Model                             | Theory of Constraints Goldratt                 |
| Baldrige categories of performance         | Deloitte Model                       | Hofstede National Differences               | Mander et al                             | Queensland Government                 | Theory of Reasoned Action Ajzen Fishbein       |
| Barker & Anderson                          | Delta Model Hax                      | Hotta                                       | Marketing Mix 4P's 5P's McCarthy         | Quick Ratio                           | Theory X Theory Y McGregor                     |
| Barrett et al                              | Deming process PDSA                  | Huff et al                                  | Martins et al                            | Quintino et al                        | Theory Z Ouchi                                 |
| Bases of Social Power French Raven         | DeVries                              | Human Capital Index HCI                     | McGarvey et al                           | RACI (RASCI)                          | 3C's model Ohmae                               |
| Bass Diffusion model Bass                  | Dialectical Inquiry                  | IBM Model                                   | McKinsey Model                           | RAROC Risk-Adjusted Return on Capital | Time-Based Activity Based Costing Kaplan       |
| BCG Matrix                                 | Diamond Model Porter                 | IC-Rating Intellectual Capital              | Mento et al                              | Real Options Luehrman SDG             | Total Business Return TBR BCG                  |
| Benchmarking                               | Doyle                                | Impact/value Hammer ICT value               | Meyer et al                              | Real Ratio                            | Total Shareholder Return TSR                   |
| Blue Ocean Strategy Kim                    | Dynamic Regression                   | Implementation Management Krüger            | Miles & Snow                             | Reddi & Moon                          | Towers-Perrin                                  |
| Bodhanya et al                             | Economic Value Added EVA             | Inclusive Value Measurement IVM             | Monteiro et al                           | Rees                                  | TQM Total Quality Management                   |
| Bordia et al                               | EFQM EFQM                            | Industry Change McGahan                     | Moss et                                  | Regression Analysis                   | Twelve Principles of the Network Economy Kelly |
| Boynnton & Rothman                         | Emotional Intelligence Goleman       | Industry Life Process                       | Motawa et al                             | Relative Value of Growth Mass         | Two Factor Theory Hertzberg                    |
| BPR Business Process Reengineering         | Entrepreneurial Government Osborne   | Innovation Adoption Curve Rogers            | National Training Laboratories           |                                       | Value Creation Index CGE&Y CBI                 |
| BPR Hammer Champy                          | ERG Theory Alderfer                  | Instrumental Approach of Stakeholder Theory | NOPAT                                    | Results-Based Leadership Ulrich       | Value Disciplines Treacy Wiersema              |
| Bracken et al                              | EVM CPM                              | Intangible Assets Monitor Sveiby            | Normative Approach of Stakeholder Theory | Resource-Based View Barney            | Value Mapping Jack                             |
| Brainstorming                              | Expectancy Theory Vroom              | Intrinsic Stakeholder Commitment            | Nystrom                                  | Reputation Quotient Harris Fornbrun   | Value Reporting Framework PWC                  |
| Brand Asset Valuator                       | Experience Curve                     | Jara et al                                  | ODS                                      | Return on Investment ROI              | Van Dam et al                                  |
| Brand Personality Aaker                    | Exponential Smoothing                | Jenkins                                     | Organic Organization Burns               | Risk Management                       | Vollman  |
| Bricks and Clicks                          | Fassauer & Schimer                   | Jingqiu & wang                              | OODA Loop Boyd                           | Root Cause Analysis                   | WACC   |
| Broadbent                                  | Ferrie et al                         | Judson Model                                | Olson et al                              | Rune & Crispin                        | Wang et al                                     |
| Brown et al                                | Five Disciplines Senge               | Junell et al                                | Operations Research                      | Sastry                                | Z-Score Altman                                 |
| Bryant                                     | Five Forces Porter                   | Just-in-time JIT                            | Orozco et al                             | Saunders & Thornhill                  |  |
| Burke & Litwin                             | Flynn et al                          | Kaizen change philosophy                    | Outsourcing                              | Scenario Planning                     |  |
| Business Assessment Array                  | Force Field Analysis Lewin           | Kassaen & Jagoo                             | PAEI management roles                    | Seddon et al                          |  |
| Callaly et al                              | 4 Dimensions of Relational Work      | Kelly & Amburgey                            | Parnelli et al                           | Seethamraju & Agrawal                 |  |
| Calverley & Dexter                         | Fourteen Points of Management Deming | Knowles                                     | Pare et al                               | Seven Habits Covey                    |  |
| Capability Maturity Model CMM              | Fox-Wolfgramm et al                  | Kolodny                                     | Parenting Advantage Goold Campbell       | 7 Ps Booms Bitner                     |  |
| Carignani                                  | Framing Tversky                      | Koonawootrittriron et al                    | Parenting Styles Goold Campbell          | 7-S Framework McKinsey                |  |
| CFROI                                      | Franck et al                         | KPMG Model                                  | Path-Goal Theory House                   | Seven Surprises Porter                |  |
| Change Behaviour Ajzen                     | Franx et al                          | Kubler-Ross                                 | Paterson & cary                          | Sezgin et al                          |  |
| Change Dimensions Pettigrew Whipp          | Freedman & Arthur                    | Langford                                    | Payback Period                           | Simison                               |  |
| Change Management Iceberg                  | Galpin model                         | Latta                                       | PDSA Deming process                      | Simulation business modeling          |  |
| Change Model Beckhard                      | Game Theory Nash                     | Leadership Continuum                        | Pecceit et al                            | Simulation modeling                   |  |
| Changing Organization Cultures Trice Beyer | Garside                              | Leadership Styles Goleman                   | Penn & Henrey                            | Six Sigma GE                          |  |
| Change Phases Kotter                       | GE Business Screen                   | Learning Organization Senge                 | People CMM CM-SEI                        | Six Thinking Hats de Bono             |  |
| Christl et al                              | GE / McKinsey matrix                 | Lee et al                                   | Performance categories Baldrige          | Skandia Navigator Leif Edvinsson      |  |
| Clarkson Principles                        | Gestalt theory                       | Levels of Culture Schein                    | Performance Prism                        | SMART Drucker                         |  |
| Competing Values Framework Quinn           | Grant                                | Leveraged Buy-Out                           | PEST analysis                            | Social Intelligence                   |  |
| Contingency Theory Fiedler                 | Granzkyk Wetzei                      | Levers of Control Simons                    | Pichault & Schoenaers                    | Spindler                              |  |

Appendix 4. List of CFFs

| <i>PROCESS CFFs</i>                         |   |                              |
|---|---|------------------------------|
| <b>Goals, Metrics &amp; Rewards Culture</b> | No Clear State of Requirements/Goals/Objectives                 | Decker & McCormack, 2008     |
|   | No Clear Vision & Objectives                                    | Lalley, 2004                 |
|   | Little Role definition & Presence of conflict                   | Boehm, 2002                  |
|   | No Metrics/Monitoring/Feedback or not aligned                   | Heneman et al, 2008          |
|   | Rewards not aligned to change                                   | Heneman et al, 2008          |
| <b>Decision Making &amp; Planning</b>       | Poor decision making  | Nutt, 1998                   |
|   | Continual changing customer requirements                        | Kannan et al, 2008           |
|   | Poor Project Management competence/plan, schedule               | Somers & Nelson, 2001        |
|   | Little user involvement in DM or planning                       | Iver & Olson, 1984           |
|   | Overreliance on customization                                   | Wong et al, 2005             |
|   | Improper Planning i.e. cost and time estimate                   | Lalley, 2004                 |
|   | Poor Strategy/Project Fit                                       | Floyd & Lane, 2000           |
| <b>Bureaucracy and Politics</b>             | Little Interdepartmental cooperation/bureaucracy                | Chaos Report, 1994           |
|   | Too much Bureaucracy and Politics                               | Lalley, 2004                 |
| <b>Knowledge Transfer</b>                   | Lack of Training/poor knowledge transfer                        | Somers & Nelson, 2001        |
|   | Inappropriate CM processes/strategy                             | Somers & Nelson, 2001        |
| <b>Staffing</b>                             | Lack of Competent Staff   | Lalley, 2004                 |
|   | Inadequate Staffing   | Keil et al. 1998             |
|   | Poor IT/ERP system misfit                                       | Wong et al, 2005             |
|   | Poor consultant performance                                     | Wong et al, 2005             |
|   | Not Commercially profitable for the contractor                  | Lalley, 1984                 |
| <b>Process Issues</b>                       | Processes not in place  | Decker & McCormack, 2008     |
|   | Mechanistic processes   | Decker & McCormack, 2008     |
|   | Poor Business Process Reengineering                             | Wong et al, 2005             |
| <i>COMMUNICATION CULTURE CFFs</i>           |   |                              |
| <b>Poor Community for Change</b>            | Little Interdepartmental Cooperation                            | Somers & Nelson, 2001        |
|   | Little Executive Management Support                             | Boehm, 2002                  |
|   | Few Project Champions Perceived                                 | Somers & Nelson, 2001        |
|   | Lots of Bureaucracy and Politics                                | Pinto & Slevin, 1989         |
|   | Poor Implementation Manager's Reputation                        | Decker & McCormack, 2008     |
|   | Low Commitment/involvement                                      | Wong et al, 2005             |
| <b>Poor Communication Culture</b>           | Poor Communication and connection                               | Boehm, 2002                  |
|   | Unrealistic Expectations of Employees                           | Somers & Nelson, 2001        |
|   | Conversation/Participation Not Allowed                          | Decker & McCormack, 2008     |
|   | Employees Cannot Express Doubt                                  | Decker & McCormack, 2008     |
|   | High Sense of Vulnerability                                     | Decker & McCormack, 2008     |
|   | No Clear & Consistent Expression of Vision & Objectives         | Toolpack, 2011               |
|   | Transparency & Trust  | Transparency & Trust         |
|   | Prior Negative Experiences                                      | Silwka, 2007                 |
|   | No Transparency   | Decker & McCormack, 2008     |
|   | Recent Change of Leadership/Management                          | Pinto & Slevin, 1989         |
|   | Lack of Trust   | Waldrersee & Griffiths, 2003 |
| <i>ORGANIZATIONAL CFFs</i>                  |   |                              |
| <b>Culture</b>                              | No Alignment of supply chain                                    | Bryan et al, 2009            |
| <b>Infrastructure/Structure</b>             | Inadequate Infrastructure                                       | Lalley, 2004                 |
|   | Inadequate Resources and Funding                                | Lalley, 2004                 |
|   | Inadequate CM   | Kemp & Low, 2008             |
| <b>Leadership</b>                           | Poor leadership (General)                                       | Pinto & Slevin, 1989         |
|   | Leadership Pays Too Much Attention to Financial Issues          | Szamosi & Duxbury, 2002      |
|   | Lack of Support from Leadership                                 | Pelletier, 2006              |
|   | Unrealistic Expectations of Leadership                          | Wong et al. 2005             |
|   | Lack of Emotional Intelligence                                  | Hill, 2009                   |
|   | Lack of Change Champions  | Chrusiel, 2008               |
| <i>PEOPLE CFFs</i>                          |   |                              |
| <b>Low Care Horizon</b>                     | Turnover of Team/ Leaders                                       | Pelletier, 2006              |
|   | Don't See the Change as Real/ Not Needed                        |                              |
|   | Unrealistic Expectations from Management Perceived by Employees | Toolpack, 2011               |
|   | Poor Alignment of People's and Org.'s Values                    | Pelletier, 2006              |
|   | Little Mgt. Support Perceived                                   | Lalley, 1984                 |
|   | Little Individual Readiness for Change                          | Holt et al, 2007             |
| <b>Low Motivation to Change</b>             | Interpersonal Resistance  | Toolpack, 2011               |
|   | Too much change coming  | Black et al, 2004            |
|   | Little Motivation to Change                                     | Toolpack, 2011               |
|   | Little Buy-in/Passion   | Pelletier, 2006              |
|   | Large Status Change Expected from Change                        | Decker & McCormack, 2008     |
|   | No Fun/Hard Work Expected                                       | Decker & McCormack, 2008     |
|   | User Resistance   | Wong et al. 2005             |
| <b>Low Ability to Change</b>                | Avoidance of Accountability                                     | Decker & McCormack, 2008     |
| <b>Culture</b>                              | High Need for Control   | Sun & Alas, 2007             |
|   | High Need for Predictability                                    | Decker & McCormack, 2008     |
|   | Little Personal Flexibility                                     | Pelletier, 2006              |

Appendix 5. Analysis of CFFs

| <i>PROCESS CFFs</i>                         |   |  | Lship | Decision Making | Change |
|---|---|--|-------|-----------------|--------|
| <b>Goals, Metrics &amp; Rewards Culture</b> | No Clear State of Requirements/Goals/Objectives                 |  |       |                 |        |
|   | No Clear Vision & Objectives                                    |  | x     |                 |        |
|   | Little Role definition & Presence of conflict                   |  |       |                 |        |
|   | No Metrics/Monitoring/Feedback or not aligned                   |  |       |                 |        |
|   | Rewards not aligned to change                                   |  |       |                 |        |
| <b>Decision Making &amp; Planning</b>       | Poor decision making  |  |       | x               |        |
|   | Continual changing customer requirements                        |  |       |                 |        |
|   | Poor Project Management competence/plan, schedule               |  |       |                 |        |
|   | Little user involvement in DM or planning                       |  |       | x               |        |
|   | Overreliance on customization                                   |  |       |                 |        |
|   | Improper Planning i.e. cost and time estimate                   |  |       |                 |        |
|   | Poor Strategy/Project Fit                                       |  |       |                 |        |
| <b>Bureaucracy and Politics</b>             | Little Interdepartmental cooperation/bureaucracy                |  |       |                 | x      |
|   | Too much Bureaucracy and Politics                               |  |       |                 | x      |
| <b>Knowledge Transfer</b>                   | Lack of Training/poor knowledge transfer                        |  |       | x               |        |
|   | Inappropriate CM processes/strategy                             |  |       | x               |        |
| <b>Staffing</b>                             | Lack of Competent Staff   |  |       |                 |        |
|   | Inadequate Staffing   |  |       | x               |        |
|   | Poor IT/ERP system misfit                                       |  |       | x               |        |
|   | Poor consultant performance                                     |  |       |                 |        |
|   | Not Commercially profitable for the contractor                  |  |       |                 |        |
| <b>Process Issues</b>                       | Processes not in place  |  |       |                 |        |
|   | Mechanistic processes   |  |       |                 |        |
|   | Poor Business Process Reengineering                             |  |       |                 |        |
| <i>COMMUNICATION CULTURE CFFs</i>           |   |  |       |                 |        |
| <b>Poor Community for Change</b>            | Little Interdepartmental Cooperation                            |  |       |                 | x      |
|   | Little Executive Management Support                             |  |       |                 | x      |
|   | Few Project Champions Perceived                                 |  |       |                 | x      |
|   | Lots of Bureaucracy and Politics                                |  |       |                 | x      |
|   | Poor Implementation Manager's Reputation                        |  |       | x               |        |
|   | Low Commitment/involvement                                      |  |       |                 | x      |
| <b>Poor Communication Culture</b>           | Poor Communication and connection                               |  |       |                 | x      |
|   | Unrealistic Expectations of Employees                           |  |       |                 | x      |
|   | Conversation/Participation Not Allowed                          |  |       |                 | x      |
|   | Employees Cannot Express Doubt                                  |  |       |                 | x      |
|   | High Sense of Vulnerability                                     |  |       |                 | x      |
|   | No Clear & Consistent Expression of Vision & Objectives         |  |       |                 | x      |
|   | Transparency & Trust  |  |       |                 | x      |
|   | Prior Negative Experiences                                      |  |       |                 |        |
|   | No Transparency   |  |       |                 | x      |
|   | Recent Change of Leadership/Management                          |  |       | x               |        |
|   | Lack of Trust   |  |       |                 | x      |
| <i>ORGANIZATIONAL CFFs</i>                  |   |  |       |                 |        |
| <b>Culture</b>                              | No Alignment of supply chain                                    |  |       |                 |        |
| <b>Infrastructure/Structure</b>             | Inadequate Infrastructure                                       |  |       |                 |        |
|   | Inadequate Resources and Funding                                |  |       | x               |        |
|   | Inadequate CM   |  |       | x               |        |
| <b>Leadership</b>                           | Poor leadership (General)                                       |  | x     |                 |        |
|   | Leadership Pays Too Much Attention to Financial Issues          |  |       |                 | x      |
|   | Lack of Support from Leadership                                 |  |       |                 | x      |
|   | Unrealistic Expectations of Leadership                          |  | x     |                 |        |
|   | Lack of Emotional Intelligence                                  |  | x     |                 |        |
|   | Lack of Change Champions  |  |       |                 | x      |
| <i>PEOPLE CFFs</i>                          |   |  |       |                 |        |
| <b>Low Care Horizon</b>                     | Turnover of Team/ Leaders                                       |  |       | x               |        |
|   | Don't See the Change as Real/ Not Needed                        |  |       |                 | x      |
|   | Unrealistic Expectations from Management Perceived by Employees |  |       |                 | x      |
|   | Poor Alignment of People's and Org.'s Values                    |  |       |                 | x      |
|   | Little Mgt. Support Perceived                                   |  |       |                 | x      |
|   | Little Individual Readiness for Change                          |  |       |                 |        |
| <b>Low Motivation to Change</b>             | Interpersonal Resistance  |  |       |                 |        |
|   | Too much change coming  |  |       | x               |        |
|   | Little Motivation to Change                                     |  |       |                 |        |
|   | Little Buy-in/Passion   |  |       |                 |        |
|   | Large Status Change Expected from Change                        |  |       |                 |        |
|   | No Fun/Hard Work Expected                                       |  |       |                 | x      |
|   | User Resistance   |  |       |                 |        |
| <b>Low Ability to Change</b>                | Avoidance of Accountability                                     |  |       |                 | x      |
| <b>Culture</b>                              | High Need for Control   |  |       |                 | x      |
|   | High Need for Predictability                                    |  |       |                 | x      |
|   | Little Personal Flexibility                                     |  |       |                 | x      |
|   |   |  | 4     | 12              | 28     |

## **Appendices**

### **Appendix 6. Queensland Government Owned Corporations (GOC)**

- Far North Queensland Ports Corporation Limited
- Gladstone Ports Corporation Limited
- North Queensland Bulk Ports Corporation Limited
- Port of Townsville Limited
- Queensland Rail Limited
- CS Energy Limited
- Energex Limited
- Case Study A Energy Corporation Limited
- Powerlink Queensland (Queensland Electricity Transmission Corporation Limited)
- Stanwell Corporation Limited
- QIC Limited
- Case Study B Limited

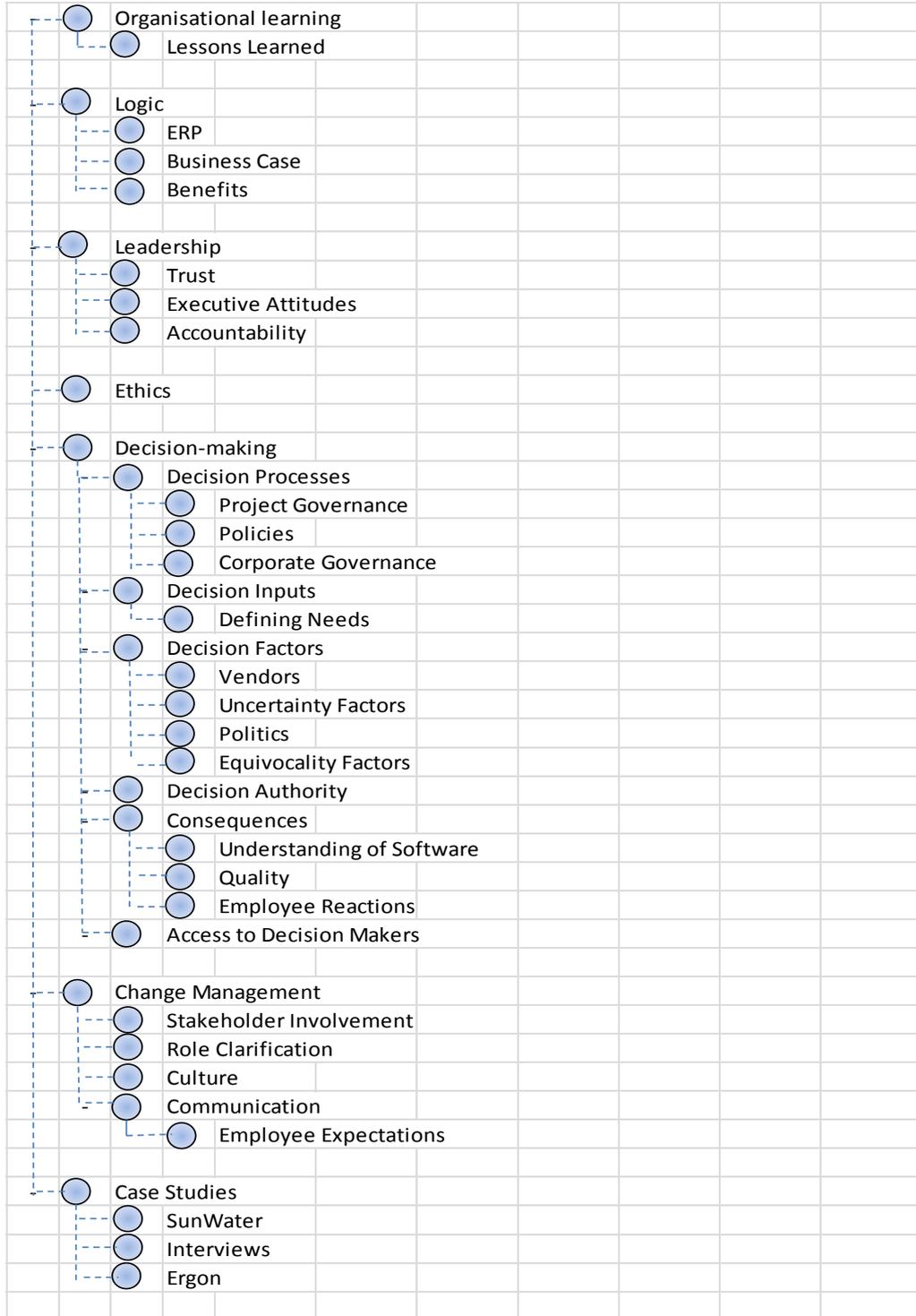
# Appendices

## Appendix 7. Research Work Plan

| # | Phase  | Activity  | Task  | Tool/Template  | Input source   | Start                    | End | Outcome   |  |
|---|--|---|---|--|--|--------------------------|-----|---|--|
| 1 | Administration & Preparation   | Select & Confirm sample   | Develop criteria for selecting sample   |  |  |                          |     | Potential sample list   |  |
|   |  |   | Identify initial sample   |  |  |                          |     | Sample selection criteria   |  |
|   |  |   | Select sample   |  |  |                          |     | Final sample  |  |
|   |  | Obtain Ethics Approval  |   | USQ Ethics Approval Form   | USQ Ethics Office  |                          |     | Completed Ethics Approval Form  |  |
|   |  | Obtain approval from each Case Studies, including completing any required Confidentiality or Non-Disclosure Statements: | Confirm sample participation  | Non-Disclosure/Confidentiality Agreement pro-formas  |  |                          |     | Confirmed participating sample list                                   |  |
|   |  | Obtain Informed Consent approvals   | Meet with each participating organisation and confirm contacts  | USQ Informed Consent Form  | USQ Ethics Office  |                          |     | Confirmed points of contact for each participating organisation       |  |
|   |  | Schedule interviews   |   |  |  |                          |     | Interview schedule  |  |
|   |  | Prepare NVivo   |   |  |  |                          |     |   |  |
| 2 | Compile Database   | Preliminary interviews  | Develop Preliminary interview protocol  | Preliminary interview protocol template  |  |                          |     | Preliminary interview protocol  |  |
|   |  |   | Send Interview Protocol to Preliminary interviewees   |  |  |                          |     |   |  |
|   |  |   | Conduct Preliminary interviews  | Preliminary Interview Protocol; Cisco MeetingPlace for regional calls, if required                   |  |                          |     | Completed, recorded Preliminary Interviews                            |  |
|   |  |   | Transcribe & file interviews in Nvivo   | Nvivo  | Recorded interviews  |                          |     | Transcribed Preliminary interviews                                    |  |
|   |  |   | Analyse Preliminary interviews to identify major themes for Semi-structured interviews (Open coding)              | King's template analysis process   | Preliminary interview analysis   |                          |     | List of identified major themes                                       |  |
|   |  |   | Develop initial Semi-structured interview protocol  | Semi-structured interview protocol template  |  |                          |     | Semi-structured interview protocol                                    |  |
|   |  |   | Semi-structured interviews  | Send Semi-structured interview protocol to each participant  |  |                          |     |   |  |
|   |  |   | Conduct Semi-structured interviews  | Semi-structured interview protocol; Cisco MeetingPlace for regional calls, if required               |  |                          |     | Completed, recorded Semi-structured interviews                        |  |
|   |  |   | Transcribe & file interviews in NVivo   | NVivo  | Recorded interviews  |                          |     | Transcribed Semi-structured interviews                                |  |
|   |  |   | Documentation   | Identify relevant documentation  |  | Project Management files |     | List of relevant documentation  |  |
|   | Collect, code and file documentation   | King's template analysis process  |   |  | Initial database of coded documentation  |                          |     |   |  |
| 3 | Disassemble data   | Classifying & coding  | Manually analyse all interviews to identify major themes, issues, patterns and assign codes to each (Open Coding) | Initial Themes/Perceptions template (King's template analysis process)                               | Interview transcripts in Nvivo   |                          |     | Initial coding structure  |  |
|   |  |   | Colleague review of open coding   |  |  |                          |     | Confirmed open coding structure                                       |  |
| 4 | Reassemble data  | Goal 1  | Develop hierarchical coding structure   | King's template analysis process   |  |                          |     |   |  |
|   |  |   | Develop initial relationship matrix   | Relationship Matrix template   |  |                          |     |   |  |
|   |  |   | Develop Relationship Map  | Relationship Map template  | Relationship Matrix template   |                          |     | Relationship Map for each Case  |  |
|   |  |   | Review and update Nvivo Stop Word list  | Nvivo standard Stop Word list  | Nvivo standard list  |                          |     | Updated Nvivo Stop Word list  |  |
|   |  |   | Run Nvivo "Coding by Node" report for each Case   | Nvivo "Coding by Node" report  |  |                          |     | Coding by Node report for each Case                                   |  |
|   |  |   | Review returned nodes and themes from Nvivo and manual analysis against Descriptive Framework                     | Descriptive Framework Analysis Matrix  |  |                          |     | Completed Descriptive Framework analysis                              |  |
|   |  |   | Revise Nvivo coding hierarchy to reflect elements of Descriptive Framework as parent and child nodes              |  | Descriptive Framework Analysis Matrix  |                          |     | Confirmed Nvivo hierarchical node structure                           |  |
|   |  |   | Complete coding on all documents and interviews   |  | Descriptive Framework Analysis Matrix  |                          |     | Confirmed Nvivo hierarchical node structure                           |  |
|   |  |   | Goal 2  | Thematic Contextual Analysis   | Nvivo Text Search Query on each of the five elements of the Descriptive Framework, by Case | Nvivo                    |     |   |  |
|   |  |   | Classify individual results as + or -   | Nvivo Word Tree format reports   |  |                          |     | High Level Thematic Contextual Analysis Table                         |  |
|   |  |   | Key Words in Context Analysis   | Nvivo Word Frequency Analysis Query on all interviews, using "Exact" match setting                   | Nvivo Word Tree format reports   |                          |     | List of most frequent words, by Case.                                 |  |
|   |  |   |   | Nvivo Text Search Analysis Query   | Filtered Word Frequency Analysis reports   |                          |     | Report of references in Nvivo, by Case, and contextual statements     |  |
|   |  |   |   | Key Words in Context Table   | Nvivo Text Search Analysis Query   |                          |     | Key Words in Context Table; Defined thematic context for Case Studies |  |
|   |  |   | Research Propositions   | Define relationship type parameters in Nvivo, using Spradley's Universal Semantic Relationship Model | Spradley's Universal Semantic Relationship Model   |                          |     | Defined relationship types in Nvivo                                   |  |
|   |  |   |   | Run Word Frequency Report in Nvivo for each Case   | Nvivo Word Frequency Report  |                          |     | List of most common words, per Case                                   |  |
|   |  |   |   | Review and compare lists   |  |                          |     |   |  |
|   |  |   |   | Develop Relationship Analysis, by Case, by major items from each Case                                | Relationship Analysis Table, by major item, by Case  |                          |     | Analysed relationships of items, by Case                              |  |
|   |  |   |   | Review documents and identify decision points, and outcomes of those decisions                       | Document mapping table   | All documents            |     | Table of documents, with identified decision points and outcomes      |  |
|   | Create Summary list of decision points   | Summary Decision Points Matrix  | Document mapping table  |  | List of decision points and outcomes   |                          |     |   |  |
|   | Identify impact of decisions on uncertainty & equivocality                             | Uncertainty & Equivocality Matrix   |   |  | Decision Point analysis of Uncertainty & Equivocality                                      |                          |     |   |  |
|   | Lessons Learned  | Review lessons learned from each Case   | Lessons Learned Matrix  | JET Post Completion Review - Case A  | Lessons Learned Analysis - Case A  |                          |     |   |  |
|   | Run Text Search in Nvivo for "lessons learned"   | Nvivo Text Search   | All interviews & documents  |  | List of references to "lessons learned"  |                          |     |   |  |
|   | Link lessons learned from Text Search with list of lessons learned from Case documents | Lesson Learned Analysis Matrix  |   |  | Lesson Learned Analysis Matrix   |                          |     |   |  |
|   | Develop initial list of findings   |   |   |  | Findings List  |                          |     |   |  |
| 4 | Interpret data   | Research Propositions   | Review and confirm findings list  |  |  |                          |     | Confirmed Findings List   |  |
|   |  |   | Develop interpretations for each finding  |  |  |                          |     | List of interpretations   |  |
|   |  |   | Link Research Propositions with findings and interpretations  |  |  |                          |     |   |  |
| 5 | Conclusions  |   | Develop conclusions about Research Problem, Research Question and Propositions                                    |  |  |                          |     | Presentation of conclusions   |  |

# Appendices

## Appendix 8. NVivo Node Structure



# Appendices

## Appendix 9. Case Study B Confidentiality Agreement

### CONFIDENTIALITY AGREEMENT

Dated the date specified in item 1 of Schedule 1.

Made by You and SunWater.

#### BACKGROUND

- A. SunWater is providing Confidential Information to You and You are providing Confidential Information to SunWater in relation to the Project.
- B. Improper use or disclosure of that Confidential Information can severely damage each party's ability to perform its commercial and statutory functions.
- C. In consideration of the Confidential Information provided to You, SunWater requires You to keep that information confidential. You must also take reasonable steps to manage any existing or future conflict of interest appropriately.
- D. In consideration of the Confidential Information provided to SunWater, You require SunWater to keep the information confidential. SunWater must take reasonable steps to manage any existing or future conflict of interest appropriately.

#### TERMS & CONDITIONS

- 1. In this Agreement:
  - (a) **Commencement Date** has the meaning given in Schedule 1.
  - (b) **Confidential Information:**
    - (i) means information that is by its nature confidential, and/or is designated by a Party as confidential; and
    - (ii) means information that is obviously confidential because of the manner of its disclosure; and
    - (iii) includes information relating to the products, services, business, governmental, personnel or commercial activities of a Party, including but not restricted to formulas, compilations, programs, devices, concepts, inventions (whether or not patentable), designs, methods, techniques, marketing and commercial strategies, processes, data concepts, and know-how, and

unique combinations of separate items which individually may or may not be confidential, if the information:

- A. is not generally known to the public; and
- B. derives economic value, actual or potential, from not being generally known; or
- C. has a character such that a Party has a legitimate interest in maintaining its secrecy; or
- D. when released may harm or jeopardise the competitive commercial activities of a Party and put it at a competitive disadvantage in the marketplace; or
- E. may unduly advantage a Party's competitors or a third party,

but Confidential Information:

- (iv) does not include information that is or comes into the public domain except as a result of a Party's breach of this Agreement; and
  - (v) does not include information that is known otherwise than through a Party providing that information to the other Party.
- (c) **Disclosing Party** has the meaning given in clause 2(a).
  - (d) **End Date** has the meaning given in Schedule 1.
  - (e) **Party** means, jointly and severally as the context requires, SunWater or You and a reference to Parties means SunWater and You, and a reference to a Party includes a reference to any of its related bodies corporate from time to time. A reference to Confidential Information includes a reference to the Confidential Information of a Party and each of its related bodies corporate from time to time.
  - (f) **Project** has the meaning given in Schedule 1.
  - (g) **Recipient Party** has the meaning given in clause 2(b).
  - (h) **SunWater** has the meaning given in Schedule 1.

## Appendices

- (i) **You** has the meaning given in Schedule 1.
2. All Confidential Information that:
- (a) is disclosed or made available by a Party (**Disclosing Party**); or
  - (b) is acquired, seen, or learnt by the recipient of the Confidential Information as a direct or indirect consequence of being involved with the other Party (**Recipient Party**),
- is, as between You and SunWater, the exclusive property of the Disclosing Party and the Recipient Party must keep that information strictly confidential and use it only for the purposes for which it is disclosed or made available.
3. The Recipient Party must:
- (a) not interfere with, or do anything that could harm or impair the Disclosing Party's rights and interests in Confidential Information; and
  - (b) return to the Disclosing Party or destroy material in its possession or control that bears, embodies or refers to the Confidential Information of the Disclosing Party promptly when requested to do so by the Disclosing Party; and
  - (c) not copy, duplicate, commercially exploit, adapt, translate, or disclose to third parties the Confidential Information of the Disclosing Party unless the express prior written consent of the Disclosing Party is obtained (for the avoidance of doubt, this clause 3(c) does not apply to SunWater's disclosure of Confidential Information to its shareholding Ministers); and
  - (d) use best endeavours to prevent material in the Recipient Party's possession or control that contains or refers to Confidential Information of the Disclosing Party from being discovered, used or copied by third parties; and
  - (e) if the Recipient Party is an agency to which the *Right to Information Act 2009* (Qld) applies, consult with the Disclosing Party before making any decision in relation to any application for access under that Act.
4. Notwithstanding clause 3 of this Agreement, each Party may retain one copy of material in its possession or control that bears, embodies or refers to the Confidential Information of the Disclosing Party for record keeping purposes.
5. In the event that a Party is compelled by law to do any of the things stated in clause 3 then that Party must:
- (a) inform the Disclosing Party as soon as reasonably practical of the legal requirement; and
  - (b) consult with the Disclosing Party in order to mutually develop the content of any public announcement required.
6. The obligations concerning the Confidential Information continue until the earlier of:
- (a) the End Date;
  - (b) the date the Confidential Information is returned to the Disclosing Party or destroyed;
  - (c) the date the Confidential Information in question becomes public knowledge, except as a result of a breach of this clause.
7. No waiver, delay, indulgence or failure to act by either Party regarding any particular default or omission shall affect or impair any rights or remedies regarding that default or omission or any subsequent default or omission that is not expressly waived in writing.
8. You indemnify SunWater and at all times keep SunWater indemnified against any loss, damage, expense or cost directly sustained, suffered or incurred as a result of Your failure to observe or perform any term or condition of this Agreement.
9. SunWater indemnifies You and at all times keeps You indemnified against any loss, damage, expense or cost directly sustained, suffered or incurred as a result of SunWater's failure to observe or perform any term or condition of this Agreement.
10. This Agreement is governed by the laws of Queensland and the parties submit to the jurisdiction of the courts of that State.
11. This Agreement may be executed in any number of counterparts. All counterparts together will be taken to constitute one instrument.

# Appendices

**EXECUTED AS AN AGREEMENT.**

**SUNWATER:**

Executed by **SUNWATER LIMITED**  
**ACN 131 034 985** by its authorised signatory in  
 the presence of:

 \_\_\_\_\_  
 Witness Signature                      Signature

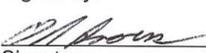
Melissa Grant                      M.R. MINTER  
 Print Name                              Print Name

4/7/2012  
 Date

**YOU:**

Derek R. B. Brown

Signed by:

 \_\_\_\_\_  
 Signature                                      Witness

D.R. BROWN                      ROSS W DILLON  
 Name of Signatory                      Name of  
 (please print)                              Witness (please print)

3rd. JULY 2012  
 Date of execution (please print)

**SCHEDULE 1**

|                 |  |
|-----------------|--|
| <b>Date</b>     | 3 <sup>rd</sup> . July, 2012   |
| <b>SunWater</b> | SunWater Limited<br>ACN 131 034 985<br>Level 10, 179 Turbot Street,<br>Brisbane Queensland 4000  |
| <b>You</b>      | Derek R. B. Brown  |
| <b>End Date</b> | 3 <sup>rd</sup> . July, 2015   |
| <b>Project</b>  | Information regarding the BILL CRM systems project, gathered through document reviews and interviews, will be used as part of a Ph.D. research thesis with University of Southern Queensland. Selected information may also be used in academic journal articles. No names or other identifiers will be used without explicit approval from SunWater in either the thesis or any related articles. |



## Appendices

### Appendix 11. List of Participants

| Case Study | Interview Type  | Participant Code | Tenure | Organisation Role         | Project Role            |
|------------|-----------------|------------------|--------|---------------------------|-------------------------|
| A          | Preliminary     | CSAP1            | 12     | Senior Business Analyst   | Business Representative |
| A          | Semi-structured | CSAP2            | 20     | General Manager           | Business Owner          |
| A          | Semi-structured | CSAP4            | 25     | Executive General Manager | Business Sponsor        |
| A          | Semi-structured | CSAP3            | 21     | General Manager           | Business Representative |
| A          | Semi-structured | CSAP5            | 17     | ICT Release Manager       | Subject Matter Expert   |
| B          | Preliminary     | CSBP1            | 10     | ICT Director              | Project Manager         |
| B          | Semi-structured | CSBP2            | 13     | General Manager           | Business Owner          |
| B          | Semi-structured | CSBP3            | 5      | ICT Release Manager       | ICT Support Lead        |
| B          | Semi-structured | CSBP4            | 15     | General Manager           | Business Representative |
| B          | Semi-structured | CSBP5            | 1      | Program Director          | Program Director        |

## Appendices

### Appendix 12. Case Study A Preliminary Interview Protocol

**Date:**

**Interviewee:**

This discussion is part of a case study of the Ellipse 8 project, which is part of my research for a Ph.D. The research is about LDM processes in Queensland Government Owned Corporations. This is completely voluntary, and there is no expectation or requirement that you must, or need to, participate. The case study write-up won't have any names or other identifiers that would link it to Case Study A Energy or to you. The purpose of this discussion is to explore some of the thinking and LDM about the Ellipse 8 project. What I'd like to get is some idea of the major areas and issues that I could use to develop more detailed, focused interviews for this case study.

The areas I am interested in are lessons learned from previous projects; the LDM process itself, and any thinking that was done about the consequences of initiating the project. This should be just an open discussion, with very few planned questions. I'll be taking notes as we talk.

I'd also like to record our discussion. Is that acceptable to you?

Are you comfortable with this format?

1. I'd like to start by trying to understand your role in the initial discussions and decisions about the project
2. Could you describe the general LDM processes in the Team?
3. To your knowledge, were there any lessons learned used in this project?
4. What were the major categories of issues that the Team had to deal with?
5. Are there any other issues you think would be useful to include in more detailed interviews?

Are there any other comments you'd like to add, or any additional issues you think we should discuss?

Thanks for your input.

# Appendices

## Appendix 13. Semi-structured Interview Protocol

### Case Study A Interview Protocol

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#### Background

**Q.A**            **What level are you in the organisation?**

- Executive
- Senior Manager
- Middle Manager
- Manager
- Supervisor
- Employee

**Q.B**            **What was your role on the Project?**

- Decision-maker
- Project leadership
- Project Management
- Other

Coding

## Appendices

### Case Study A Interview Protocol

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#### Process

- Q.1 What was the set-up process for the project?
- Q.2 How well did that process work?
- Q.3 What effects did the start-up process have on the employees?
- Q.4 Who had overall accountability for the project?
- Q.5 What was the decision-making process for the project?
- Q.6 What was the process for accessing decision-maker(s)?
- Q.7 What effects did the decision-making processes for the project have on employees?

#### Priorities

- Q.8 What were the priorities for the project?
- Q.9 How were these decided?
- Q.10 Were any lessons learned from previous projects used?
- Q.11 What impact, if any, did the change of government have on the project?
- Q.12 Were there any other factors that drove the decisions for the project?
- Q.13 How much did the end of vendor support for the current version influence the decision-making process?
- Q.14 Were there any other assumptions made, or beliefs held, about the project?
- Q.15 What role did external consultants and vendors play in the decision-making process?
- Q.16 Were you at any of the initial sales presentations or discussions given by the consultants?
- Q.17 What effects did the external consultants/vendors have on the decision-making process?
- Q.18 Once the project kicked off, the consultants used an accelerated process. What impacts did that have on the project?

Coding

# Appendices

## Case Study A Interview Protocol

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- Q.19** What were your thoughts or reactions to those?
- Q.20** Were the timelines set for the project realistic?
- Q.21** Were you involved in defining the benefits of the proposed upgrade project?
- Q.22** How well did the employees understand what the new version of the software could do?
- Executive Attitudes**
- Q.23** What were the executive attitudes towards the project?
- Quality**
- Q.24** Overall, how would you rate the quality of the project?

Coding

## Appendices

### Appendix 14. List of Secondary Data (by Case Study)

| Case Study A |                   |           |      |   | Case Study B |                   |           |       |   |
|--------------|-------------------|-----------|------|---|--------------|-------------------|-----------|-------|---|
| #            | Occurrence        | Date      | Code | Description   | #            | Occurrence        | Date      | Code  | Description                                     |
|              | Task              |           |      |   |              | Task              |           |       |   |
| 1            | Conference Call   | 16-Aug    | CS1  | Discussion of Design Phase resource requirements & user input                                   | 1            | Excel spreadsheet | 9/1/2010  | CSB1  | Project costs                                   |
| 2            | email             | 16-Aug    | CS2  | Concerns raised with consultants about data gathering process                                   | 2            | Excel spreadsheet | 9/1/2010  | CSB2  | Earned Value Graph                              |
| 3            | email             | 18-Aug    | CS3  | Concerns raised with consultants about data gathering process                                   | 3            | Excel spreadsheet | 9/1/2010  | CSB3  | Issues & Objectives Register                    |
| 4            | email             | 18-Aug    | CS4  | Concerns raised with consultants about data gathering process                                   | 4            | Excel spreadsheet | 9/1/2010  | CSB4  | Risk Register                                   |
| 5            | email             | 23-Aug    | CS5  | Concerns raised with consultants about data gathering process                                   | 5            | Excel spreadsheet | 9/1/2010  | CSB5  | Costs   |
| 6            | email             | 24-Aug    | CS6  | Concerns raised with consultants about data gathering process                                   | 6            | Excel spreadsheet | 9/1/2010  | CSB6  | Scope Change Assessment                         |
| 7            | email             | 23-Aug    | CS7  | Organisation Change Impact Analysis information   | 7            | Excel spreadsheet | 9/1/2010  | CSB7  | Risks & Issues document                         |
| 8            | presentation      | 23-Aug    | CS8  | Presentation from vendors   | 8            | Word document     | 10/1/2010 | CSB8  | Project Charter                                 |
| 9            | email             | 24-Aug    | CS9  | ERP Upgrade: Change Management Agenda   | 9            | Word document     | 11/1/2010 | CSB9  | SWIMS Systems replacement Director presentation |
| 10           | Conference Call   | 29-Aug    | CS10 | Discussion of Design Phase resource requirements & user input                                   | 10           | Word document     | 11/1/2010 | CSB10 | SWIM replacement Executive Summary              |
| 11           | Conference Call 2 | 29-Aug    | CS11 | Discussion of Design Phase resource requirements & user input                                   | 11           | Word document     | 12/1/2010 | CSB11 | SWIMS Project Management Plan                   |
| 12           | email             | 29-Aug    | CS12 | FW: Blueprinting YY ELT Update  | 12           | Word document     | 12/1/2010 | CSB12 | BILL Project Program Plan                       |
| 13           | spreadsheet       | 29-Aug    | CS13 | EXCEL impact analysis   | 13           | Excel spreadsheet | 4/12/2011 | CSB13 | Work Plan Discovery stage                       |
| 14           | Conference Call   | 30-Aug    | CS14 | Conference Call re ERP resourcing & user input  | 14           | Word document     | 5/27/2011 | CSB14 | Serviceworks proposal                           |
| 15           | email             | 30-Aug    | CS15 | SPQ bp ph2 ERP - Design Phase resourcing draft - FYI all  | 15           | Word Document     | 3/16/2012 | CSB15 | BILL program Recommendations re Execution Phase |
| 16           | email             | 31-Aug    | CS16 | Initial comments on the ERP Upgrade Design Phase meeting  | 16           | Excel spreadsheet | 7/17/2012 | CSB16 | Project Summary                                 |
| 17           | Conference Call   | 2-Sep     | CS17 | Discussion re ERP resourcing & user input   |              |                   |           |       |   |
| 18           | email             | 2-Sep     | CS18 | SPQ bp ph2 ERP - draft ERP Blueprinting business case - for review by all                       |              |                   |           |       |   |
| 19           | email             | 2-Sep     | CS19 | ERP Upgrade Risk for WDIP   |              |                   |           |       |   |
| 20           | Conference Call   | 5-Sep     | CS20 | Discussion re Change Impact Assessment process with consultants                                 |              |                   |           |       |   |
| 21           | document          | 5-Sep     | CS21 | vendor Business Case .pdf   |              |                   |           |       |   |
| 22           | document          | 5-Sep     | CS22 | EXCEL design Phase resourcing   |              |                   |           |       |   |
| 23           | presentation      | 5-Sep     | CS23 | ERP roadshow attendees .xcl   |              |                   |           |       |   |
| 24           | presentation      | 5-Sep     | CS24 | ERP implementation approach .ppt  |              |                   |           |       |   |
| 25           | Conference Call   | 6-Sep     | CS25 | Discussion re ERP resourcing  |              |                   |           |       |   |
| 26           | email             | 6-Sep     | CS26 | SPQ bp ph2 ERP - more material for resourcing review - FYI D, PC, all                           |              |                   |           |       |   |
| 27           | document          | 6-Sep     | CS27 | Vendor B business Case doc  |              |                   |           |       |   |
| 28           | document          | 13-Sep    | CS28 | Vendor Scope doc  |              |                   |           |       |   |
| 29           | Meeting           | 14-Sep    | CS29 | Meeting with consultants re concerns about Change Impact Assessment process & Change Management |              |                   |           |       |   |
| 30           | email             | 15-Sep    | CS30 | Action Response: Notes on ERP - AR RELEASE for Response to Louise tomorrow                      |              |                   |           |       |   |
| 31           | presentatrion     | 15-Sep    | CS31 | ERP Implementation structures .ppt  |              |                   |           |       |   |
| 32           | email             | 16-Sep    | CS32 | ERP Upgrade YY Business Case  |              |                   |           |       |   |
| 33           | email             | 14-Sep    | CS33 | To: PS(ICT Provider); SN(NQ); MW (ICT Provider); JD (ICT Provider); EK (ICT Provider)           |              |                   |           |       |   |
| 34           | email             | 15-Sep    | CS34 | ERP Upgrade Business Case   |              |                   |           |       |   |
| 35           | Meeting           | 21-Sep    | CS35 | Meeting with vendors re concerns about Change Impact Assessment process & change management     |              |                   |           |       |   |
| 36           | email             | 22-Sep    | CS36 | YY IRC meeting - ERP Upgrade Supplementary Paper  |              |                   |           |       |   |
| 37           | email             | 6-Feb-12  |      | ERP project   |              |                   |           |       |   |
| 38           | email             | 31/10/12  |      | ERP Upgrade Early Communications DRAFT v0 3 (2)   |              |                   |           |       |   |
| 39           | email             | 31/10/12  |      | ERP Upgrade Early Communications DRAFT v0 3 (2)   |              |                   |           |       |   |
| 40           | email             | 3/11/2012 |      | FW: Update on ERP Upgrade   |              |                   |           |       |   |

# Appendices

## Appendix 15. Initial Assessment – Case Study A

| # | Occurrence      | Date   | Code | Description   | Decision | Outcome   |
|---|-----------------|--------|------|---|----------|---|
|   |                 |        |      | Task  | Point    |   |
| 1 | Conference Call | 16-Aug | CS1  | Discussion of Design Phase resource requirements & user input   |          | Concerns raised about data gathering process                  |
| 2 | email           | 16-Aug | CS2  | <p>Great to be working with you both on this.</p> <p>Our earlier contact has been by Martin (contact info below) to our Strategic Change &amp; Portfolio Management group.</p> <p><b>Project Delivery</b></p> <p>ICT Provider</p> <p>G has pulled together the points from our conversation today.</p> <p>I took some quick notes when A, D. and yourself were covering off the key items that need to be addressed with TS and ICT Provider.</p> <ul style="list-style-type: none"> <li>• Scope of vendor Change Management (contract)</li> <li>• Establish/understand vendor's approach (change management and communication plan)</li> <li>• Develop relationship moving forward, rules of engagement</li> <li>• Establish our contribution to change moving forward</li> </ul> <p>Feel free to amend as required.</p> <p>I'll follow up with KP from our end. Hopefully have some information to share by the end of the week.</p> <p>RH Change Manager</p>   |          |   |
| 3 | email           | 18-Aug | CS3  | <p>Thanks for attaching both docs. We (Change Office) met with C regarding the data gathering change impacts doc.</p> <p>The expectation set with C. when we met was that the data gathering would occur throughout the workshop process and individually should more info be required</p> <p>Can you confirm that this happened or when the data gathering for the change impacts will be used (and how).</p> <p>Looking forward to catching up with you.</p> <p>RH Change Manager</p> <p><b>From:</b> TS<br/> <b>Sent:</b> Thursday, 18 August 2011 9:29 AM<br/> <b>To:</b> RH<br/> <b>Subject:</b> SPQ bp ph2 ERP - change mgt update - FYI all</p> <p>Just to close a few loops, this is the template we will use for the high-level change impact assessment as part of the current high-level scoping work.</p> <p>This is based on this template/ guidance pack from CD, which I understand has been previously reviewed with Corporate Organisational Change at XX and PD at YY.</p> <p>R, we should be completing this template in the next week, so will schedule a time to talk end next week.</p> <p>TS</p>   | Yes      | Concerns raised with consultants about data gathering process |
| # | Occurrence      | Date   | Code | Description   | Decision | Outcome   |
|   |                 |        |      | Task  | Point    |   |
| 4 | email           | 18-Aug | CS4  | <p>Hi A &amp; D</p> <p>I'm not sure who is working today with an Ekka show holiday in Brisbane. Apologies this is from my private email – I didn't bring my work laptop home and was keen to provide an update before we continued with the action items from our meeting.</p> <p>Yesterday I had an extremely brief conversation with Simon Middap (my manager) he said he has been asking questions in the change management space. I said that we (XX &amp; YY) had also caught up but I was unable to give him details of our discussion or get info from him as we to step into other meetings</p> <p>I will catch up with S tomorrow to ensure that we're not asking the same questions to the same people.</p> <p>I reviewed my emails and have one from CD where he confirmed that the data gathering tool was being used in the current round of round of workshops. I also think in the meeting G and I had with him that we asked him if there would be individual 'interviews' with key people.</p> <p>G, I'm sure he indicated that this would happen too if they needed to clarify some of their information.</p> <p>Rather than talking to TS, I will go back to CD tomorrow to confirm the data gathering did happen in the workshops (and how it was done, given nobody is aware that this happened). I can then ask him some questions about the change assessment which T tabled at the meeting last Friday</p> <p>Tomorrow I'll get an update from SM. Once I've spoken to CD from I'll email you both to confirm the data gathering.</p> <p>It may be beneficial for us all to have a meeting with C in his role as change lead for</p> <p>It may assist to have the above info before we move on with some of our action items from our meeting.</p>  |          | Concerns raised with consultants about data gathering process |
| 5 | email           | 23-Aug | CS5  | <p><b>From:</b> AT<br/> <b>Sent:</b> Wednesday, 17 August 2011 8:37 AM<br/> <b>To:</b> RH<br/> <b>Subject:</b> RE: message from RH</p> <p>Hi, All.</p> <p>I've spoken with Sam about this. At this stage the impact analysis is around the high level impacts required so that YY PDy can gain an overall picture of our whole strategic enablement program. So there is no great cause for concern. I do however, need to catch up with M IV (ICT Provider) to determine where the whole change management agenda is landing beyond this initial scoping phase. There is no change management activities being conducted at the blueprinting phase.</p> <p>S is also raising the change management agenda with PS, vendor and vendor2 so that we have a clear road ahead moving into the design phase. I'll be in touch once I've spoken with M.</p> <p><b>AT</b></p>  |          | Concerns raised with consultants about data gathering process |
| 6 | email           | 24-Aug | CS6  | <p><b>From:</b> RH<br/> <b>Sent:</b> Wednesday, 17 August 2011 8:17 AM<br/> <b>To:</b> AT<br/> <b>Subject:</b> message from RH</p> <p>I'm not sure who is working today with an Ekka show holiday in Brisbane. Apologies this is from my private email – I didn't bring my work laptop home and was keen to provide an update before we continued with the action items from our meeting.</p> <p>Yesterday I had an extremely brief conversation with SM (my manager) he said he has been asking questions in the change management space. I said that we (XX and YY) had also caught up but I was unable to give him details of our discussion or get info from him as we had to step into other meetings</p> <p>I will catch up with S tomorrow to ensure that we're not asking the same questions to the same people.</p> <p>I reviewed my emails and have one from CD where he confirmed that the data gathering tool was being used in the current round of workshops. I also think in the meeting G and I had with him that we asked him if there would be individual 'interviews' with key people.</p> <p>G, I'm sure he indicated that this would happen too if they needed to clarify some of their information.</p> <p>Rather than talking to TS, I will go back to CD tomorrow to confirm the data gathering did happen in the workshops (and how it was done, given nobody is aware that this happened). I can then ask him some questions about the change assessment which T tabled at the meeting last Friday.</p> <p>Tomorrow I'll get an update from SM. Once I've spoken to CD from vendor, I'll email you both to confirm the data gathering. It may be beneficial for us all to have a meeting with C in his role as change lead for vendor.</p> <p>It may assist to have the above info before we move on with some of our action items from our meeting.</p> <p>I'll ring/email you both tomorrow. Cheers R</p> |          |   |

# Appendices

| #  | Occurrence      | Date   | Code | Description  | Decision | Outcome   |
|----|-----------------|--------|------|--|----------|---|
|    | Task            |        |      |  | Point    |   |
| 7  | email           | 23-Aug | CS7  | <p>From: PC</p> <p>Sent: Tuesday, 23 August 2011 8:14 AM</p> <p>Subject: FW: FW: Organisation Change Impact Analysis information</p> <p>Attachments: YY change impact information from ICT program.ppt</p> <p>There is some good stuff here. Pls review.</p> <p>PC</p> <p>-----Original Message-----</p> <p>From: SN</p> <p>Sent: Monday, 22 August 2011 4:43 PM</p> <p>Subject: FW: FW: Organisation Change Impact Analysis information required</p> <p>Info provided to Michelle</p> <p>SN</p> <p>-----Original Message-----</p> <p>From: TdH</p> <p>Sent: Tuesday, 16 August 2011 6:48 PM</p> <p>To: MN</p> <p>Subject: RE: FW: Organisation Change Impact Analysis information required</p> <p>M</p> <p>As promised, attached is a synopsis of the data available for assessing change impacts of the ICT straw man. The document includes:</p> <ol style="list-style-type: none"> <li>1. The high level ICT roadmap which the ELT have identified as the preferred roadmap based on the analysis to date. This shows the macro ICT streams</li> <li>2. An outline of each of the ICT initiatives proposed, indicating some of the key objectives of each, risks and dependencies within the ICT program (pages 3 to 7). This is a more granular view than the roadmap, which is a roll-up.</li> <li>3. An initial view of the work groups impacted by the key programs (pages 9 to 13). This information is probably a little of date, since it was produced in May 2011 and the thinking has evolved a bit since then. However, it is the best available at this time and the broadly the impacts should not be too far out.</li> <li>4. The estimated business resources required to contribute to the implementation of these products, by macro stream (pages 14-15). (See attached file: YY change impact information from ICT program.ppt)</li> </ol> <p>Since I don't have much insight into the other strategic programs, I cannot comment on whether there is overlap between these and the ICT program. I also have limited visibility of in-flight ICT projects eg there is already a BI program underway. Please keep an eye out for these - am happy to discuss if needed.</p> <p>vendor</p> <p>RE: FW: Organisation Change Impact Analysis information</p> <p>Hi T,</p> <p>Can we please have the Organisation Change Impact Analysis, by Work Group, by end of business Tuesday 16th August?</p> <p>M</p> <p>-----Original Message-----</p> <p>From: TdeH</p> <p>Sent: Friday, 12 August 2011 10:27 AM</p> <p>To: MN</p> <p>Subject: Re: FW: Organisation Change Impact Analysis information required</p> <p>Hi M - Am targeting this for early next week. As discussed, the estimated aggregate number of business FTEs for each project over time will be available. As Blueprinting progresses through September, more information is expected to be available at the workgroup level. I'll also send you an initial change impact assessment undertaken during the first phase of Blueprinting</p> <p>vendor</p> <p>11/08/2011 10:03 AM</p> <p>FW: Organisation Change Impact Analysis information</p> <p>Thanks for your valued time and participation at Tuesday's meeting.</p> <p>As agreed, can you please forward on the Organisation Change Impact data?</p> <p>Please note we need this per project rather than stream and at work group level.</p> |          | Response from consultants to some issues raised               |
| 8  | presentation    | 23-Aug | CS8  | Presentation from vendors  |          |   |
| 9  | email           | 24-Aug | CS9  | <p>From: AT</p> <p>Sent: Tuesday, 23 August 2011 3:47 PM</p> <p>To: RH; DB</p> <p>Subject: ERP Upgrade: Change Management Agenda</p> <p>Hi, R and D.</p> <p>I've had several conversations with SN, MW and others. It appears that at this stage, the impact analysis that is being done as part of the business case is a high-level one. I am not sure at this stage what to expect from the business case in terms of resourcing for change management. I will however, be pushing for more details entering into the design phase, as I will be for resourcing, project structure and roles (which I have started discussing with PC), project plan and milestones.</p> <p>I believe it is important that we have an agreed approach between the two organisations, for the change management agenda as soon as the project kicks off with the design phase, which I believe is expected to occur early November.</p> <p>I believe vendors are struggling with the end-August deadline for the business case (gate 2 release of funds for detailed design). I would therefore be looking to have conversations around the change management agenda soon after this.</p> <p>It would possibly pay to have the key players around the table to discuss, e.g., SN, SM, yourselves, PK and myself. The important aspect from my view is that we get an early heads-up on expected resource requirements (change management, Business Analysts and SMEs, and agree on a common approach</p>   |          |   |
| 10 | Conference Call | 29-Aug | CS10 | Discussion of Design Phase resource requirements & user input  |          | Concerns raised with consultants about data gathering process |
| 11 | Conference Call | 29-Aug | CS11 | Discussion of Design Phase resource requirements & user input  |          | Concerns raised with consultants about data gathering process |
| 12 | email           | 29-Aug | CS12 | <p>PC</p> <p>Thursday, 25 August 2011 5:32 PM</p> <p>Program Delivery Management Team</p> <p>FW: Blueprinting YY ELT Update</p> <p>FYI</p> <p>PC</p>   |          |   |



Appendices

| #  | Occurrence Task | Date   | Code | Description   | Decision Point | Outcome  |
|----|-----------------|--------|------|---|----------------|--|
| 19 | email           | 2-Sep  | CS19 | <p><b>From:</b> IW</p> <p><b>Sent:</b> Friday 2 Sept 2011 3.43 pm</p> <p><b>To:</b> PC, RB, GS</p> <p><b>Subject:</b> ERP Upgrade Risk for WDIP</p> <p>Thank you for raising this concern. I have already written to TS today in respect to his scheduling meetings at such short notice I can never attend them. I did read through the slide pack but I did not get a feel of what is actually the content of the changes for the ERP and the impact and or requirements for Asset Management. I share your concerns below and I believe that perhaps we should ask S to clarify the intended scope of works that they are thinking of to allow each of us to assess the impact on our WDIP Programs.</p> <p>G, in R's stead, would you be acceptable to P and I to ask this from S?</p> <p><b>From:</b> PC</p> <p><b>Sent:</b> Friday, 2 September 2011 2:44 PM</p> <p><b>To:</b> RB(CA); GS(YY); M(YY)</p> <p><b>Subject:</b> ERP Upgrade Risk for works</p> <p>I have some concerns over the understanding of what is in scope for ERP Upgrade Phase 1 – target end of 2012 completion. I have attended 2 discussions with TS of vendor and have advice from AT who has been closely involved in the development of the ERP upgrade</p> <p>The ERP upgrade has been phased with Phase 1 being primarily a technical upgrade and Phase 2 supporting business change. The presentation slides and business case reference an inclusion in Phase 1 of:</p> <ul style="list-style-type: none"> <li>• Enable works programs</li> <li>• Enable improved Asset Management</li> </ul> <p>There is no more detail provided on what this means.</p> <p>The indicative resourcing identified for the ERP upgrade of 2 Full Time YY SMEs to support the whole upgrade for works (Operations) and 2 FTEs for Asset Management would not seem adequate to support definition of the business change from strategy to detailed business requirements as well as identifying all other changes and improvements supported by the standard ERP functionality across these business units</p> <p>There is clearly an expectation (not explicit) that the works program and other Asset Management activity will drive out detailed business requirements. There is a risk that the business will expect that this will come from the ERP Upgrade project rather than identifying it themselves and there is also a risk that these business requirements will not be identified in time to be included in the Phase 1 Design – target estimated to be Mar/ Apr 2012.</p> <p>For example the Use of ERP Project in operations appears to be winding down when it is still required to define requirements for inclusion in ERP upgrade</p> <p>Please let me know your views and whether you are comfortable that the projects currently identified in works will deliver the definition of detailed business requirements for use of ERP that you're looking for</p>  |                | Concerns raised to leadership re process, estimates and lack of acknowledgement of user concerns |
| 20 | Conference Call | 5-Sep  | CS20 | <b>Discussion re Change Impact Assessment process with consultants</b>  |                | Concerns raised; no changes made to documents  |
| 21 | document        | 5-Sep  | CS21 | vendor Business Case .pdf   | Yes            | Business case submitted without changes  |
| 22 | document        | 5-Sep  | CS22 | EXCEL design Phase resourcing   | Yes            | Submitted by consultants with no changes reflecting issues &                                     |
| 23 | presentation    | 5-Sep  | CS23 | ERP roadshow attendees .xcl   |                |  |
| 24 | presentation    | 5-Sep  | CS24 | ERP implementation approach .ppt  | Yes            | Submitted without changes  |
| 25 | Conference Call | 6-Sep  | CS25 | Discussion re ERP resourcing  |                | Concerns again raised  |
| #  | Occurrence Task | Date   | Code | Description   | Decision Point | Outcome  |
| 26 | email           | 6-Sep  | CS26 | <p><b>From:</b> TS</p> <p><b>Sent:</b> Friday, 2 September 2011 4:29 PM</p> <p><b>To:</b> DB(YY); MJ(YY); D-LB(CA);PC(YY)</p> <p><b>Subject:</b> SPQ bp ph2 ERP - more material for resourcing review - FY1 D, PC, all</p> <p><b>Attachments:</b> YY ICT Provider ERPUpgrade Project Plan R1 98.mpp; YY, XX, ICT Provider Des Ph resourcing v3.2.1.xls; 110902 SPQ bp ph2 ERP EE bfg v0.3.pdf; ERP implem app v110824.4 post_mtg.ppt; Solution Design Items exMin.docx</p> <p>Hi D, PC</p> <p>Assorted docs to help w resourcing..</p> <ol style="list-style-type: none"> <li>1. Design Phase plan from vendor2, 2 versions..</li> <li>2. Resource estimating spreadsheets..</li> <li>3. Docs detailing scope items for Implementation Ph1 vs Ph2..</li> <li>4. ERP update briefing for YY stakeholders from this morning..</li> </ol> <p>If there's anything else you need, please contact A or D or myself.</p> <p>[PK - CCg you in case this is also helpful for XX stakeholders/ resourcing plan reviewers]</p>   |                | Details from consultants re sources of estimates   |
| 27 | document        | 6-Sep  | CS27 | Vendor B business Case doc  | Yes            | Refined business case submitted; still no changes reflecting                                     |
| 28 | document        | 13-Sep | CS28 | Vendor Scope doc  |                | Business case doesn't reflect changes  |
| 29 | Meeting         | 14-Sep | CS29 | Meeting with consultants re concerns about Change Impact Assessment process & Change Management   | Yes            | Consultants confirmed no changes to be made  |
| 30 | email           | 15-Sep | CS30 | <p>JM</p> <p>Wednesday, 14 September 2011 2:36 PM</p> <p>DB</p> <p>Action Response: Notes on ERP - AR RELEASE for Response to Louise tomorrow</p> <p>High</p> <p>Confidential</p> <p>Here are my notes as requested. The information provided is based on information/perceptions provided by Louise Urzi.</p> <p><b>Reason for Approach to me</b></p> <p>Others recommended that L contact me as other channels have not proven effective.</p> <p><b>Individual's Task</b></p> <p>Rollout the above release to identified departments.</p> <p><b>Background Provided by Individual</b></p> <ul style="list-style-type: none"> <li>• Project due for rollout by mid October – it is already behind.</li> <li>• Identified areas for the rollout include: Admin Finance AR, CRM, Finance Accounting, Service Transition Centre, and Retail.</li> <li>• SN is the Sponsor and System Owner. Project does not appear to be a priority for the sponsor. He is not interested in the details nor does he see it as his responsibility.</li> <li>• ICT Provider Project Manager/Technical contact is JC</li> <li>• UAT completed with the customer services area but resources are no longer available to be part of the process due to competing priorities</li> <li>• PMO tools are too detailed for their project requirements and they do not use them.</li> <li>• Training and Development area do not have capacity to assist and it is not really in their scope of services.</li> <li>• Project Manager is DB. The issue and information has been raised to D already.</li> <li>• Project will affect a number of divisions of YY.</li> <li>• L is asked questions like these: 'What we need to do?' 'What has changed?' She does not feel she has the information to answer these questions</li> <li>• SME Resources are not available.</li> <li>• Release notes do not provide enough information</li> <li>• Planned escalation process for the system 1) ICT Provider Help Desk 2) Customer Service 3) ICT Provider technical Team 4) Vendor ?</li> <li>• ICT Provider created this part of the system.</li> <li>• S wrote a business requirements specification document but this does not seem to fulfil the current needs.</li> <li>• No mapping of current/future states/change impacts etc has taken place yet.</li> <li>• Core project documentation does not appear to be in place.</li> <li>• L does not have access to a copy of the system at this stage.</li> <li>• Initial thoughts on recommendations were provided to L with the understanding that JM and DB would discuss and respond.</li> <li>• We need to be very careful about how we communicate and the approach for this issue as it is a sensitive topic.</li> </ul> <p><b>My Interpretation of Key Issues</b></p> <p>Tools, information and processes do not enable L to complete the rollout.</p> <p><b>Initial High Level Recommendations</b></p> <p><b>*Bold items indicate priority areas.</b></p> <p>Hold a conversation with D about recommendations:</p> <ul style="list-style-type: none"> <li>• <b>Define roles and responsibilities (RACI matrix) – Sponsor, PM, etc</b></li> <li>• Confirm existence of SLA with vendor (if applicable) to identify external interface</li> <li>• Create a single point of contact for managing the system and obtaining required information</li> <li>• Develop a strategy to engage the sponsor</li> <li>• <b>Identify stakeholders and develop a strategy to get everyone on the same page</b></li> <li>• <b>Obtain a copy of the test version.</b></li> </ul> <p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>• Contact L to let her know that we will come back with a response tomorrow (allocated to JM)</li> <li>• JM and DB will discuss how to proceed from here.</li> </ul> <p>Can you have a look at this and then perhaps we can discuss?</p> |                | Concerns collated from various sources in organisation   |

# Appendices

| #  | Occurrence   | Date   | Code | Description  | Decision | Outcome  |
|----|--------------|--------|------|--|----------|--|
| #  | Task         |        |      |  | Point    |  |
| 31 | presentation | 15-Sep | CS31 | ERP Implementation structures .ppt   | Yes      | Document submitted by consultants contrary to internal estimates                                   |
| 32 | email        | 16-Sep | CS32 | <p><b>From:</b> MJ</p> <p><b>Sent:</b> Thursday, 15 September 2011 11:23 AM</p> <p><b>To:</b> DB</p> <p><b>Subject:</b> FW: ERP Upgrade YY Business Case</p> <p><b>Importance:</b> High</p> <p><b>Attachments:</b> ICT Vendor BI BPP ERP high level business case v4.5.1.doc; ERP Upgrade Business Cast 14 SEP v0.7.pdf</p> <p>D,</p> <p>Not sure if you have seen this or not. FYI &amp; comment.</p> <p><b>From:</b> AT</p> <p><b>Sent:</b> Wednesday, 14 September 2011 5:39 PM</p> <p><b>To:</b> MJ, PC</p> <p><b>Subject:</b> FW: ERP Upgrade YY Business Case</p> <p><b>Importance:</b> High</p> <p>Copy for your info. This, along with a covering memo and vendor business case will be forwarded to PE later this afternoon. I will then bundle up and overnight changes and discuss with PB how he wants it submitted, i.e., via formal IRC submissions directly. I've attached the latest version of the vendor case I have, however a further version is due later tonight, which I will also send through.</p> <p>This is only going to IRC for a warm up, not approval, for further consideration on 7 October and out-of-session discussions and approval. This is current thinking. The socialisation and approval process with ELT I believe is still being decided.</p> <p>One of my concerns is that because of the timelines we are working towards, this has not been reviewed by Commercial, but given the level of discussions this should not be a problem. I have however, alerted SN to this. We will though, be sending through to Commercial by way of advice, at the same time as sending through to PB.</p> <p>Could I therefore ask for your feedback by 9.30 am tomorrow.</p>  | Yes      | Submitted without changes from internal  |
| 33 | email        | 14-Sep | CS33 | <p><b>From:</b> AT</p> <p><b>Sent:</b> Wednesday, 14 September 2011 3:56 PM</p> <p><b>To:</b> PS(ICT Provider); SN(NQ); MW (ICT Provider); JD (ICT Provider); EK (ICT Provider)</p> <p><b>Subject:</b> ERP Upgrade YY Business Case</p> <p>Attached for endorsement/validation at this afternoon's meeting, is the latest version of the business case including financials.</p> <p>The current version I have of the vendor document is Version 4.5.1 which needs to accompany this business case. If there is a later version, could you please forward to me</p> <p>Can I confirm if this is being submitted through IRC submissions, or by some other means?</p>   |          | Business case doesn't reflect changes  |
| 34 | email        | 15-Sep | CS34 | <p><b>From:</b> MJ</p> <p><b>Sent:</b> Thursday, 15 September 2011 3:42 PM</p> <p><b>To:</b> DB(YY); D-LB (CA)</p> <p><b>Subject:</b> FW: ERP Upgrade Business Case</p> <p><b>Attachments:</b> ERP Upgrade Business Case v1.0.pdf</p> <p>FYI, see below advice sent from P to IRC Reps.</p> <p><b>MJ</b></p> <p><b>From:</b> PC</p> <p><b>Sent:</b> Thursday, 15 September 2011 1:34 PM</p> <p><b>To:</b> PB (YY); ML (YY); BR (CA)</p> <p><b>Subject:</b> FW: ERP Upgrade Business Case</p> <p>PS will be submitting the YY Business Case for the ERP Upgrade directly to IRC submissions this morning.</p> <p>See draft Gate 2 Business Case for ERP Upgrade. PS from ICT Provider will be submitting this business case for noting to the IRC with the view that further work will be done to finalise and submit for approval by October the 5<sup>th</sup>.</p> <p>I have some serious concerns with the quality of the draft business case and would appreciate if these were raised as issues to be resolved in finalising the Gate 2 business case for approval by the IRC.</p> <p>This Business Case has been compiled in a very short time and is based solely on the information available in the vendor documents.</p> <p>Quality issues include:</p> <ul style="list-style-type: none"> <li>The scope of work is not clearly defined – vendor 2 have provided some detail not yet captured in the business case</li> <li>There is ambiguity on the inclusion of significant business improvements in works delivery through the works improvement Program and Joint Workings Asset Management Framework</li> <li>Financial benefits are not identified</li> <li>Resources are under-estimated</li> <li>The balance between incremental and non-incremental Opex is unclear and details of Capex funding is also unclear.</li> </ul> <p>I think there are 2 risks worth highlighting:</p> <ul style="list-style-type: none"> <li>Business expects higher level of system solution design than will be delivered from the ERP upgrade and it will not be integrated with development of business design for WDIP and AM</li> <li>Vendor resource estimates are based on a compliance and limited consultations with full time resources – a model proven to be ineffective on JET.</li> </ul>   |          | Official notice that document would be submitted without issues, concerns raised by internal staff |
| 35 | Meeting      | 21-Sep | CS35 | Meeting with vendors re concerns about Change Impact Assessment process & change management  |          | Vendor confirmed process was accepted by ELT/no changes  |
| 36 | email        | 22-Sep | CS36 | <p><b>From:</b> PS (ICT Provider)</p> <p><b>Sent:</b> Thursday, 22 September 2011 7:33 PM</p> <p><b>To:</b> YY Senior Executive Team</p> <p><b>Subject:</b> YY IRC meeting - ERP Upgrade Supplementary Paper</p> <p>Tomorrow morning at the IRC meeting, we're discussing the draft business case for the ERP upgrade.</p> <p>Since submission of the draft paper, several good questions have been asked about the proposal. I've therefore prepared the attached supplementary paper, addressing these questions.</p> <p>I realise you're receiving this without notice, so I naturally don't expect you to read it prior to the meeting. But, as the questions are likely to come up at the meeting, I think it's good if you have written answers in front of you.</p> <p>I will bring some printed copies for Brisbane attendees.</p> <p><b>From:</b> AT</p> <p><b>Sent:</b> Wednesday, 28 September 2011 10:25 AM</p> <p><b>To:</b> BM</p> <p><b>Subject:</b> ERP Upgrade Initiation: Early Communications Considerations</p> <p>As discussed yesterday, there are a few communications considerations that I believe may benefit from some early attention. I am mindful that there were earlier commitments to our stakeholders to feedback the output of the AIPS which has not yet occurred.</p> <p>I am also mindful that there are some grass-roots conversations occurring amongst stakeholders around the upgrade, and no formal messages have been sent regarding what is coming through with the business case, the need for Board approval, project establishment, expected durations, start times, what is in phase 1 and phase 2, potential resourcing/SME requirements, and so on.</p> <p>There has also been some discussions around the need for either capability workshops (Values Assessment) or Key User Familiarisation sessions, with some stakeholders wanting to know the detailed capability of the system. This would enable them to nominate the right SMEs to participate in the design phase, and align process work to the capabilities of the new system.</p> <p>Additionally, given the less than positive engagement experience of our stakeholders during the AIPS, there are some bridges that could benefit from rebuilding to get the commitment needed from them.</p> <p>It would appear that, as soon as we start approaching our stakeholders for SME resource commitments, these questions (and possibly more) will be raised.</p> <p>I believe it is important that we establish a solid footing from the outset of the project. I see a positive opportunity to achieve this through some form of early planned and formal communications approach to our key stakeholders and the business as a whole, as part of the project initiation efforts.</p> <p><b>AT</b></p> | Yes      | Short notice of submission.  |



## Appendices

### Appendix 16. Project JET: Post completion review

Project Sponsors: TE, ML, JM, DB  
Project Manager: DB  
Approved Closure Date: Oct 30 2006  
Post Completion Review Author: PC & PD

#### Executive Summary

In September 2003, the CEOs of XX and YY commissioned a joint review (the Queensland “QUEST” project) to explore alternative options for implementing a model for sharing IT and determining what model provides the maximum benefit to the common shareholder.

This review found that there is a compelling case for XX and YY to share their investments in IT projects as well as IT operations. An estimated \$80 -100m in Capital expenditure (CAPEX) and Operating expenditure (OPEX) savings can potentially be realised from the \$750m in combined IT spend currently planned over the next 5 years.

It was recommended that XX’s recently implemented (Software Vendor) (ERP Package) solution be enhanced to a full ERP system for both XX and YY through a phased rollout.

Project JET (Joint Enterprise Transformation) then commenced 21 June 2004 to progress the joint ERP implementation. During the first phase (Business Blueprint) of this project, the vision for both XX and YY has been facilitated and documented and an indicative business case prepared.

The PROJECT JET Post Implementation Review (PIR) was deferred due to a number of factors which included: delayed handover and finalisation of the project due to outstanding issues and bugs requiring (Software Vendor) fixes, limited resource availability due to the focus on providing support, meeting business requirements and taking leave to mitigate resource burnout.

Given limited current access to key resources involved on the project and timing for completion of this deliverable it makes more sense to complete a post completion review rather than a full blown PIR.

The post completion review assesses whether a completed project has complied with its original brief, and as a separate issue, whether the completed project meets the strategic objectives and operational owner requirements. The Post Completion Review also seeks to describe some significant learning outcomes.

#### Realisation of Benefits - PD

##### Project JET focused on delivery of business benefits:

- **To increase efficiency of work delivery**
- **To improve effectiveness of network maintenance**
- **To increase confidence in information for decision making**
- **To optimise efficiency in the provision of administrative and IT support**
- **To improve customer service delivery**
- **To develop as a results oriented organisation**

Realisation of projected IT savings requires alignment of both the systems that are jointly developed and business processes that are supported by these systems. Hypothesis were developed and a business case for projected benefits was developed.

Based on the expected benefits, the following summary was provided:

- The first category contains those benefits that provide an incremental cost saving to YY. Examples of this category include consolidation of freight purchases and purchasing cost reduction enabled by (ERP Package). The recurrent benefits in this category amount to \$13.5M per annum. This represents 33% of the benefits.
- The second category of benefits are those that realise productivity improvements in field work. These efficiency improvements could be outworked as additional work performed on the network with the same

## Appendices

number of people, or outworked as the same volume of work with less input resource required. The recurrent benefits are \$16.2M or 40% of the total.

The third category of benefits are in the support process where process efficiency is possible. Again this efficiency could be realised through the same resource volume being used to support an increased volume of field work or alternatively the same volume of support provided by a smaller number of people. This benefit amounts to \$10.6M per annum or 26% of the total.

Like many other projects the JET benefits were not delivered at end of project. Realisation of benefits for YY is a continuing journey where, as employees mature with use of the system and become aware of new process and system capability, appropriate measures are adjusted to reflect desired business performance.

Not all benefits can be attributed solely to JET. This issue was raised very early in the project. A number of management actions have occurred during JET build. For example, MOS Pilot provided significant visibility of labour utilisation performance. Management action as a consequence of this focus resulted in an increase in utilisation rates across the operational groups. Benefits Realisation is a continuous process which requires periodic checks just like a financial investment and must be managed just like any other business process

During the final phase of the JET and JET Bridging project a JET Benefits Realisation project, was set up with the objective to assist the EMT in meeting their 06/07 KPI of "JET Benefit Plans in place". This resulted in specific actions and agreed targets attributed to appropriate managers in the business, and an appropriate monitoring / reporting mechanism established to track the actions. Benefit Statement templates formed the main evidence of the 06/07 KPI of JET Benefit Plans in place".

Benefit realisation for Project JET has effectively transitioned to ownership and management by the Executive Management team through the introduction of MOS measures and Business Enterprise Framework outcomes.

### Project Outcomes

Senior management agreed what success would like at the end of PROJECT JET. It was recognised that the PROJECT would deliver an 80% not 100% solution and that there would be a performance dip for approximately 6 months after go live.

Success for the Project JET looks like:

#### 1. Alignment

- XX, YY and ICT Provider will have an agreed ongoing management model for the (ERP Package) solution
- Common business process and ERP platform will have been adopted. Minor differences may exist at the task level to address organisational differences e.g. Geographic spread

#### Alignment outcome

Whilst 100% alignment was desirable, the targeted achievement was likely to be 80% - 100%. Fundamental differences between YY and XX drove some divergence from the joint alignment principle. There has not been significant work carried out on aligning business rules between the organisations. While the organisations have very similar business drivers there remains a culture of managing to the single business rules applying to the respective organisations.

#### 3. (ERP Package) and Complimentary Software

- The technology component of the system will have been fully tested and users will be confident that it works to expectation.
- Network Performance - an acceptable level of network performance will be achieved to support the applications across both businesses.

#### Outcome - (ERP Package) and Complimentary Software

- The technology component of the system was tested and deployed through five data conversion stages leading to the final go live conversion.
- Initial network performance post go live was less than acceptable with a significant number of help desk calls fielded and progressively resolved. Significant work in relation to performance has improved performance to acceptable levels.

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### 4. Business Solution

- The business solution in terms of functionality and user friendliness will be perceived at a minimum to be satisfactory.
- A list will exist of longer term solution elements that need to be built in a subsequent phase.

#### **Outcome - Business Solution**

- The business solution deployed met some resistance and post go live adaptation but the general performance enabled the organisation to continue functioning. Reporting proved to be the most significant post go live issue.
- Longer term solution requirements have been retained and managed in accordance with business expectations and capability to deliver. Significant future solution elements are being managed under the ET2010 program.

### 4.1 Data

- Users will believe that the data is correct and adequate to go forward;
- Users will understand the importance of and be committed to ongoing data integrity.

#### **Outcome**

Data was converted from legacy systems and provided in the JET Systems. Initial acceptance of data and the use of systems to forward manage varied between workgroups. A number of interface issues compounded the user acceptance.

A combined organisational effort to build understanding of the solution design has provided an improvement in use of the integrated solution to manage outcomes.

Diligence by managers and appropriate reporting will be key to continued improvement and data integrity.

### 4.2 Support Model

- A tested user help and support model will be in place.
- Users will know how to access support.

#### **Outcome**

An integrated support model within the Business Solutions and Process Group provides organisational support. The interface to this support model is via the ICT Provider help desk and has been communicated to users.

### 4.3 Workplaces, Business Work Teams & Individuals

- User Help contact numbers, 'cheat sheets' and user guides will be posted at key points in the workplace
- Daily and weekly work patterns will be readily available to all staff.

#### **Outcomes**

- Desktop and local IT infrastructure was addressed as a JET deliverable. There were some issues with performance at specific localities addressed during the Bridging project. Current help desk call indicate that generally IT infrastructure is appropriate for user's needs.
- User help contact numbers have been deployed via normal communication channels. Training material has been updated and modularised and available on the Intranet.
- Daily and weekly patterns deployed during JET training drew mixed acceptance, particularly where commonly accepted practices were changed.

### 4.4 Managers/Team Leaders

- understand their role in helping their staff operate successfully in the 'new world'
- have reported on the readiness status of their workplace in the build up to go-live,
- have led their team in a go-live transition planning session and made sure that the workplace and each person is ready for the go-live event
- be able to operate effectively in the new business environment including using the new reporting framework
- recognise that (ERP Package) go-live is not the end game but the start of really driving for ongoing improvement.

### 4.5 Wider Organisation

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The wider organisation will have constructed the appropriate environment for the operation of an ERP system and related business solution. This includes:

- ownership of a body of material to support the ongoing solution for example, training material
- KPIs and their associated reports are available to drive and measure the behaviours required to achieve the expected business benefits
- an appropriate level of funding, management time and ongoing support is available within the fabric of the organisation
- personnel with responsibility for the ongoing management enjoy organisational status and the genuine ability to access influence and decision making bodies to promote the ongoing management of the solution

The success of the actual go-live was reported to the Board as follows:

- The JET Solution ((ERP Package), Org Charter, eSafe, NGA.net and associated interfaces) is deployed and operating on 4 September 2006.
- YY is able to keep functioning after the implementation of the JET Solution and there is reasonable acceptance by the business of the JET Solution. YY has been able to keep functioning through this go-live and that the majority of staff have been able to continue with business operations
- The first payroll run post go-live is successfully processed and funds transferred to the appropriate staff bank accounts.
- The September end of month processing meets reasonable processing timetable.

A number of issues were identified after go live:

- There were significant issues being experienced in EAI (interface), time-out issues within (ERP Package), MER reporting solution within (ERP Package) and the Works Planner application.

### **(ICT consultant) REVIEWS**

(ICT consultant) was engaged by YY and XX sponsors to conduct regular reviews of progress to provide an expert outside perspective of PROJECT JET progress.

(ICT consultant) reviewed JET project activity by comparison against the following measuring system attributes 7 Keys to Success Project Management Review and specific focus areas identified by the Joint Steering Committee.

#### **(ICT consultant) Review 1 – Sept 2005**

Identified a number of significant issues including:

- 3 rd. party dependency impacts ((Software Vendor) core code development)
- Scope not locked down
- design not completed and
- ICT Provider readiness for support and maintenance.

Actions were identified to mitigate scope, risks and work schedule.

#### **(ICT consultant) Review 2 – Feb 2006**

Identified a number of significant issues including:

- Delay in (Software Vendor) core code
- Revised estimates from (Software Vendor)
- Reporting stream has no clear estimate to complete targets
- Long Term Solution Strategy is only partially complete with substantial differences in expectations of purpose & outcomes

Substantial progress had been achieved from first review and some focus and action required from the JET PM to manage the issues identified above.

#### **(ICT consultant) Review 3 – May 2006**

Identified a number of major recommendations including:

- Appoint single point of accountability for the LTSS to expedite development of support models
- Focus on training and training materials to meet go live dependencies
- Escalate some of the cutover activities

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- JSC and PM to take actions on recommendations.

### **(ICT consultant) Review 4 – Aug 2006**

Identified a number of observations including:

- A number of cut over activities were going well
- Go live and support plans are well considered
- Acceptance criteria for handover need further development and handover plan completed

Overall the (ICT consultant) review outcomes were positive reflecting the confidence within the project coming up to cutover and transition.

## **STATEMENT OF FINANCIALS**

Project JET has been fully costed (including YY resources) at \$65M. See the major cost categories below. (Pls note this is the final costing provided by the project to Finance who may have made other adjustments)

Financials deleted

### **Issues – PD**

At the completion of the JET Bridging Project on 1<sup>st</sup> April 2007 as there were a number of Project JET outstanding priority 2 work orders on (Software Vendor) delaying formal handover. The governance and management of that handover was transferred to the Business Systems and Process Support Manager.

Contractual obligations with the C1 contract required that there be no P1 and P2 defects and that there be no P3 defects which in aggregate significantly impact the business associated with the formal handover and to meet those requirements a formal acceptance document was prepared and closely managed. It should be noted that many of the defects were complex and rectification often involved a number of iterations from the vendor in developing corrective action.

Handover was completed in July 2007 following resolution of the outstanding issues.

### **Transition to Business Owners**

A number of change and communications channels were utilised to transition ownership. The most important of these included:

- Sponsorship through executive managers – executive managers led the way for staff
- Business sourced JET Stream Leaders
- Utilising current line and corporate communication channels and management team meetings – SMT Briefs, Management Team Meetings, E-Link etc.
- Joint Collaborative Teams – to engage senior managers in key decisions and issue resolution
- JET Leaders – to build understanding and ownership with wider management for cascading to staff
- Readiness Assessments – surveys of specific work groups to gauge readiness for the JET Solution.
- Trainers and coaches sourced from the business – staff who really understood the specific work areas utilised to develop training materials, train staff and then provide support post go live.

### **LTSS/ JISIC**

A long term solution strategy committee was set up to identify how YY and XX would work together and gain the value and benefits from implementation of a common solution.

The JET Joint Steering Committee agreed the principles put forward by the LTSS committee of a federated governance model and that the Joint IT Strategy and Investment Committee (JISIC) would provide governance for changes to the joint solution. A new LTSS working group was set up with participants from YY, XX and

## Appendices

ICT Provider to manage ongoing alignment and provide the input for JISIC decision making on the joint solution.

### Go Live

A number of mechanisms were put in place to transition the business to the JET Solution at go live in September 2006. These included:

- Post Go Live Support provided by key (Software Vendor), YY and ICT Provider experts
- Support from Trainers and Coaches
- Dedicated phone lines and additional help desk staff were put in place
- Communication of issues and bug fixes
- Continued online and face to face training

### Operational Support Model

The LTSS provided a framework for joint governance of JET Solution and allowed each organisation to define a way to provide support, training and manage process & system change to the joint solution to maintain the investment in Project JET post go live.

Each organisation was expected to develop their own governance and operational models ensuring that they are consistent with the joint governance and program management requirements. YY called its framework the Operational Support Model.

The Operational Support Model integrated with the Process Framework and a revised organisational support structure to deliver training, reporting, JET Solution support and managed continuous improvement for YY.

The Operational Support Model was launched in Oct 2006 post (Software Vendor) post go live support and was delivered as part of the JET Bridging Project as a way to manage the transition to the business given the uncertainties of future JET Solution demand for support, training and continuous improvement.

### Bridging project transition to operational Support–

A key milestone signified functional completion of the JET Project on 1<sup>st</sup> April 2007 with the transition of key resources from the JET team to Finance, Information and Services as an interim Operational Support Model as the Business Systems and Process Support group with the Finance, Information and Services. This also signified the completion of the JET Bridging Project and commencement of business ownership of the solution.

The interim Business Systems and Process Support (OSM) operated until 1<sup>st</sup> July 2007 when the permanent support structure in Business Process and Solutions, within FSS, commenced.

The Key elements of the permanent structure focused on supporting the JET Footprint are:

- Business Solutions - providing a skilled group of Process Integration managers focused on managing both process and system improvement while maintaining system integration on behalf of Process Owners.
- Solutions Support – providing business wide support for use of the system, fix resolution, testing coordination and report development and fix coordination.
- Solutions Delivery – providing business and process analysts to support business improvement services

Where appropriate other elements of the Operational Support Model were also completed with the following activities transitioned to other YY business units and ICT Provider.

- Service Desk, Infrastructure, Applications and Information Management support to ICT Provider.
- Coaching and training delivery to TT&D and embedded business resources.
- System Administration to ICT Provider.

### Ongoing Improvement

#### Operational Support Model

Mechanisms and governance for ongoing continuous improvement were developed and agreed as part of the Operational Support Model. All continuous improvement activity was deferred from the end of the PROJECT JET to allow a focus fixing bugs and to give staff some time to get used to the JET Solution. Need to consider this in light of above.

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### ET2010 – PC

The ET2010 Program includes a number of projects that are focused on simplifying and leveraging the value of the JET Solution with a particular focus on simplifying processes and how people work. Some of the ET2010 projects (EG. FFA) utilise the JET Platform to provide large potential benefits and drive increased productivity.

### BP&S – Business Solutions

The Business Solutions Group, within the Business Process and Solutions Group (BP&S) is charged with supporting continuous process and system improvement for the JET footprint by providing appropriate tools and governance for the continuous improvement of both process and systems. This work dovetails into the ET2010 program and maintains the need for integration of the system and alignment with XX.

### Project Learning's

#### What we could improve.

#### Implementation Partner –

- (Software Vendor) as an organisation had very limited experience as an implementation partner and this is likely to have had an impact on the quality of the JET Deliverables, time and cost to deliver the project and transition of the solution to the business. (Software Vendor) had very limited methodology and framework to support project activity. (Software Vendor) consultants had good functional but limited project implementation experience.

#### Learning

- In the future consider only experienced implementation partners for projects as large and complex as PROJECT JET.

#### Joint Working -

- Added increased complexity and time to deliver project outcomes due to increased consultation, and differences in culture and how the organisations worked. Service providers found it difficult to provide consistent support and tended to focus based on implementation timeframes. At times, project team members spent time on protecting organisational interests rather than getting on with the job due to a lack of clarity about what a common solution means and whether it can pragmatically be outworked. Joint governance requires additional overhead and time for the Project Team.

#### Learning

- In future have 1 organisation lead the implementation with input from the other in early project phases (planning and design) and utilise this as a template for the other organisation as they implement the solution.
- Suggest Joint Governance requires additional overhead and time for the Project Team suggest joint governance be limited to design phase.
- Need to define what common solution really means in some detail.

#### Cultural impediments to project delivery –

- At times the silo mentality of staff and managers made it extremely difficult to gain agreement and/ or compliance to decisions made by senior managers for the corporate good. EG Process & Organisational Lockdowns were not fully complied with.
- Demands on senior sponsors time and focus meant that decisions were sometimes not cascaded to management and staff

#### Learning

- Free up demands on sponsors so they have the time and focus to deliver their sponsor role fully
- Projects need to look at ways to mitigate for a culture of optionality (EG. utilise a few key sponsor/ champions at middle management level to ensure that key decisions are supported and complied with)

#### Reporting –

- The (Software Vendor) MER BO technology is new and still being developed.
- YY & XX did not have a clear strategy for what and how they wanted to report at different levels of organisation
- The JET Reporting Solution Strategy was not considered early enough to deliver a cohesive reporting solution

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- (Software Vendor) did not give reporting the focus it required to deliver an appropriate outcome
- Different business rules between the organisations drove different reporting requirements and limited ability to have a common solution

### Learning

- Have an early clear strategy for what and how reporting will be delivered within an organisation
- Utilise proven technologies when implementing new reporting tools
- Be pragmatic about common solutions when business rules are different EG Labour Utilisation calculated in different ways between YY and XX.
- Make reporting a key deliverable and monitor progress throughout project life

### Systems Solution –

- Due to time and resource constraints JET Solution training was restricted to systems solution within a process context.
- JET Solution scope excluded change and update of work instructions
- Limited process coaching and training was provided to some staff
- Some staff had difficulty reconciling what they normally did with the new system steps they had been taught.

### Learning

- Where processes have changed what people are required to do then significant attention and resources should be allocated to building an understanding - The principles of the new ways of working and how the system supports that new way.

### Training/ coaches

- Trainers and coaches were sourced from the business and provided pragmatic real world examples and understanding of what staff needed to know
- Trainers and coaches provided post go live support in their local area

### Learning

- *Where possible utilise staff for training and coaching and post go live support*

### Support - Post go live support

- The requirements for business support were at their highest when project team members were tired and having time off after the implementation
- Mechanisms to capture issues and provide support were not robust enough to cope with the demand and variety of sources for issues and problems

### Learning

- Where possible predict support demand, develop robust ways to capture, categorise and prioritise issues from all levels and areas in the organisation and agree with sponsors and staff prior to go live.

### Process Ownership Support

Process ownership has a varied level of acceptance and support by both managers allocated Process Ownership and Functional Managers who sometimes view Process Ownership as threatening their patch. driving continuous improvement be reinforced.

### Learning

A Process Owner Forum will be established to provide self direction in relation to process ownership and for setting strategic direction for continuous improvement across all processes, aligned with Business Plans.

### Change Advisory Board

The Change Advisory Board currently has a charter which limits flexibility in relation to the continuous improvement of both System and Process.



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### Appendix 17. Case Study A – Sorted and Coded Items

| #  | Item  | Format           | Source                      | Date       | Code   |
|----|---|------------------|-----------------------------|------------|--------|
|    |   |                  |                             | Acquired   |        |
|    | <b>Project Set-up &amp; Business Case Preparation</b>                   |                  |                             |            |        |
|    |   |                  |                             |            |        |
| 1  | Infor to move forward with (ICT consultant)                             | email            | ICT PROVIDER                | 16/08/2011 | CS1e   |
| 2  | questions re (ICT consultant) change mgt.                               | email            | Sister GOC                  | 17/08/2011 | CS2e   |
| 3  | (ICT consultant) change management                                      | email            | Sister GOC                  | 17/08/2011 | CS3e   |
| 4  | Change management update  | email            | Sister GOC                  | 18/08/2011 | CS4e   |
| 5  | ERP change management agenda  | email            | PBA Case Study A            | 23/08/2011 | CS5e   |
| 6  | Organisation change impact analysis information                         | email            | Case Study A/ICT PROVIDER   | 23/08/2011 | CS7e   |
| 7  | Case Study A Change Impact info from ICT program                        | Power Point doc. | ICT PROVIDER                | 23/08/2011 | CS6pp  |
| 8  | Business & Information - Study 2 - Blueprinting Implementation Approach | PowerPoint doc.  | ICT PROVIDER                | 24/08/2011 | CS8pp  |
| 9  | Blueprinting Case Study A ELT paper                                     | email            | GM PDG                      | 25/08/2011 | CS9e   |
| 10 | Design phase resourcing   | email            | ICT consultant              | 30/08/2011 | CS11e  |
| 11 | ERP Upgrade Design Meeting  | email/Word doc.  | Case Study A                | 30/08/2011 | CS10eW |
| 12 | Draft business case   | email/Word doc.  | Case Study A                | 31/08/2011 | CS12eW |
| 13 | ERP Upgrade Options Paper   | PowerPoint doc.  | ICT PROVIDER Team           | 1/09/2011  | CS13pp |
| 14 | ERP Upgrade risk for WIDP   | email            | GM PDG                      | 2/09/2011  | CS15e  |
| 15 | material for resourcing review  | email            | ICT consultant              | 2/09/2011  | CS14e  |
| 16 | Briefing for Case Study A Stakeholders                                  | PowerPoint doc.  | ICT consultant/ICT PROVIDER | 2/09/2011  | CS16pp |
| 17 | High Level Business Case  | Word document    | ICT PROVIDER/ICT consultant | 6/09/2011  | CS17W  |
| 18 | Ellipse training  | email            | Case Study A                | 8/09/2011  | CS18e  |
| 19 | Scope Items   | Word document    | Software vendor             | 9/09/2011  | CS19W  |
| 20 | Action response notes - ERP FACOM release                               | email            | Case Study A                | 14/09/2011 | CS20e  |
| 21 | Ellipse 8 Business Case   | email/Word doc.  | Case Study A                | 15/09/2011 | CS21e  |
| 22 | Proposed ERP Upgrade project  | email            | GMPDG                       | 19/09/2011 | CS22e  |
| 23 | OCM Impact Assessment   | Word document    | ICT consultant              | 21/09/2011 | CS23W  |
| 24 | ERP EE - Supplementary paper  | email/Word doc.  | GM PDG                      | 23/09/2011 | CS24eW |
|    |   |                  |                             |            |        |
|    |   |                  |                             |            |        |
|    | <b>Project Initiation</b>   |                  |                             |            |        |
|    |   |                  |                             |            |        |
| 25 | ICT consultant ELT Presentation   | PowerPoint doc.  | ICT consultant              | Nov, 2011  | CS25pp |
| 26 | Thoughts on working remotely  | email            | ICT PROVIDER                | 28/11/2011 | CS26e  |
| 27 | ICT PROVIDER ELT recommendations  | Word document    | ICT PROVIDER                | Dec, 2011  | CS28W  |
| 28 | Project Background  | PowerPoint doc.  | ICT PROVIDER                | 2/12/2012  | CS30pp |

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|    |                                   |                 |                              |            |        |
|----|-----------------------------------|-----------------|------------------------------|------------|--------|
| 29 | HYSS Survey, 2010 & 2011          | Word document   | Case Study A home page       | Dec, 2011  | CS27W  |
| 30 | ERP SC Memo - CM & BPM resourcing | Word Document   | ICT PROVIDER                 | 8/12/2011  | CS29W  |
| 31 | Project governance structure      | PowerPoint doc. | ICT PROVIDER                 |            | CS34pp |
| 32 | JET Lessons Learned Report        | Word document   | GM PDG                       | 16/03/2012 | CS31W  |
| 33 | High Level Change Assessment      | spreadsheet     | ICT PROVIDER/IBM             | 16/03/2012 | CS32Ex |
|    | Blueprinting                      |                 |                              |            |        |
| 34 | Design Phase resourcing           | spreadsheet     | Software vendor/ICT PROVIDER | 16/03/2012 | CS33Ex |
| 35 | Project status                    | email           | Case Study A EGM             | 8/06/2012  | CS35e  |
| 36 | Project status/decision           | email           | CEO                          | 20/06/2012 | CS36e  |

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### Appendix 18. Case Study B – Sorted and Coded Items

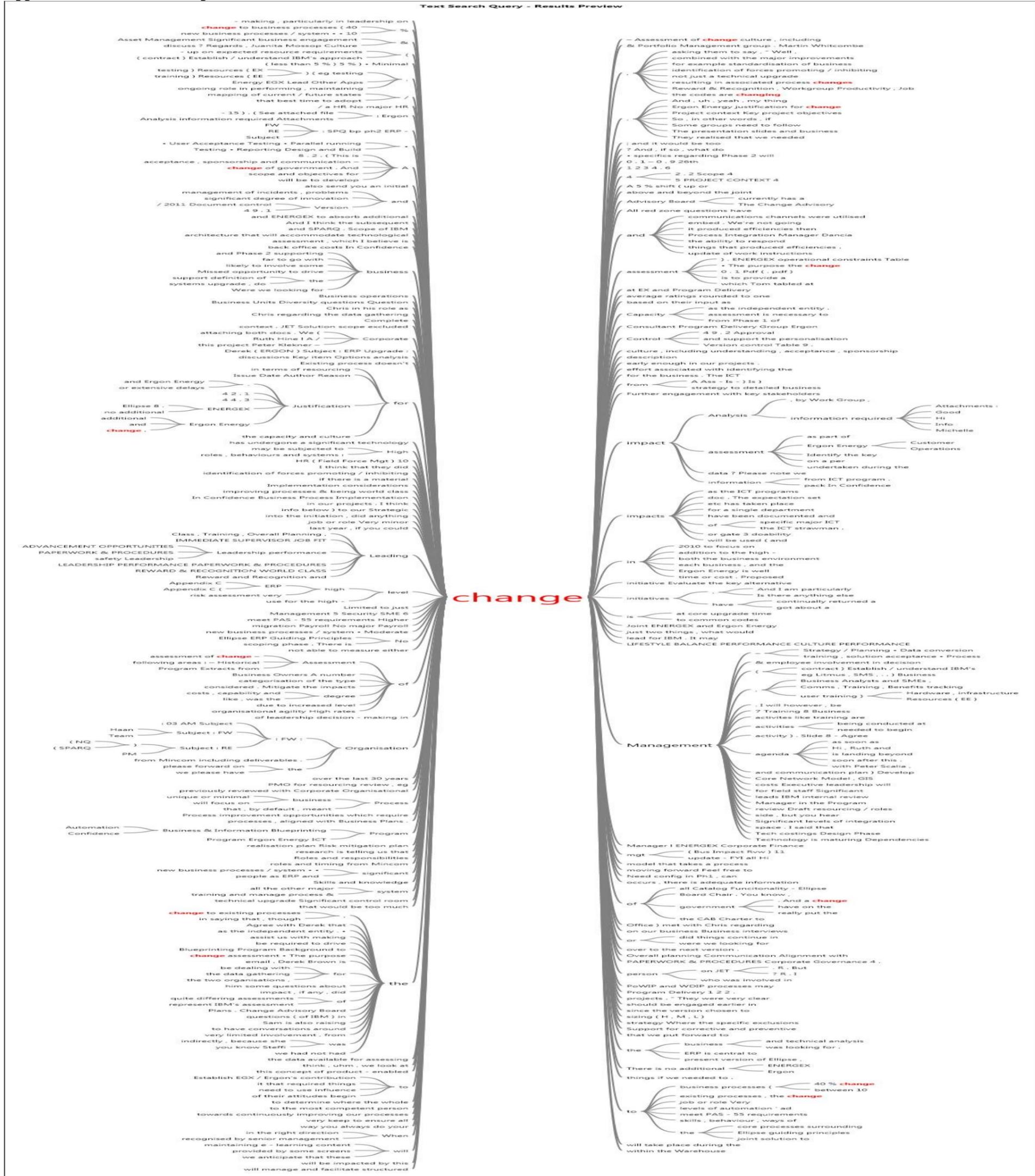
| #  | Item  | Format            | Source | Date       | Code     |
|----|---|-------------------|--------|------------|----------|
|    | <b>Initial Set-up</b>                           |                   |        |            |          |
| 1  | Project costs                                   | Excel spreadsheet |        | 1/09/2010  | CSB1Ex   |
|    |   |                   |        |            |          |
| 2  | Earned Value Graph                              | Excel spreadsheet |        | 1/09/2010  | CSB2Ex   |
|    |   |                   |        |            |          |
| 3  | Issues & Objectives Register                    | Excel spreadsheet |        | 1/09/2010  | CSB4Ex   |
|    |   |                   |        |            |          |
| 4  | Risk Register                                   | Excel spreadsheet |        | 1/09/2010  | CSB5Ex   |
|    |   |                   |        |            |          |
| 5  | Costs   | Excel spreadsheet |        | 1/09/2010  | CSB7Ex   |
|    |   |                   |        |            |          |
| 6  | Scope Change Assessment                         | Excel spreadsheet |        | 1/09/2010  | CSB8Ex   |
|    |   |                   |        |            |          |
| 7  | Risks & Issues document                         | Excel spreadsheet |        | 1/09/2010  | CSB9Ex   |
|    |   |                   |        |            |          |
| 8  | SWIM replacement Executive Summary              | Word document     |        | 1/11/2010  | CSB12W   |
|    |   |                   |        |            |          |
| 9  | SWIMS Systems replacement Director presentation | Word document     |        | 1/11/2010  | CSB11W   |
|    |   |                   |        |            |          |
| 10 | Project Charter                                 | Word document     |        | 1/10/2010  | CSB10W   |
|    |   |                   |        |            |          |
| 11 | SWIMS Project Management Plan                   | Word document     |        | 1/12/2010  | CSB13W   |
|    |   |                   |        |            |          |
| 12 | BILL Project Program Plan                       | Word document     |        | 1/12/2010  | CSB14W   |
|    |   |                   |        |            |          |
|    | <b>Discovery</b>                                |                   |        |            |          |
| 13 | Work Plan Discovery stage                       | Excel spreadsheet |        | 12/04/2011 | CSB15MSP |
|    |   |                   |        |            |          |
|    | <b>Preliminary Design</b>                       |                   |        |            |          |
|    |   |                   |        |            |          |
|    | <b>Detailed Design</b>                          |                   |        |            |          |
|    |   |                   |        |            |          |
| 14 | Serviceworks proposal                           | Word document     |        | 27/05/2011 | CSB16W   |
|    |   |                   |        |            |          |
| 15 | BILL program Recommendations re Execution Phase | Word Document     |        | 16/03/2012 | CSB17W   |
|    |   |                   |        |            |          |
| 16 | Project Summary                                 | Excel spreadsheet |        | 17/07/2012 | CSB18Ex  |

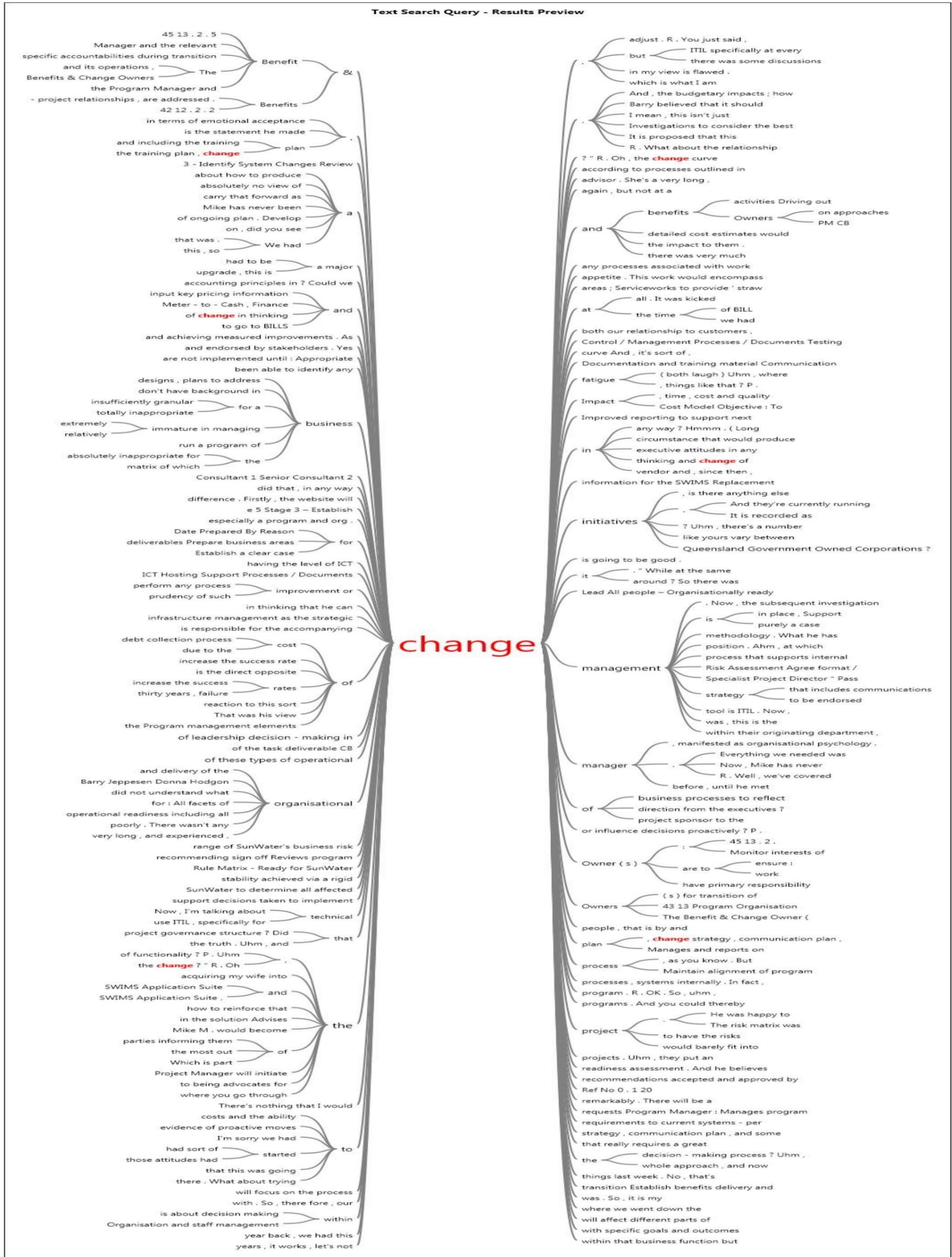
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### Appendix 19. Spradley's Universal Semantic Relationship Model

|                        |   |                        |
|------------------------|---|------------------------|
| a. Strict inclusion    | - x is a kind of y                      | is,                    |
| b. Spatial             | - x is a place in y, x is a part of y   | in, within, part of    |
| c. Cause-effect        | - x is a result of y, x is a cause of y | because, so            |
| d. Rationale           | - x is a reason for doing y             | therefore, because of, |
| e. Location for action | - x is a place for doing y              | where                  |
| f. Function            | - x is used for y                       | does,                  |
| g. Means-end           | - x is a way to do y                    | do,                    |
| h. Sequence            | - x is a step/stage in y                | next                   |
| i. Attribution         | - x is an attribute/characteristic of y | type, kind of,         |

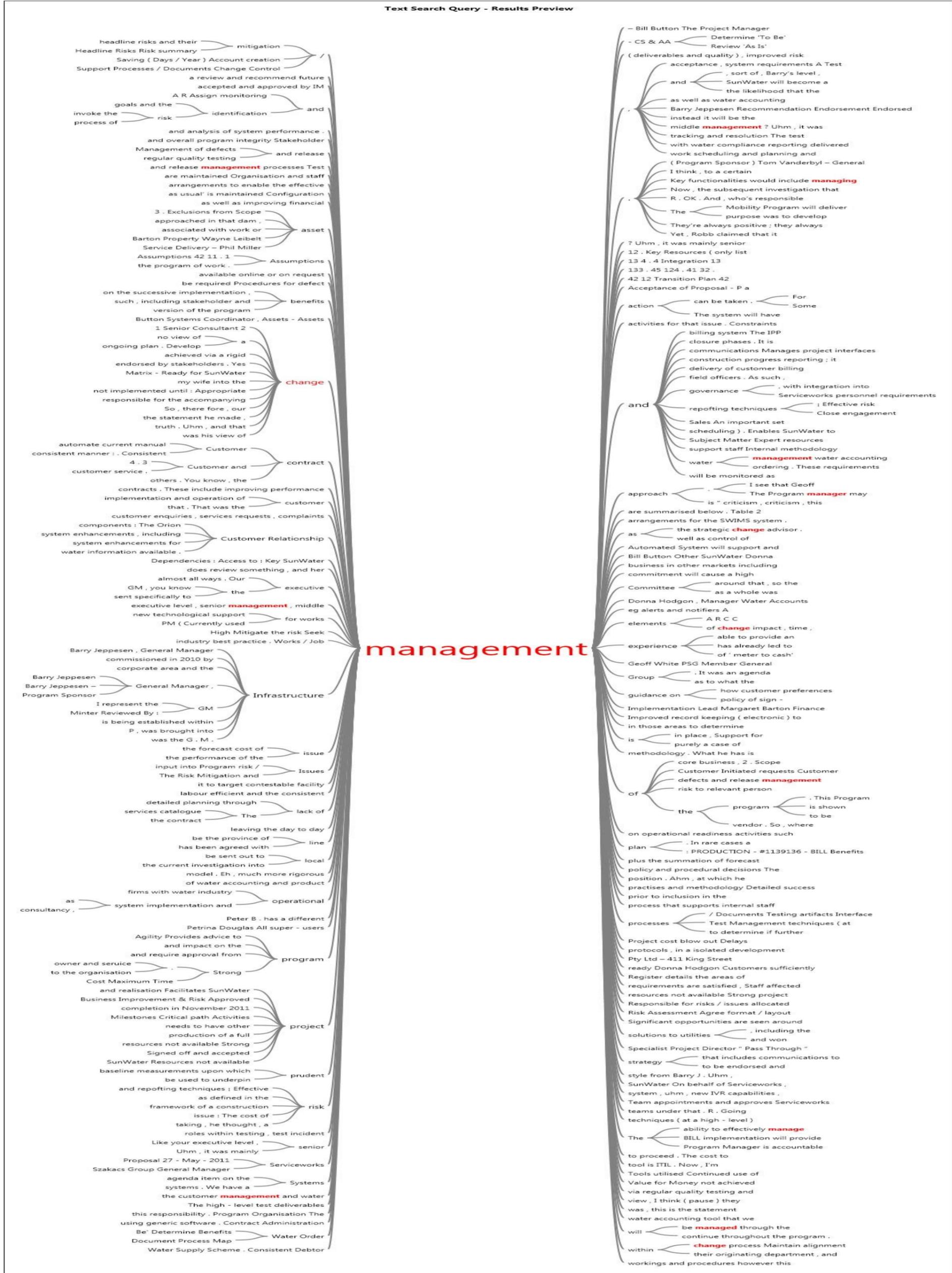
Appendix 20. Word Tree Reports

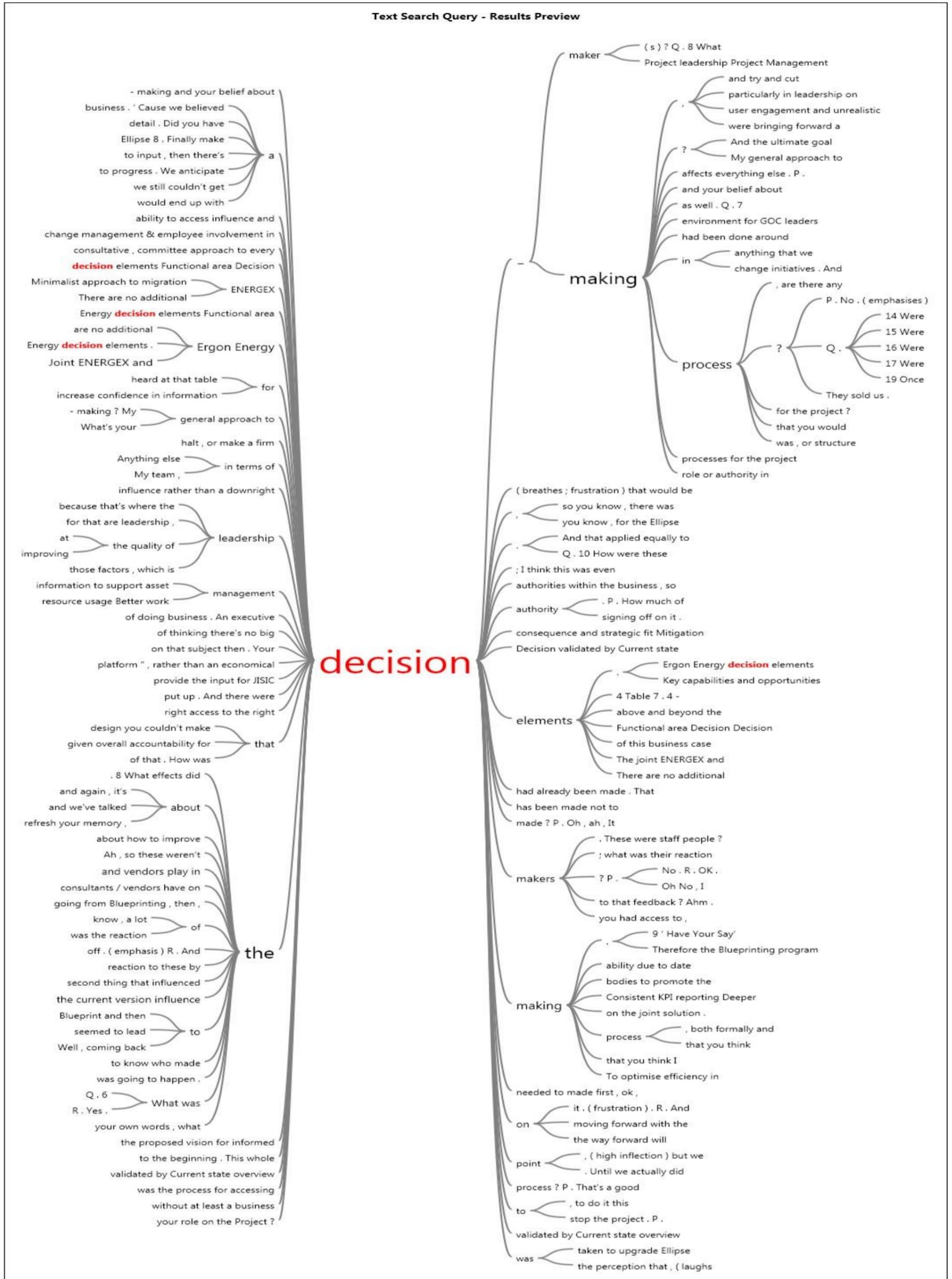


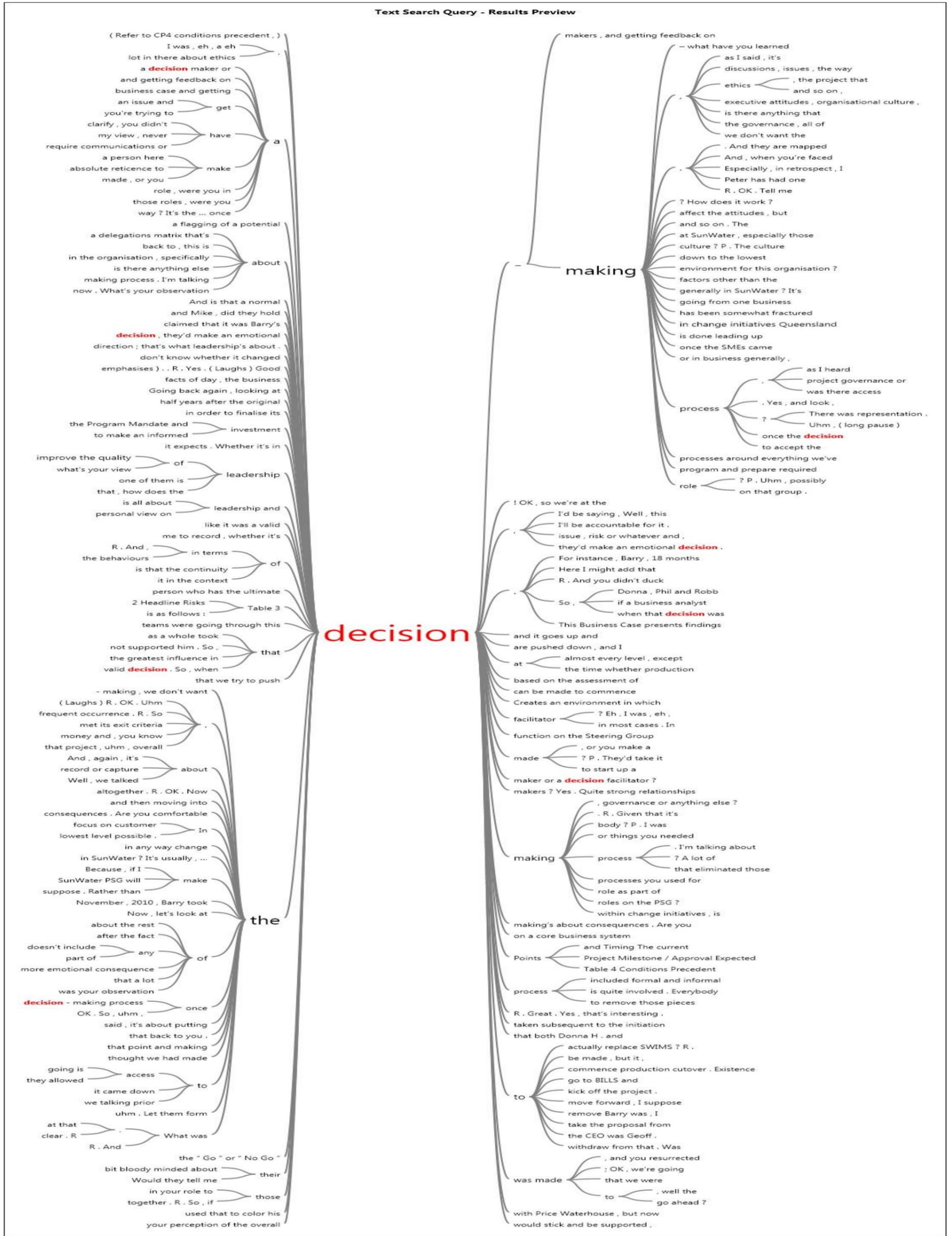




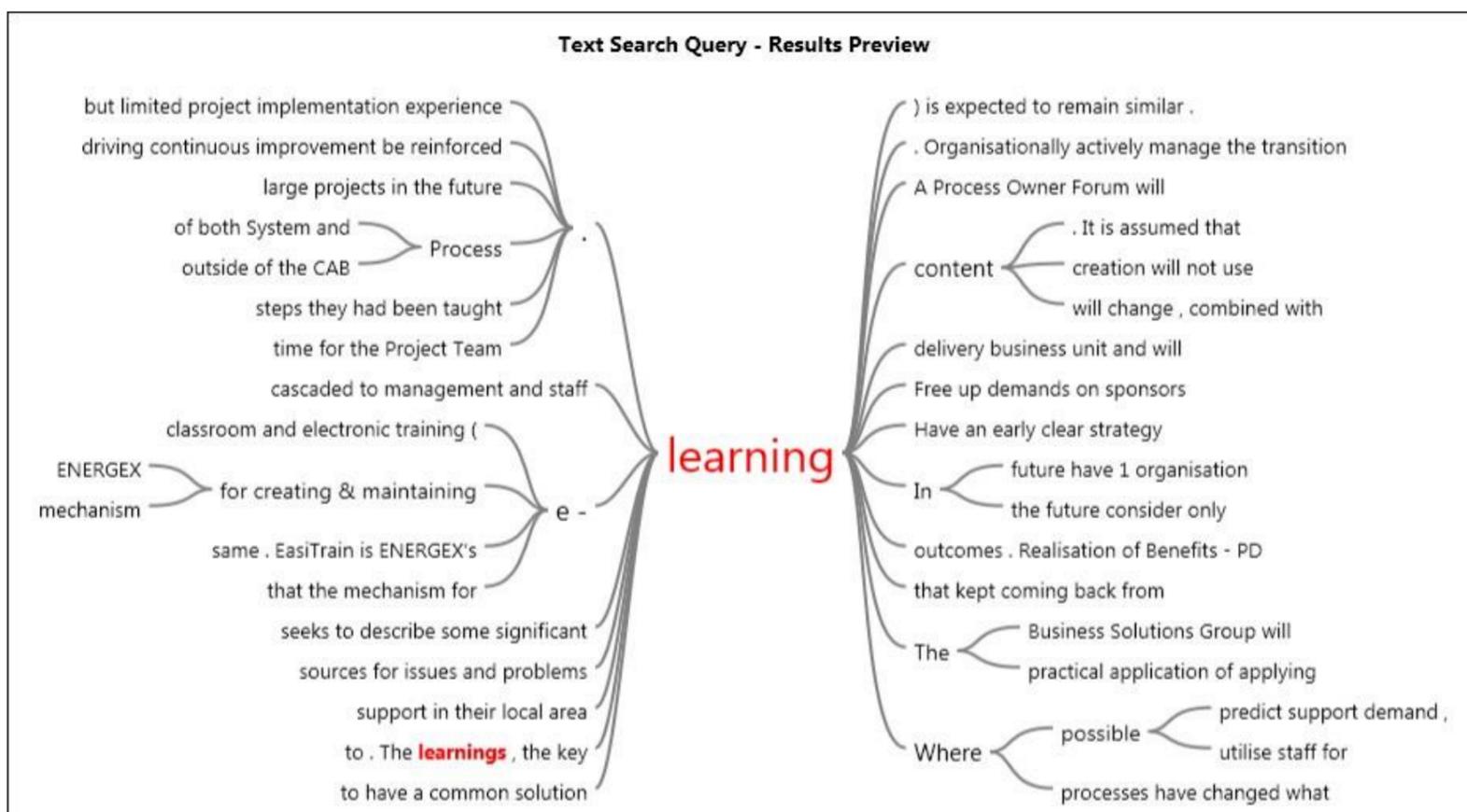
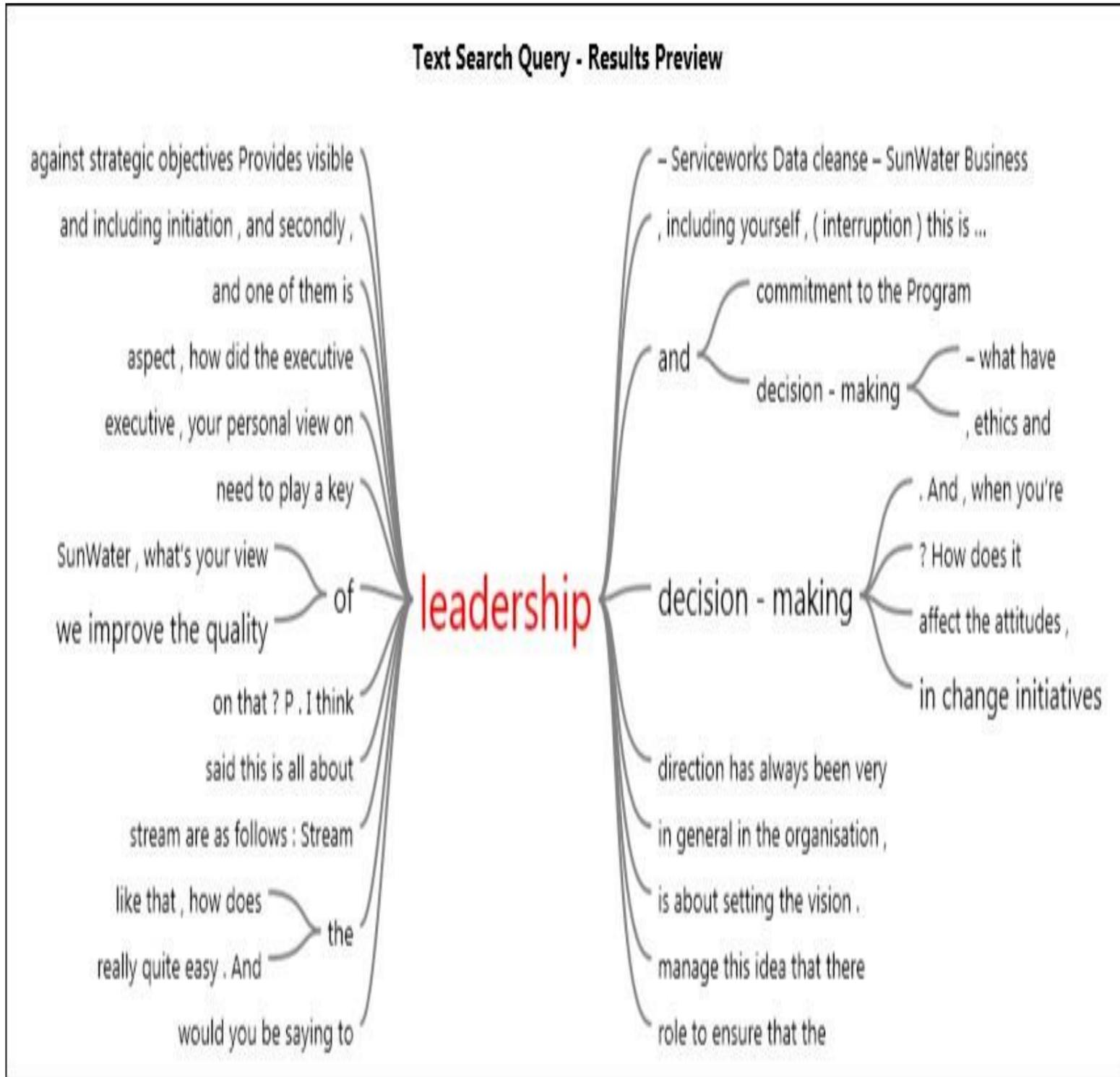
Text Search Query - Results Preview

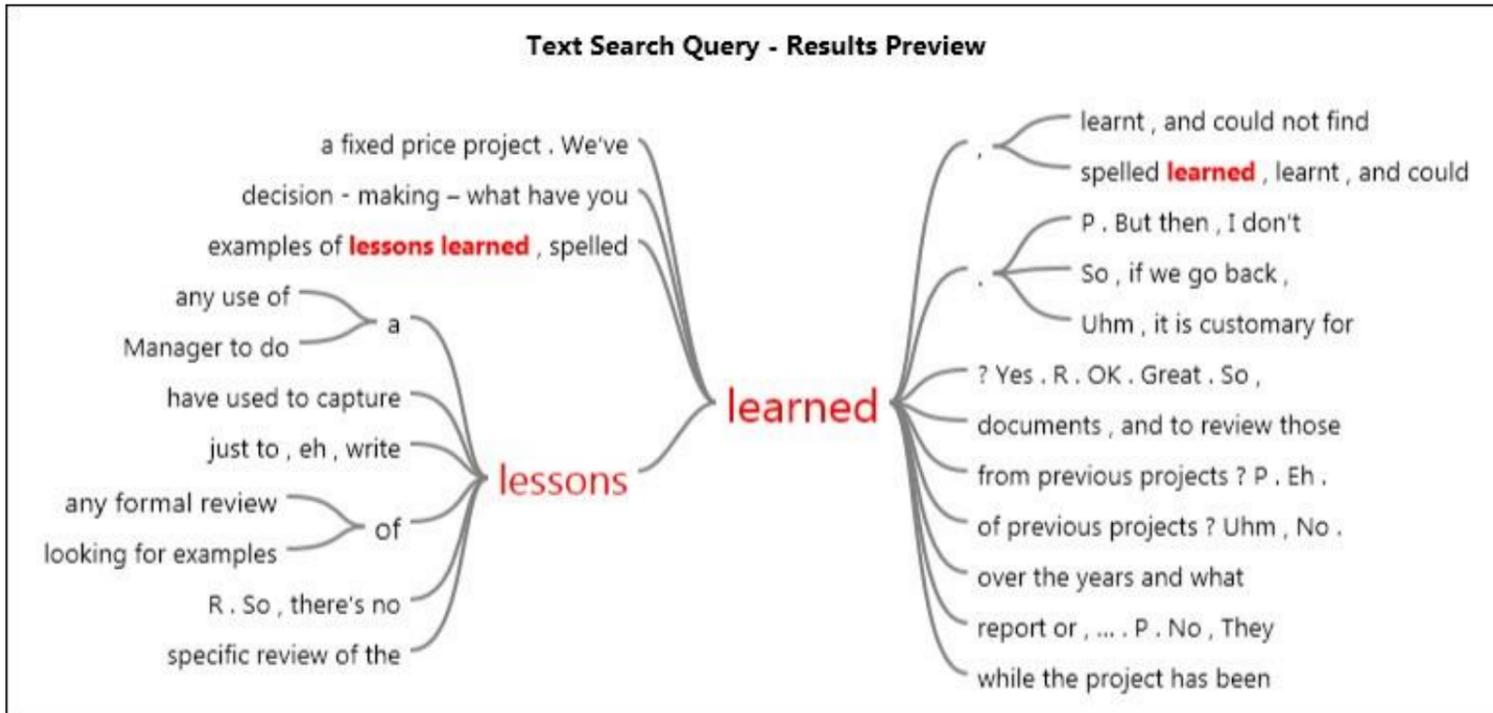












## Appendices

### Appendix 21. Word Frequency Analysis

| Case Study A   |        |       |            | Case Study B   |        |       |              |
|----------------|--------|-------|------------|----------------|--------|-------|--------------|
| Word           | Length | Count | Weighted % | Word           | Length | Count | Weighted (%) |
| and            | 3      | 1663  | 5.09       | and            | 3      | 1423  | 5.17         |
| business       | 8      | 516   | 1.58       | project        | 7      | 468   | 1.70         |
| project        | 7      | 450   | 1.38       | program        | 7      | 307   | 1.11         |
| management     | 10     | 430   | 1.32       | so             | 2      | 307   | 1.11         |
| energy         | 6      | 340   | 1.04       | business       | 8      | 306   | 1.11         |
| asset          | 5      | 314   | 0.96       | as             | 2      | 255   | 0.93         |
| ellipse        | 7      | 302   | 0.93       | sunwater       | 8      | 223   | 0.81         |
| as             | 2      | 267   | 0.82       | phase          | 5      | 186   | 0.68         |
| program        | 7      | 241   | 0.74       | risk           | 4      | 152   | 0.55         |
| phase          | 5      | 237   | 0.73       | system         | 6      | 150   | 0.54         |
| upgrade        | 7      | 197   | 0.60       | customer       | 8      | 145   | 0.53         |
| information    | 11     | 188   | 0.58       | management     | 10     | 144   | 0.52         |
| erp            | 3      | 186   | 0.57       | serviceworks   | 12     | 144   | 0.52         |
| change         | 6      | 182   | 0.56       | swims          | 5      | 139   | 0.50         |
| process        | 7      | 172   | 0.53       | manager        | 7      | 137   | 0.50         |
| staff          | 5      | 163   | 0.50       | process        | 7      | 135   | 0.49         |
| work           | 4      | 159   | 0.49       | cost           | 4      | 134   | 0.49         |
| sparq          | 5      | 156   | 0.48       | design         | 6      | 130   | 0.47         |
| new            | 3      | 155   | 0.47       | change         | 6      | 125   | 0.45         |
| data           | 4      | 151   | 0.46       | team           | 4      | 123   | 0.45         |
| design         | 6      | 148   | 0.45       | detailed       | 8      | 115   | 0.42         |
| processes      | 9      | 142   | 0.44       | decision       | 8      | 112   | 0.41         |
| case           | 4      | 138   | 0.42       | think          | 5      | 111   | 0.40         |
| joint          | 5      | 138   | 0.42       | well           | 4      | 110   | 0.40         |
| support        | 7      | 128   | 0.39       | requirements   | 12     | 107   | 0.39         |
| training       | 8      | 128   | 0.39       | water          | 5      | 103   | 0.37         |
| benefits       | 8      | 123   | 0.38       | processes      | 9      | 99    | 0.36         |
| review         | 6      | 121   | 0.37       | review         | 6      | 99    | 0.36         |
| table          | 5      | 119   | 0.36       | bill           | 4      | 91    | 0.33         |
| impact         | 6      | 111   | 0.34       | 2011           | 4      | 87    | 0.32         |
| required       | 8      | 111   | 0.34       | time           | 4      | 86    | 0.31         |
| functionality  | 13     | 110   | 0.34       | plan           | 4      | 82    | 0.30         |
| blueprinting   | 12     | 109   | 0.33       | within         | 6      | 82    | 0.30         |
| solution       | 8      | 102   | 0.31       | end            | 3      | 80    | 0.29         |
| significant    | 11     | 101   | 0.31       | execution      | 9      | 80    | 0.29         |
| need           | 4      | 97    | 0.30       | know           | 4      | 79    | 0.29         |
| personnel      | 9      | 94    | 0.29       | data           | 4      | 77    | 0.28         |
| customer       | 8      | 90    | 0.28       | case           | 4      | 76    | 0.28         |
| delivery       | 8      | 89    | 0.27       | one            | 3      | 76    | 0.28         |
| solutions      | 9      | 89    | 0.27       | replacement    | 11     | 76    | 0.28         |
| key            | 3      | 87    | 0.27       | implementation | 14     | 74    | 0.27         |
| ibm            | 3      | 86    | 0.26       | work           | 4      | 73    | 0.27         |
| reporting      | 9      | 86    | 0.26       | board          | 5      | 72    | 0.26         |
| time           | 4      | 86    | 0.26       | making         | 6      | 72    | 0.26         |
| level          | 5      | 84    | 0.26       | just           | 4      | 70    | 0.25         |
| wdip           | 4      | 81    | 0.25       | benefits       | 8      | 69    | 0.25         |
| ict            | 3      | 79    | 0.24       | high           | 4      | 69    | 0.25         |
| systems        | 7      | 79    | 0.24       | service        | 7      | 69    | 0.25         |
| think          | 5      | 79    | 0.24       | level          | 5      | 68    | 0.25         |
| changes        | 7      | 78    | 0.24       | now            | 3      | 68    | 0.25         |
| implementation | 14     | 76    | 0.23       | psg            | 3      | 67    | 0.24         |
| scope          | 5      | 76    | 0.23       | group          | 5      | 65    | 0.24         |
| costs          | 5      | 75    | 0.23       | systems        | 7      | 65    | 0.24         |
| team           | 4      | 75    | 0.23       | people         | 6      | 64    | 0.23         |
| cost           | 4      | 74    | 0.23       | required       | 8      | 62    | 0.23         |
| works          | 5      | 72    | 0.22       | approval       | 8      | 61    | 0.22         |
| high           | 4      | 71    | 0.22       | issues         | 6      | 60    | 0.22         |
| essential      | 9      | 69    | 0.21       | changes        | 7      | 58    | 0.21         |
| improvement    | 11     | 68    | 0.21       | document       | 8      | 58    | 0.21         |
| performance    | 11     | 68    | 0.21       | involved       | 8      | 58    | 0.21         |
| analysis       | 8      | 66    | 0.20       | approach       | 8      | 56    | 0.20         |
| field          | 5      | 66    | 0.20       | key            | 3      | 56    | 0.20         |
| part           | 4      | 66    | 0.20       | model          | 5      | 56    | 0.20         |
| based          | 5      | 65    | 0.20       | back           | 4      | 55    | 0.20         |
| job            | 3      | 65    | 0.20       | discovery      | 9      | 55    | 0.20         |
| jet            | 3      | 64    | 0.20       | including      | 9      | 55    | 0.20         |
| so             | 2      | 63    | 0.19       | new            | 3      | 55    | 0.20         |
| operational    | 11     | 62    | 0.19       | day            | 3      | 54    | 0.20         |
| system         | 6      | 62    | 0.19       | like           | 4      | 54    | 0.20         |
| existing       | 8      | 61    | 0.19       | information    | 11     | 53    | 0.19         |
| integration    | 11     | 61    | 0.19       | preliminary    | 11     | 51    | 0.19         |
| improved       | 8      | 60    | 0.18       | testing        | 7      | 51    | 0.19         |
| network        | 7      | 60    | 0.18       | reporting      | 9      | 50    | 0.18         |
| planning       | 8      | 60    | 0.18       | ensure         | 6      | 49    | 0.18         |
| 2011           | 4      | 59    | 0.18       | because        | 7      | 48    | 0.17         |
| confidence     | 10     | 59    | 0.18       | customers      | 9      | 47    | 0.17         |
| relevant       | 8      | 59    | 0.18       | organisation   | 12     | 47    | 0.17         |
| services       | 8      | 58    | 0.18       | training       | 8      | 47    | 0.17         |
| well           | 4      | 58    | 0.18       | delivery       | 8      | 46    | 0.17         |
| planners       | 8      | 56    | 0.17       | phases         | 6      | 46    | 0.17         |
| schedulers     | 10     | 56    | 0.17       | strategy       | 8      | 46    | 0.17         |
| financial      | 9      | 55    | 0.17       | total          | 5      | 46    | 0.17         |
| assumptions    | 11     | 53    | 0.16       | way            | 3      | 46    | 0.17         |
| strategy       | 8      | 53    | 0.16       | proposal       | 8      | 45    | 0.16         |
| decision       | 8      | 51    | 0.16       | scope          | 5      | 45    | 0.16         |
| version        | 7      | 51    | 0.16       | provide        | 7      | 44    | 0.16         |
| additional     | 10     | 50    | 0.15       | solution       | 8      | 44    | 0.16         |
| service        | 7      | 50    | 0.15       | two            | 3      | 44    | 0.16         |
| yes            | 3      | 50    | 0.15       | around         | 6      | 43    | 0.16         |
| features       | 8      | 49    | 0.15       | conditions     | 10     | 43    | 0.16         |
| focus          | 5      | 49    | 0.15       | costs          | 5      | 43    | 0.16         |
| know           | 4      | 49    | 0.15       | precedent      | 9      | 43    | 0.16         |
| migration      | 9      | 49    | 0.15       | yes            | 3      | 43    | 0.16         |
| user           | 4      | 49    | 0.15       | appendix       | 8      | 42    | 0.15         |
| executive      | 9      | 48    | 0.15       | following      | 9      | 42    | 0.15         |
| group          | 5      | 47    | 0.14       | test           | 4      | 42    | 0.15         |
| number         | 6      | 47    | 0.14       | ict            | 3      | 41    | 0.15         |
| provided       | 8      | 46    | 0.14       | report         | 6      | 41    | 0.15         |
| risk           | 4      | 46    | 0.14       | resources      | 9      | 41    | 0.15         |
| capability     | 10     | 45    | 0.14       | role           | 4      | 41    | 0.15         |

Appendices

Word Frequency Analysis (cont.)

| Case Study A<br>(ordered) |    | Case Study B<br>(ordered) |    | Case Study A<br>(aligned) |    | Case Study B<br>(aligned) |    | Filtered A<br>(Common) |    | Filtered B<br>(Common) |    |
|---------------------------|----|---------------------------|----|---------------------------|----|---------------------------|----|------------------------|----|------------------------|----|
| people                    | 40 | project                   | 58 | people                    | 40 | people                    | 14 | people                 | 40 | project                | 58 |
| project                   | 35 | approach                  | 34 | project                   | 35 | project                   | 58 | project                | 35 | business               | 24 |
| working                   | 29 | business                  | 24 | working                   | 29 | approach                  | 34 | business               | 27 | decision               | 22 |
| business                  | 27 | around                    | 23 | business                  | 27 | business                  | 24 | issues                 | 23 | change                 | 20 |
| just                      | 25 | decision                  | 22 | just                      | 25 | around                    | 23 | decision               | 18 | people                 | 14 |
| need                      | 24 | times                     | 21 | need                      | 24 | times                     | 21 | benefits               | 16 | functionality          | 11 |
| issues                    | 23 | change                    | 20 | issues                    | 23 | issues                    | 10 | change                 | 9  | issues                 | 10 |
| making                    | 21 | system                    | 20 | change                    | 9  | change                    | 20 | functionality          | 6  | benefits               | 6  |
| really                    | 21 | executive                 | 17 | making                    | 21 | system                    | 20 |                        |    |                        |    |
| initiatives               | 19 | requirements              | 17 | really                    | 21 | executive                 | 17 |                        |    |                        |    |
| decision                  | 18 | managers                  | 16 | initiatives               | 19 | requirements              | 17 | Filtered A<br>(Unique) |    | Filtered B<br>(Unique) |    |
| benefits                  | 16 | need                      | 16 | decision                  | 18 | decision                  | 22 | scoping                | 16 | requirements           | 17 |
| case                      | 16 | areas                     | 14 | benefits                  | 16 | benefits                  | 6  | consequences           | 11 | responsible            | 13 |
| look                      | 16 | likely                    | 14 | functionality             | 6  | functionality             | 11 | accelerated            | 6  | market                 | 7  |
| scoping                   | 16 | reasons                   | 14 | case                      | 16 | managers                  | 16 | frustration            | 6  | governance             | 9  |
| strong                    | 16 | back                      | 14 | look                      | 16 | need                      | 16 | leadership             | 6  | sponsor                | 9  |
| sure                      | 16 | people                    | 14 | scoping                   | 16 | areas                     | 14 |                        |    |                        |    |
| like                      | 15 | specific                  | 14 | strong                    | 16 | likely                    | 14 |                        |    |                        |    |
| much                      | 14 | steering                  | 14 | sure                      | 16 | reasons                   | 14 |                        |    |                        |    |
| time                      | 14 | group                     | 13 | like                      | 15 | back                      | 14 |                        |    |                        |    |
| know                      | 13 | know                      | 13 | much                      | 14 | specific                  | 14 |                        |    |                        |    |
| things                    | 13 | making                    | 13 | time                      | 14 | steering                  | 14 |                        |    |                        |    |
| actually                  | 12 | particular                | 13 | know                      | 13 | group                     | 13 |                        |    |                        |    |
| detail                    | 12 | responsible               | 13 | things                    | 13 | know                      | 13 |                        |    |                        |    |
| board                     | 11 | just                      | 12 | actually                  | 12 | making                    | 13 |                        |    |                        |    |
| consequences              | 11 | committee                 | 12 | detail                    | 12 | particular                | 13 |                        |    |                        |    |
| IBM                       | 11 | process                   | 11 | consequences              | 11 | responsible               | 13 |                        |    |                        |    |
| process                   | 11 | trying                    | 11 | process                   | 11 | just                      | 12 |                        |    |                        |    |
| SPARQ                     | 11 | functionality             | 11 | talked                    | 11 | committee                 | 12 |                        |    |                        |    |
| talked                    | 11 | information               | 11 | given                     | 10 | process                   | 11 |                        |    |                        |    |
| given                     | 10 | look                      | 11 | impact                    | 10 | trying                    | 11 |                        |    |                        |    |
| impact                    | 10 | number                    | 11 | organisation              | 10 | information               | 11 |                        |    |                        |    |
| organisation              | 10 | really                    | 11 | phase                     | 10 | look                      | 11 |                        |    |                        |    |
| phase                     | 10 | role                      | 11 | still                     | 10 | number                    | 11 |                        |    |                        |    |
| still                     | 10 | SAP                       | 11 | concerns                  | 9  | really                    | 11 |                        |    |                        |    |
| change                    | 9  | understand                | 11 | happen                    | 9  | role                      | 11 |                        |    |                        |    |
| concerns                  | 9  | within                    | 11 | started                   | 9  | understand                | 11 |                        |    |                        |    |
| ergon                     | 9  | certainly                 | 10 | want                      | 9  | within                    | 11 |                        |    |                        |    |
| happen                    | 9  | issues                    | 10 | back                      | 8  | certainly                 | 10 |                        |    |                        |    |
| started                   | 9  | meet                      | 10 | interesting               | 8  | meet                      | 10 |                        |    |                        |    |
| want                      | 9  | original                  | 10 | lack                      | 8  | original                  | 10 |                        |    |                        |    |
| back                      | 8  | new                       | 9  | lot                       | 8  | new                       | 9  |                        |    |                        |    |
| energex                   | 8  | PSG                       | 9  | mean                      | 8  | sponsor                   | 9  |                        |    |                        |    |
| interesting               | 8  | sponsor                   | 9  | something                 | 8  | way                       | 9  |                        |    |                        |    |
| lack                      | 8  | way                       | 9  | understanding             | 8  | works                     | 9  |                        |    |                        |    |
| lot                       | 8  | works                     | 9  | investment                | 7  | governance                | 9  |                        |    |                        |    |
| mean                      | 8  | governance                | 9  | low                       | 7  | concept                   | 8  |                        |    |                        |    |
| something                 | 8  | concept                   | 8  | made                      | 7  | customers                 | 8  |                        |    |                        |    |
| understanding             | 8  | customers                 | 8  | planning                  | 7  | deliver                   | 8  |                        |    |                        |    |
| investment                | 7  | deliver                   | 8  | question                  | 7  | part                      | 8  |                        |    |                        |    |
| low                       | 7  | part                      | 8  | quite                     | 7  | whole                     | 8  |                        |    |                        |    |
| made                      | 7  | SWIMS                     | 8  | right                     | 7  | direct                    | 7  |                        |    |                        |    |
| Peter                     | 7  | whole                     | 8  | system                    | 7  | engage                    | 7  |                        |    |                        |    |
| planning                  | 7  | direct                    | 7  | way                       | 7  | involvement               | 7  |                        |    |                        |    |
| question                  | 7  | engage                    | 7  | identifying               | 7  | market                    | 7  |                        |    |                        |    |
| quite                     | 7  | involvement               | 7  | reasons                   | 7  | possibilities             | 7  |                        |    |                        |    |
| right                     | 7  | market                    | 7  | accelerated               | 6  | previous                  | 7  |                        |    |                        |    |
| system                    | 7  | possibilities             | 7  | ahead                     | 6  | solution                  | 7  |                        |    |                        |    |
| way                       | 7  | previous                  | 7  | anything                  | 6  | able                      | 7  |                        |    |                        |    |
| identifying               | 7  | solution                  | 7  | anyway                    | 6  | great                     | 7  |                        |    |                        |    |
| reasons                   | 7  | able                      | 7  | clear                     | 6  | proof                     | 7  |                        |    |                        |    |
| accelerated               | 6  | federal                   | 7  | comfortable               | 6  | sure                      | 7  |                        |    |                        |    |
| ahead                     | 6  | great                     | 7  | costs                     | 6  | different                 | 6  |                        |    |                        |    |
| anything                  | 6  | proof                     | 7  | document                  | 6  | ensure                    | 6  |                        |    |                        |    |
| anyway                    | 6  | sure                      | 7  | done                      | 6  | ICT                       | 6  |                        |    |                        |    |
| clear                     | 6  | benefits                  | 6  | engage                    | 6  | lot                       | 6  |                        |    |                        |    |
| comfortable               | 6  | different                 | 6  | frustration               | 6  | matter                    | 6  |                        |    |                        |    |
| costs                     | 6  | ensure                    | 6  | leadership                | 6  | quite                     | 6  |                        |    |                        |    |
| document                  | 6  | ICT                       | 6  | makers                    | 6  | something                 | 6  |                        |    |                        |    |
| done                      | 6  | lot                       | 6  | move                      | 6  | started                   | 6  |                        |    |                        |    |
| ellipse                   | 6  | matter                    | 6  | number                    | 6  | terms                     | 6  |                        |    |                        |    |
| engage                    | 6  | quite                     | 6  | particular                | 6  | whether                   | 6  |                        |    |                        |    |
| frustration               | 6  | something                 | 6  | structured                | 6  | based                     | 6  |                        |    |                        |    |
| leadership                | 6  | started                   | 6  | support                   | 6  | forward                   | 6  |                        |    |                        |    |
| makers                    | 6  | SunWater                  | 6  | whether                   | 6  | opportunities             | 6  |                        |    |                        |    |
| move                      | 6  | terms                     | 6  | end                       | 6  | political                 | 6  |                        |    |                        |    |
| number                    | 6  | water                     | 6  | reaction                  | 6  | strong                    | 6  |                        |    |                        |    |
| particular                | 6  | whether                   | 6  | specific                  | 6  | take                      | 6  |                        |    |                        |    |
| structured                | 6  | based                     | 6  | stage                     | 6  | accounting                | 5  |                        |    |                        |    |
| support                   | 6  | forward                   | 6  | voice                     | 6  | achieve                   | 5  |                        |    |                        |    |
| whether                   | 6  | opportunities             | 6  |                           |    | context                   | 5  |                        |    |                        |    |
| end                       | 6  | political                 | 6  |                           |    | couple                    | 5  |                        |    |                        |    |
| functionality             | 6  | strong                    | 6  |                           |    | difficult                 | 5  |                        |    |                        |    |
| reaction                  | 6  | take                      | 6  |                           |    | discussions               | 5  |                        |    |                        |    |
| specific                  | 6  | accounting                | 5  |                           |    |                           |    |                        |    |                        |    |
| stage                     | 6  | achieve                   | 5  |                           |    |                           |    |                        |    |                        |    |
| voice                     | 6  | bill                      | 5  |                           |    |                           |    |                        |    |                        |    |
|                           |    | context                   | 5  |                           |    |                           |    |                        |    |                        |    |
|                           |    | couple                    | 5  |                           |    |                           |    |                        |    |                        |    |
|                           |    | difficult                 | 5  |                           |    |                           |    |                        |    |                        |    |
|                           |    | discussions               | 5  |                           |    |                           |    |                        |    |                        |    |

Common  
 Unique  
 Specific name  
 Other

Appendix 22. Cause-Effect Analysis

| Connector analysis |  |     |  |
|--------------------|--|-----|--|
| Case Study A       |  |     |  |
|                    | ...the project was difficult...  | C-E | ...because of the pre-work (lack of)   |
|                    |  | C-E | So, we had a number of issues  |
| Consultants/       | Energex were looking SPARQ were ....   | C-E | So, early on I think we were probably mixing   |
| Vendors            | ...the project got a bit lost  | C-E | ...because it began to be driven by IT   |
|                    | And that was the problem   | C-E | ...run by SPARQ  |
|                    |  | C-E | ...and Energex were really positive  |
|                    | ...it was very much a SPARQ flavour  | C-E | ...because with Greg Mc being employed by SPARQ  |
|                    | ...accelerated process - made it worse   | C-E | Because the business didn't want this to be a hurry thing  |
|                    | We asked for the A team; we don't ever get the A team  | C-E | So I get the perception that we're, .. An easy target for them   |
|                    | Scoping and business case was very much reliant on ... IBM and Ventix  | C-E | ...IBM ... had a particular methodology - accelerated  |
|                    | The detail was skipped over...   | C-E | Because it was an accelerated program  |
|                    | Getting feedback was difficult   | C-E | Because it was an accelerated program  |
|                    | It was done too quickly  | C-E | That meant that IBM were skimming the surface  |
|                    | SPARQ said this thing is out of support  | C-E | so, ..the exec would say they've been misled by their ICT providers  |
|                    | ..and so people wouldn't look forward to the engagement meetings....It was all very defensive  | C-E | Because in the early stages it was just being pushed through   |
|                    | There could have been more participation   | R   | Because it was an accelerated program it was decided not to do that  |
|                    | ...the vendor was pushing forward  | C-E | ... not really listening to us   |
|                    | ...they realised when people went "What about this person?"  | C-E | ...they then started to invite people  |
|                    | ...they made a statement as if it was fact   | C-E | So, that didn't go down well   |
|                    |  | C-E | So, there was disregard for our requirements   |
|                    |  | C-E | ...because they upset people   |
|                    | We're not accepting the view from the vendor anymore   | R   | And this aligns with me coming on to the S.C.  |
|                    |  | R   | So, it was probably two months to be able to influence   |
|                    | ...requirements specification .... Would have helped immensely   | M-E | because we ... they could have said" We can deliver this" or "We can't deliver that"                                     |
| Executives         | So the executive were of the opinion that really the core was ERP, ...and it needed to be first off rank                               | R   | So, that was what actually went up first (push Ellipse to the back)  |
|                    | So we spent quite a lot of time with execs around what were they agreeing to?  |     | I still don't think we gave them a clear definition of what the project was about  |
|                    | ... that replacement would be way too expensive  | R   | And, so, it wasn't in the cycle for replacement  |
|                    | And, so, Ellipse being the ERP product...  |     | So, the additional dimension was to look at the priority   |
|                    | So we were trying to explore how far to go, without knowing what the product could do  | R   | And that's where it was sort of decided to do a Design phase   |
|                    | It took quite a bit of time for any of the execs to stand up   | C-E | So we ended up having P.F. as sort of Chair  |
|                    | ...business units were a little less concerned   | C-E | ...because they actually had a business lead identified  |
|                    |  | C-E | So, there was a bit of structure   |
|                    | ...the business didn't like that ( unclear benefits)   | C-E | Because why would you pay that amount of money and get no benefits?  |
|                    | (exec attitudes)... they were at a bit of a loss   | C-E | ...because we weren't allowed to do a proper socialisation   |
|                    |  | C-E | Because it got hijacked into Blueprinting  |
|                    | (exec attitudes) Because of the amount of money  | C-E | ...it started to ring alarm bells  |
|                    | So they get to Ellipse 8 and they realise it's a waste of time   | C-E | So that's what I was hearing from SMEs, ...how do we make these decisions, ...then realise this was all a waste of time? |
|                    | If we don't spend it now, we're not going to get it next time  | R   | So, I think that's probably another dimension  |
|                    | There could have been more participation   | M-E | ...so that they could identify specific impacts  |
|                    | (the project)... was pulled...   | R   | Because there was a lack of quantified benefits  |
|                    | We don't need to worry about the detail  | R   | ...because there was the understanding, even at exec level, that this is something we're going to do                     |
|                    | As the project got underway, and they dug under the surface, and the impacts got clearer it was virtually a significant implementation | C-E | And, so, once we got closer to it, ...."Maybe we should be looking at another system" or"Maintaining the status quo"     |
| Lessons Learned    | (Re advice on lessons learned)   | C-E | So, it wasn't accepted because I think none of them wanted to lead   |
|                    | We're not going to do a JET - let's put it in and then do a Phase Two  |     | So, the lesson kept coming up in the discussion  |

## Appendices

|                     |   |     |  |
|---------------------|---|-----|--|
| Connector analysis  |   |     |  |
| Case Study B        |   |     |  |
| employee engagement | ..a lot of people were involved in the ...process   | S   | ...so, that was the business case put together   |
|                     |   |     | So, Board approval   |
|                     | They're involved with that (employees) ...they're down on the floor with Serviceworks (re the decision making process)  | C-E | ...so they're involved in testing  |
|                     |   | C-E | I think it went pretty well, because they were involved  |
|                     |   | C-E | And the leadership direction has always been clear   |
|                     | re employee engagement (approval fatigue)   | C-E | So, as long as there is something agreed that will start this process  |
| decision drivers    | ...so the decision was made...the probability of getting the tick (approval) was less than optimal  | C-E | ...so, we've done that on several occasions  |
|                     |   |     |  |
|                     | Our view at the time was that it wasn't stable... Because the code ...was reliant on OC4J   | R   | So, we got PwC to have a look at it  |
|                     |   | C-E | It cannot be upgraded without having to re-do the entire code  |
|                     |   | C-E | So, in order for us to do anything new, we'd have to go and upgrade the OC4J   |
|                     |   | C-E | So, we could not upgrade ORACLE  |
|                     |   | C-E | So, the technology behind it was the key driver behind suggesting we need a new system   |
|                     |   | C-E | And, so that ..fed into the business case  |
|                     | Because we were going ... for an application that we already had  | C-E | So, ...scope was very clear  |
|                     | We didn't want to cloud where we were going   | C-E | So, we wanted a fresh perspective  |
|                     |   | R   | So putting forward some opinions on looking at the vanilla, the base modules....   |
|                     |   | C-E | So, there was no baggage   |
|                     |   | C-E | so, we just went through the As Is processes,...   |
|                     |   | R   | so there was major part of it was bringing stability to the system   |
|                     | SWIMS was pretty much compliance oriented...we were moving into a world where we had legislative requirements in water accounting...it was very much an unknown | C-E | So, that was part of the beginning   |
| SME involvement     | (re SME involvement)  | C-E | .....it created debate. Cause there was lots of ...Well why should we do it that way?  |
|                     |   | R   | So, its how to reinforce the change is going to be good  |
| Leadership          | ...the project sponsor took a much lower level...   | C-E | So, ...Barry had a lot more input  |
|                     |   | C-E | ...there was tensions there  |
|                     |   |     |  |
|                     | I pulled myself out of the detail, we shifted another member of the team into that role   | C-E | So, its ended up that we've got implementation leads from each of the different areas  |
| Politics            | (re politics)   | C-E | ..I think we identified the major areas,...So I think we'd already had those conversations                                       |
|                     |   | C-E | So, possible sensitivities had been noted  |
|                     | ... there were certainly undercurrents of resistance...   | C-E | So, the focus on improving our services to customers   |
|                     |   |     |  |
|                     | (Re make-up of PSG - adding Manager, Strategy)  | R   | ...being that this was going to change...our relationship to customers...changes to the way we deliver our services              |
| Decision making     | (re decision making process)  | R   | So, a lot of the background work was to ensure that context was sufficiently understood ... the implications were well explained |
|                     | (re impact of turnover on decision continuity)  | C-E | so ...the process of re-education, understanding of the context...we've had to re-visit some of those decisions                  |
|                     | (re socialisation)  | C-E | So there were opportunities ..to raise any of those issues well in advance of the S.C.   |
|                     |   | C-E | So, it wasn't a surprise when the project came back and said, "We need to reconsider...."  |
|                     | ...we weren't particularly well-informed as to what possible solutions were out there   | C-E | So, determining our business requirements...was our biggest risk   |
|                     |   | C-E | So, our approach to market ... a limited approach to...three vendors   |
|                     |   |     |  |
|                     | ...the original proof of concept partners ... SAP, on the basis we have SAP in-house  | R   | So, unless there are other requirements...we're likely to get a cheaper solution...  |
|                     | (re SAP policy)   | C-E | ...so those attitudes had started to change  |
|                     |   |     |  |
|                     | ...there are strong reactions ... from particular people  | C-E | Because we tend to have very open communications   |
|                     |   | C-E | ...there's been a number of specific efforts around particular individuals   |
| Lessons learned     | (re lessons learned)  | R   | So, its around ensuring that we extract specialist knowledge ...without trying to broaden their responsibilities too much        |
|                     | ...we've done similar roll-outs for customers   | C-E | And, we're making those decisions almost on the pros and cons of doing it that way   |
|                     |   |     | So, to us, there was lesser customer perspective risk  |
|                     |   |     |  |
|                     | (re NWMI)   | R   | So, ...we soon realised we weren't going to get what we needed from that, but it had to be fully investigated                    |
|                     |   | C-E | So, we went into an RTB brief  |
|                     |   | R   | So, we just wanted to re-visit, to make sure we were going down the right track  |
|                     |   | R   | So, there were all those things about how we can better look at...   |
|                     |   | C-E | And there was a lot of gnashing of teeth ... "Well, hang on, what is best for the organisation?"                                 |
|                     |   | C-E | So, there were all those discussions   |
|                     |   | C-E | So, we did a couple of more months just to be certain of the assessment... Sunwater then withdrew from that project              |
|                     |   | C-E | ...so the executive as a whole took that decision based on the assessment of likely outcomes                                     |

Appendices

Appendix 23. Case Study A – Initial email mapping

| Date     | Project Set-Up & Business Case Preparation                         |  |  |  |  |   |   | Project Initiation   |   |  | 1-Feb            | 20-Jun            |  |
|----------|--|--|--|--|--|---|---|--|---|--|------------------|-------------------|--|
|          | 29-Aug-12  | 5-Sep  | 6-Sep  | 13-Sep   | 15-Sep   | 16-Sep  | 22-Sep  | 28-Sep   | 31-Oct  | 28-Nov   |                  |                   |  |
| Decision | Continue with project set-up?                                      | Submit business case for approval?   | Submit revised business case for approval?                                 | Endorse consultants' plan and approach?                | Escalate concerns to Investment Review Committee and/or Steering Committee?                        | Escalate concerns to Executive Leadership Team?   | Continue to Project initiation?                         | Introduce early communications?                                    | Send out whole of business communications re project status?                            | Locate team in Brisbane or allow weekly travel?  | Project Kick-off | Project cancelled |  |
| Inputs   | Concerns raised about data gathering process                       | Concerns raised about resourcing estimates                                   | Concerns again raised  | Business case doesn't reflect changes                  | Official notice that document would be submitted without issues, concerns raised by internal staff | Message from CIO stopping all communications with consultants re arrangements & business case | Short notice of submission.                             | Concerns about increasing negative rumor, and potential resistance | Concerns from Corporate Communications that the project had not been formally approved. | Thoughts requested about remote working by ICT. Included comment about JET lessons learned |                  |                   |  |
|          | Concerns raised with consultants about data gathering process      | Concerns raised about resourcing estimates                                   | Details from consultants re sources of estimates                           |  |  |   | Vendor confirmed process was accepted by ELT/no changes | Request for thoughts and assistance                                | Confusion about approval status of project  |  |                  |                   |  |
|          | Concerns raised with consultants about data gathering process      | Concerns raised about resourcing estimates                                   |  | Concerns collated from various sources in organisation |  |   |   |  | Revised draft communications proposed by ICT  |  |                  |                   |  |
|          | Concerns raised with consultants about data gathering process      | Reactions to business case being submitted without any                       |  |  |  |   |   |  |   |  |                  |                   |  |
|          | Concerns raised with consultants about data gathering process      | acknowledgement of concerns and issues                                       |  |  |  |   |   |  |   |  |                  |                   |  |
|          | Response from consultants to some issues raised                    | Concerns raised to leadership re process, estimates and lack of              |  |  |  |   |   |  |   |  |                  |                   |  |
|          | Concerns raised with consultants about data gathering process      | of acknowledgement of user concerns  |  |  |  |   |   |  |   |  |                  |                   |  |
|          | Concerns raised with consultants about data gathering process      | Concerns raised; no changes made to documents                                |  |  |  |   |   |  |   |  |                  |                   |  |
|          | Concerns raised with consultants about data gathering process      | Submitted by consultants with no changes reflecting issues & concerns raised |  |  |  |   |   |  |   |  |                  |                   |  |
|          | Internal responses from organisation leadership re concerns raised | Submitted without changes  |  |  |  |   |   |  |   |  |                  |                   |  |
| Outcome  | Decision made to continue irrespective                             | Business case submitted without changes                                      | Refined business case submitted; still no changes reflecting user concerns | Consultants confirmed no changes to be made            | Document submitted by consultants contrary to internal estimates                                   | Submitted without changes from internal   | Project Initiation approved                             | Initial communication from newly appointed Business Owner          | General update message sent to both organisations from ICT CEO on Nov 3.                | Team members to commute, where possible  |                  |                   |  |

# Appendices

## Appendix 24. Decision Point Analysis – Case Study A

| # | Occurrence      | Date   | Code | Description   | Decision     | Outcome   |
|---|-----------------|--------|------|---|--------------|---|
|   | <b>Task</b>     |        |      |   | <b>Point</b> |   |
| 1 | Conference Call | 16-Aug | CS1  | Discussion of Design Phase resource requirements & user input   |              | Concerns raised about data gathering process                  |
| 2 | email           | 16-Aug | CS2  | <p>Great to be working with you both on this.</p> <p>Our earlier contact has been by Martin (contact info below) to our Strategic Change &amp; Portfolio Management group.</p> <p><b>Project Delivery</b></p> <p>ICT Provider</p> <p>G has pulled together the points from our conversation today.</p> <p>I took some quick notes when A, D. and yourself were covering off the key items that need to be addressed with TS and ICT Provider.</p> <ul style="list-style-type: none"> <li>• Scope of vendor Change Management (contract)</li> <li>• Establish/understand vendor's approach (change management and communication plan)</li> <li>• Develop relationship moving forward, rules of engagement</li> <li>• Establish our contribution to change moving forward</li> </ul> <p>Feel free to amend as required.</p> <p>I'll follow up with KP from our end. Hopefully have some information to share by the end of the week.</p> <p>RH Change Manager</p>   |              |   |
| 3 | email           | 18-Aug | CS3  | <p>Thanks for attaching both docs. We (Change Office) met with C regarding the data gathering change impacts doc.</p> <p>The expectation set with C. when we met was that the data gathering would occur throughout the workshop process and individually should more info be required</p> <p>Can you confirm that this happened or when the data gathering for the change impacts will be used (and how).</p> <p>Looking forward to catching up with you.</p> <p>RH Change Manager</p> <p><b>From:</b> TS<br/> <b>Sent:</b> Thursday, 18 August 2011 9:29 AM<br/> <b>To:</b> RH<br/> <b>Subject:</b> SPQ bp ph2 ERP - change mgt update - FYI all</p> <p>Just to close a few loops, this is the template we will use for the high-level change impact assessment as part of the current high-level scoping work.</p> <p>This is based on this template/ guidance pack from CD, which I understand has been previously reviewed with Corporate Organisational Change at XX and PD at YY.</p> <p>R, we should be completing this template in the next week, so will schedule a time to talk end next week.</p> <p>TS</p>   | Yes          | Concerns raised with consultants about data gathering process |
|   | <b>Task</b>     |        |      |   | <b>Point</b> |   |
| 4 | email           | 18-Aug | CS4  | <p>Hi A &amp; D</p> <p>I'm not sure who is working today with an Ekka show holiday in Brisbane. Apologies this is from my private email – I didn't bring my work laptop home and was keen to provide an update before we continued with the action items from our meeting.</p> <p>Yesterday I had an extremely brief conversation with Simon Middap (my manager) he said he has been asking questions in the change management space. I said that we (XX &amp; YY) had also caught up but I was unable to give him details of our discussion or get info from him as we to step into other meetings</p> <p>I will catch up with S tomorrow to ensure that we're not asking the same questions to the same people.</p> <p>I reviewed my emails and have one from CD where he confirmed that the data gathering tool was being used in the current round of round of workshops. I also think in the meeting G and I had with him that we asked him if there would be individual 'interviews' with key people.</p> <p>G, I'm sure he indicated that this would happen too if they needed to clarify some of their information.</p> <p>Rather than talking to TS, I will go back to CD tomorrow to confirm the data gathering did happen in the workshops (and how it was done, given nobody is aware that this happened). I can then ask him some questions about the change assessment which T tabled at the meeting last Friday</p> <p>Tomorrow I'll get an update from SM. Once I've spoken to CD from I'll email you both to confirm the data gathering.</p> <p>It may be beneficial for us all to have a meeting with C in his role as change lead for</p> <p>It may assist to have the above info before we move on with some of our action items from our meeting.</p>  |              | Concerns raised with consultants about data gathering process |
| 5 | email           | 23-Aug | CS5  | <p><b>From:</b> AT<br/> <b>Sent:</b> Wednesday, 17 August 2011 8:37 AM<br/> <b>To:</b> RH<br/> <b>Subject:</b> RE: message from RH</p> <p>Hi, All.</p> <p>I've spoken with Sam about this. At this stage the impact analysis is around the high level impacts required so that YY PDy can gain an overall picture of our whole strategic enablement program. So there is no great cause for concern. I do however, need to catch up with M (ICT Provider to determine where the whole change management agenda is landing beyond this initial scoping phase. There is no change management activities being conducted at the blueprinting phase.</p> <p>S is also raising the change management agenda with PS, vendor and vendor2 so that we have a clear road ahead moving into the design phase. I'll be in touch once I've spoken with M.</p> <p><b>AT</b></p>  |              | Concerns raised with consultants about data gathering process |
| 6 | email           | 24-Aug | CS6  | <p><b>From:</b> RH<br/> <b>Sent:</b> Wednesday, 17 August 2011 8:17 AM<br/> <b>To:</b> AT<br/> <b>Subject:</b> message from RH</p> <p>I'm not sure who is working today with an Ekka show holiday in Brisbane. Apologies this is from my private email – I didn't bring my work laptop home and was keen to provide an update before we continued with the action items from our meeting.</p> <p>Yesterday I had an extremely brief conversation with SM (my manager) he said he has been asking questions in the change management space. I said that we (XX and YY) had also caught up but I was unable to give him details of our discussion or get info from him as we had to step into other meetings</p> <p>I will catch up with S tomorrow to ensure that we're not asking the same questions to the same people.</p> <p>I reviewed my emails and have one from CD where he confirmed that the data gathering tool was being used in the current round of workshops. I also think in the meeting G and I had with him that we asked him if there would be individual 'interviews' with key people.</p> <p>G, I'm sure he indicated that this would happen too if they needed to clarify some of their information.</p> <p>Rather than talking to TS, I will go back to CD tomorrow to confirm the data gathering did happen in the workshops (and how it was done, given nobody is aware that this happened). I can then ask him some questions about the change assessment which T tabled at the meeting last Friday.</p> <p>Tomorrow I'll get an update from SM. Once I've spoken to CD from vendor, I'll email you both to confirm the data gathering. It may be beneficial for us all to have a meeting with C in his role as change lead for vendor.</p> <p>It may assist to have the above info before we move on with some of our action items from our meeting.</p> <p>I'll ring/email you both tomorrow. Cheers R</p> |              |   |

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| # | Occurrence   | Date   | Code | Description   | Decision | Outcome   |
|---|--------------|--------|------|---|----------|---|
| 7 | email        | 23-Aug | CS7  | <p>From: PC</p> <p>Sent: Tuesday, 23 August 2011 8:14 AM</p> <p>Subject: FW: FW: Organisation Change Impact Analysis information</p> <p>Attachments: YY change impact information from ICT program.ppt</p> <p>There is some good stuff here. Pls review.</p> <p>PC</p> <p>-----Original Message-----</p> <p>From: SN</p> <p>Sent: Monday, 22 August 2011 4:43 PM</p> <p>Subject: FW: FW: Organisation Change Impact Analysis information required</p> <p>Info provided to Michelle</p> <p>SN</p> <p>-----Original Message-----</p> <p>From: TdH</p> <p>Sent: Tuesday, 16 August 2011 6:48 PM</p> <p>To: MN</p> <p>Subject: RE: FW: Organisation Change Impact Analysis information required</p> <p>M</p> <p>As promised, attached is a synopsis of the data available for assessing change impacts of the ICT straw man. The document includes:</p> <ol style="list-style-type: none"> <li>1. The high level ICT roadmap which the ELT have identified as the preferred roadmap based on the analysis to date. This shows the macro ICT streams</li> <li>2. An outline of each of the ICT initiatives proposed, indicating some of the key objectives of each, risks and dependencies within the ICT program (pages 3 to 7). This is a more granular view than the roadmap, which is a roll-up.</li> <li>3. An initial view of the work groups impacted by the key programs (pages 9 to 13). This information is probably a little of date, since it was produced in May 2011 and the thinking has evolved a bit since then. However, it is the best available at this time and the broadly the impacts should not be too far out..</li> <li>4. The estimated business resources required to contribute to the implementation of these products, by macro stream (pages 14-15). (See attached file: YY change impact information from ICT program.ppt)</li> </ol> <p>Since I don't have much insight into the other strategic programs, I cannot comment on whether there is overlap between these and the ICT program. I also have limited visibility of in-flight ICT projects eg there is already a BI program underway. Please keep an eye out for these - am happy to discuss if needed.</p> <p>vendor</p> <p>RE: FW: Organisation Change Impact Analysis information</p> <p>Hi T,</p> <p>Can we please have the Organisation Change Impact Analysis, by Work Group, by end of business Tuesday 16th August?</p> <p>M</p> <p>-----Original Message-----</p> <p>From: TdeH</p> <p>Sent: Friday, 12 August 2011 10:27 AM</p> <p>To: MN</p> <p>Subject: Re: FW: Organisation Change Impact Analysis information required</p> <p>Hi M - Am targeting this for early next week. As discussed, the estimated aggregate number of business FTEs for each project over time will be available. As Blueprinting progresses through September, more information is expected to be available at the workgroup level. I'll also send you an initial change impact assessment undertaken during the first phase of Blueprinting</p> <p>vendor</p> <p>11/08/2011 10:03 AM</p> <p>FW: Organisation Change Impact Analysis information</p> <p>Thanks for your valued time and participation at Tuesday's meeting.</p> <p>As agreed, can you please forward on the Organisation Change Impact data?</p> <p>Please note we need this per project rather than stream and at work group level.</p> | Point    | Response from consultants to some issues raised |
| 8 | presentation | 23-Aug | CS8  | <p>Presentation from vendors</p>  | Point    |   |

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| 9  | email           | 24-Aug | CS9  | <p><b>From:</b> AT<br/> <b>Sent:</b> Tuesday, 23 August 2011 3:47 PM<br/> <b>To:</b> RH; DB<br/> <b>Subject:</b> ERP Upgrade: Change Management Agenda</p> <p>Hi, R and D.</p> <p>I've had several conversations with SN, MW and others. It appears that at this stage, the impact analysis that is being done as part of the business case is a high-level one. I am not sure at this stage what to expect from the business case in terms of resourcing for change management. I will however, be pushing for more details entering into the design phase, as I will be for resourcing, project structure and roles (which I have started discussing with PC), project plan and milestones.</p> <p>I believe it is important that we have an agreed approach between the two organisations, for the change management agenda as soon as the project kicks off with the design phase, which I believe is expected to occur early November.</p> <p>I believe vendors are struggling with the end-August deadline for the business case (gate 2 release of funds for detailed design). I would therefore be looking to have conversations around the change management agenda soon after this.</p> <p>It would possibly pay to have the key players around the table to discuss, e.g., SN, SM, yourselves, PK and myself. The important aspect from my view is that we get an early heads-up on expected resource requirements (change management, Business Analysts and SMEs, and agree on a common approach</p>   |              |   |
|----|-----------------|--------|------|--|--------------|---|
| 10 | Conference Call | 29-Aug | CS10 | Discussion of Design Phase resource requirements & user input  |              | Concerns raised with consultants about data gathering process                                 |
| 11 | Conference Call | 29-Aug | CS11 | Discussion of Design Phase resource requirements & user input  |              | Concerns raised with consultants about data gathering process                                 |
| 12 | email           | 29-Aug | CS12 | <p>PC</p> <p>Thursday, 25 August 2011 5:32 PM<br/> Program Delivery Management Team<br/> FW: Blueprinting YY ELT Update</p> <p>FYI<br/> PC</p> <p>-----<br/> <b>From:</b> PS<br/> <b>Sent:</b> Thursday, 25 August 2011 5:31 PM<br/> <b>To:</b> PC<br/> <b>Subject:</b> FW: Blueprinting YY ELT Update</p> <p>Sorry P - I should have copied you on this.</p> <p>PS<br/> Thursday, 25 August 2011 5:30 PM<br/> YY Senior Executive Team<br/> Blueprinting YY ELT Update</p> <p>Attached is a short pack of material we had intended discussing yesterday afternoon at your ELT meeting (don't worry - there are &lt;5 slides of new content). I realise your agenda was tight and keeping the Blueprinting timeslot open at the end of the day was ambitious. Therefore, I ask that please just peruse the attached material when you have a moment. I'd be happy to meet with any of you to discuss as required at your convenience.</p> <p>Contained herein is:</p> <p><b>1. A slide on project status</b><br/> <b>. A review of the state of the strawman program timeline as discussed at the last Joint Executive meeting.</b><br/> That last strawman left "to be determined" on the customer / market / meter / SO mgmt) investment stream. The pack therefore includes:<br/> <b>2. A slide on the current state of the program</b><br/> <b>3. Two slides on drivers for investment in that stream, a potential transition timeline, and options for the future state.</b></p> <p>We've been working through this last point with R's team. R, we'd now like to arrange a combined discussion with you and your team to reach a landing. PB - as this also relates to service order handling we need to discuss with you as well. Plus NJJ this naturally affects MD w.r.t. M Asset Management and M Data Management functions. The team has already spent a lot of time with M and his team and understands his goals.</p> <p>As an appendix, the pack also includes minutes / notes we took from the last strawman meeting we had with your team.</p> <p>Thank you. We'll arrange the above-mentioned discussions on the related stream. But in the meantime, please let me know if you'd like to discuss any aspect of the project</p> |              |   |
|    |                 |        |      |  | Yes          | Internal responses from organisation leadership re concerns raised                            |
|    |                 |        |      |  | Yes          | Decision made to continue irrespective  |
|    |                 |        |      |  | Yes          |   |
| #  | Occurrence      | Date   | Code | Description  | Decision     | Outcome   |
|    | <b>Task</b>     |        |      |  | <b>Point</b> |   |
| 13 | spreadsheet     | 29-Aug | CS13 | EXCEL impact analysis  |              |   |
| 14 | Conference Call | 30-Aug | CS14 | Conference Call re ERP resourcing & user input   |              | Concerns raised about resourcing estimates  |
| 15 | email           | 30-Aug | CS15 | <p><b>From:</b> TS<br/> <b>Sent:</b> Tuesday, 30 August 2011 11:48 AM<br/> <b>To:</b> AT SN; MJ, AW<br/> <b>Subject:</b> SPQ bp ph2 ERP - Design Phase resourcing draft - FYI all<br/> <b>Attachments:</b> ERP Des Ph res'g v0.3.pdf</p> <p>This is the draft pack for our resourcing mtgs this arvo..</p>   | Yes          |   |
| 16 | email           | 31-Aug | CS16 | <p>D-LB</p> <p>Tuesday, 30 August 2011 3:25 PM<br/> Initial comments on the ERP Upgrade Design Phase meeting</p> <p>Following are my initial comments.</p> <ul style="list-style-type: none"> <li>The approach needs to be communicated to the business as soon as possible for buy-in and to give them as much notice as possible so that they can realistically commit to it and to ensure that the required resources are committed, engaged and available.</li> <li>This approach needs to be business driven at all times.</li> <li>Slide 8 - Work streams item 5 Key User Familiarisation ERP needs to start sooner so the business users required to begin work in the design phase from 17 Oct are more familiar with ERP. This will enable them to engage with confidence and with some knowledge of ERP. (This is a change management activity).</li> <li>Slide 8 - Agree with D that the Change Management activities needed to begin before now so they need to be moved forward.</li> </ul> <p>δορυμενταδ αρχορδινγλυ</p> <ul style="list-style-type: none"> <li>Before the Design Phase begins YY needs to review of the resource plan to ensure it reflects (as we know it) the effort required to complete the design phase</li> <li>Need to be able to at least read the business case that support the design phase.</li> </ul> <p>I recommend that we engage the BSIMs in the review of the Design Phase and ask them to review and comment.</p>  |              | Concerns raised about resourcing estimates  |
| 17 | Conference Call | 2-Sep  | CS17 | Discussion re ERP resourcing & user input  |              | Concerns raised about resourcing estimates  |
| 18 | email           | 2-Sep  | CS18 | <p><b>From:</b> AT<br/> <b>Sent:</b> Wednesday, 31 August 2011 12:25 PM<br/> <b>Subject:</b> FW: SPQ bp ph2 ERP - draft ERP Blueprinting business case - for review by all<br/> <b>Importance:</b> High<br/> <b>Attachments:</b> ICT Provider B&amp;I BPP ERP high level business case v1.0.docm</p> <p>Hi, P and M.</p> <p>I wanted to give you an early heads-up on this one. I have a meeting with T, DS and S this afternoon to cover off a number of issues including timeline, financials and how we communicate the draft business case and the process moving forward.</p> <p>My initial reaction is that there appears a significant amount of work that may be involved in extracting and interpreting information from the business case, specifically for YY's format. After talking with A, there may be further work involved in polishing the financials into Capex/Opex, incremental/non-incremental and what buckets they are coming out of, e.g., ICT Provider/YY, may also be significant. All of this would need completion before internal review and signoff prior to submission. This means that our submission date of 13 September for IRC approval on 23 September is looking somewhat unsteady at this time.</p> <p>I'd greatly appreciate your feedback on what you see as the main issues and concerns with the attached, and options for consideration.</p> <p><b>From:</b> TS<br/> <b>Sent:</b> Tuesday, 30 August 2011 11:48 PM<br/> <b>To:</b> DS; TdeH; MR; SH; PS; PP; AW<br/> <b>Subject:</b> SPQ bp ph2 ERP - draft ERP Blueprinting business case - for review by all</p> <p>Please find attached the draft ERP Blueprinting business case..</p> <p><b>Note..</b><br/> business case does not yet contain costs or implementation Ph1 timeline - these are still under review<br/> JD will advise all on details of review process<br/> A, P - please forward this draft to others who should review - eg Business Leads, eg PMO for resourcing review, eg change management leads<br/> vendor internal review is in progress, as per "caveats"..</p>  |              | Reactions to business case being submitted without any acknowledgement of concerns and issues |

Appendices

| #  | Occurrence      | Date   | Code | Description  | Decision | Outcome  |
|----|-----------------|--------|------|--|----------|--|
| 19 | email           | 2-Sep  | CS19 | <p><b>From:</b> IW</p> <p><b>Sent:</b> Friday 2 Sept 2011 3:43 pm</p> <p><b>To:</b> PC, RB, GS</p> <p><b>Subject:</b> ERP Upgrade Risk for WDIP</p> <p>Thank you for raising this concern. I have already written to TS today in respect to his scheduling meetings at such short notice I can never attend them. I did read through the slide pack but I did not get a feel of what is actually the content of the changes for the ERP and the impact and or requirements for Asset Management. I share your concerns below and I believe that perhaps we should ask S to clarify the intended scope of works that they are thinking of to allow each of us to assess the impact on our WDIP Programs. G, in R's stead, would you be acceptable to P and I to ask this from S?</p> <p><b>From:</b> PC</p> <p><b>Sent:</b> Friday, 2 September 2011 2:44 PM</p> <p><b>To:</b> RB(CA); GS(YY); IW(YY)</p> <p><b>Subject:</b> ERP Upgrade Risk for works</p> <p>I have some concerns over the understanding of what is in scope for ERP Upgrade Phase 1 – target end of 2012 completion. I have attended 2 discussions with TS of vendor and have advice from AT who has been closely involved in the development of the ERP upgrade. The ERP upgrade has been phased with Phase 1 being primarily a technical upgrade and Phase 2 supporting business change. The presentation slides and business case reference an inclusion in Phase 1 of:</p> <ul style="list-style-type: none"> <li>• Enable works programs</li> <li>• Enable improved Asset Management</li> </ul> <p>There is no more detail provided on what this means. The indicative resourcing identified for the ERP upgrade of 2 Full Time YY SMEs to support the whole upgrade for works (Operations) and 2 FTEs for Asset Management would not seem adequate to support definition of the business change from strategy to detailed business requirements as well as identifying all other changes and improvements supported by the standard ERP functionality across these business units. There is clearly an expectation (not explicit) that the works program and other Asset Management activity will drive out detailed business requirements. There is a risk that the business will expect that this will come from the ERP Upgrade project rather than identifying it themselves and there is also a risk that these business requirements will not be identified in time to be included in the Phase 1 Design – target estimated to be Mar/ Apr 2012. For example the Use of ERP Project in operations appears to be winding down when it is still required to define requirements for inclusion in ERP upgrade. Please let me know your views and whether you are comfortable that the projects currently identified in works will deliver the definition of detailed business requirements for use of ERP that you're looking for</p>   | Point    | Concerns raised to leadership re process, estimates and lack of acknowledgement of user concerns |
| 20 | Conference Call | 5-Sep  | CS20 | <b>Discussion re Change Impact Assessment process with consultants</b>   |          | Concerns raised; no changes made to documents  |
| 21 | document        | 5-Sep  | CS21 | Vendor Business Case .pdf  | Yes      | Business case submitted without changes  |
| 22 | document        | 5-Sep  | CS22 | EXCEL design Phase resourcing  | Yes      | Submitted by consultants with no changes reflecting issues &                                     |
| 23 | presentation    | 5-Sep  | CS23 | ERP roadshow attendees .xcl  |          |  |
| 24 | presentation    | 5-Sep  | CS24 | ERP implementation approach .ppt   | Yes      | Submitted without changes  |
| 25 | Conference Call | 6-Sep  | CS25 | Discussion re ERP resourcing   |          | Concerns again raised  |
| #  | Occurrence      | Date   | Code | Description  | Decision | Outcome  |
| 26 | email           | 6-Sep  | CS26 | <p><b>From:</b> TS</p> <p><b>Sent:</b> Friday, 2 September 2011 4:29 PM</p> <p><b>To:</b> DB(YY); MJ(YY); D-LB(CA); PC(YY)</p> <p><b>Subject:</b> SPQ bp ph2 ERP - more material for resourcing review - FY1 D, PC, all</p> <p><b>Attachments:</b> YY ICT Provider ERPUpgrade Project Plan R1 98.mpp; YY, XX, ICT Provider Des Ph resourcing v3.2.1.xls; 110902 SPQ bp ph2 ERP EE bfg v0.3.pdf; ERP implem apph v110824.4 post_mtg.ppt; Solution Design Items exMin.docx</p> <p>H D, PC</p> <p>Assorted docs to help w resourcing..</p> <ol style="list-style-type: none"> <li>1. Design Phase plan from vednor2, 2 versions..</li> <li>2. Resource estimating spreadsheets..</li> <li>3. Docs detailing scope items for Implementation Ph1 vs Ph2..</li> <li>4. ERP update briefing for YY stakeholders from this morning..</li> </ol> <p>If there's anything else you need, please contact A or D or myself.</p> <p>[PK - CCo you in case this is also helpful for XX stakeholders/ resourcing plan review ers]</p>  | Point    | Details from consultants re sources of estimates   |
| 27 | document        | 6-Sep  | CS27 | Vendor Business Case doc   | Yes      | Refined business case submitted; still no changes reflecting                                     |
| 28 | document        | 13-Sep | CS28 | Vendor Scope doc   |          | Business case doesn't reflect changes  |
| 29 | Meeting         | 14-Sep | CS29 | Meeting with consultants re concerns about Change Impact Assessment process & Change Management  | Yes      | Consultants confirmed no changes to be made  |
| 30 | email           | 15-Sep | CS30 | <p>JM</p> <p>Wednesday, 14 September 2011 2:36 PM</p> <p>DB</p> <p>Action Response: Notes on ERP - AR RELEASE for Response to Louise tomorrow</p> <p>High</p> <p>Confidential</p> <p>Here are my notes as requested. The information provided is based on information/perceptions provided by Louise Urzi.</p> <p><b>Reason for Approach to me</b></p> <p>Others recommended that L contact me as other channels have not proven effective.</p> <p><b>Individual's Task</b></p> <p>Rollout the above release to identified departments.</p> <p><b>Background Provided by Individual</b></p> <ul style="list-style-type: none"> <li>• Project due for rollout by mid October – it is already behind.</li> <li>• Identified areas for the rollout include: Admin Finance AR, CRM, Finance Accounting, Service Transition Centre, and Retail.</li> <li>• SN is the Sponsor and System Owner. Project does not appear to be a priority for the sponsor. He is not interested in the details nor does he see it as his responsibility.</li> <li>• ICT Provider Project Manager/Technical contact is JC</li> <li>• UAT completed with the customer services area but resources are no longer available to be part of the process due to competing priorities</li> <li>• PMO tools are too detailed for their project requirements and they do not use them.</li> <li>• Training and Development area do not have capacity to assist and it is not really in their scope of services.</li> <li>• Project Manager is DB. The issue and information has been raised to D already.</li> <li>• Project will affect a number of divisions of YY.</li> <li>• L is asked questions like these: 'What we need to do?' 'What has changed?'. She does not feel she has the information to answer these questions</li> <li>• SME Resources are not available.</li> <li>• Release notes do not provide enough information</li> <li>• Planned escalation process for the system 1) ICT Provider Help Desk 2) Customer Service 3) ICT Provider technical Team 4) Vendor ?</li> <li>• ICT Provider created this part of the system.</li> <li>• S wrote a business requirements specification document but this does not seem to fulfil the current needs.</li> <li>• No mapping of current/future states/change impacts etc has taken place yet.</li> <li>• Core project documentation does not appear to be in place.</li> <li>• L does not have access to a copy of the system at this stage.</li> <li>• Initial thoughts on recommendations were provided to L with the understanding that JM and DB would discuss and respond.</li> <li>• We need to be very careful about how we communicate and the approach for this issue as it is a sensitive topic.</li> </ul> <p><b>My Interpretation of Key Issues</b></p> <p>Tools, information and processes do not enable L to complete the rollout.</p> <p><b>Initial High Level Recommendations</b></p> <p><b>*Bold items indicate priority areas.</b></p> <p>Hold a conversation with D about recommendations:</p> <ul style="list-style-type: none"> <li>• <b>Define roles and responsibilities (RACI matrix) – Sponsor, PM, etc</b></li> <li>• Confirm existence of SLA with vendor (if applicable) to identify external interface</li> <li>• Create a single point of contact for managing the system and obtaining required information</li> <li>• Develop a strategy to engage the sponsor</li> <li>• <b>Identify stakeholders and develop a strategy to get everyone on the same page</b></li> <li>• <b>Obtain a copy of the test version.</b></li> </ul> <p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>• Contact L to let her know that we will come back with a response tomorrow (allocated to JM)</li> <li>• JM and DB will discuss how to proceed from here.</li> </ul> <p>Can you have a look at this and then perhaps we can discuss?</p> | Point    | Concerns collated from various sources in organisation   |

# Appendices

| #  | Occurrence      | Date   | Code | Description   | Decision | Outcome  |
|----|-----------------|--------|------|---|----------|--|
| 31 | presentatration | 15-Sep | CS31 | ERP Implementation structures .ppt  | Yes      | Document submitted by consultants contrary to internal estimates                                   |
| 32 | email           | 16-Sep | CS32 | <p><b>From:</b> MJ</p> <p><b>Sent:</b> Thursday, 15 September 2011 11:23 AM</p> <p><b>To:</b> DB</p> <p><b>Subject:</b> FW: ERP Upgrade YY Business Case</p> <p><b>Importance:</b> High</p> <p><b>Attachments:</b> ICT Vendor BI BPP ERP high level business case v4.5.1.doc; ERP Upgrade Business Cast 14 SEP v0.7.pdf</p> <p>D,</p> <p>Not sure if you have seen this or not. FYI &amp; comment.</p> <p><b>From:</b> AT</p> <p><b>Sent:</b> Wednesday, 14 September 2011 5:39 PM</p> <p><b>To:</b> MJ, PC</p> <p><b>Subject:</b> FW: ERP Upgrade YYBusiness Case</p> <p><b>Importance:</b> High</p> <p><u>Copy for your info. This, along with a covering memo and vendor business case will be forwarded to PE later this afternoon. I will then bundle up and overnight changes and discuss wither PB how he wants it submitted, i.e., via formal IRCsubmissions directly. I've attached the latest version of the vendorcase I have, however a further version is due later tonight, which I will also send through.</u></p> <p>This is only going to IRC for a warm up, not approval, for further consideration on 7 October and out-of-session discussions and approval. This is c current thinking. The socialisation and approval process with ELT I believe is still being decided.</p> <p>One of my concerns is that because of the timelines we are working tow ards, this has not been review ed by Commercial, but given the level of discussions this should not be a problem. I have how ever, alerted SN to this. We will though, be sending through to Commercial by way of advice, at the same time as sending through to PB.</p> <p>Could I therefore ask for your feedback by 9.30 am tomorrow .</p>   | Yes      | Submitted without changes from internal  |
| 33 | email           | 14-Sep | CS33 | <p><b>From:</b> AT</p> <p><b>Sent:</b> Wednesday, 14 September 2011 3:56 PM</p> <p><b>To:</b> PS(ICT Provider); SN(NQ); MW (ICT Provider); JD (ICT Provider); EK (ICT Provider)</p> <p><b>Subject:</b> ERP Upgrade YY Business Case</p> <p>Attached for endorsement/validation at this afternoon's meeting, is the latest version of the business case including financials.</p> <p>The current version I have of the vednor document is Version 4.5.1 which needs to accompany this business case. If there is a later version, could you please forw ard to me</p> <p>Can I confirm if this is being submitted through IRC submissions, or by some other means?</p>   |          | Business case doesn't reflect changes  |
| 34 | email           | 15-Sep | CS34 | <p><b>From:</b> MJ</p> <p><b>Sent:</b> Thursday, 15 September 2011 3:42 PM</p> <p><b>To:</b> DB(YY); D-LB (CA)</p> <p><b>Subject:</b> FW: ERP Upgrade Business Case</p> <p><b>Attachments:</b> ERP Upgrade Business Case v1.0.pdf</p> <p>FYI, see below advice sent from P to IRC Reps.</p> <p><b>MJ</b></p> <p><b>From:</b> PC</p> <p><b>Sent:</b> Thursday, 15 September 2011 1:34 PM</p> <p><b>To:</b> PB (YY); ML (YY); BR (CA)</p> <p><b>Subject:</b> FW: ERP Upgrade Business Case</p> <p>PS will be submitting the YY Business Case for the ERP Upgrade directly to IRC submissions this morning.</p> <p>See draft Gate 2 Business Case for ERP Upgrade. PS from ICT Provider will be submitting this business case for noting to the IRC with the view that further work will be done to finalise and submit for approval by October the 5<sup>th</sup>.</p> <p>I have some serious concerns with the quality of the draft business case and would appreciate if these were raised as issues to be resolved in finalising the Gate 2 business case for approval by the IRC.</p> <p>This Business Case has been compiled in a very short time and is based solely on the information available in the vendor documents.</p> <p>Quality issues include:</p> <ul style="list-style-type: none"> <li>The scope of work is not clearly defined – vendor 2 have provided some detail not yet captured in the business case</li> <li>There is ambiguity on the inclusion of significant business improvements in works delivery through the works improvement Program and Joint Workings Asset Management Framew ork</li> <li>Financial benefits are not identified</li> <li>Resources are under-estimated</li> <li>The balance between incremental and non-incremental Opex is unclear and details of Capex funding is also unclear.</li> </ul> <p>I think there are 2 risks worth highlighting:</p> <ul style="list-style-type: none"> <li>Business expects higher level of system solution design than will be delivered from the ERP upgrade and it will not be integrated with d development of business design for WDIP and AM</li> <li>Vendor resource estimates are based on a compliance and limited consultations with full time resources – a model proven to be ineffective on JET.</li> </ul> |          | Official notice that document would be submitted without issues, cocnerns raised by internal staff |



# Appendices

| #  | Occurrence | Date   | Code | Description   | Decision | Outcome   |
|----|------------|--------|------|---|----------|---|
| #  | Task       | Date   | Code | Description   | Point    | Outcome   |
| 35 | Meeting    | 21-Sep | CS35 | Meeting with vendors re concerns about Change Impact Assessment process & change management   |          | Vendor confirmed process was accepted by ELT/no changes |
| #  | Task       | Date   | Code | Description   | Point    | Outcome   |
| 36 | email      | 22-Sep | CS36 | <p>From: PS (ICT Provider)</p> <p>Sent: Thursday, 22 September 2011 7:33 PM</p> <p>To: YY Senior Executive Team</p> <p>Subject: YY IRC meeting - ERP Upgrade Supplementary Paper</p> <p>Hello colleagues,</p> <p>Tomorrow morning at the IRC meeting, we're discussing the draft business case for the ERP upgrade.</p> <p>Since submission of the draft paper, several good questions have been asked about the proposal. I've therefore prepared the attached supplementary paper, addressing these questions.</p> <p>I realise you're receiving this without notice, so I naturally don't expect you to read it prior to the meeting. But, as the questions are likely to come up at the meeting, I think it's good if you have written answers in front of you.</p> <p>I will bring some printed copies for Brisbane attendees.</p> <p>From: AT</p> <p>Sent: Wednesday, 28 September 2011 10:25 AM</p> <p>To: BM</p> <p>Subject: ERP Upgrade Initiation: Early Communications Considerations</p> <p>Hi, B</p> <p>As discussed yesterday, there are a few communications considerations that I believe may benefit from some early attention. I am mindful that there were earlier commitments to our stakeholders to feedback the output of the AIPS which has not yet occurred.</p> <p>I am also mindful that there are some grass-roots conversations occurring amongst stakeholders around the upgrade, and no formal messages have been sent regarding what is coming through with the business case, the need for Board approval, project establishment, expected durations, start times, what is in phase 1 and phase 2, potential resourcing/SME requirements, and so on.</p> <p>There has also been some discussions around the need for either capability workshops (Values Assessment) or Key User Familiarisation sessions, with some stakeholders wanting to know the detailed capability of the system. This would enable them to nominate the right SMEs to participate in the design phase, and align process work to the capabilities of the new system.</p> <p>Additionally, given the less than positive engagement experience of our stakeholders during the AIPS, there are some bridges that could benefit from rebuilding to get the commitment needed from them.</p> <p>It would appear that, as soon as we start approaching our stakeholders for SME resource commitments, these questions (and possibly more) will be raised.</p> <p>I believe it is important that we establish a solid footing from the outset of the project. I see a positive opportunity to achieve this through some form of early planned and formal communications approach to our key stakeholders and the business as a whole, as part of the project initiation efforts.</p> <p>I'd appreciate your thoughts.</p> <p>Regards,</p> <p>AT</p> <p>From: PC</p> <p>Sent: Thursday, 9 February 2012 8:13 AM</p> <p>To: Program Delivery Group</p> <p>Subject: FW: ERP project</p> <p>FYI</p> <p>Thanks and Regards</p> <p>PC</p> <p>From: SL</p> <p>Sent: Monday, 6 February 2012 2:17 PM</p> <p>To: Senior Leadership Team</p> <p>Subject: ERP project</p> <p>Team</p> <p>I would like to provide an update on the ERP project. I have been appointed as the YY business lead and will commence on the project fulltime this Wednesday 8/2/12. JD has kindly agreed to take on the role of GMSDC. J will be based in Mackay and will be contactable on</p> <p>The ERP project has been progressing with pre-design workshops prior to Christmas which gave some key users the opportunity to view a new version of ERP. These workshops identified some opportunities for improvement which we will use in the design phase. We have compiled a group of SMEs and key users that will be working on the project. The project start up workshops were held last week and this week the SMEs are in Brisbane working on extracting information in preparation for key user familiarisation sessions that will commence on the 13/2/12 running through to the 21/2/12. The design phase follows the KUF sessions.</p> <p>The intention is to work in Brisbane for the first four weeks then transition to the two project offices we have established in Townsville and Rockhampton. This should reduce our travel, reduce cost and improve the work life balance for those involved on the project fulltime.</p> <p>I am sure there are many questions out there and we are in the process of developing a communication plan to keep the business informed.</p> <p>Please give me a call if you have any specific questions.</p> <p>Regards</p> <p>S</p> <p>AT</p> <p>Monday, 31 October 2011 10:06 AM</p> <p>PC</p> <p>FW: ERP Upgrade Early Communications DRAFT v0 3 (2)</p> <p>ERP Upgrade Early Communications DRAFT v0 3 (2).doc</p> <p>Hi, P.</p> <p>B is keen to see this communiqué sent out from the Joint SteerCo to the target list identified. Corporate communications have concerns about a whole of business communiqué from CEO at this point in time, as this is not yet a formally approved or established project. In light of this, I believe that a piece targeted at those involved in the AIPS would fit the purpose, rather than a whole of business communication.</p> <p>Regards,</p> <p>AT</p> <p>BM</p> <p>Monday, 31 October 2011 9:59 AM</p> <p>SM (XX), AT (NQ)</p> <p>ERP Upgrade Early Communications DRAFT v0 3 (2)</p> <p>A/S</p> <p>I have marked up some changes to the comms. Can you review today and then we will produce a the final version. I think we could get away with one version covering all companies?</p> <p>In terms of distribution I think this should come from the Joint SteerCo via PE's email.</p> <p>Do you have the specific distribution lists for XX and YY?</p> <p>Thanks</p> <p></p> <p>ERP Upgrade Early Communicatio...</p> <p>PC</p> <p>Thursday, 3 November 2011 1:11 PM</p> <p>Program Delivery Group</p> <p>FW: Update on ERP Upgrade</p> <p>FYI</p> |          |   |

Appendices

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  | <a href="#">From: AC</a>   |  |  |
|  |  |  | <b>Sent:</b> Thursday, 3 November 2011 12:58 PM  |  |  |
|  |  |  | Colleagues   |  |  |
|  |  |  | I wanted to take the opportunity to update you on where we are at with the ERP Upgrade Initiative cognisant that it has been a couple of months since we undertook the Implementation Planning study as part of the Blueprint initiative.  |  |  |
|  |  |  | <b>WHAT IS IT?</b>   |  |  |
|  |  |  | ERP is the core Enterprise Resource Planning (ERP) software for YY and XX. It supports the day-to-day running of both businesses across the functional areas of, Asset Management, Works Management and Delivery, Finance, Logistics and Procurement, Human Resources and Payroll.   |  |  |
|  |  |  | <b>WHY UPGRADE?</b>  |  |  |
|  |  |  | As part of the recent Blueprinting initiative the upgrade to version ERP was identified as a key imperative for YY and XX consistent with what was forecast in the submission. Upgrading ERP will enable improvements in a range of functional areas, especially in the delivery of our capital works program and will also provide better integration to other applications.  |  |  |
|  |  |  | <b>WHAT ARE WE DOING?</b>  |  |  |
|  |  |  | The Blueprinting program is laying the foundation over the next four years to ensure the direction for technology investment meets the requirements to run both businesses and achieve the various business objectives. You may have been involved in the Blueprinting process when, in August, key stakeholders provided input into the Blueprinting streams including the Accelerated Implementation Planning Study (AIPS) for the ERP upgrade.  |  |  |
|  |  |  | The AIPS and the Options Analysis phase of Blueprinting formed the basis of a business case to invest in upgrading the ERP solution. That business case has now received endorsement from the Investment Review Committees in both XX and YY and is intended to be submitted for approval to both XX and YY Boards in November 2011.   |  |  |
|  |  |  | Subject to Board approvals the ERP Upgrade project will commence in late January 2012. The first six months of this project will see YY, XX, ICT Provider and vendor jointly complete a solution design for ERP. During the second half of next year, and into 2013, XX and YY will complete parallel implementations of the ERP upgrade. It is expected that XX will go live in March/April 2013, followed by YY in August/September 2013.  |  |  |
|  |  |  | <b>WHAT IS HAPPENING NOW?</b>  |  |  |
|  |  |  | In order to be best prepared for the ERP Upgrade, project work has already commenced on pre-design and project initiation activities during November and December. This work is being led by BM from IUCT Provider and involves representatives from XX and YY. AT in XX and SM/DB in XX are working with B on the pre-design and initiation activities. A joint project steering committee has been established with PB and NL representing XX and CA and PP representing YY. PE is the Executive Sponsor of the project. |  |  |
|  |  |  | Current activities include project resourcing and mobilisation, contract negotiations, and a capability discovery exercise. The capability discovery exercise will run from mid-November to mid-December and will engage with a number of key managers and SMEs via a set of workshops. It is likely some of you along with other stakeholders in XX and YY, will be invited to participate in these workshops to:   |  |  |
|  |  |  | <ul style="list-style-type: none"> <li>• Experience the functionality and capabilities of ERP, and how the system works in the context of business processes;</li> <li>• Identify key opportunities to leverage functions and potential gaps;</li> <li>• Better understand the business benefits of the upgrade;</li> <li>• Identify and assess the impacts of the upgrade across all business units; and</li> <li>• Inform the solution design.</li> </ul>  |  |  |
|  |  |  | Some further information will be made available this week to enable the workshops to be scheduled, participants locked-in and travel arrangements to be finalised.   |  |  |
|  |  |  | <b>MORE INFO</b>   |  |  |
|  |  |  | If you are interested in finding out more about the ERP Upgrade initiative or have any questions or concerns please contact one of the following:  |  |  |
|  |  |  | Regards  |  |  |
|  |  |  | PE   |  |  |

Appendix 25. Uncertainty & Equivocality Analysis – Case Study A

| Date   | Code | Issues  | Decision point? | Uncertainty decreased? | Evidence   | Source   | Equivocality decreased? | Evidence   | Source                      |
|--------|------|---|-----------------|------------------------|--|--|-------------------------|--|-----------------------------|
| 16-Aug | CS1  | Concerns raised about data gathering process  |                 |                        |  |  |                         |  |                             |
| 18-Aug | CS3  | Concerns raised with consultants about data gathering process   |                 |                        |  |  |                         |  |                             |
|        | CS4  | Concerns raised with consultants about data gathering process   |                 |                        |  |  |                         |  |                             |
| 23-Aug | CS5  | Concerns raised with consultants about data gathering process   |                 |                        |  |  |                         |  |                             |
| 23-Aug | CS6  | Concerns raised with consultants about data gathering process   |                 |                        |  |  |                         |  |                             |
|        | CS7  | Response from consultants to some issues raised   |                 |                        |  |  |                         |  |                             |
| 24-Aug | CS10 | Concerns raised with consultants about data gathering process   |                 |                        |  |  |                         |  |                             |
| 29-Aug | CS11 | Concerns raised with consultants about data gathering process   |                 |                        |  |  |                         |  |                             |
|        | CS12 | Internal responses from organisation leadership re concerns raised<br><b>Decision made to continue irrespective</b> | Yes             | NO                     | The decision to continue with the current process was made without addressing any issues raised. These issues included the inadequacy and inaccuracy of the change impact assessment process; confusion about whether the process was actually carried out in the initial design workshops | CS2; CS3; CS4; CS5; CS7; CS9; CS29                                 | NO                      | The scope of the vendor/consultant's change management tasks remained unclear. The input of project team members/SMEs to the impact analysis was not clarified adequately. These issues caused discussions and concerns and allowed interpretation by employees. For example, internal change management staff believed that the vendors had their own agenda and accelerated program which did not facilitate detailed employee involvement | CS3; CS4; CS5; CS7; CS9     |
| 30-Aug | CS14 | Concerns raised about resourcing estimates  |                 |                        |  |  |                         |  |                             |
| 31-Aug | CS16 | Concerns raised about resourcing estimates  |                 |                        |  |  |                         |  |                             |
| 2-Sep  | CS17 | Concerns raised about resourcing estimates  |                 |                        |  |  |                         |  |                             |
|        | CS18 | Reactions to business case being submitted without any acknowledgment of user concerns                              |                 |                        |  |  |                         |  |                             |
|        | CS19 | Concerns raised to leadership re process, estimates and lack of acknowledgement of user concerns                    |                 |                        |  |  |                         |  |                             |
| 5-Sep  | CS20 | Concerns raised; no changes made to documents   |                 |                        |  |  |                         |  |                             |
|        | CS21 | <b>Business case submitted without changes</b>  | Yes             | NO                     | Resourcing estimates did not clarify numbers of change management resources required. The Business Case did not include recommendations from internal experts, and did not address issues and concerns raised.   | CS1; CS4; CS7; CS9; CS10; CS11; CS12; CS14; CS15; CS16; CS17; CS18 | NO                      | The perceived vagueness of the consultant resource estimates was open to interpretation. Equally, the scope of some internal functions, e.g. change management, was open to interpretation.  | CS9; CS10; CS11; CS16; CS18 |
|        | CS22 | Submitted by consultants with no changes reflecting issues & concerns raised  |                 |                        |  |  |                         |  |                             |
|        | CS24 | Submitted without changes   |                 |                        |  |  |                         |  |                             |
| 6-Sep  | CS25 | Concerns again raised   |                 |                        |  |  |                         |  |                             |
|        | CS26 | Details from consultants re sources of estimates  |                 |                        |  |  |                         |  |                             |
|        | CS27 | <b>Refined business case submitted; still no changes reflecting user concerns</b>                                   | Yes             | NO                     | Resubmitted Business Case did not address any issues raised. The initial uncertainty about numbers, scope and resources remained   | CS19; CS21; CS25; CS26; CS27; CS28; CS30; CS32                     | NO                      | The initial vagueness remained, and interpretations were being made  | CS32; CS34; CS36            |
| 13-Sep | CS28 | <b>Business case doesn't reflect changes</b>  | Yes             | NO                     | Resubmitted Business Case did not address any issues raised. The initial uncertainty about numbers, scope and resources remained   | CS19; CS21; CS25; CS26; CS27; CS28; CS30; CS32                     | NO                      | The initial vagueness remained, and interpretations were being made  | CS32; CS34; CS36            |
|        | CS29 | Consultants confirmed no changes to be made   |                 |                        |  |  |                         |  |                             |
|        | CS30 | Concerns collated from various sources in organisation  |                 |                        |  |  |                         |  |                             |
| 14-Sep | CS31 | <b>Document submitted by consultants contrary to internal estimates</b>   | Yes             | NO                     | Project team members did not feel confident in the consultant estimates  | CS30; CS33; CS34; CS36   | NO                      | The initial vagueness remained, and interpretations were being made  | CS32; CS34; CS36            |
| 15-Sep | CS34 | Official notice that document would be submitted without issues, concerns raised by internal staff                  |                 |                        |  |  |                         |  |                             |
| 16-Sep | CS32 | <b>Submitted without changes from internal staff</b>  | Yes             | NO                     | Project team members did not feel confident in the consultant estimates  | CS30; CS33; CS34; CS36   | NO                      | The initial vagueness remained, and interpretations were being made  | CS32; CS34; CS36            |
| 19-Sep | CS36 | Message from CIO stopping all communications with consultants/vendors re business case                              |                 |                        |  |  |                         |  |                             |
| 21-Sep | CS35 | Vendor confirmed process was accepted by ELT/no changes   |                 |                        |  |  |                         |  |                             |
| 22-Sep | CS36 | <b>Short notice of submission.</b>  | Yes             | NO                     | Project team members were concerned about the short notice, particularly as their issues had not been addressed  | CS34; CS36   | NO                      |  | CS32; CS34; CS36            |

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Appendix 26. Decision Point Analysis –Case Study B

| #  | Occurrence<br>Task                              | Date   | Code  | Description | Decision<br>Point | Outcome  |
|----|---|--------|-------|-------------|-------------------|--|
| 1  | Project costs                                   | 1-Sep  | CSB1  |             | Yes               | Board approval to initiate project                                   |
| 2  | Earned Value Graph                              |        | CSB2  |             |                   |  |
| 3  | Issues & Objectives Register                    |        | CSB3  |             |                   |  |
| 4  | Risk Register                                   |        | CSB4  |             |                   |  |
| 5  | Costs   |        | CSB5  |             |                   |  |
| 6  | Scope Change Assessment                         |        | CSB6  |             |                   |  |
| 7  | Risks & Issues document                         |        | CSB7  |             |                   |  |
| 8  | SWIM replacement Executive Summary              |        | CSB10 |             |                   |  |
| 9  | SWIMS Systems replacement Director presentation |        | CSB9  |             |                   |  |
| 10 | Project Charter                                 | 1-Oct  | CSB8  |             |                   |  |
| 11 | SWIMS Project Management Plan                   | 1-Dec  | CSB11 |             | Yes               | Approval to re-commence SWIMS after review of NWM initiative options |
| 12 | BILL Project Management Plan                    | 1-Dec  | CSB12 |             | Yes               | Decision to convert project to BILL format, and continue             |
|    | <b>Discovery</b>                                |        |       |             |                   |  |
| 13 | Work Plan Discovery stage                       | 22-Mar | CSB13 |             | Yes               | Approval for scope revisions and project restructure                 |
|    | <b>Preliminary Design</b>                       |        |       |             |                   |  |
| 14 | Service works proposal                          | 27-May | CSB14 |             | Yes               | Approval for Service works as consultant                             |
|    | <b>Detailed Design</b>                          |        |       |             |                   |  |
| 15 | BILL program Recommendations re Execution Phase | 16-Mar | CSB15 |             | Yes               | Approval to begin BILL execution phase                               |
| 16 | Project Summary                                 | 17-Sep | CSB16 |             | Yes               | Approval to continue BILL project                                    |

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Appendix 27. Uncertainty & Equivocality Analysis – Case Study B

| Date   | Code  | issues  | Decision Point | Uncertainty decreased? | Evidence   | Source   | Equivocality decreased? | Evidence   | Source                 |
|--------|-------|---|----------------|------------------------|--|--|-------------------------|--|------------------------|
| 1-Sep  | CSB1  | Project costs                                   | Yes            | YES                    | Costs, by Phase, clear. Resources required, by Phase, confirmed and committed. Expected benefits defined   | CSB1; CSB2; CSB3; CSB5                                       | YES                     | Roles, scope and accountabilities clarified.   | CSB1; CSB2; CSB3; CSB5 |
| 1-Dec  | CSB11 | SWIMS Project Management Plan                   | Yes            | YES                    | Clear case for discontinuing NWMS involvement. Scope and resources clarified and committed. Decision not to apply policy of using SAP first clarified. Review and recommend Meter to Cash best practices. Validate Concept Brief findings. Required processes, configurations, documentations, schedules and requirements. Operate in a hosted facility during Execution Phase | CSB11; CSB2; CSB3; CSB4; CSB5; CSB6; CSB7; CSB10; CSB8; CSB9 | YES                     | SAP policy issue clarified. Role of consultants and vendors clear. Accountability clear. Validate Concept Brief findings. Clearly define all aspects of final solution. Confirm vendor's hosting capability. Confirm project success criteria.   | CSB11; CSB8            |
| 22-Mar | CSB13 | Work Plan Discovery stage                       | Yes            | YES                    | Tasks and responsibilities defined, scheduled and mapped. Delivery dates confirmed   | CSB1; CSB2; CSB13  | YES                     | Deliverables and outcomes defined, by task, and responsibilities clear.  | CSB1; CSB2; CSB13      |
| 27-May | CSB14 | Service works proposal                          | Yes            | YES                    | Consultant scope and accountability, role clarified  | CSB14  | YES                     | Technical and functional approaches and accountabilities clear   | CSB14; CSB11           |
| 16-Mar | CSB15 | BILL program Recommendations re Execution Phase | Yes            | YES                    | Rationale for name change explained. Key project and business drivers confirmed. Benefits quantified and schedule provided for achievement. Program dependencies clearly defined. Levels of testing defined and scheduled. Technology requirements and specifications clearly defined.   | CSB15  | YES                     | Business drivers and expected outcomes re-confirmed. Visions statement defined. Customer Care Strategy confirmed and explained. Scope redefined and explained in detail. Responsibilities by business function defined and communicated. Criteria for user acceptance clearly defined. | CSB15                  |
| 17-Sep | CSB16 | Project Summary                                 | Yes            | YES                    | Benefits achieved  | CSB16  | YES                     | Benefits achieved  | CSB16                  |

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### Appendix 28. Lessons Learned Analysis

| #  | Lesson Learned  | Project documents  | Code | L.L.    | Observation(s)   | Identified as an issue in interviews?   |
|----|---|--|------|---------|--|---|
|    | (from Post Completion Review - Project J)   | referenced   |      | Applied | Analysis   |   |
| 1  | In the future consider only experienced implementation partners for projects as large and complex as PROJECT JET.   | Ellipse 8 Project Background presentation (1202-03)  |      | NO      | The same implementation partner was chosen for this project as for the JET project.  | Yes. IBM and/or Ventex/Mincom mentioned negatively xx instances.  |
| 2  | In future have 1 organisation lead the implementation with input from the other in early project phases (planning and design) and utilise this as a template for the other organisation as they implement the solution.                     | Ellipse 8 Project Background presentation (1202-03)  |      | NO      | The project structure is led by SPARQ (ICT services provider), with Business Leads from each of the other two organisations. No one organisation has a "lead" role | Yes. Project governance, accountability, lack of clear leadership mentioned xx instances as negative issues |
| 3  | Suggest Joint Governance requires additional overhead and time for the Project Team suggest joint governance be limited to design phase.  | Ellipse 8 Project Background presentation (1202-03)  |      | NO      | Current project structure is presented as being relevant to all phases   |   |
| 4  | Need to define what common solution really means in some detail.  | Ellipse 8 Project: Change Management, Process Modelling and Training Engagement. Briefing Document |      | YES     | Being addressed in early Design Workshops  |   |
| 5  | Free up demands on sponsors so they have the time and focus to deliver their sponsor role fully   | Ellipse 8 Project Background presentation (1202-03)  |      | NO      | Identified as a Project Risk, and allocated to a business owner. No resultant action   | Yes. Project Governance mentioned xx instances as an issue  |
| 6  | Have an early clear strategy for what and how reporting will be delivered within an organisation  | Ellipse 8 Project Background presentation (1202-03)  |      | YES     | Reporting included as a critical success factor  |   |
| 7  | Utilise proven technologies when implementing new reporting tools   |  |      | NO      | The software version being implemented is untested   | Yes. Software version mentioned xx instances as an issue  |
| 8  | Be pragmatic about common solutions when business rules are different EG Labour Utilisation calculated in different ways between YY and XX.   |  |      | NO      |  |   |
| 9  | Make reporting a key deliverable and monitor progress throughout project life   | Ellipse 8 Project Background presentation (1202-03)  |      | YES     | Reporting included as a critical success factor  |   |
| 10 | Where processes have changed what people are required to do then significant attention and resources should be allocated to building an understanding - The principles of the new ways of working and how the system supports that new way. |  |      | NO      | It was initially stated that there would be no process design/redesign involved in the project.  |   |
| 11 | Where possible utilise staff for training and coaching and post go live support   | Ellipse 8 Project: Change Management, Process Modelling and Training Engagement. Briefing Document |      | NO      | The tender briefing document for Change Management/Training services requires a "train the trainer" strategy, including provision of trainers                      |   |
| 12 | Where possible predict support demand, develop robust ways to capture, categorise and prioritise issues from all levels and areas in the organisation and agree with sponsors and staff prior to go live.                                   |  |      | NO      | There was continuous, visible lack of support for the project manifested in a large number of requests by staff to be removed; visible lack of leadership buy-in.  |   |
| 13 | A Process Owner Forum will be established to provide self direction in relation to process ownership and for setting strategic direction for continuous improvement across all processes, aligned with Business Plans.                      | Ellipse 8 Project Background presentation (1202-03)  |      |         | Identified as a Project Risk, and allocated to a business owner  |   |
| 14 | The practical application of applying process ownership approval through the Process Integration Managers has evolved outside of the CAB process.   |  |      | NO      | No Change Advisory Board exists. User acceptance identified as a Project Risk, and allocated to a business owner.  |   |
| 15 | Organisationally actively manage the transition of staff  |  |      | NO      | A number of staff assigned to the project did not have substantive positions to return to.   |   |

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### Appendix 29. Initial themes – Case Study A

| Interview 1                        | Consolidated List                  | Input/Outcome | Predecessor                                | Successor   |
|------------------------------------|------------------------------------|---------------|--|---|
| Access to decision makers          | Access to decision makers          | Input         | Organisation structure; Decision process   |   |
| Decision authority                 | Decision authority                 | Input         | Organisation structure; Project governance |   |
| Consequences                       | Consequences                       | Outcome       | Decisions                                  | Decisions   |
| Participation                      | Participation                      | Outcome       | Decisions                                  | Decisions   |
| Software choice                    | Software choice                    | Input         |  | Assumptions/beliefs   |
| Assumptions/beliefs                | Assumptions/beliefs                | Input         |  | Change of government; Software support; Software choice; Executive attitudes              |
| Change of government               | Change of government               | Input         |  | Assumptions/beliefs; Software support   |
| Phases                             | Phases                             | Input         | Project governance; Organisation structure | Project governance; Organisation structure  |
| Benefits                           | Benefits                           | Input         | Decision drivers; Assumptions/beliefs      | Decision drivers; Assumptions/beliefs   |
| Software support                   | Software support                   | Input         | Assumptions/beliefs                        | Software choice   |
| Executive attitudes                | Executive attitudes                | Input         | Software choice                            | Assumptions/beliefs   |
| Lessons learned                    | Lessons learned                    | Input         | Decision Factors; Decision drivers         | Decision Factors; Decision drivers  |
| Project governance                 | Project governance                 | Input         | Decision authority; organisation structure | Decision authority; organisation structure  |
| Organisation structure             | Organisation structure             | Input         | Decision authority                         | Decision authority  |
| Consultants                        | Consultants                        | Input         | Organisation structure; Decision authority | Accelerated program   |
| Accelerated program                | Accelerated program                | Input         | Consultants                                |   |
| Employee understanding of software | Employee understanding of software | Outcome       | Decisions                                  | Decisions   |
| Timeframes                         | Timeframes                         | Input         | Consultants                                |   |
| Sales pitch                        | Sales pitch                        | Input         | Consultants                                | Quality   |
| Quality                            | Quality                            | Outcome       | Consultants                                |   |
|                                    | Decision priorities                | Input         |  | Decision Factors; Benefits; Consultants; Accelerated program; Timeframes; Sales pitch     |
|                                    | Decision drivers                   | Input         | Assumptions/beliefs                        | Assumptions/beliefs   |
|                                    | Decision process                   | Input         |  | Project governance; Organisation structure; Decision authority; Access to decision makers |
|                                    | Decision factors                   | Input         | Benefits; Consultants                      | Decision drivers; Assumptions/beliefs   |

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### Appendix 30. Themes Relationship Analysis – Case Study A

| Topic   | Level 1    | Level 2                    | Level 3                  | Level 4                 | Topic        | Level 1                | Level 2                                  | Level 3              |
|---------|------------|----------------------------|--------------------------|-------------------------|--------------|------------------------|--|----------------------|
| Drivers | Process    | Organisatio<br>n structure | Project<br>Governance    | Authority               | Consequences | Quality                | Executive<br>Attitudes                   |                      |
|         |            | Organisatio<br>n structure | Project<br>Governance    | Access                  |              | Quality                | Executive<br>Attitudes                   |                      |
|         | Priorities | Factors                    | Consultants              | Accelerated<br>process  |              | Quality                | Executive<br>Attitudes                   |                      |
|         |            |                            |                          | Timelines               |              | Quality                | Employee<br>understanding of<br>software |                      |
|         |            |                            |                          | Sales Pitch             |              | Quality                | Executive<br>Attitudes                   |                      |
|         |            |                            | Assumptions &<br>Beliefs | Change of<br>Government |              | Executive<br>Attitudes |  |                      |
|         |            |                            |                          | Software<br>Support     |              | Executive<br>Attitudes | Employee<br>understanding of<br>software | Demoralised<br>staff |
|         |            |                            |                          | Software Choice         |              | Executive<br>Attitudes | Employee<br>understanding of<br>software | Demoralised<br>staff |
|         |            |                            |                          | Benefits                |              | Executive<br>Attitudes |  |                      |
|         |            |                            | Lessons Learned          |                         |              | Executive<br>Attitudes |  | Demoralised<br>staff |
|         |            |                            |                          |                         |              |                        |  |                      |

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### Appendix 31. Initial Themes – Case Study B

| Interview 1                   | Input/<br>Outcome | Predecessor  | Successor   |
|-------------------------------|-------------------|--|---|
| Project governance            | Input             | Corporate governance                               | Accountability  |
| Accountability                | Input             | Project governance;role clarification              | Decision authority; role clarification  |
| Decision authority            | Input             | Role clarification; accountability                 | Decision process  |
| Role clarification            | Input             | Accountability                                     | Decision process  |
| Decision making               | Input             | Project governance                                 |   |
| Corporate governance          | Input             |  | Project governance  |
| Access to decision makers     | Input             | Project governance;Decision process                |   |
| communication                 | Input             | Project governance;Decision process                | Employee expectations; understanding of software; employee reactions/attitudes                      |
| decision processes            | Input             | Project governance                                 |   |
| socialisation                 | Input             | Decisions  | Executive attitudes; Employee expectations; understanding of software; employee reactions/attitudes |
| Decision inputs               | Input             | Decision process                                   | employee reactions/attitudes; employee expectations; quality  |
| politics                      | Input             | Corporate governance; Organisation culture         | Decision processes  |
| understanding of software     | Outcome           | Decisions  | employee reactions/attitudes; employee expectations   |
| consequences                  | Outcome           | Decisions  | trust   |
| decision factors              | Input             | Decision drivers                                   | Decision drivers  |
| lessons learned               | Input             | Decision Factors; Decision drivers                 | Decision Factors; Decision drivers  |
| defining needs                | Input             | Project governance                                 | Decision drivers  |
| policies                      | Input             | Corporate governance                               | Decision processes  |
| executive attitudes/reactions | Input             | Organisation culture; socialisation; communication | Assumptions/beliefs   |
| trust                         | Input             | Organisation culture                               |   |
| employee reactions/attitudes  | Outcome           | Decisions;Communications; Socialisation            |   |
| employee expectations         | Input             | Decisions;Communications; Socialisation            |   |
| culture                       | Input             | Corporate governance                               | Decision process  |
| benefits                      | Outcome           | Decision drivers                                   | executive attitudes/reactions   |
|                               | Input             | Decision Factors; Decision drivers                 | quality   |
|                               | Input             | Project governance                                 | Decision process  |
|                               | Input             | Project governance                                 | Decision process  |

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### Appendix 32. Theme Relationship Analysis – Case Study B

| Topic   | Level 1              | Level 2            | Level 3                  | Level 4                   |  | Topic    | Level 1              | Level 2                       | Level 3 |
|---------|----------------------|--------------------|--------------------------|---------------------------|--|----------|----------------------|-------------------------------|---------|
| Drivers | Corporate governance | Accountability     | decision authority       |                           |  | Outcomes |                      |                               |         |
|         |                      | Project governance | Role clarification       | Access to decision makers |  |          |                      |                               | Trust   |
|         |                      |                    | Vendors                  |                           |  |          |                      |                               |         |
|         |                      | Culture            | Decision processes       | Decisions                 |  |          | Consequences         | Employee expectations         |         |
|         |                      |                    |                          | Communication             |  |          |                      | Employee reactions/attitudes  | Quality |
|         |                      | Policies           | Defining needs           | Decision inputs           |  |          | Employee involvement | Socialisation                 |         |
|         |                      | Politics           |                          |                           |  |          |                      |                               |         |
|         |                      |                    | Business case            | Decision factors          |  |          |                      | Lessons learned               |         |
|         |                      |                    |                          | Benefits                  |  |          |                      |                               |         |
|         |                      | Customer           | Change/change management |                           |  |          |                      | Executive attitudes/reactions |         |

Appendix 33. Q.L.D. model Decision Point Analysis – Case Study A

| Date   | Code | Issues   | Decision point? | Uncertainty decreased? | Equivocality decreased? | Q.L.D. process  | Q.L.D. process - potential outcomes   |
|--------|------|--|-----------------|------------------------|-------------------------|---|---|
| 16-Aug | CS1  | Concerns raised about data gathering process   |                 |                        |                         |   |   |
| 18-Aug | CS3  | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |   |   |
|        | CS4  | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |   |   |
| 23-Aug | CS5  | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |   |   |
| 23-Aug | CS6  | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |   |   |
|        | CS7  | Response from consultants to some issues raised  |                 |                        |                         |   |   |
| 24-Aug | CS10 | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |   |   |
| 29-Aug | CS11 | Concerns raised with consultants about data gathering process                                      |                 |                        |                         |   |   |
|        | CS12 | Internal responses from organisation leadership re concerns raised                                 |                 |                        |                         |   |   |
|        | CS12 | <b>Decision made to continue irrespective</b>  | Yes             | NO                     | NO                      | 1. The requirement to include organisational learning may have identified Lesson Learned 1 from the JET Post Implementation Report, "In the future only experienced implementation partners for projects as large and complex as JET".<br>2. The consideration of ethical factors and issues would have identified the lack of response to the data gathering concerns raised.<br>3. The inclusion of organisational learning may have identified Lesson Learned 12 from the JET PIR, "Where possible predict support demand, develop robust ways to capture, categorise and prioritise issues from all levels and areas in the organisation and agree with sponsors and staff prior to go live". | 1. Implementation partners selected may have been different, with a different attitude.<br>2. The data gathering process may have been revised, potentially removing the perception that IBM were "skimming the surface".<br>3. The issues and concerns process may have been more robust, and issues may have been addressed or, at a minimum, acknowledged. |
| 30-Aug | CS14 | Concerns raised about resourcing estimates   |                 |                        |                         |   |   |
| 31-Aug | CS16 | Concerns raised about resourcing estimates   |                 |                        |                         |   |   |
| 2-Sep  | CS17 | Concerns raised about resourcing estimates   |                 |                        |                         |   |   |
|        | CS18 | Reactions to business case being submitted without any acknowledgment of user concerns             |                 |                        |                         |   |   |
|        | CS19 | Concerns raised to leadership re process, estimates and lack of acknowledgement of user concerns   |                 |                        |                         |   |   |
| 5-Sep  | CS20 | Concerns raised; no changes made to documents  |                 |                        |                         |   |   |
|        | CS21 | <b>Business case submitted without changes</b>   | Yes             | NO                     | NO                      | 1. The Q.L.D. processes may have decreased the levels of uncertainty and equivocality resulting from the perceptions of low quality of the submitted business case, by moving the decision to submit from Decision Point 1 to Decision Point 2.<br>2. The ethical consideration element of the Q.L.D. process may have caused relevant leadership to review lack of adequate response to concerns about the quality of the business case<br>3. The change management element of the Q.L.D. process may have identified a need for increased stakeholder involvement, and user buy-in activities.  | 1. The business case may have been more strictly reviewed before submission, and areas of uncertainty and equivocality identified and addressed.<br>2. The business case may not have been submitted in its original form.<br>3. Internal resources may have been more involved and engaged, resulting in less resistance and demoralisation.                 |
|        | CS22 | Submitted by consultants with no changes reflecting issues & concerns raised                       |                 |                        |                         |   |   |
|        | CS24 | Submitted without changes  |                 |                        |                         |   |   |
| 6-Sep  | CS25 | Concerns again raised  |                 |                        |                         |   |   |
|        | CS26 | Details from consultants re sources of estimates   |                 |                        |                         |   |   |
|        | CS27 | <b>Refined business case submitted; still no changes reflecting user concerns</b>                  | Yes             | NO                     | NO                      | 1. The ethical consideration element of the Q.L.D. process may have caused relevant leadership to review lack of adequate response to concerns about the quality of the business case<br>2. The Q.L.D. processes may have decreased the levels of uncertainty and equivocality resulting from the perceptions of low quality of the submitted business case, by moving the decision to submit from Decision Point 1 to Decision Point 2.  | 1. The business case may not have been re-submitted in its original form.<br>2. The business case may have been more strictly reviewed before submission, and areas of uncertainty and equivocality identified and addressed.   |
| 13-Sep | CS28 | <b>Business case doesn't reflect changes</b>   | Yes             | NO                     | NO                      | 1. The use of organisational learning may have identified Lesson Learned 5 from the JET PIR, "Free up demands on sponsors so they have the time and focus to deliver their sponsor role fully".   | 1. The Sponsor may have had the time to protect the organisation by confirming internal resource estimates, and deciding which estimates would be used.   |
|        | CS29 | Consultants confirmed no changes to be made  |                 |                        |                         |   |   |
|        | CS30 | Concerns collated from various sources in organisation   |                 |                        |                         |   |   |
| 14-Sep | CS31 | <b>Document submitted by consultants contrary to internal estimates</b>                            | Yes             | NO                     | NO                      | 1. The use of organisational learning may have identified Lesson Learned 5 from the JET PIR, "Free up demands on sponsors so they have the time and focus to deliver their sponsor role fully".<br>2. The change management element of the Q.L.D. process may have identified a need for increased stakeholder involvement, and the need for ownership of the project to be internal  | 1. The Sponsor may have had the time to protect the organisation by confirming internal resource estimates, and deciding which estimates would be used.<br>2. Internal resources may have felt more ownership of the project, resulting in decreased equivocality about project politics, agendas and drivers.  |
| 15-Sep | CS34 | Official notice that document would be submitted without issues, concerns raised by internal staff |                 |                        |                         |   |   |
| 16-Sep | CS32 | <b>Submitted without changes from internal staff</b>   | Yes             | NO                     | NO                      | 1. The use of organisational learning may have identified Lesson Learned 5 from the JET PIR, "Free up demands on sponsors so they have the time and focus to deliver their sponsor role fully".<br>2. The ethical consideration element of the Q.L.D. process may have caused relevant leadership to identify why changes from internal staff had not been acknowledged and included  | 1. The Sponsor may have had the time to identify why internal staff changes were ignored.<br>2. Recommended changes from internal staff may have been included  |
| 19-Sep | CS36 | Message from CIO stopping all communications with consultants/vendors re business case             |                 |                        |                         |   |   |
| 21-Sep | CS35 | Vendor confirmed process was accepted by ELT/no changes  |                 |                        |                         |   |   |
| 22-Sep | CS36 | <b>Short notice of submission.</b>   | Yes             | NO                     | NO                      | 1. The ethical consideration element of the Q.L.D. process may have caused relevant project leadership to review the drivers of the short notice of submission.   | 1. The submission timing and schedule may have been changed to allow more review and input. This may have decreased concerns about the politics of the short notice.  |

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### Appendix 34. Contribution of this thesis to existing research

| Authors/researchers  | Year | Area                         | Ethics | Logic | Org | Decision | Change | How this thesis relates to this research   |
|----------------------|------|------------------------------|--------|-------|-----|----------|--------|--|
|                      |      |                              |        |       |     |          |        |  |
| Rausch & Anderson    | 2011 | Quality of Decision-making   | X      | X     |     | X        |        | These authors suggest that the quality of LDM may be improved by how the data is collected and analyzed. This research contributes to their research by demonstrating that quality of decisions may be improved by how information is collected and analyzed. link12   |
| Woiceshyn            | 2004 |                              | X      |       |     | X        |        | Woiceshyn suggests that the significant impacts of decisions confirm that how decisions are made matters. She suggests a model where reasoning and intuition interact, and where moral principles are applied. This research contributes to Woiceshyn's work by expanding on her concept of applying moral principles to decisions through the ethics element of the Q.L.D. model and its supporting research.   |
| Lipshitz & Mann      | 2004 | Decision-making              | X      |       |     | X        |        | These authors suggest that LDM is a core leadership activity. They further suggest a framework for research into how effective leaders make the right decisions. This research adopts their contention that LDM is a core leadership activity, and expands the concept by further defining the elements and relationships of the LDM process.  |
| Sonenshein           | 2007 |                              | X      | X     |     | X        |        | Sonenshein (2007) argues that the "rationalist approaches" that suggest humans respond to ethical issues rationally and with moral reasoning ignore the issues of uncertainty and equivocality. He proposes a new approach that includes intuitive judgment, and that addresses uncertainty and equivocality. This research builds on Sonenshein's work by expanding on the roles of uncertainty and equivocality, and by proposing a process for decreasing them in LDM.  |
| Patzer & Voegtlin    | 2010 |                              | X      | X     |     | X        | X      | These authors address the issue of the changing nature of leadership resulting from recent global scandals and crises. In the context of socially responsible leadership, they try to address the issue of what "good leadership" is in this new environment. They contend that, in spite of the ethical and moral issues facing leadership, it remains an under-researched field. Their stated goal is to improve existing dialogue between the various fields and strands of related research. This thesis contributes to this improved dialogue by expanding on existing related research, and by adding to the definition of what might constitute "good leadership".  |
| Boal & Hooijberg     | 2000 | Leadership and Ethics        | X      | X     | X   | X        | X      | These authors are concerned with strategic leadership. They present a discussion of the New and the Emerging Theories of leadership, including examples. They then present their approach to integrating them into a revised theory of strategic leadership. They propose that this revised approach to strategic leadership comprises three elements of absorptive capacity (ability to learn), capacity to change, and managerial wisdom (understanding others' emotions and sensitivities). This thesis supports the revised approach to strategic leadership. Further, it suggests that, as a result of the changing nature of leadership, strategic leadership is becoming increasingly important for organizations. Moreover, the consequences of the increasingly large and complex change initiatives, and the impacts of their failures, also demands an increase in strategic leadership capacity in change management.  |
| Rosenthal            | 2009 |                              | X      |       |     | X        |        | Rosenthal discusses leadership in the context of the public sector. He suggests that leadership is an exercise in practical ethics, and contends that ethics is central to leadership and to LDM. This thesis adopts Rosenthal's view of ethics as central to LDM.   |
| Peretz et al         | 2011 |                              | X      |       |     | X        |        | These authors suggest that "serving two masters" creates ethical challenges in the form of paradoxical injunctions. This contradiction can be addressed through a new role of a manager; the responsible manager applying ethics in practice. This research contributes to their work by suggesting a process for applying ethics in LDM practice.   |
| Ciulla               | 2006 |                              | X      | X     |     | X        |        | Ciulla (2005) contends that, " <i>The ethics of the ends of leadership require an understanding of LDM, history, culture and a variety of other factors.</i> " Consequently, she argues that an approach to leadership ethics must encompass the deontological, teleological and virtue ethics views. Further, she contends that leaders must be more successful at achieving the same moral standards as the rest of society. This thesis adopts Ciulla's view of a combined philosophical approach to discussing leadership ethics. Moreover, this thesis incorporates her stance on moral standards for leaders by the focus on ethical considerations in LDM.  |
| Zhu et al            | 2004 |                              | X      | X     |     | X        |        | These authors propose that leader authenticity, which they define as consistency between intent and action, impacts the relationship between ethical leader behaviour and employee outcomes. These outcomes include trust in leaders. This research supports the concept of leader authenticity by proposing a process for including ethical behaviour, LDM, that would enhance leader authenticity.   |
| Higgs & Rowland      | 2011 | Ethics in change leadership  | X      |       |     |          | X      | These authors researched the impact of leadership behaviour on the success of implementing change. Their research identified the positive impact of a leadership style based on facilitating and engaging in implementing change. They also identified that leader-centric behaviour had an adverse impact on change. This research supports Higgs & Rowland's work by proposing a LDM model that requires an ethical element which results in increased engagement, achieved by decreasing levels of uncertainty and equivocality in the process.   |
| Uday Bashkar         | 2003 |                              | X      |       |     |          | X      | These researchers studied perceptions of ethicality in change management. They demonstrated a difference in perceptions of what constitutes ethicality. Part of their research included analysis of the role of leadership in change management. This research contributes to, and expands on, the work of these researchers in the area of the role of leadership in change initiatives.  |
| By & Burnes          | 2012 |                              | X      |       |     |          | X      | In their Introduction to the 12 <sup>th</sup> edition of the Journal of Change Management (2010), these authors suggest that there is an increased requirement for ethics and values in leadership in change management. They reference the recent business scandals, and the dominant environment of profits before people, as indicative of unethical leadership behaviour. They suggest that, although the argument for an ethical foundation for change is not new, there is an urgency resulting from the recent situations. This research contributes to the work of By and Burnes by defining the role of ethics in LDM in change management, and by proposing a model for operationalizing that role.  |
| Garcia-Morales et al | 2009 | Organisational Learning      |        |       | X   |          |        | These authors focus on the role that perceptions of a CEO can have on organizational learning. Specifically, they show through their research that a stable environment, shared vision and personal mastery all positively impact the effectiveness of organizational learning. This research supports their work by demonstrating the relationship between LDM and the application of organizational learning processes.  |
| Gronn                | 1997 |                              |        |       | X   |          |        | Peter Gronn argues against leadership prototyping and its assumed role in maintaining organizational culture. Rather, his research suggests that an expansion of leadership types is more beneficial to organizations. Part of his argument is that only by expanding leadership types can an organization challenge the status quo and evolve a supportive culture. This research complements Gronn's by suggesting that leaders must be able and willing to challenge cultural status quos to apply organizational learning.   |
| Carmeli & Sheaffer   | 2008 |                              |        |       | X   |          |        | In their 2008 article in The Journal of Applied Behavioural Science, these authors address two issues in organizational learning; the role of leadership in applying organizational learning, and how these learning behaviours impact the organization's capacity to adapt. Their research supports their contention that leadership attitude and behaviour impacts the organization's ability to learn from failures. This research complements the work of Carmeli & Sheaffer by further defining the role of leadership in organizational learning, specifically in the LDM process.   |
| Armenakis & Bedeian  | 1999 | Change management            |        |       |     |          | X      | Armenakis & Bedeian's (1999) research provides an analysis of change approaches, and of their classification as process, content or contextual-based. Moreover, their research presents a valuable foundation for practitioners to develop criteria for selecting a change approach. This thesis supports and enhances these authors' research by expanding the analysis of change approaches to include processes for quality LDM.  |
| Coldwell             | 2010 | Leadership & decision-making | X      | X     |     |          | X      | In his paper to the 1 <sup>st</sup> International Conference in Responsible Leadership in Pretoria in 2010, Coldwell suggested that organizational restrictions, in the form of rules, practices, expectations and climates prohibit responsible leadership behaviour. He maintains that this behaviour is affected by factors including moral orientation, level of moral development, degree of managerial freedom and corporate ethical climate. He further suggests that the inappropriate representation or use of ethical climate can eliminate the possibility of responsible management behaviour. This thesis supports Coldwell's contentions by acknowledging the influence of ethical climate on the application of LDM and of organizational learning. Further, this research contributes to Coldwell's heuristic by proposing a LDM process that, when applied, imposes a degree of management freedom by intentionally formalising the inclusion of ethical considerations in LDM. |



# Appendices

## Appendix 35. Slides used in senior leadership workshop Slide 1



### The WV Change Framework



Adapted from Brown et al, 2012

# Appendices

## Appendix 35. Slides used in senior leadership workshop Slide 2



# Appendices

## Appendix 35. Slides used in senior leadership workshop Slide 3



### Decision-making Worksheet

Name:

Date:

| Issue(s)  | Impacts  | Consequences   | Acceptable? | What additional information do I need?   | What am I still unclear about?  |
|---|--|--|-------------|--|---|
| <p>1. P2. Leverage people for better impact</p> | <p>1.1 Increased mobility of staff</p> <p>1.2 Increased skills and experience base</p> | <p>1.1.1 Potential recruits may not wish to travel</p> <p>1.2.1 Some staff may become more attractive to other employers</p> |             | <p>1.1.1 Limits on frequency and duration of travel</p><br><br><br><br><ul style="list-style-type: none"> <li>➤ Facts</li> <li>➤ Ethics               <ul style="list-style-type: none"> <li>- Organisational politics</li> </ul> </li> <li>➤ Organisational learning</li> </ul> | <p>1.1.1 Developmental processes for staff</p> <p>1.2.1 Will staff retention policies change?</p> |