The Role of Vision as a Critical Success Element in Project Management

A Thesis
Submitted in partial completion of the requirements for a
Doctor of Project Management

Royal Melbourne Institute of Technology University
School of Property, Construction and Project Management

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Submitted By
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DRAFT v.08
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Certification

I, Dale Christenson, do hereby certify for this thesis that:

a) Except where due acknowledgement has been made, the work contained in this thesis was completed by myself alone.
b) The work has not been submitted, in whole or part previously for any other academic award.
c) The content of the thesis is the result of the work which has been carried out since the official commencement date of my enrolment in the Doctor of Project Management programme.
d) That the editorial work, both paid and unpaid, has been acknowledged.

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March 26, 2007

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Abstract

The current Critical Success Factors (CSF) identified in the literature are necessary but not sufficient to explain all project success.

The author has observed during his 10 years working in the project management field, projects where all of the apparent critical success factors were present yet the project still was not deemed a success at its conclusion. Conversely the author has also observed projects where most of the critical success factors have not been present at one time or another during the project's lifecycle yet the project was deemed a success at its conclusion. The author also noticed that many of these projects had or lacked a project vision and surmised this may be a key factor in the project's success or failure. This raised and formed the study's research question to determine, "How does the effective development and communication of a 'project vision' impact project outcomes?" The qualitative research design selected to investigate this question was a multiple case study method conducted within a public service organization.

The findings of the multiple case studies strongly suggest that a project's 'vision' is a critical success factor to successful project outcomes. As such, the projects examined represented a continuum of change projects from changes to business practices to holistic cultural change (where the desired end state was not fully known). The project vision was found to be instrumental in signalling change to all stakeholders. Similarly, the project vision was found to be critical in knowledge management projects where the purpose is to share new, best or next best practices. The research also shows that the maintenance of a project vision has significant impacts on the successful completion of the project, especially on its timeliness for completion due to enhanced decision making. A project vision needs to be a shared vision of all stakeholders and the project champion, sponsor, and manager all have a role in communicating and maintaining the project vision throughout the lifecycle of the project.

Lastly, the study highlights four emergent issues that require further investigation but for the moment may be risks that need to be managed or opportunities to be exploited. These were the benefits of an incremental or phased approach, the need for sustainment, the necessity of addressing horizontality and the imperative of vision champions.

The thesis also identifies areas of further research, improvements to the research design used and the personal learning of the author candidate during this research project.

Key Words: Vision, project management, leadership, critical success factors, project success, incremental approaches, sustainment and vision champions.

Acknowledgement

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I also want to acknowledge the BC Public Service Agency for their willingness to give me the necessary support and time to complete this thesis.

I also want to acknowledge and give my heartfelt gratitude to Janice, who gave me the strength to continue as you were my inspiration that challenged me to dream the impossible dream – you were my vision.

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List of Symbols, Abbreviations and Nomenclature

ACRONYM	DESCRIPTION
AI	Artificial Intelligence
ADM	Assistant Deputy Minister
APM	Association of Project Management
CGPMUG	Cross Government Project Management Methodology User Group
CIO	Chief Information Officer
COE	Community of Excellence
COI	Community of Interest
COP	Community of Practice
CSF	Critical Success Factors
DPM	Doctor of Project Management
DRIVES©	Vision Model see Chapter 3
ESI	European Software Institute
IM	Information Management
ISD	Integrated Service Delivery
IT	Information Technology
JIMS	Justice Information Management System
KM	Knowledge Management
MPDQ	Managerial Position Description Questionnaire
PhD	Doctorate of Philosophy
PIR	Post Implementation Review
PM	Project Manager
PM-BOK	Project Management Body of Knowledge Guide
PM-COE	Project Management – Center of Excellence
PMO	Project Management Office
PMP	Project Management Professional
PRINCE	**Pr**ojects **in C**ontrolled **E**nvironments
PSO	Project Support Office
SEI	Software Engineering Institute – Carnegie Mellon
TQM	Total Quality Management

Chapter One – Introduction

Introduction

This chapter will outline the context of the thesis and more importantly set out the scope of the research that is discussed throughout this thesis including the research problem being investigated, the research questions to be answered and the research propositions that are being proffered. The chapter also outlines the format and organization of the thesis in a way that is hopefully intuitive to the reader. The chapter will end with a summary for which the purpose of the research and the manner in which it will be reported will be clear to the reader. Lastly, this chapter will provide a transition toward the content of chapter two which investigates in more depth the corollary and collateral context issues of management, leadership, knowledge management, change management and critical success factors. Now, let us turn to the background in which the thesis was developed.

Background

The thesis is traditionally the final product of an academic program that the candidate (Appendix L) produces to provide evidence of the mastery of a topic area, the ability to conduct research and build theory, the ability to clearly communicate ideas and to contribute towards the discipline of the profession relevant to the area of investigation. This thesis is no different but the academic program from which it derives is unique as it is a professional doctorate in project management (DPM) (Appendix M). The thesis will show a mastery of both broad and specific knowledge as it relates to the general area of project management and more specifically to what the author will argue is a critical element of project management; project vision. Lastly, judgement on the ability to clearly communicate will be left to the examiners and readers of this dissertation.

A review of the current literature on management and leadership strongly suggests a need to have a strong vision as a critical element to achieving business results and successful business outcomes (Lipton 2003, p. 17). As

noted by Johns (1998) and Kwak and Ibbs (2000) organizations are turning to projects to achieve many of their strategic planning goals and objectives and, an unmistakable trend in international companies has been toward the Project Management Method (Johns 1998 p; Kwak and Ibbs 2000). Given the importance of an organizational vision to companies and the trend towards using project management methods, it stands to reason that a project vision would be no less important to achieving project results and successful project outcomes. Therefore, it is a worthwhile research endeavour to examine the role of project vision in achieving successful project outcomes that in turn support overall organizational goals. To date, there is a paucity of academic attention to the issue of project vision or project leadership as seen in the Table 2 later in this chapter.

A vision tells us what the final results will look like and assists us in knowing when a project is finished. A review of project management literature supports the criticality of this particular aspect of project management. As Lewis (2001. p. 117) explains: "if everyone does not agree on the vision, each person will try to achieve the outcome he or she imagines, *(often)*[1] with disastrous results". Therefore, the creation of a common and shared project vision is an important guide to future decision making, to manage project scope and to direct project activities towards benefit realization. Without this, a project is at risk of failure from the outset. However, the development of the project vision is not well understood within the project management discipline. This thesis contributes toward the project management literature and discipline by investigating the criticality of a project vision as well as suggesting useful means to create and maintain a project vision that supports successful project outcomes. It does not attempt to add to the literature related to management or leadership but to the literature related to the construct of 'project vision.'

Given the possible import of a project vision, the thesis investigation will use a

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[1] Italics added

qualitative theory building research methodology. Yin (1984) posits that for exploratory research that attempts to determine "how" and "why" that case study methods are most appropriate. Myles and Huberman (1994) and Lofton (1971) also point out that case study methods are appropriate when one wants to conduct thematic analysis of qualitative data.

A model of project vision will be established and tested. Finally, a workshop will be developed to demonstrate how a project vision can be effectively created, communicated and maintained.

The Discipline

One can argue that projects have been undertaken by man from the beginning of time and point to exceptional construction accomplishments such as the pyramids and the Great Wall of China but even earlier with campaigns such as the great crusades or cross ocean voyages (Verzuh 1999), however, most (Meredith and Mantel 1995; Yeo 1996, p.7) point to the genesis of "modern project management……..is said to have begun with the Manhattan Project (1939-1945) that developed the atomic bomb."

The formal study of project management is even more recent and gained prominence with identifiable and unique bodies of knowledge (e.g. Project Management Body of Knowledge (PMI 2004) Prince2 (Office of Government Commerce 1989) and Association of Project Management (APM 2004) Body of Knowledge.

A body of knowledge consists of a number of areas of subject matter that individuals wishing accreditation need to master. The Project Management Body of Knowledge (PMI 2004) is no different and has the following nine areas of knowledge:

Integration Management	Cost Management	Communications Management
Scope Management	Quality Management	Risk Management
Time Management	Human Resource	Procurement Management

The professional body of knowledge approach is built on techniques and skills but the maturation of any profession requires grounded theoretical research. Such research has often been found in graduate level academic programs and this is true in the project management context as well. Much of this research has been published in two major journals dedicated to project management; The International Journal on Project Management and the Project Management Journal.

Since the development of the bodies of knowledge, practitioners and academics alike, have been studying and reflecting upon practices in their discipline. Typically, when looking at best practices in project management, one can find examinations of practices such as methodologies, techniques, tools, etcetera (hard skills) or in people or relationship building skills (soft skills) (Daniel 1990; Toney and Powers 1997; Loo 2002). In academic ranks Crawford, Pollack and England (2006) have identified the trends of the last ten years. This work included the work of seven other studies that have looked at trends in project management and acknowledges that trends have changed over time. Currently the emphasis seems to be shifting to "project evaluation and improvement and strategic alliance" (Crawford, Pollack et al. 2006, p. 14). This thesis seems timely in this regard as the study is certainly dealing with a concept that has potential to improve project management success.

Another indicator of the discipline's evolutionary progression is the development of maturity models that measure the relative maturity of project management methodologies and practices within individual organizations. The development and use of maturity models is widespread but finds its genesis in the software and defence industry in the mid 1980s. In the last decade a number of firms have turned to maturity models to attempt to measure and manage competitive

advantage. The idea is that as one matures the use of project management within the organization, one will become more competitive (Hartman and Skulmoski 1998; Jugdev and Thomas 2002). Therefore, the Project Management Maturity Models (PMM) have become popular tools to measure a firm's project management methodology and processes. They also provide a benchmark to compare one firm's performance against another (Dinsmore 1998).

PMM is both a model and method to measure the extent to which project management processes are defined, implemented, managed and controlled (Sawaya and Trapanese 2004). One of the first maturity models was developed by Software Engineering Institute (SEI) as the Capability Maturity Model (CMM). Schlicter (2001, p.5) defines the term maturity as the development of, "capabilities that must be grown to produce repeatable success in project management" and this explains why these models are sometimes referred to as capability maturity models (Hartman 2000). White and Yosua, (2001, p. 1) explain, "obtaining predictable results *(in software development)* [2] is a real challenge." So too is the mission of project management in its continuous quest for repeatable results through repeatable processes and structures. The underpinnings of such a quest is likely linked to the works and principles of Deming (1982), Juran (1979) and Crosby (1979) who were pioneers in the process improvement field. The principles of improvement attempt to set out a context where, over time, successful outcomes become more efficient and predictable. Similarly, the many maturity models that have emerged use and measure such broad concepts as, repeatable processes (SW-CMM 1984), common processes (Kerzner 2001), managed effectiveness (OPM3 2003), continuous improvement (Kerzner 2001).

It is typical of maturity models developed by both academics and industry professionals to have a five-step process of maturity as seen in the following table.

Table 1 – Maturity Models

Model	Level 1	Level 2	Level 3	Level 4	Level 5
SEI – CMM	Initial	Repeatable	Defined	Managed	Optimizing
PM Solutions	Initial Processes	Structured Processes	Organizational Standards	Managed Processes	Optimizing Processes
Berkely	Adhoc	Planned	Managed	Integrated	Sustained
Kerzner	Common Language	Common Processes	Singular Methodology	Benchmarking	Continuous Improvement
Micro Frame	Ad-hoc	Abbreviated	Organized	Managed	Adaptive
SMART	Unrecognized Project managers	PM training, standards and formal recognition of PM in the organization			

Generally the five levels display the following characteristics as adapted from Dinsmore (1998).

Level 1 – Initial
- The processes are adhoc
- Little management awareness

Level 2 - Repeatable
- Abbreviated
- Some basic processes in some projects
- General management support

Level 3 - Refined
- Organized
- Standard processes
- Management has institutionalized processes in expected business practices

Level 4 - Managed
- Integrated
- Processes are integrated in wider organizational practices
- Management requires compliance

Level 5 - Optimized
- Sustained
- Processes are continuously reviewed
- Processes are continuously improved

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[2] text in italics added

The value of maturity models does not rest in their ability to assess an organization's general project management maturity but in their ability to provide a plan for future development of project management within the organization. The assumption underlying the maturity models is that the more advanced one becomes in project management the more competitive one will be in the market. Such an assumption may be valid for a time but it may also be fleeting. Jugdev and Thomas (2002, p. 4) rightfully point out that PMM, "captures explicit, codified practice (know-what), but do not include the intangible assets of project management (know-how)." While the importance of these intangible assets should be considered it does not limit the value of the PMM if used to improve the explicit practices and processes of project management. White and Yosua (2001, p. 2) point out that, "what is important is that an organization has a vision and is moving to improve the capability of project management with very targeted efforts."

Project management has progressed considerably since its recognized genesis in the1940s. Advances have been made in the field through various best practices and enhanced maturity. Also academically, several PhD programs in engineering have had project management specialties (e.g. University of Calgary) but as a professional discipline another type of doctoral program was imagined combining both course work and research into what has become known as the professional doctorate.

The Literature

Given the research area of interest in "project vision" and the structure of the DPM program, one is intuitively guided to various areas of literature. Vision is a leadership concept and one needs to search the literature for the topics of "leadership" and "vision" for which there is a plethora of books, articles and associated documents. When searching the two major project management journals for the topics of "leadership" there is a growing body of research and literature in the last fifteen years. However, when searching the same journals

for comment on "project vision," there is a paucity of research or comment as seen in the following table. Chapter three (pages 98 to 116) also provides a thorough review and discussion of the current literature related to project vision showing the lack of documented thought on this topic to date.

Table 2 - Search of Leadership and Vision in the PM Literature

Year	Project Management Journal (EBSCO Default Fields)			International Journal of Project Management (Science Direct)		
	Leadership Citations	Vision Citations	Total Citations	Leadership Citations	Vision Citations	Total Citations
2005	3		3	3		3
2004	3*	2*	5	4		4
2003				3		3
2002				2		2
2001	3		3	3		3
2000						
1999	3		3			
1998	1	1	2		1	1
1997				2		2
1996				3		3
1995				2		2
1994				2		2
1993				1		1
1992						
1991				2	1	3
1990				2	1	3
Subtotals	13	3	16	29	3	32

* 1 is Author's own article

Given the lack of focus on this possibly critical issue, the author has reviewed the topic of "project vision" juxtaposed to three of the main learning streams of the DPM program (one is self selected by the candidate author), namely leadership and management, knowledge management and change management. When investigating these major areas of work, one begins to enquire about other areas and this creates a need to define the terminology and nomenclature of the various areas of interest. As such, chapter two of this thesis is dedicated to creating and clarifying this expanded context but only to a high level sufficient to create an understanding of the key concepts in the areas of knowledge

management, change management, management, leadership and critical success factors.

The diagram below provides a depiction of a mind map to the various areas of literature one might investigate.
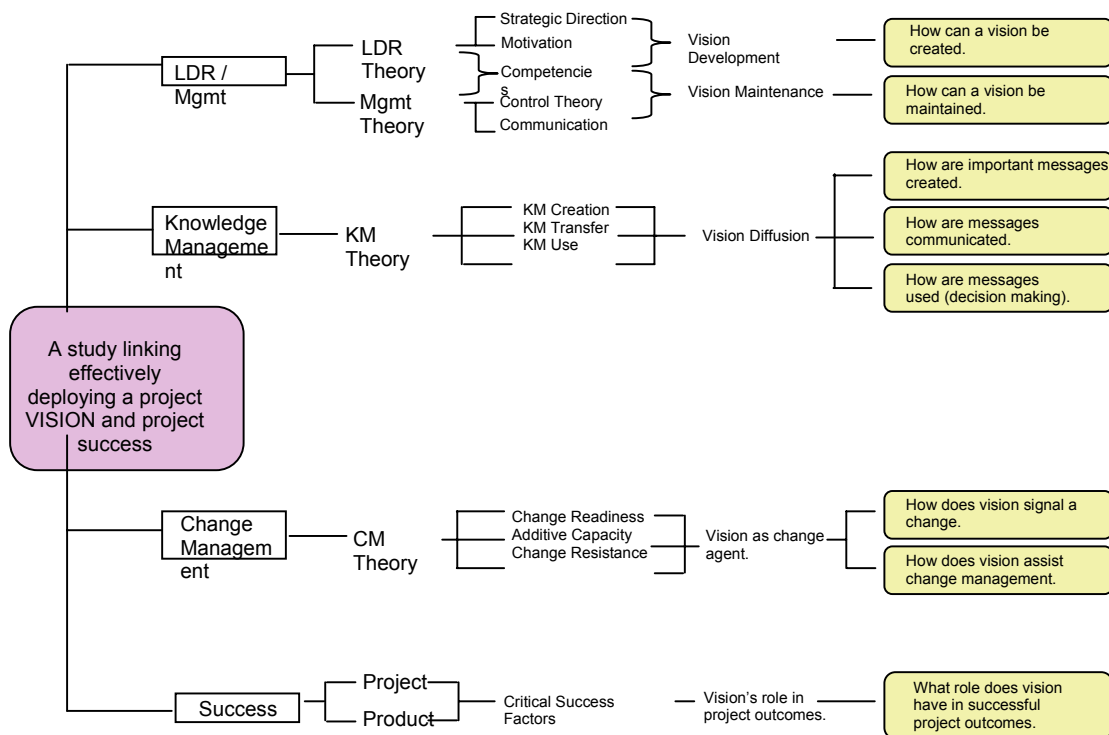
Figure 1 – Mind Map for Literature review

One finds in the general leadership literature (Kotter 1995; Mintzberg, Ahlstrand et al. 1998; Senge, Kleiner et al. 1999; Lipton 2003) that a vision can be motivational and directional. When turning to areas of motivational theory and strategic planning but again we find little in the areas related to our subject of project vision except for the works of Lewis (2001) and Briner et. al (1996). One finds in the general leadership literature what one knows intuitively that a vision must be created and communicated (Lipton 2003). The creation of a project vision is given no attention in the main project management journals except for the author's own article with Walker (Christenson and Walker 2004). The communication of a vision leads one into the field of knowledge management and there is a complimentary relationship between vision and knowledge

management.   In order to have an effective knowledge management program one needs to have strong knowledge vision. Part of the effective use of a vision requires knowledge management structures to effectively communicate the vision. However, in relation to the communication or a project vision one is again left only with the author's own article with Walker (Christenson and Walker 2004) and several articles related to the champion's role in ICT innovation projects (Howell 2005; Coakes 2007).

When considering change management, the other major area of program learning, one can argue that change management and vision are inextricably linked. The general literature supports this proposition with the works of Kotter (1996) and Senge et al. (1999) to mention just a few.   General references to change management are numerous with significant works completed by Bridges (2003) and Ackerman and Anderson (2001). When looking for direct references related to project change management there are also numerous articles as seen in the following table and a thorough covering of the topic in Connor and Harrington (2000). However, the consideration of project vision and change management seems yet to have been contemplated as seen in Table 3.

Lastly, the criticality of the vision construct is in its influence as a success factor for organizations. Vision has also been identified as a priority competency for leaders of organizations (Elango and Rowe 2005). While there is a plethora of references for vision's importance within the organization, there is only cursory mention of vision in relation to projects as evidenced in table two above. A review of the literature finds few scholarly writings on the topic with a few notable and recent exceptions (Clark and Fujimoto 1988; Lewis 2001; Lynn and Akgun 2001; Christenson and Walker 2004).[3]

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[3] For a fuller review and analysis see Chapter three.

Table 3 – Literature on project change management and project vision

Year	Project Management Journal (EBSCO Default Fields) Change Management Citations	International Journal of Project Management (Science Direct) Change Management Citations	Total Citations	Project Management Journal (EBSCO Default Fields) Project Vision and Change Management Citations	International Journal of Project Management (Science Direct) Project Vision and Change Management Citations	Total Citations
2005	2	2	4			
2004		6	6			
2003		2	2			
2002		2	2			
2001	1	1	2			
2000		1	1			
1999		1	1			
1998		4	4			
1997		3	3			
1996						
1995						
1994						
1993						
1992						
1991						
1990						
Subtotals	3	22	28	0	0	0

When considering projects there is no mention of vision as a critical success factor. Some authors (Baker and Murphy 1987; Lewis 2001; White and Fortune 2002; White and Fortune 2006) do point to the need of having goals and objectives but no one suggests, nor is there evidence that anyone has considered that a project vision is a critical success factor for achieving successful project outcomes.

Given the criticality of vision to an organization in its ability to promote strategic objectives, the author's experience and academic learning leads one to wonder if the same criticality may be present in the project context and chapter three examines the construct of vision further. Such curiosity and speculation leads one to a more rigorous examination of the issues related to project management vision.

Research Study and Purpose

The purpose of this study is to advance the current practice of project management, incrementally advance current project management theory and to explore the apparent gap that exists between the literature and current practice. The contemporary literature reflects a considerable effort to discover and test critical success factors for projects but a scarcity of documented thought on the topic of project vision. In keeping pace with the research to date the author has observed all of the documented critical success factors in a variety of projects. The author has observed during his ten years working in a project management field, projects where all of the apparent critical success factors were present yet the project still was not deemed a success at its conclusion. Conversely, the author has also observed projects where most of the critical success factors have not been present at one time or another during the project's lifecycle yet the project was still deemed a success at its conclusion. This raises and forms the studies research problem.

Research Problem

The current Critical Success Factors (CSF) identified in the literature are necessary but not sufficient to explain all project success.

During the course work of this doctoral program and upon reflection, the author has identified another variable or critical success factor that may impact upon the success of projects. This reflection suggests that the construct of "project vision" has a role in project success. This reflection and absence of academic investigation has led us to proffer our research question.

Research Question

The research question for the thesis is "How does the effective development and communication of a "project vision" impact project outcomes?" In Eisenhardt's (1989. p. 536) seminal paper on case study research, she suggests that, "the investigators should formulate a research problem and possibly specify some

potentially important variables, with reference to extant literature. However, they should avoid thinking about specific relationships between variables and theories as much as possible, especially at the outset of the process." To this end, this research has reviewed the extant literature and has identified a possible construct but the latter remained tentative as it was based only upon reflection and needed further investigation.

Research Design

The research design selected was a multiple case study method. (See Chapter four for a fuller description and justification). Eisenhardt (1989) supports taking different views of the cases to discover cross-case patterns. While this was done in the analysis, it was also built into the front end of the research in the form of research propositions. The DPM program requires that the research thesis consider four areas of inquiry as identified by Bourne and Walker (2003),

1. Project management/leadership,
2. Knowledge management and innovation diffusion,
3. Project management ethics and procurement, and
4. Advanced Project Management Practice (guided individual research for which the author chose to investigate change management)

Given these four program focuses, the research question is extended through three research propositions.

Research Propositions

1. Project vision is an important factor in successful outcomes of change management projects.
2. Effective communication and maintenance of knowledge relating to a project vision will have positive impact on expected project outcomes.
3. Projects represent change and the project vision is an important factor in signaling the change.

The three propositions directly relate to the four areas of inquiry above and form a sufficient and robust span of investigation as seen in the following diagram. Together the areas of enquiry form a response framework to address the study's

research question. The other subsequent benefit of this approach is the study's contribution to parallel disciplines and to components that operate within the larger context of project management.

How Does Project Vision Impact Projects Outcomes	
Area of Inquiry	**Research Propositions**
Project management/leadership	Project vision is an important factor in successful outcomes of knowledge management projects
Knowledge management and innovation diffusion	Effective communication and maintenance of knowledge relating to a project vision will have positive impact on expected
Change Management	Projects represent change and the project vision is an important factor in signalling the change

BREADTH (vertical, left axis)

DEPTH (horizontal, bottom axis)

Figure 2 – Response Framework to the Research Question

The approach as depicted in the above diagram has the advantage of guiding the research towards greater breadth and depth of response to the research question.

As stated earlier, one of the key goals of the DPM is to advance the discipline of project management both theoretically to gain a better understanding of relevant issues but also pragmatically to advance the practice of project management in a meaningful and substantive way. To achieve both these objectives the following model will be used.

Case studies may show the importance of vision as a critical success factor in projects
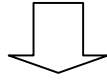
If, vision is an essential leadership construct for projects and organizations. Leaders need to be able to develop and communicate a shared vision for their projects, business units or organizations
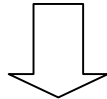
Develop a workshop to create awareness of the need for a project vision and skills to develop a project vision
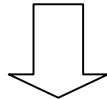
Evaluate the course (satisfaction)

Figure 3 - Theory Building and Application Model

Road Map to the Thesis

Eisenhardt (1989) provides an excellent eight-step structure for a thesis that applies an inductive approach to building theory from case study research. Her eight-step model has been adapted and a ninth step for practical application has been added to form the road map for this thesis.
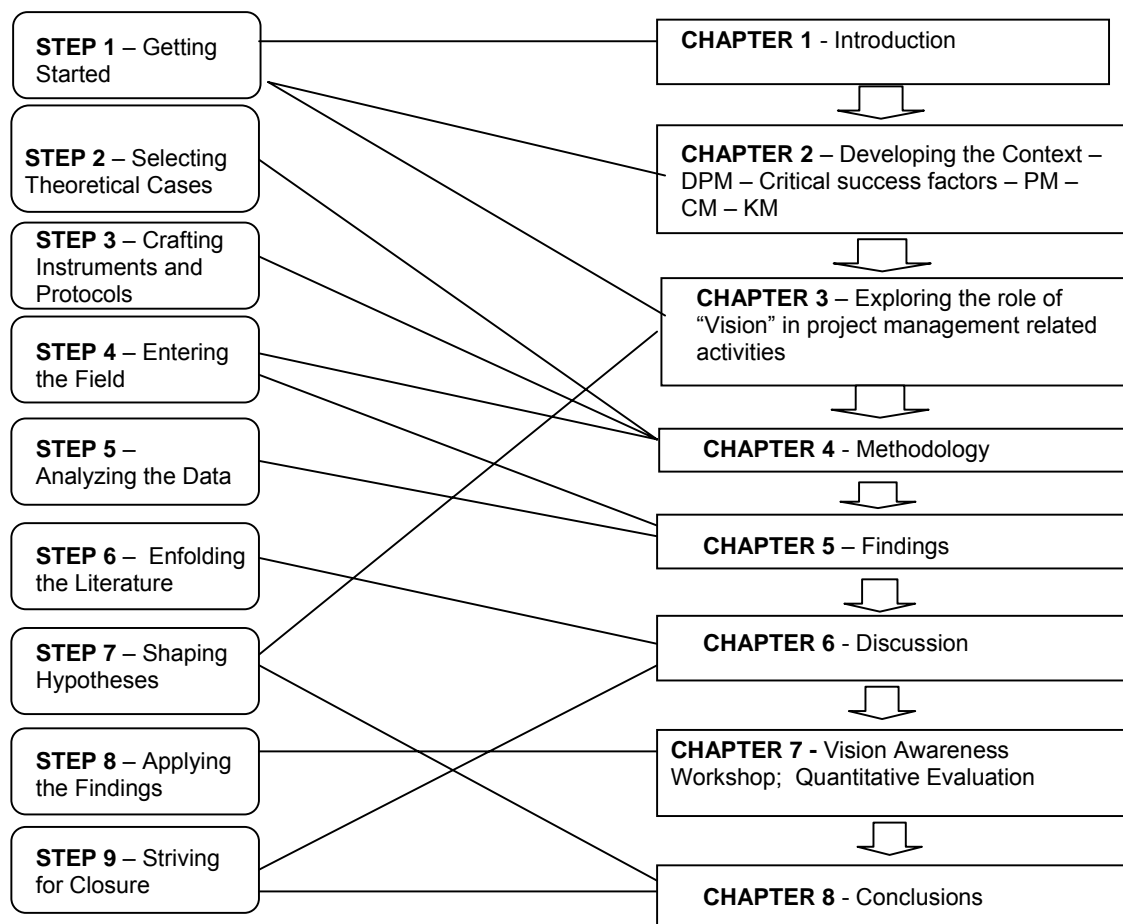
Figure 4 - Thesis Road Map

Step One – Getting Started: presents the introduction to the thesis including the central construct under examination, namely "project vision", the context, literature review, research problem, research questions and general propositions which are all found in **Chapters One, Two and Three**.

Step Two – Selecting Theoretical Cases: through a purposive technique with attention to those cases most representative of the construct of "project vision" and is described in **Chapter Four**.

Step Three – Crafting Instruments and Protocols: The study uses an eclectic methods approach using multiple case studies from various dimensions of project management and complimentary disciplines. Using an eclectic

approach facilitates triangulation of the evidence gathered and mitigates conclusions based on single data sources or single collection points. This information is found in **Chapter Four**.

Step Four – Entering the Field: Some analysis is conducted during the data collection and guides the investigation. Eisenhardt (1989. p. 539) explains, "overlapping data analysis with data collection not only gives the researcher a head start in analysis but, more importantly, allows researchers to take advantage of flexible data collection…the freedom to make adjustments during the data collection processes." Data collection and data management will be described in **Chapter Four**.

Step Five – Analyzing the Data: This step involves telling the story (theory) and showing results (the data)(Locke 2001). Data analysis considers both the qualitative and quantitative data in an iterative process of data collection, reporting and confirmation. In this step the data's story is told describing both within case, across case, within project, across project, data, findings and emergent themes as reported in **Chapter Five**.

Step Six – Enfolding the Literature: This step juxtaposes the literature with the findings of the study. This section also builds on the internal validity of the research and is described in **Chapter Six**.

Step Seven – Shaping Hypothesis: Although the research question and general propositions are discussed, refined and tested, the central construct of "project vision" is further defined and distinguished from others. It is here that the model of project vision will be debated and tested. Emerging themes will also be confirmed or discounted as described in **Chapter Six.**

Step Eight – Having investigated the research question, analyzed the research proposition, revealed emerging themes and tested the proposed model,

this information is synthesized and applied to design a project vision workshop. The practical application of research is found in **Chapter 7**.

Step Nine – Striving for Closure: The final step typically describes ongoing data gathering until saturation is reached in terms of no new themes or findings. **Chapter Eight** also focuses on bringing the study to an end when further improvements to the research become small or unlikely.

As such the chapters are now outlined as follows:

Chapter Reviews

Chapter 1 - Introduction

Chapter one provides an overview to the thesis and introduces the reader to the research topic, the academic program and the candidate author. More importantly it outlines the research problem, research question and research propositions. Lastly, it provides a roadmap to the structure of this thesis.

Chapter 2 – The Context

Chapter two introduces the key topics of the thesis including critical success factors, management, leadership, knowledge management and change management.

Chapter 3 – Vision

Chapter three provides context and background to the main topic of the thesis, which is project vision. It also provides a theoretical model of an effective project visions' purpose while outlining the characteristics and attributes of an effective project vision. Lastly, the chapter suggests a developmental process for creating a project vision.

Chapter 4 – Research Methodology

Chapter four outlines the research methodology used to investigate the role of project vision.   The chapter describes the appropriate use of a multiple case

study methodology for exploratory research. The chapter also describes the research design, case selection, interview protocol and data management. Lastly, the chapter will address the advantages and disadvantages of such a research methodology.

Chapter 5 – Findings and Analysis

Chapter five outlines the within case and across case analysis of the data and reports on significant findings. The data will show the role of vision in relation to project success and address the three lenses of inquiry as defined in the DPM program.

Chapter 6 – Discussion

Chapter six considers the findings and emerging themes in relation to the literature. This chapter also integrates the findings in relation to the proposed models created in Chapter two and three. Lastly, the chapter critically analyses the findings, literature and proposed models to fully address the research question and propositions as presented in Chapter one.

Chapter 7 - Harvesting the Benefits of Research

Chapter seven uses the findings and emerging themes of the research study and applies the new knowledge in the creation of a project vision workshop. Preliminary evaluations of this workshop are presented.

Chapter 8 – Conclusion

Chapter eight concludes the study by further refining the research question for future inquiry and makes recommendations with respect to future research. The conclusion also includes the self-reflections of the candidate/author having completed the research project.

Conclusion

In this chapter the reader has been presented with the context of the thesis. More importantly, the scope of the research has been presented including the research problem being investigated, the research question to be answered and the research propositions that are being proffered. The chapter outlines the literature that has been considered in reflection of the research question. The chapter also introduced the format and organization of the thesis. Lastly, the main topic of the thesis, namely "project vision," was introduced.

Having outlined the structure and content of the thesis, we now turn to the next chapter that discusses the context of this study and the topic areas of leadership, management, knowledge management, change management and critical success factors.

Chapter 2 – General Literature Review

Introduction

Chapter one introduced the background to the thesis including a brief review of project management. Additionally, the first chapter outlined the research problem, question and design. Lastly, it outlined the structure of the thesis and introduced the main topic of inquiry which is the construct of "project vision". It was also stated that there has been a lack of focus on this possible critical issue (further support of this contention is provided in Chapter three) and by pursuing the three main learning streams of the DPM program, namely leadership and management, knowledge management and change management one would begin to have a broader understanding of the main topic under review. However, before investigating the construct through these various disciplines or lenses one needs to first understand their individual etiology. As such, Chapter two will define and investigate the subject areas of leadership and management, knowledge management, change management and critical project success factors. This chapter is quite lengthy but is essential for setting the context in which the discussion of findings will occur in Chapter six. The chapter will conclude with a relational explanation between the subject areas and associate each and all within the context of project management. Let us turn now to our first learning stream of leadership and management.

Leadership and Management

Most practitioners will agree with Bennis (1989, p. 386) when he wrote, "leaders need to manage and managers need to lead." However, academic scholars are split on their stated opinions as to the distinction between these two perspectives as will be discussed in this section of the chapter. Let us first define what leadership and management are so that when we later contrast the two it will be more meaningful for the reader.

Leadership

Burns (1978, p. 18), suggests, "leadership over human beings is exercised when persons with certain motives and purposes mobilize, in competition or conflict with others, institutional, political, psychological and other resources so as to arouse, engage and satisfy the motives of followers". This is but one definition and as Bass and Stogdill (1990, p.259) have determined, "there are almost as many definitions of leadership as there are persons who have attempted to define the concept." However, Clark (2006, p.1) offers a definition that captures the essence of many of those definitions in stating that, "leadership is a complex process by which a person influences others to accomplish a mission, task, or objective and directs the organization in a way that makes it more cohesive and coherent."

A preponderance of attention on leadership and management has been on the individual leader or manager. However, the position and perspective of these individuals are different in that managers tend to push employees to desired goals. Leaders tend to pull employees in a direction to achieve goals. It is here that we see the reciprocal nature between those who aspire to lead and those who choose to follow.

The investigation as to what made a successful leader traces back to early psychological trait studies in the 1920s. In the 1950s and 1960s researchers turned their attention to leadership and management styles and behaviours. The search continued in the 1970s and the 1980s examining contingency and power/ influence (leader/follower) theories. Currently, much attention is being focused on change theory and the effectiveness of leaders as change catalysts.

Change theory had such an impact that a relatively new style began to emerge in the mid 1980s and early 1990s called 'transformational leadership (Bass 1985). The distinction between transactional and transformational leadership

was made earlier by Burns (1979) and presented as polarized opposites on a continuum. Bass (1985) argued that transactional and transformational leadership were distinct styles and were not on a continuum at all (Bass and Avolio 1990).

Transformational leadership is characterized by heightened awareness of followers' needs, empowering followers to challenge the status quo, motivation of followers to envision and greater personal self awareness of the example they set as leaders. It is not surprising given these characteristics that transformational leadership is often termed 'charismatic' or 'visionary' leadership (Thite, 2000, p.236).

While the examination of all of these areas continues, their origins and significant contributors are roughly outlined in the following table.

Table 4 - Evolution of Leadership Research

Trait	Behaviour/ Style	Agency/ Contingency	Influence/ Power/Servant Steward	Transformational/ Change Mgmt
I	I	I	I	I
1920 -1960	1950 - 1970	1970-1985	1975-1985	1990
(Katz 1955)	(Carlson 1951)	(Evans 1970)	(Burns 1978)	(Senge 1990)
(Mann 1965)	(Hemphill 1960)	(Hersey and Blanchard 1982)	(Bass 1985)	(Kotter 1990)
(Stogdill 1948)		(House and Mitchell 1974)	(Donaldson 1989)	
(Ghiselli 1963)		(Jensen and Meckling)	(Greenleaf 1979)	
	(Tannenbaum and Schmidt 1958)			

The evolution of leadership theory has too often been a response to the limitations of a previous theory. For example, stewardship was a response in part to servant theory and servant theory in response to agency theory. The evolution of management research and theory has also had a similar evolutionary path.

Management

There has been an evolution of management research from the genesis of Classical theory, to the Behavioural approach, on to the Management Science approach and then to the Integrated approaches. Classical theory was generally concerned with production and focused on planning, organizing and control. Behavioural approaches used concepts of psychology and sociology to examine the management of people and generally subordinates. The Management Science approach used management information (statistics and research) to analyze issues of production and suggest best practices. Finally, there have been the integrated approaches that have used a systems or contingency perspective. Both of these integrated approaches viewed organizations as interrelated groups.

Definitions for management are not as prolific as one might expect. Perhaps the best indicator of what management is can be found reviewing early job description research such as that conducted by Page (1985) in their benchmark work entitled "Managerial Position Description Questionnaire (MPDQ).[4] Here we find that a manager's general range of duties are as follows:

1. Supervising
2. Planning (Short term) and Organizing
3. Decision Making
4. Monitoring Indicators
5. Controlling
6. Representing
7. Coordinating
8. Consulting
9. Administering

What is interesting about this taxonomy is not so much of what it contains but what it does not contain. As one might expect, the categories do not include

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[4] Page worked for Control Data Corporation (CDC) which was one of the myriad computer companies that sprung up after the end of World War II to exploit the technology that came out of the war. Its charismatic leader, William Norris, not only helped the company become highly successful, but also took it down paths not normally explored by businesses. When many companies suffered business losses in the early 1980s,

vision making, long term or strategic planning or governance which the author believes are within the purview of leadership. Mintzberg (1973) who viewed leadership and management as the same construct, includes these missing categories to some extent in his taxonomy of managerial roles. He also includes a "leaders' role" within his general taxonomy of managerial roles, as seen in the following table.

Table 5 - Mintzberg's Taxonomies

Missing categories from Page's taxonomy	Mintzberg's Managerial Macro Taxonomy (1975)	Mintzberg's Managerial Micro taxonomy (1973)	Description
Vision	Interpersonal role	Leaders Role	Pursuit of its basic purpose
Governance	Informational Role	Spokesman Role	Must have up to date information regarding his organization
Strategic planning	Decisional Roles	Resource Allocator Role	Maintains control over strategy formation

It should be noted that Mintzberg (1994) will later write a book entitled, "The Rise and Fall of Strategic Planning" where he separates 'strategic planning' from 'strategic thinking'. He concluded that, 'strategic thinkers" are visionary leaders and 'strategic planners' would typically be managers. This suggests that Mintzberg may have come to consider management and leadership as distinct constructs in line with other contemporaries such as Kotter (1990) and Burns (1989).

Mintzberg (1975, p. 54) does suggest that the definition of a manager is "someone who is responsible for the work of the people of their unit". Similarly, and in the same year, Kuntz and Fulmer (1975, p. 475) describe a manager as "someone who is responsible for the performance of one or more persons

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CDC was no exception. See also Worthy, James C. "William C. Norris: Portrait of a Maverick" Ballinger Publishing Company, Cambridge, Massachusetts, 1987.

reporting to him".   The readers will note that these definitions are similar, in part, to that of Clark's definition of leadership cited above.

The missing element in the management definition is one of controls. While both leaders and managers should be aligned to have their organizations achieve its vision and goals, the primary difference between leadership and management is that of perspective. Leadership is outward looking and constantly questioning the status quo, while management is inward looking and constantly checking to maintain the status quo. Leadership proactively creates a structure (governance) to achieve its vision while management reacts to the vision by creating and controlling a plan (mission) to achieve the vision. While there are many descriptions of management such as Donnelly, Gibson and Ivacevich (1987, p. 5) who state, "Management is the process undertaken by one or more individuals to coordinate the activities of others to achieve results not possible by one individual acting alone." They also state that there are, "Three fundamental tasks that comprise the managerial work: managing work and organizations, managing people and managing production and operations" (Donnelly, Gibson et al. 1987, p. 10). However, perhaps the simplest definition is the most useful and representative of the many characteristics of management as identified above and as found in Houghton Mifflin's Canadian Dictionary (Morris 1982, p. 792) "the act, manner or practice of managing (to direct or control the use of)[5] handling, or controlling something." Given the many definitions of management, this simple definition will be adopted for the purpose of this thesis.

The central tenet of management is to create order and control regardless of the theoretical underpinnings that influence the approach. Similarly, the evolution of project management has been very process oriented (PMBOK, 2004) to provide a framework *(order)* to *control* the necessary resources and to achieve a desired result, service or product.

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[5] Parenthesis and content added.

Given this definition and the above understanding of management and the earlier definition of leadership, we can now begin to contrast the two constructs.

Leadership versus Management

While all of these theoretical perspectives are generally useful to increase our understanding of effective leadership and management, there has been little effort to distinguish between leadership and management until the late 1980s and early 1990s Yukl (1998, p. 5) suggests that the, "distinction between (management and leadership) is an arbitrary one that seems simplistic and unnecessary." Others such as Cloke and Goldsmith (2002, p.46) observe a difference between the two disciplines as one of being on an evolutionary continuum for, "as management becomes more capable and self-conscious, it gradually and automatically begins to evolve into leadership." Still others and of particular note the works of Bennis, (1989) Bass and Stogdill (1990), Stogdill (1948) and Kotter (1998) state categorically that these two activities are not to be thought of as a spectrum or continuum but rather as two separate and distinct domains each with their own unique applications and intended outcomes. As seen in the following table, academics have taken various positions in the debate.

Table 6 - Management and Leadership Perspectives

The same or no distinction	Academic	Year	Position
	(Yukl 1998)	1994	• The difference between management and leadership is arbitrary
	(Mintzberg 1973)	1973	• Managers have variety of roles, of which many are leadership roles
	(Goleman 2000)	2000	• Senior managers the same as leaders
Completely Different			
	(Kotter 1996)	1996	• Management is coping with complexity while leadership is coping with change
	(Kotter 1990)	1990	• Management and leadership are distinct processes but the people need not be
	(Zaleznik 1977)	1977	• Managers follow goals out of necessity Leaders create goals from their

			desires
			• Leaders tolerate chaos. Managers seek order and control
	(Bennis 1989)	1989	• Managers do things right, Leaders do the right thing
On a continuum			
	(Cloke and Goldsmith 2002)	2002	• Management when mature evolves into Leadership
Combined but different functions			
	(Davis 1992)	1992	• Management construct lie dormant until leadership pulls the trigger to motivate management pull
	(Robbins 2001)	2001	• Project Managers need to be leaders
	(Farr 2002)	2002	• Management is a subset of leadership

Interestingly, the various perspectives as grouped in the above chart all have limitations. Those who see no distinction between leadership and management see the two disciplines as the same. The author believes their perspective cannot withstand the evaluation when considering leadership styles as each discipline has very different methods. For example, Bennis' (1989) earlier work is replete with examples drawn from corporation after corporation where there is ample practice of the mundane work of task management but a dearth of real leaders who can bring vision, passion and energy to their teams. His later work (Bennis, Spevietzer et al. 2001) continues with this theme as he attempts to help shape the views of future business leaders with what he and many others have learned about the notable differences between these two domains. There are essential differences across a large possible spectrum of behavioural and attitudinal motives of leaders and managers. From the work of Bennis, and in the interests of simplicity, the twelve most important items have been isolated in the table below.

Table 7 - Discernible Differences Between Leaders and Managers

LEADERS	MANAGERS
Inductive	Deductive
Dynamic	Static
Ideas	Facts
Broad	Narrow
Experiential	Rote
Initiative	Direction
Questions	Answers
Process	Content
Strategy	Tactics
Long-term	Short-term
Change	Stability
Risk	Rules

A quick analysis of the above table should help establish Bennis' theoretical perspective in the reader's mind that the two domains are quite different almost to the point of being opposite to each other. It should be noted that Bennis views were shaped over a period of approximately ten years where he talked to hundreds of leaders. Bennis (2000, p. 6) came to understand that, "every leader I talked with shared at least one characteristic: a concern with a guiding purpose, an overarching vision….I think of it this way: Leaders manage the dream: All leaders have the capacity to create a compelling vision, one that takes people to a new place, and the ability to translate that vision into reality."

This reflection appears to have crystallized Bennis' distinction between the leadership and management where as one could almost think of them as being at the opposite ends of twelve spectrums. The author agrees with this perspective but also agrees that effective practitioners need to both lead and manage and at times simultaneously. While this is in a general context, how does it apply within the project management context?

Leadership and Management in a PM Context

To date, the literature reveals (as seen in the previous two sections) that considerable research has been applied to discovering what contributes to effective leadership and management and considerable attention has been applied to determining the difference between these two disciplines. To the best of the author's knowledge, there has only been a cursory examination of the differences when applied to project leaders and managers. One of the exceptions is Robbin (2001, p. 313) who states that "project managers need to be leaders". Robbins (2001, p.2) also describes a manager as "an individual who achieves goals through other people." This is quite similar to Clark's leadership definition provided earlier in this paper. And in part, the definitions should be somewhat similar in that both leadership and management achieve the project's vision through the efforts of other persons.

Verma and Wideman's (1994) contribution will be covered extensively in the next section of this chapter as he correctly suggests that both leadership and management are necessary to achieve successful project outcomes. While there are many similarities between leadership and management the differences are significant. Given the definitions of leadership and management as described above and the general research to date, the author proposes the following two separate models of effective project leadership and project management.

Effective Project Leadership Framework

Effective Project Leadership concerns the anticipation and articulation of a vision, a structure and the motivation of others to achieve the vision. Broken into further detail the proposed leadership framework is similar to the following diagram which has been adapted from (Verma and Wideman 1994, p.2).[6]

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[6] Wideman adapted his diagram on effective project leadership from the work of Hellreigel, Slocum and Woodman Wideman suggested that project success came from project leadership alone. This is not the position of presented in this thesis.

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┌──────────────┐   ┌──────────────┐   ┌──────────────────┐
│              │   │ Listening and│   │ Empowering and   │
│  Visioning   │   │ Questioning  │   │ influencing      │
│              │   │              │   │ others           │
│              │   │              │   │ to act           │
└──────────────┘   └──────────────┘   └──────────────────┘
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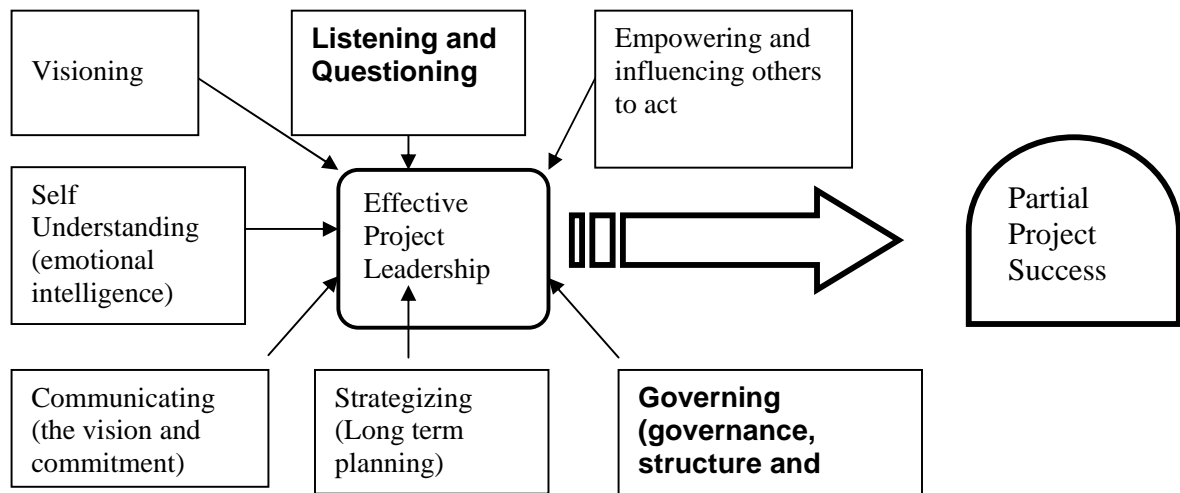
Figure 5 - Effective Project Leadership

Visioning is the anticipation of a future state or end state of where you want the project to end up. It symbolizes an anticipated cultural state (Morris 1994). It also symbolizes the stage at which you have arrived at or a picture of the end state. Briner, Hastings and Geddes (1996, p.89) state that the "most significant success factor for project teams is that they have a common and shared idea of what difference they are trying to make as a result of the project" or as defined in Chapter two as 'a preferred future end state.'

Listening and **Questioning** is the constant challenging of the status quo or as Bennis (1989, p. 9) has suggested that leaders need to determine if they are "doing the right thing." One needs to consistently listen and consider all the data to evaluate the effectiveness of the current leadership strategy.

Empowering and Influencing those responsible for the project's Mission (the project team). Ensuring that the project team is sufficiently motivated, supported, enabled and has the requisite authority and responsibility to accomplish their work to achieve the desired end state (Lewis 2001). Influencing, marshalling and developing the commitment of stakeholders to ensure their actions are in the best interest of the project. Also, to continue to influence senior management and executive to ensure continued commitment to the project throughout its life cycle.

Self-understanding is requirement for leaders as indicated in recent research related to 'emotional intelligence' (Goleman 1994).

Communicating the vision and the benefits of the project to align stakeholder perceptions of the vision and to ensure that the vision is as Kotter (1996, p. 85) states a 'shared vision' that is 'urgent' and therefore must be acted upon immediately.

Strategizing is the long-term planning (a process not an event) that constantly assesses the environment in which the host organization and project exists. This is also required for each project to ensure that the project is strategically aligned with the goals of the host organization (Thorpe 1998). Lastly, strategic alignment ensures continued relevance of the project in an ever changing business environment.

Governance is the creation of a project's organizational structure (Carver 2000, p. 14) within the host organization and the project itself (Hill 2004, p. 140).

Effective Project Management Framework

Effective Project Management concerns the internal communication of a vision, the development of a mission, the motivation of others and careful control to realize the mission through to the end of the project. Broken into further detail the proposed framework is as follows:
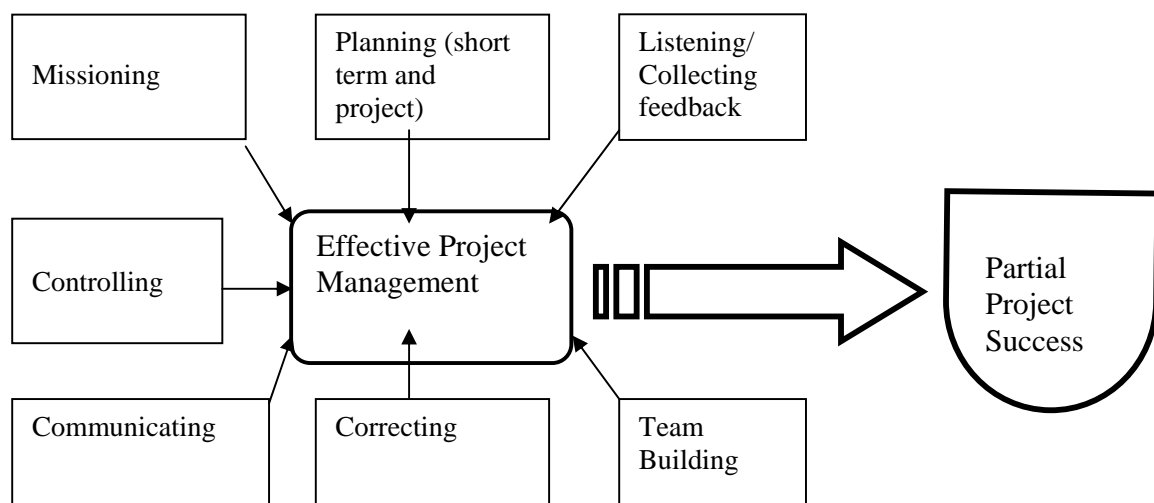
Figure 6 - Effective Project Management

Missioning is developing strategies to get the project to its vision or end state (Kouzes and Posner 2002). It has been said that, vision is the music whereas the mission is the 'words.'

Planning creates short-term operational plans in organizations and necessary flexible adjustment to project plans within a project environment.

Listening/Collecting feedback, Controlling and Correcting is all part of what Deming (1982, p. 88) calls the "Shewart Cycle"[7] which we have come to attribute as the Deming cycle of management 'plan-do-check-act'.[8]

Communicating at the management level is essential for maintaining the status quo and keeping on track (Yukl 1998). It is also essential to ensure that the project vision is communicated to all levels of the project and is truly a 'shared vision'.

Team Building is the motivation/influence required to meet the project vision or to complete the project mission. Katzenbach and Smith (1986, p. 76) defined a team as "A small number of people with complementary skills who are committed to a common purpose, performance goals, and common approach for which they hold themselves mutually accountable." While this is likely a definition of a self managing team and the end goal of team building, the Tuchman Model (Tuchman 1965) "Forming, Storming, Norming, Performing" of team building shows the reader that there is a great deal of effort that is needed before a team becomes self managing. This effort is the responsibility of the Project Manager. Even during the still of the night, the project manager must remain on watch for returning storms.

The above two diagrams show very distinct differences between effective project leadership and effective project management. If working within only one of the models depicted it would leave the person responsible for completing the project wanting. If you are a pure **project leader** you may not attend to the requirements of management and lose control of the mission. If you are a pure **project manager** you may not attend to the requirements of leadership and lose sight of the project vision or its support from senior management. Similarly, if your attention is strictly inward as is the typical focus of management to maintain the status quo, you may not recognize environmental changes that threaten the project. One must be conscious that there are always shifts in societal values, organizational cultures, political directions not to mention the fast pace changes of technology that impact one's project.

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[7] Deming in his book, 'Out of Crisis' (1982) properly acknowledges that Shewart who first identified this cycle in a graduate school paper called "Statistical Method from the viewpoint of Quality control" in 1939.

[8] ISO 14000 Quality Control standards have adopted a similar improvement process cycle as the plan-do-check-act.

The reader will also notice the similarities between the effective project leadership and effective project management frameworks. Each framework has a component related to communication, planning and listening. Communication of the project vision is important for both leaders and managers. It is the key concept that signifies senior management commitment and legitimizes the projects work (mission). Planning is often broken into two groups, strategic and operational. While Mintzberg (1994) suggests that all planning should be completed by management the author distinguishes between leadership planning that is strategic and long term as compared to management planning that is operational and short term. Lastly, listening is important to both leaders and managers but for different reasons. Leaders need to listen and question to ensure that project vision continues to be in line with the organization's vision. Managers need to listen to ensure that they collect feedback to keep the project on track and to maintain the status quo. To borrow from Bennis' (1989) distinction, leaders need to listen to determine if they are, "doing the right thing", while managers need to listen to ensure they are, "doing things right". Typically, one person has responsibility for a project and is required to attend to leadership and management issues to achieve the project's outcomes.

Project Stewardship

This one person that is responsible for the project usually has the title of Project Manager or Project Leader. These titles are actually misleading as the person responsible for heading up projects needs to both lead and manage to effectively attain desired project outcomes. Therefore, it is proposed that the name Project Steward be used. The word steward typically implies someone who is entrusted with the resources of another for this person's benefit and not that of the steward. Hernandez (2007, 24) defines stewardship, "as the attitudes and behaviours that place the long-term best interests of the group ahead of personal goals that serve an individual's self-interests." Donaldson and Preston (1993) describe a steward as one who serves the interests of all stakeholders. Stewardship theories of leadership are very similar to servant styles of

leadership although some argue they are different. However, their central characteristic is one of transcending self-interest and any distinction between the two may be arbitrary. The development of stewardship (Donaldson, 1989) and servant (Greenleaf, 1979) theories of leadership were in direct response to agency (Jensen and Meckling, 1976) theories that explain relationships where separate parties interests are at odds. Conversely, stewardship and servant theories explain relationships where one is motivated to act in the best interest of the collective or group. However, as Davis, Schoorman and Donaldson (1997) note the selection of a stewardship or servant perspective is "contingent on their psychological motivations and their perception of the situation" as leaders choose to adopt a servant or stewardship style. Also, followers choose to follow and in situations where there is a lack of willing followers an agency perspective employing management skills may be more effective.

While the focus of leadership and management are separate, one person is usually responsible for selecting which approach is required, at which time and deploying it accordingly. Similarly, Turner and Keegan (2001 p. 255) distinguishes between a steward and that of a broker role in viewing, "the broker is essentially an extrovert, entrepreneurial role and the steward an introvert, intrapreneurial role." These authors also suggest that the broker is responsible for the client relationship and identifying the client's requirements while the steward is responsible for assembling a project team to meet the requirements, including the identification of the project manager. Traditionally, different project entities have performed these roles and often it is the project manager. Often times the steward's role of identifying the project manager has rested with the project sponsor. The sponsor is "the person or group that provides the financial resources, in cash or in kind, for the project" (PMI 1996, p. 376). Also, very high level business needs are often communicated to the project manager by the sponsor. The project manager is then responsible for identifying the detailed business requirements and will often use a project team member known as a business analyst to complete this task. Interestingly, Turner and Keegan (2001) also attribute the traditional project champion role to the broker as they are the

salesperson or client/solution (project) interface. In another article Turner (2006, p. 93) asserts that it is the broker's role to, "define the objective of he project, the desired outcome (benefit) and defined output (deliverable, facility or asset)" although this information is often transferred to the project manager via a project sponsor.

Within the limitations of this chapter, the premise of this section is to propose that there are seldom pure Project Leaders and pure Project Managers, a majority of project work is conducted in a convergence zone between leadership and management as displayed in Figure 7. This is not to suggest a 'universal theory' per se but to suggest more of a 'contingency theory' dependant on the need at the time. It is recognized that although a majority of work will occur in the convergence zone, some project work will occur in the Leadership sphere while other work will occur in the Management sphere. Therefore, there are times when Project Stewards need to act predominantly as a manager or a leader. Similarly, there are times depending on the size and complexity of the project and the environment in which the project exists that the Project Steward as defined by this author must take on the responsibilities of both the broker (champion) and the steward (sponsor) as defined by Turner and Keegan (2001). The role of project champion and sponsor is predominantly seen as a leadership quality and if delegated or is absent, is assumed by the project manager. This quality will be practiced mostly within the leadership sphere of the following figure. [9]

While there are many factors that impact in which sphere the work will occur, it is likely that one determining factor will be where one is operating within the project's life cycle. The project life cycle processes according to the PMBOK (PMI 1996 p. 19) are "initiating, planning, executing, closing and controlling".
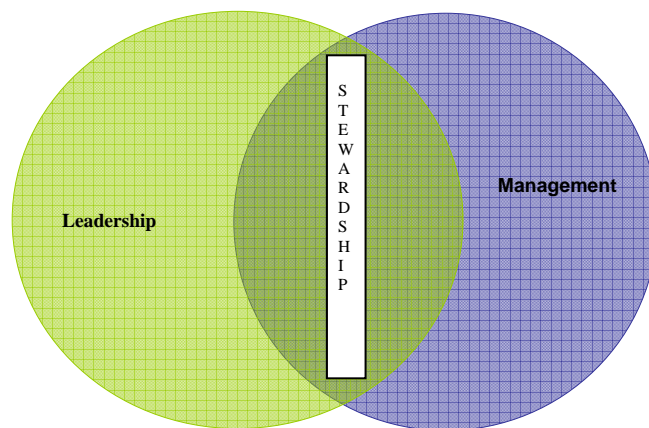
Figure 7 - Project Convergence Model

One may expect that initiation tasks (sponsoring, envisioning, scoping, charter creation and project steward selection) are conducted in the leadership sphere. Many of these tasks may be handled by the project's sponsor in conjunction with the Project Steward if hired. Similarly, one may expect that closeout tasks (contract closeout and administrative closure) are conducted in the management sphere. The author suggests that planning and implementation processes are conducted in the convergence zone. This leaves the controlling process which sounds like a strictly management function, but these are often completed by members of the project team and therefore require both leadership of team members as well as command and control functions. Therefore, the author suggests that the controlling processes rightfully belong within the convergence zone.

Reflecting upon our examination of the Convergence Zone Model as applied against the project life cycle, it seems reasonable that much of the work in projects may indeed occur in this overlap of processes between management and leadership. If we combine our frameworks of effective project leadership and effective project management within this convergence zone, the author suggests that one has created a project Stewardship Model that reconciles the differences between management and leadership as they relate to projects. The significance of this model is in its simplicity as illustrated in Figure 8 below.

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[9] For further information on the role of the champion and sponsor see Chapter three.

Figure 8 - Within the Convergence Zone of the Project Stewardship Model

The Stewardship Model no longer requires one to decide exclusively between leadership and management nor does it require that you ignore the differences between the two disciplines. It suggests that Project Stewards select best practices from each discipline and apply them as required to increase the likelihood of achieving desired project outcomes.

Achieving project outcomes typically requires a change to process or structure or use of a new product and we will now address the issues surrounding the management of that change.

Change Management

Project management alone is an uncertain trumpet unless brought into the audience of other complimentary disciplines such as change management. This section of the chapter is a basic primer on the issues of change management in relation to project management. The section will show how these two disciplines are inextricably linked if one wishes to achieve repeatable and successful business outcomes using project management. But first, what is change?

Change

The history of change would undoubtedly go back to the beginnings of time, for as man evolved he was confronted with change and even nations emerged as they had changing leaders and the nations themselves have changed. Change is everywhere in our life. Not just in our business life, but in our personal, family and spiritual lives as well. We use the word change continuously in our day-to-day speech. We change clothes, change lanes, change time, change ………… According to a dictionary (Morris 1982, p. 224) change is, "to make different". This reference also states that change, "implies making either an essential difference often amounting to a loss of original identity or a substitution of one thing for another." Change is a constant in our daily lives as it is generally accepted as a constant in corporate business culture. One of the leading writers in business management literature, Daft (1998, p. 291) defines change as, "the adoption of a new idea or behaviour by an organization." Change has also been receiving growing attention in relation to project management. However, not all change is equal as there are different types of change.

Types of Change

Conner (2000, p.2) also suggests a differentiation between major and lesser types of changes. The idea of greater and lesser changes is well referenced in the literature and captured by Kennedy (2002, p.25) in the following table.

Table 8 - Change Typologies[10]

Lesser effect on the organization	Greater effect on the organization	Author
Piecemeal, incremental	Quantum	(Miller and Friesen 1982)
1st Order	2nd Order	(Watzlawick 1978) (Levy 1986)
Continuous	Discontinuous (punctuated)	(Hinings and Greenwood 1988) (Tushman and Romanelli 1985) (Sastry 1997)
Incremental	Upheaval	(Tushman and Romanelli 1985)
Incremental	Transformative	(Dunphy and Stace 1988) (Fiol and Lyles 1985)
Evolutionary	Revolutionary	(Dunphy and Stace 1988) (Pettigrew 1985) (Grenier 1972)
Peripheral	Core	(Singh, House et al. 1986)
Downscaling	Downscoping	(Legatski II 1998)
Alpha, Beta	Gamma	(Golebiewski, Billingsley et al. 1976) (Singh, House et al. 1986) (Armenakis 1988)
Convergent	Radical	(Powell and DiMaggio 1991)

There is considerable danger in the segregation of change into lesser and greater changes. While at the extremes it is relatively easy to distinguish between greater and lesser change, it becomes increasingly difficult to make the determination as one moves towards the center of the continuum. In fact, the only person that will really be able to determine the magnitude of the change will be the person that is impacted by the change. And if there is more than one person impacted they all likely will have different determinations of what is a greater or lesser change. Having said this, most people will experience a common linear change process.

The Change Process

The literature contains a number of change processes that have differing nomenclature but all show a transition from one state to another (Ford 2000, Rouda 1995). Lewin (1941; 1951) uses the terms of unfreezing, changing and

re-freezing to indicate the transition from a stable environment to a fluid environment to a stable environment. Bridges (1980 p. 9) suggests the following process:

1. an ending
2. a period of confusion and distress, leading to
3. a new beginning.

Conner and Harrington (2000, p. 52) take another simplistic approach in the following diagram.

Current State

Transition State

Desired State

Pain   Remedy
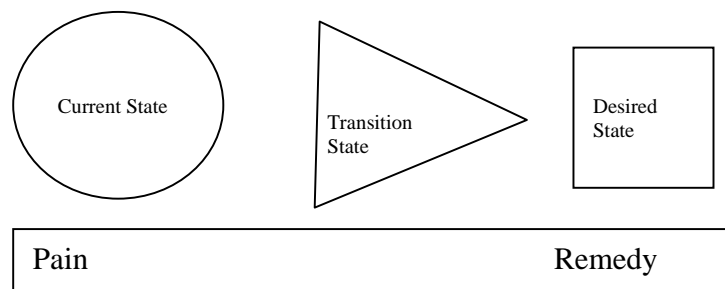
Figure 9 - Transition Model

Again, we see the common theme of transition which one would expect given the previously discussed definitions.

Needleman (1990) suggests when confronted with uncertainty or anxiety, there are only two outcomes; stay with the moment, reflect, discover, adopt, learn and ultimately increase ones "negative capability" [11] (Ward 1963, p.163) or "adaptive capacity" (Conner and Harrington 2000, pp. 21 - 22). The alternative is what Needleman (1990 p.63) terms "dispersal".   By dispersing, we breakdown a seemingly overwhelming change into manageable bite size pieces. For those without sufficient negative capability that needs to disperse, it is either breakdown the change into manageable pieces or have oneself breakdown (dysfunction). The concept of anxiety that in some cases leads to dispersal is worthy of closer examination. As noted in Christenson and Walker (2004, p. 7 - 8), Schein (1993)

[11] Malone, D. (2002). "Knowledge Management: A model of organizational learning." International Journal of Accounting Information Systems **3**(2): 111-123. Negative capability is the capacity to " remain content with half knowledge" or in a state of ambiguity or uncertainty.

has identified two different types of anxiety that affects people's readiness for change.

> "Anxiety 1 is the feeling associated with an inability or unwillingness to learn something new because it appears too difficult or confronting (Schein 1993, p86). In this situation we deny the problem exists, search to blame others for the symptoms requiring the change, or simplify the perceived problem triggering change in terms that when seen in retrospect, appears ridiculous……. Unfortunately, Anxiety 1 behaviours are universal and all too evident with a management response to mount more pressure to conform to the expected response. This can exacerbate the situation as it drives people towards panic and when people are under severe stress (panic) they revert to earlier patterns of learning even when these patterns are no longer effective or appropriate (Weick 2001). This leaves people in a bind. They need to change and update their knowledge but this is a painful and energy absorbing process**.**

> Anxiety 2, the fear, shame, or guilt associated with not learning anything new, particularly when survival is challenged without action being taken, (Schein 1993, p88) is the type of anxiety that change activists and leaders need to cultivate. Moreover, they need to ensure that Anxiety 2 pressure is greater than Anxiety 1…………... If Anxiety 2 is responded to through a project vision, then we may see that project leaders can make a positive difference through providing enabling support systems. Creating Anxiety 2 grabs attention and is consistent with what knowledge management gurus (Nonaka and Takeuchi 1995) refer to as providing a shock impetus to trigger improvement. Anxiety 2 provides a trigger to search for a way out of the Anxiety 1 dilemma. Anxiety 2 impacts must be greater than Anxiety 1 so that the project leader needs to prepare a general solution outline (the project vision statement) that enables people to find their own way to channel their energies and commitment to move from a position of defensiveness to one of confidently addressing the change deployment that constitutes the project in question."

In response to enabling others to find their own way, Thiry (2001) suggests that the invocation of anxiety gives rise to sense making. Sense making is a constructivist perspective where one makes sense of the world around them. Such a perspective is based on one's worldview and expectations. When these expectations are not met one must again try to make sense or find explanations to the changed world. Thiry also explains that sense making is required when there is a lack of information that causes uncertainty or when the information is unclear or inconsistent causing ambiguity.   Uncertainty can in part be addressed through a quantity of information whereas ambiguity requires quality of the

information. Regardless of the lack of information or its clarity, each exacerbates the state of anxiety and likely deepens the negative impact people experience.

Change Impact

There are many impacts to change and the impacts are typically individualistic and no one change will be experienced identically by any two people. However, people will generally perceive change negatively or positively.

Change is an opportunity to improve or be different. As people cannot stay in a state of crisis nor can they stay in a transition state there is a choice to return to the status quo or to change. Sometimes there is no going back so the opportunity is either to change or withdraw. During this time of unrest there is an opportunity to create new behaviours consistent with the change but also ancillary changes due to the state of transition. The time of upheaval is an excellent opportunity to create additional changes. While the author suggests an opportunity exists, he also agrees with Senge (1990 p. 154) that there is a "mistaken belief that fundamental change requires a threat to survival. This crisis theory of change is remarkably widespread …but is a dangerous oversimplification." People also desire change when life becomes too routine. So we are left with the idea that Senge (1990 p. 155) purports that, "People don't resist change. They resist being changed."

Two general approaches exist to present negatively perceived change. One approach when negative change is in the air is based on the adage that it is better to have one bad day than a week of bad days so take the opportunity to make as many changes that are needed in the organization at one time. This approach suggests that a unified change will ultimately limit the impact of the change. The other approach is to move incrementally and ease the organization into the change. However, this approach reminds the author of a story he used when counselling other well intentioned patients who were contemplating breaking bad news incrementally.

There was a man who purchased a Doberman Pincher puppy. He was quite proud of his new possession and wanted to ensure his puppy grew up to look like all the other Doberman Pinchers in the neighborhood. Therefore his tail needed to be crimped. He was not concerned about the blocking of the ears as this was a quick surgery with some taping. He was however concerned about causing the puppy pain in shortening his tail. So to spare the puppy he arranged a number of consecutive appointments with the veterinarian to crop just a half-inch of the dog's tail each appointment. This he thought would save the puppy some pain if they just did a little at a time.

As can be seen by the above story, good intentions of proceeding incrementally are not always the best way to create a change that might be painful. While much of the above is based on the author's speculation and experience, others have developed models of negatively and positively perceived changes.

Negative

Conner and Harrington (2000, p. 60), suggests and the author agrees that there are stages to perceived negative changes. This is a change that individuals do not believe they want nor do they feel they have any control over its occurrence or impact.

1. Stage 1 - Immobilization
2. Stage 2 - Denial
3. Stage 3 - Anger
4. Stage 4 - Bargaining
5. Stage 5 - Depression
6. Stage 6 - Testing
7. Stage 7 - Acceptance

These are also very similar to the classic stages of grief recovery first advanced by Kubler-Ross (1969) in her five stage model.

1. Denial and Isolation
2. Anger
3. Bargaining
4. Depression
5. Acceptance

Regardless of their origin and application, the stages of loss are well known and accepted. Combining Conner and Harrington's adaptation and Kubler-Ross's stages the author suggests the following table is representative.

Table 9 - Combined Taxonomy for Stages of Perceived Negative Change

Kubler-Ross	Conner	Combined Model
	Immobilization	Shock
Denial and isolation	Denial	Denial
Anger	An Anger	Anger
Bargaining	Bargaining	Reorganization
Depression	Depression	
	Testing	
Acceptance	Acceptance	Reinvestment

The combined model incorporates both the Kubler-Ross and Conner models and provides a sound framework to view an individual's reaction to a perceived negative change.

1. **Shock** - There is a certain amount of disbelief when one receives bad news. Shock is also the body's protection where the body starts to shut down to reserve energy for its vital organs. Shock can also help preserve people during the initial impact of an unexpected or major change. It temporarily numbs the person so as to not overwhelm the person with the full impact or realization of the change.

2. **Denial** – is a defensive mechanism to allow the person time to reflect before considering or having to realize the full impact of the change.

3. **Anger** – once an appreciation or understanding begins to take hold, the person may feel angry at others for disturbing their status quo, certainty or expectation of the future.

4. **Reorganization** – is a stage where a person starts to reflect on the change and make adjustments to the change. There will be attempts to bargain away the impact of the change but this typically does not work. It is a time of adaptation and reflection to decide to either join in with the change or remove oneself from the change.

5. **Reinvestment** – is a stage where the impacted person joins in fully and commits to the change or withdraws from the environment and remain outside the realm of the change. For example, with major change in one company a person may re-invest in the new order by adapting to the change or leave the company and find one more representative of the old way of doing business and re-invest there.

These models are not perfect and not everyone will act according to the model. Each person experiences loss and will react to change differently. The models offer a benchmark of what can be expected. As people proceed through these linear models one must always be conscious that such movement is multi-directional. The achievement of one stage does not mean the person will not slip back into a former stage. Lastly, some people will get stuck in various stages such as anger and this may be when we see a certain amount of dysfunctional behavior displayed.

Regardless whether change is viewed as negative or positive, the person impacted may be somewhat resistant to change. To change takes effort and given our busy lives, we may not have the effort at the time the change is required. However, most believe that there exists a typical response for both negative and positive changes. We have reviewed the expected response for negative change and now turn to a typical response for a positive change.

Positive

Conner and Harrington (2000, p. 63) has developed a model to depict a typical individualistic response to a perceived positive change. The model consists of the following five stages. The following diagram shows this model.

Emotional Response to a Positively Perceived Change
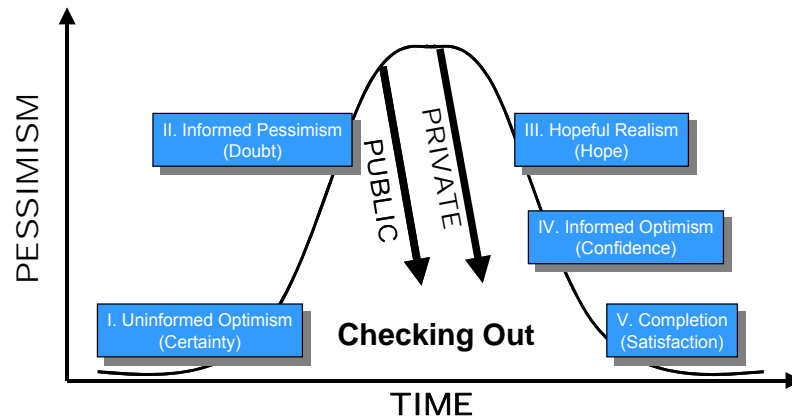
Figure 10 - Emotional Response to a Positively Perceived Change

Similar to negatively perceived change, the stages appear linear in nature and movement within and between them are multi-directional. The achievement of one stage does not mean the person will not slip back into a former stage. Again, the interpretation of a change being positive is solely within the jurisdiction of the individual.

Table 10 - Combined Taxonomy for Stages of Perceived Positive Change

Stage	ODR	Conner	Combined Model
1	Uniformed Optimism,	Certainty	Naïve Confidence
2	Informed Pessimism	Doubt	Helplessness
3	Hopeful Realism	Hope	Hope
4	Informed Optimism	Confidence	Informed Confidence
5	Completion	Satisfaction	Thriving

Uninformed optimism is a naïve certainty or **confidence** of expectations based on assumptions and too little information. As one begins to gather or hear more information, a sense of doubt rises and one begins to question their previously held positive expectations to a point where they begin to feel **helplessness**. Reconciliation between the naivety and informed pessimism or helplessness occurs and results in a new sense of **hope** with the expectation that if one proceeds fully aware that the change may indeed be positive. As one continues

to gather more information and begins implementing the change, an informed optimism, confidence or **informed confidence** likely remains for the duration of the change until it is finally completed, satisfied and the person begins to thrive in a new changed environment.

Similar to judging the success of a project, different people may view the same project a success while others deem it failure. So too, is the story of change, as some will see change as a positive experience and others will see it as a negative experience. Unlike projects however, the degree of perceived control over the change is often a factor in one's perception if the change is positive or negative. Once there is a feeling of loss of control one's expectations are threatened and people begin to take on a negative reaction to the perceived or real change that is occurring. To address this resistance and to enhance the likelihood of making a successful change it has become popular to employ strategies known as change management.

Change Management

Change management is not just about resistance although much of the literature's focus has shown a propensity to dwell on this aspect of the phenomenon. The other side of the resistance coin is resiliency.   Resilience as defined by Conner and Harrington (2000, p. 30) is, "the ability to absorb high levels of disruptive change while displaying minimal dysfunctional behavior." The need for resiliency in individuals and what many term flexibility is critical to the survival of each organism. One way to build individual resiliency is through learning. The learning processes itself as MacKeracher (1996, p. 7) describes, "stems from a need to make sense of experience, reduce the unknown and uncertain aspects of life to a manageable level, and act skilfully in ensuring one's survival and security."

Nickols (2004, p.1) contends that there are three definitions of change management as follows:

1. The *task of managing change* (from a reactive or a proactive posture)

2. An *area of professional practice* (with considerable variation in competency and skill levels among practitioners)

3. A *body of knowledge* (consisting of models, methods, techniques, and other tools)

The author argues that these are not definitions at all but they do provide a variety of perspectives to view change management from. The task of "making a change" is a planned, proactive and systematic process of managing a change for which the organization has control. "Managing a change" may also include a more reactive treatment addressing issues that are outside of the organizations control. The "professional practice" is not so much a definition but a group of practitioners who will assist others to respond to or plan for change. Lastly, there is a "body of knowledge" that forms the content or subject matter expertise used by the "professional practice". As Nicklols (2004, p. 2) points out, "suffice it to say that there is a large, reasonably cohesive albeit somewhat eclectic body of knowledge underlying the practice and on what most practitioners would agree – the application of it does exist a high degree of variance". This latter context of the body of knowledge typically includes the theory of change, methodologies and frameworks in which change and change management are explained.

Connor and Harrington (2000, p.2) states, "change management refers to the application of behavioral science to decision-making, planning, execution and evaluation phases of the change process, all focused on the management of unnecessary disruption." This is not an unambiguous definition although at first it appears straightforward. Let us break the definition down into its components to gain further insights.

- behavioural science – is the application of psychology, sociology, anthropology etc. and relies heavily on human behaviour.

- decision making – is typically used and sometimes called problem solving which implies there is a problem to resolve. However not all problems are negative and this same decision making may be used to take advantage of an opportunity.

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- change process – the change process is simplistic: Current State Transition State and Desired State. The Current and Transition State represents the pain of the situation and the desired state, the remedy or relief. (Conner and Harrington 2000).

- unnecessary disruption – this suggests that change causes disruption and the author suggests this is a desirable thing. What is not desirable is to cause any disruption beyond that which is necessary to bring about the change.

This definition, albeit seemingly comprehensive, only touches upon part of the true nature of change management and is therefore left wanting. Change management is about people, the impact of change on people and their responses to the change. As Bridges (2003, p.3-7) explains, "unmanaged transition makes change unmanageable" because "change is situational" and "transition is psychological."   Therefore any definition of change management must also have an emphasis on the people or the transition side of the definition over the situational aspects of managing the change.

The author has considered the various definitions and for the purpose of this dissertation will define change management as, *'the application of social science (information, knowledge, involvement and skill acquisition) to assist those experiencing change to adapt (environment) and increase their ability to cope (psychological impact).'*   Given our emphasis on the psychological side of change it is important to clear up an oft misnomer regarding change management and the management of change within the project.

Change Management vs. Management of Change

The phrase "change management" is often confusing as it is used to refer to humanistic impact of change (Conner and Harrington, 2000) and the management of change (Kezbom and Edward, 2001; Schwalbe, 2004) within projects, each of which is important to the success of the project. The latter, management of change, relates to change control of scope within a project environment. Change management on the other hand relates to the

psychological impact of the project on people given the implementation of the project in the field or within the organization. Both types of changes need to be managed but in very different ways. Change control according to the PMBOK (PMI 1996 p.47; PMI 2004, p. 90) is "concerned with (a) influencing the factors that create change to ensure that changes are agreed upon, (b) determining that a change has occurred, and (c) managing the actual change when and as they occur. The original defined project scope and the integrated performance baseline must be maintained by continuously managing changes to the baseline….." Change control does not happen in a vacuum but within a context of a project and change management also does not happen in isolation but in the context of an organization and its culture.

Change in Organizations

The ideas of organizations as stable environments have lost popularity to new radical concepts of complexity and chaos. Change in organizations is neither permanent nor are they one time events. There is growing recognition that what is required for these changing times is complex adaptive systems (Morgan 2005). Change within the organization is a continuous process that evolves with the organization. Wagner and Hollenbeck (1998, p. 37) define organizational culture[12] as, "the shared attitudes and perceptions in an organization that are based on a set of fundamental norms and values that help members understand the organization." The examination of culture is difficult as, "cultures are gestalts, wholes whose flavor can only be completely experienced by insiders and which demand empathy in order to be appreciated by outsiders" (Hofstede, Neuijen et al. 1990, p. 313).

Culture as defined by Schein (1996, p.11) is, "a set of basic tacit assumptions about how the world is and ought to be that a group of people share and that determines their perceptions, thoughts, feelings and to some degree, their overt

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[12] The term "organizational culture" was first used by Pettigrew in Pettigrew, A. (1979). "On studying organizational cultures." Administrative Science Quarterly **24**: 570-581.

behaviour." When considering organizations, Schein's definition is consistent with Hofstede's that culture is about visible practices (symbols, heroes and rituals) and opposes earlier views that culture was invisible and based solely on values (Peters and Waterman 1982). Similar to our discussion on resistance we see too that culture is also about expectations and control. When one's expectations are not met or they are threatened, a person will begin to feel a sense of loss of control. Small changes will likely threaten control and put expectations in question. Major changes may threaten their very beliefs, values and norms.

Culture reduces anxiety by creating certainty and expectations about behavior and change threatens this culture. However, there are changes that are designed to intentionally change culture and these types of changes do threaten core beliefs and create the most uncertainty.

Conner and Harrington (2000, pp. 88 - 89) laments that if the change does not match the culture you have three choices;

1. "Modify the change to be more in line with the existing beliefs, behaviours or assumptions of your culture
2. Modify the beliefs, behaviours and assumptions of the current culture to be more supportive of the change
3. Prepare for the change to fail."

To most organizations, options one and three are not acceptable therefore one may wish to follow Kotter's (1996, pp. 20 -21) eight-stage process to create a major cultural change.

1. Establishing a Sense of Urgency
2. Creating the Guiding coalition
3. Developing a Vision Strategy
4. Communicating the Change Vision
5. Empowering Broad based Action
6. Generating Short Term Wins
7. Consolidating Gains and Producing More Change
8. Anchoring New Approaches in the Culture

Many of these stages are common to those identified by academics such as Senge (1990) and Bennis (1989). Regardless of the nomenclature, the following generic steps are required:

1. Identify the need (requirement)
2. Identify a solution (vision)
3. Engender commitment (intellectual and emotional)
4. Implement the solution

By identifying the need one creates an ***urgency*** of action. The creation of a solution is usually an iterative process between knowledgeable individuals within the organization and those ultimately responsible for anticipating and imagining an organizational **vision**. Once the vision is described, a communication strategy must be deployed to create a **shared vision** throughout the organization. The combination of urgency and **shared vision** will begin to create **commitment** if the required communication is completed.

Commitment and the interrelationship between this construct and vision is worthy of a closer examination. The import and understanding of the relationship between vision and commitment may be found within the benefit of having highly engaged project teams. To understand these terms and their importance will be a bit like peeling an onion. Before doing so we know that engaged employees, and one may extrapolate, engaged project team members outperform non engaged or neutrally engaged employees (Strelioff 2005). Engaged workers are seen to work above and beyond contractual requirements and therefore show levels of higher performance. Many organizations have constructed their own Employee Engagement models such as Hewit's (stay, say, thrive model) (Wellens, Bernthal et al. 2004). Similarly, the author's organization has developed its own model using structural equation modeling that bases employee engagement on job satisfaction, organizational satisfaction and commitment. Commitment in part leads to higher employee engagement but not all commitment is akin as Meyer and Allen (1991) describe three components of commitment. These should not be confused with typologies and the components

are not mutually exclusive. Meyer and Allen (1991, p. 67) label the three components as affective, continuance and normative commitment. Affective commitment is shown by employees who stay with organizations because they "want to". Continuance commitment finds employees staying with organizations because they "need to". Whereas, normative commitment finds employees staying with organizations because they feel they "ought to".   Interestingly, a strong shared project vision would likely be an antecedent to the affective commitment for team members as it would show strong organizational support and assist in resolving conflict. As this commitment grows, the combination of urgency, shared vision and commitment will create a **passion** that will move the change from an intellectual cause to an emotional cause that will impact the belief and value system of the organization.[13] Again, this passion promotes further commitment as the project team member has a strong desire to stay with the project to its end. The interrelationship between vision and commitment is a major driver in the author's organization's employee engagement model and may be worthy of investigation within the project context.

While Kotter (1996) raises the issue and the importance of individual commitment, Walton (1985) also raises the prerequisite that the organization's leadership must be committed to and value the change. While this is similar to the need for senior management support for any project to be successful it is worthy of note that the idea of "commitment" must first be born in the initiating sponsor. It must also be present in those who will ultimately be responsible for implementing the change and for those who will experience the change. Senge et al (1999) also highlight commitment and warns of a possible commitment gap. However, to be successful in creating a cultural change, the commitment to change must be achieved at all levels of the organization.

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[13] As an aside, the author believes these steps are also required for the implementation of a project management culture within an organization.

Change Management in PM Context

The world we once knew was more predictable, continuous and linear. The world is becoming more complex and interdependent while the changes we are experiencing are non-linear, discontinuous and unpredictable. The future is becoming less like the past and at increasing rates of differentiation. In order to survive, organizations have to respond to current and anticipated future changes. This requires that organizations to continually move from the status quo to a different state. To move to this different state an organization will need to identify clear goals and outcomes. Increasingly, project management is being used to achieve these goals and outcomes and therefore is becoming a significant change tool (Kerzner 2001).

Project management and change management are inextricably linked in practice (Englund and Bucero, 2006) as well as by the definition of a project according to the Project Management Body of Knowledge (PMBOK). The PMBOK (2004, p.5) defines a project as "a temporary endeavour undertaken to create a unique product, service or result." As such, this unique or new product service or result will create change to those who use the product or service or are impacted by the result.

As such, it is difficult to imagine a project that doesn't create change. Not linking the technical aspects of project management with the humanistic aspects of change management has been a cause of considerable project failure (Johnson, D. 2001). The tendency of those desiring change is as Giddings (2006, p.15) identifies, "often to focus on the structural and process needs and neglect the human side of planning and implementation."

The development of a new result, product or service alone may lead to product success but not necessarily project success unless the result, product or service is successfully implemented. Therefore to successfully implement the project or

the change that it will bring about, one needs to consider the discipline of change management to increase the likelihood of full cycle project success.

With out such a consideration, project success will be diminished and likely be viewed a success by only those who perceived the change as positive. One needs to also remember, as discussed earlier. that there are lesser and greater degrees of change that individuals impacted by the change may view as positive or negative. However, even those persons viewing the change as positive will require elements of change management such as communication (awareness) and training (if required) to maintain a positive view of the impending change.

Englund and Bucero (2006, p. 105) also point out that, "clients request projects and projects generate changes in the organizations and that there are critical roles in the change management process. Organizational changes usually affect people, methods, processes and products." They identified the four critical roles of the advocate, sponsor, agent and target. The advocate desires the change but does not have the positional power or resources to bring it about. The sponsor has the authority and the resources to initiate a project and is ultimately responsible for its success. Englund and Bucero (2006, p. 105) explain that the agent role is pivotal as they need to "passionately build a vision that people will adopt because they believe in it." The development is likely also the purview of the sponsor and as such one person often acts in both roles simultaneously. Lastly, the targets are the individuals impacted by the change.

Given this propensity to use project management to achieve desired outcomes, it is not surprising that the field of project management has also given considerable attention to the concept of change (Conner and Harrington 2000). Therefore, change management is critical to project management and while both are necessary to each other, neither is sufficient on their own to achieve the repeated attainment of business outcomes desired through project management or change management alone.

Knowledge Management

Today, the success of a typical company, depends on its ability to anticipate changes, reduce product life cycles, adjust to changing government regulations, compete with companies in every corner of the globe, and transform ever-increasing amounts of data into information and, in turn, into knowledge that can be acted upon (Teece, Pisano and Shuen 1997; Roos and Roos 1997). In addition, success depends on the ability of employees to learn to work in new and different ways, including acting on acquired knowledge that can change over time.

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Knowledge

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Dictionaries offer a number of definitions for "knowledge" such as the Houghton Mifflin Canadian Dictionary (1982, p. 725) where knowledge is defined as, "that which is known; the sum or range of what has been perceived, discovered or inferred." Sveiby (1994, 1997) posits a definition that knowledge is a conscious and unconscious capacity to act. Walker (2001, p.4) offers a compilation of definitions by notable academics but supports Davenport and Prusak's definition, as, "highly comprehensive and all embracing" Davenport and Prusak (2000, p. 5) state that:

> "Knowledge is a fluid mix of framed experience, values,
> contextual information and expert insight that provides a
> framework for evaluation and incorporate new experiences
> and information. It originates and is applied in the minds of
> knowers. In organizations, it often becomes embedded not
> only in documents or repositories but also in organizational routines"

Knowledge is important to individuals and the organizations in which they work. Drucker (1993, p.8) has called "knowledge the only meaningful resource available today." He also explains that, "information is data endowed with relevance and purpose."   Knowledge is critical to organizational survival as one cannot methodically respond to their environment without strategic answers to the following questions:

1. What do we need to know?
2. What do we know?
3. How do we access or create what is between what is needed and what we have?

These questions are based on an understanding of the organization's vision and objectives. The organization must first know where it wants to go; what is its vision and preferred future end state? The next step is to determine what the organization needs to know in order to achieve its vision and objectives. Once it is determined what is required one needs to assess what knowledge and knowledge resources it already has to bring to bear on achieving its objectives? Next is to determine the gap of what is required and what is already available within the organization. The penultimate step is to acquire or create the missing knowledge. Lastly, apply the new knowledge with what is already available to further the organization in the achievement of its objectives and vision.

This is an overly simplistic process but highlights the need to manage knowledge as a strategic asset that is used by the organization to achieve its objectives. What an organization knows is, as previously attributed to Drucker (1993, p. 8), ultimately the only "meaningful resource available" that can be brought to bear on achieving organizational objectives, processes, practices and norms. However, knowledge is vital to an organization if for no other reason than not knowing leaves the attainment of organizational objectives and vision to happenchance. The management of knowledge is critical to the organization, not only to meet its current objectives but also to be able to respond to future goals in an ever-changing environment.

Knowledge Management

It is not the purpose of this section to enter the debate whether or not knowledge can be managed (Stacy 2001; Snowden 2002). Leading academics in the field such as Nonaka (1995) have not dismissed the idea of knowledge management but prefer the idea of knowledge enablement. This is just one of the many attempts to better define the concept of knowledge management. Such

operationalization shows no sign of slowing as can be seen in the recent definition offered by Liebowitz and Megbolugbe (2003 p. 189) who state, "knowledge management is the process of creating value from an organization's assets. Simply put, knowledge management deals with how best to leverage knowledge internally and externally." Regardless of the many definitions that abound and for the purpose of this thesis, the author will rely on a definition of knowledge management as that stated in Kerrisk (2003, p. 10),

> "Knowledge Management then, is the development of processes to link knowledge requirements to business strategies, as well as to plan for, generate, represent and provide access to individual and organizational knowledge."

And while the **idea** of knowledge management has become almost commonplace in the corporate world we still have a significant way to go before it is **assimilated** into its processes and corporate culture.

The development of knowledge management as a managerial practice over the last five years raises important questions for which approaches in organizational science can provide the intellectual framework. Indeed, thanks to the extraordinary rise in information technology tools, promoters of knowledge management see no limits to the spread of new tools and technology. However, the experience in the field of artificial intelligence (AI) should have alerted experts and managers to one of the major difficulties of knowledge management, namely its formalization. Current organization and managerial practices, especially those relating to downsizing, continuous restructuring and outsourcing (Chesbrough and Teece, 1996), pose a problem for knowledge management. As Maitland (1999, p. 9; 2001, p. 18) states, in the case of downsizing: "the cost can be enormous when job cuts cause companies to lose experienced people who know how things work".

We are certainly witnessing a paradigm shift in relation to our application of knowledge within organizations. Allee (2000) points out that historically it was believed that knowledge equals power and therefore to be powerful one must

hoard knowledge. We still agree that knowledge equals power, however we are beginning to also understand that much of its power is unrealized unless we share it. More importantly, the greatest benefit of sharing knowledge is the possibility of creating new knowledge. This suggests that knowledge is expandable and is an important precursor to the idea that knowledge leads to innovation, which directly supports an organization's continued survival. So, power hoarded is knowledge squelched! The shift in thought has a significant impact on the structure of our organizations. Organizations have traditionally been vertical (silo-based) and hierarchical in design, which worked well to facilitate the hoarding of information. Complimentary to this design was the command and control method of management. The pursuit of innovation and the need to fully utilize knowledge is creating a need for new organizational designs that are more horizontal and employ a more participatory management strategy. Hansen and von Oetinger (2001) perhaps sum up the evolution best in pointing out that knowledge management is nothing new but newly practiced.

Knowledge management has been generally described as the process of facilitating the creation, organisation and refinement, transfer, and use of knowledge (Davenport and Prusak 2000). The key issue in knowledge management is that it is about facilitation rather than applying specific tools, particularly information and communication technologies. The ultimate aim of knowledge management is to enable people to access and transform knowledge that helps them wisely use that knowledge to create value. Standards Australia (2001, p7) states that "Wisdom could be described as the best use of knowledge …to focus on to achieve (organisational) objectives." One of these new practices or facilitators is the development of meaningful knowledge structures.

Knowledge Structures

The importance of managing knowledge has been firmly acknowledged by corporate and academic leaders (Drucker 1993; Harvey and Denton 1999; Ganesh 2000; Gongla and Rizzuto 2001) as a key driver of innovation and

competitiveness for organizations. However, in the era of rapid technical advancement and functionality has come a need to be strategic in what knowledge is required and this will significantly influence the organization's knowledge management strategy and type of knowledge structures it selects to employ. Knowledge structures are those constructs that people in organizations create to support knowledge collection, dissemination and creation (Sveiby, 1997). They need not be part of an organization's knowledge management strategy or even be hosted by an organization but may live independently outside of any one organization. However, when these structures are considered a part of an organization's knowledge management strategy Davenport (2001) warns that the options are many and strategies and accompanying structures have become burdensome and too wide in scope. Simply they have been too ambitious and likely did not consider organizational readiness for what will in many organizations be a significant cultural change.

While one wants to proceed carefully in the selection of a knowledge structure such a structure must be aligned with the overall knowledge management strategy of the organization. Issues of alignment are beyond the scope of this thesis but the knowledge structure chosen must support the overall knowledge management strategy which in turn supports the strategic objectives of the whole organization. There is little contention that organizations need to share and grow knowledge if they are to survive. In recent years the need for cross-organizational knowledge sharing and the inclusiveness of a participatory style of management has been fertile breeding grounds for a number of different knowledge structures known as knowledge communities.

Knowledge Communities

Communities are first and foremost a social concept. Tiwana and Bush (2001 p. 244) have identified four components to social communities as seen in the following diagram. Communities are where individuals share and integrate knowledge within a social construct that provides identity and meaning through a

shared experience and where those who participate have a sense of belonging due to common interests.
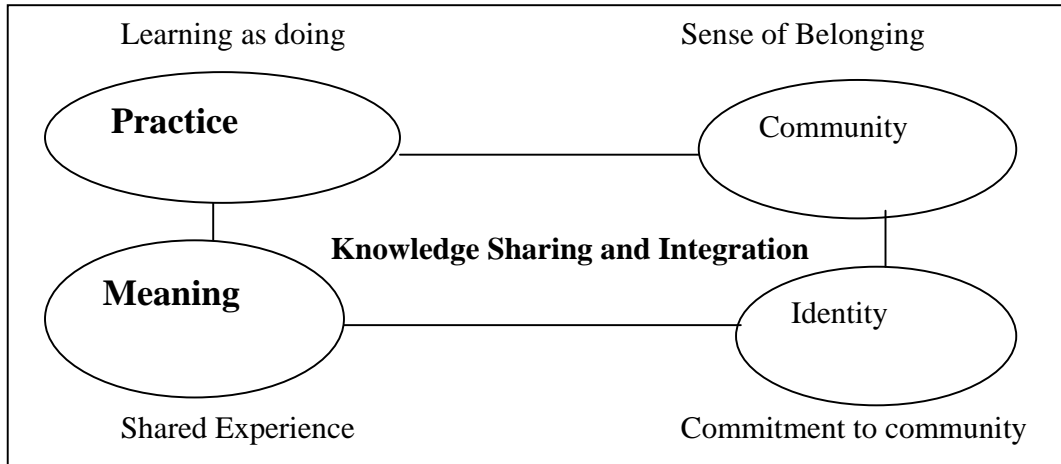
Figure 11 - Knowledge Sharing and Integration

Many communities develop out of these common interests or shared experiences. This common foundation sets an environment where people not only share common experiences but have a common language and often common beliefs. The sharing of experiences facilitates learning and experimentation of new ideas into practice. Eventually one begins to identify oneself as a member of the community and achieves a sense of belonging to something bigger and more valuable than isolated alternatives or traditional methods of learning. One will often find that in communities that sustain themselves members will feel a sense of commitment to the group. If one steps back and considers how we build relationships, even intimate relationships, we will often see a similar evolution. As such, there can be little dispute that communities are social constructs. Not surprisingly, through relationships and through communities we are able to share, integrate and create knowledge. The breadth of these endeavours are only bounded by our ability to reach out to other individuals who have common interests.

McDermott et al. (2001, p .36) suggest that, "it is not surprising that communities are central to successful knowledge management initiatives…. a channel for

knowledge to cross boundaries created by workflow, functions, geography and time." Por (2003, p. 1) states that "boundary-crossing is indeed at the heart of how communities create extra value, beyond value of stewarding knowledge evolution on their domain of practice." Even within boundaries, Senge (1990, p.10) notes when discussing one of his five disciplines of a learning organizations that "learning starts with dialogue. To the Greeks dia-logos meant a free flowing of meaning through a group, allowing the group to discover insights not attainable individually." Stewart (2001) writes that, "these communities of practice have become a recognized part of business. They are where knowledge creation happens." Stewart was addressing communities of practice, however, the author believes that the same can be said for Centers of Excellence and Project Management Offices that will be discussed later in this section.

The value proposition of communities is their ability to promote and support social capital within organizations. They shift the evolution of knowledge management into its next generation of development as Davenport and Prusack (2002) have indicated "firms need to shift their attention from documents to discussion." Such discussion occurs in communities and the author suggests that such communities are in fact as Malone (1998) titles "Knowledge Communities" [14] that can take many forms in the project management context, but the more popular are Communities of Interest (CoI), Communities of Practice (CoP), Project Teams, Project Offices and Centers of Excellence (CoE). The common denominator for all these knowledge communities is their desire to manage and share knowledge, however, their structure can be significantly different (Walker and Christensen 2005).

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[14] Jugdev, K. (2003). Developing and Sustaining Project Management as a Strategic Asset: A Multiple Case Study Using the Resource Based View. Department of Civil Engineering. Calgary, Alberta, Canada, University of Calgary.
　　　uses the term knowledge communities to distinguish between voluntary and organic self-forming knowledge structures such as CoPs and other knowledge structures whose interests are identified by a host organization. The author uses knowledge communities to represent all communities that share knowledge regardless of their voluntary or mandated structure.

Another value proposition exists as identified by McKenzie (2003) that COPs form personal networks that point to relevant knowledge sources. This is a critical step in McKenzie's eight step process of interpersonal exchange of payload knowledge whereas payload knowledge is, defined practically as "comprising that specific distillations of knowledge, both tacit and explicit, required to resolve an applied problem in context" (McKenzie 2003, p. 356). Without COPs a significant amount of time would be wasted trying to find knowledge sources that may be available through the communities of practice.

Communities of Interest

These loosely grouped and often ad hoc groups known as Communities of Interest (CoI) come together from time to time to share information but seldom have a life span beyond one or two meetings. They meet with such infrequency that they remain ad hoc as membership varies greatly between meetings and formal structure or membership is ill defined. Having said this does not in any way limit the value of such knowledge networks as considerable information and knowledge is shared, learned and even created in such informal settings. The capture of such knowledge at these networks is often a great deal more illusive given the lack of structure and methodologies to capture it. Such meetings often have no record of proceedings. The lack of knowledge capturing strategies is understandable once you accept that the Community of Interest or knowledge network is as Wenger (1991) states about "relationships" whereas Communities of Practice are about "something" in addition to the relationship.

Communities of Practice

Communities of Practice are first and foremost social networks that cannot be separated from the concept of knowledge as a social construct. Lave and Wenger (1991; Wenger 1998) are credited with introducing the concept of communities of practice but as a social construct, these communities have always existed at some level. As previously posited, knowledge is a social construct and the best way to share and grow knowledge is within a social framework such as a "community of practice." Fittingly, Lave and Wegner (Lave

and Wenger 1991) describe the communities of practice as "sets of relations among people" interacting within their environments. Wegner (1991) later suggests that Communities of Practice are defined across three dimensions:

- ❏ " What it is about – its joint enterprise as understood and continually renegotiated by its members
- ❏ How it functions – mutual engagement that bind members together into a social entity
- ❏ What capability it has produced – the shared repertoire of communal resources (routines, sensibilities, artefacts, vocabulary, styles, etc.) that members have developed over time"

CoPs are voluntary gatherings of persons with a common interest that wish to improve their understanding and share their knowledge with like-minded individuals. Brown and Duguid (2002) agree and assert that communities of practice emerge from work or interest related groups who voluntarily join together. The structure is often more formal and membership more defined than in CoIs. The other major difference is that CoPs will meet for as long as it has value to its membership whereas CoIs meet only once or infrequently.

Wenger (2002) has determined that, "*Communities of Practice"* are groups of people who share a concern, a set of problems or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis." Such communities are very popular in the health profession and growing in popularity in other professions and environments including the public service. Wenger (2002) points out that a project team is different from a CoP in that it is a organizational requirement that brings the team together whereas, "shared learning and interest of its members are what keep it *(CoP)* together. The CoP is defined by knowledge rather than by a task."

Project Teams

Project teams are formed for a common purpose to achieve a set of objectives, tasks and to produce a product or deliverable.   Project teams may live within the sponsoring business unit or in some case be part of a centralized strategy within a project office.   Kerrisk (2003, p. 7) defines **teams** as, "formal constructions,

groups of staff brought together for a particular purpose." A team collaborates on joint work and usually involves cross-disciplinary interaction. Katzenbach and Smith (2003) suggest the essence of a high-performing team is their ability to take risks involving conflict, trust, interdependency and hard work, as well as understanding and acceptance of the need to move from individual accountability to mutual accountability. Kerrisk (2003, p. 7) also states that, "teams that achieve high levels of performance also achieve high levels of team cohesiveness."

A good working definition of a team is *a group of individuals each with particular skills who are assembled to deliver a particular outcome* – a building, a bridge, a business application or change program. Kezsbom and Edward (1998), p. 408) state that, "The most effective means of implementing any plan or process, or strategy is by encouraging the full participation of those who will be responsible for implementation. Participation translates into commitment and creates a psychological bond between the plan and those who generate it." This link between the plan and the individual speaks to the performance of the team. However, the author suggests that participation will only translate into commitment when individuals within the team are also having their own personal needs met. It is then that we often see a strong team emerge when the psychological bond between the project and those who participate have formed a team that has mutual returns to both the organization and the individual team members. Similarly, Project Offices serve two masters in their effort to support the needs of the business unit and the organization as a whole.

Project Offices

Miller (2003) suggests that Project Offices first started to appear in the 1960s (Block and Frame 1997) while Kerzner (2003) claims they were in use in the 1950s which is also consistent with the emergence of project management as a discipline in the 1950s (Dai 2002). As Dai (2002, p. 13) notes, "the project office has been viewed as one way for improving organizational effectiveness,

particularly by enabling the effective transfer of knowledge from earlier success and failures and by providing a variety of supports to projects and management." The project office concept has grown in popularity and there are now a variety of structures for project offices with the most common being the Project Management Offices (PMO) and the Project Support Office (PSO). Project offices typically provide a standard methodology as well as tools and templates to their organizations. The differences between PMO and PSOs are typically in the area of authority and accountability. The PSO traditionally supports the organization and its business units to achieve successful outcomes but does not direct or have a line of authority over the business. The PMO however often has a dual role of insuring compliance in relation to using the methodology, tools and templates and also supports individual business units. The PMO often monitors project progress and reports on this progress and accompanying risks to the organization's senior managers. Another form of PMO finds the office actually managing projects on behalf of the organization and forming project teams. In this structure the PMO typically manages a project from Initiation to Closeout and is responsible for achieving successful project outcomes. However, another structure that is gaining popularity and offers a strategy to support both project managers and the host organization is the Center of Excellence.

Center of Excellence

The Center of Excellence is a concept that has grown to promote growth within disciplines, associations or groups that share common practices. "Organizations excellent in project management" as defined by Kerzner (2003, p. 18) "create an environment in which there exists a continuous stream of successfully managed projects, where success is measured by having achieved performance that is in the best interest of the whole company as well as the specific project". In order to create an effective CoE, Bolles (1967) identifies the four necessary key elements:

1. Authorization – assists organizations to align its resources with its strategic objectives. It identifies, categorizes and prioritizes projects. It also provides a means to manage projects and assists an organization to advance in its project management maturity

2. Standards – establishes standard tools, templates and methodologies to be applied to all projects within an organization

3. Education – provides training and education to all concerned with respect to project management within an organization. This is a key component of the cultural change that is often required to implement the authority and standards of a methodology

4. Readiness – establishes a project's readiness to proceed through the required methodologies and may include an evaluative aspect or pre-project assessment as to the likelihood of success for a project. This could involve a pre-project assessment of critical success factors or a preliminary risk analysis.

However, these necessary elements are not what one finds when reviewing different centers of excellence on the World Wide Web. In fact, the above suggests quite a mandatory structure that formally transfers knowledge as a requirement of the organization and does not necessarily address the needs of its members. This structure is very much similar to a rigid and mandated Project Management Office structure. However, the evidence found on the Internet, suggests that other types of CoEs exist that are less prescriptive and are based on voluntary participation of a membership (see Appendix J).

In fact, the author suggests that these seemingly diametrically opposed views are a natural reconciliation of structures that are unsurprisingly looking for the middle ground. This middle ground has yet to be completely defined but it is interesting that both sides of the spectrum have been termed Centers of Excellence (Walker and Christensen 2005).

One of the case studies presented in this thesis will extend evidence that this middle ground is both desirable and a coming of age for knowledge communities within large organizations. Even within effective knowledge structures there are often barriers to effective knowledge diffusion. Since the main aim of knowledge management consists in sharing knowledge created by individuals and groups, it appears completely legitimate to consider that such behaviour does not manifest itself spontaneously, if only because of the difficulties of change and the complexity of the relations between individuals and organizations.

Before examining barriers to knowledge diffusion Snowden (2002), makes an interesting distinction between communities of practice and social networks that closely align with the above knowledge structures of COP and COE. Snowden suggests that there are three types of human systems: "complicated, complex and chaotic" (2002, p. 105). Here he implies that new networks of experts (COE) are created in response to chaotic systems whereas social networks (COP) are created in response to complex and complicated systems. He also suggests that, "known space is the only legitimate domain for best practices" (Snowden 2002, p. 106) which would be aligned with complex human systems. He also asserts through a sense making model (Snowden 2002, p. 104) that communities of practice are formed of professionals (experts) who have known membership and objectives. These are interesting distinctions but they are not inclusive of a new knowledge structures of Centres of Excellence that are gaining much acceptance. The COE is often formed of professional experts whereas the COP is by definition a voluntary and often informal network. The COP will predominantly have a high level of abstraction whereas the COE may be more bureaucratic and structured. Regardless of the proper placement within Snowden's models he provides a number of distinctions that provides perspective as to the value of new knowledge structures such as the COE to diffuse knowledge. As interesting as this is, each knowledge structure will still have challenges or barriers to successfully diffuse knowledge.

Knowledge Management in a PM Context

These knowledge barriers are also relevant within organizations that employ project management methodologies. However, many of the project management knowledge structures discussed above can mitigate some of these knowledge barriers. Naivety is common amongst project managers, especially given the relative newness of the discipline and the widespread assumption that anyone can manage a project simply by calling them a project manager. These accidental project managers[15] (Pinto and Kharbanda 2001) are usually well intentioned but know little of the discipline and as such exemplify the axiom 'that a little knowledge is a dangerous thing.' Project managers need to be competent and need to know what they don't know.

The identification and transference of tacit knowledge is no less relevant within the project management milieu. Projects and project methodologies live within organizational cultures where there is a surfeit of tacit personal and organizational knowledge. One of the challenges of introducing project management methodologies is to ensure one understands the organizational culture. If the PM methodology being introduced affronts the culture, the introduction of PM will fail as "culture trumps change" (Martin 2006). Having said this, most project methodologies consider lessons learned which collect information and data about what worked and what didn't work on a project. Unfortunately, while this information may be shared within the project, it is seldom transferred between projects and therefore the utility of gathering the lessons learned remains somewhat ineffectual. However, with the growing acceptance of project management there has been the establishment of various knowledge structures such as project offices that collect project information for

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[15] Pinto and Kharbana distinguish between accidental project managers who have subject matter expertise in the functional area where the project occurs and career project mangers that also have education and experience in managerial, organizational and project management.

both project control and reporting but also can provide a means of sharing information across projects and throughout an organization.

Central to project management methodologies are the development of plans and the control activities within the plans. The control is typically in the form of progress reports which are shared with governing bodies, project teams and other stakeholders. The plans are created once a project charter is signed-off authorizing the planning and work to take place. The project charter identifies stakeholders and their roles. This is the first step in stakeholder analysis from which a full communication (knowledge diffusion in part) strategy can be formed. Project management offices can also assist in creating standards for projects which require the wider consideration of stakeholder communication needs and therein create repositories that can be used to create and share knowledge (Walker and Christensen 2005).

This addresses in part the strategic recognition barrier or legitimization of knowledge sharing in the organization.   The creation of a project management office clearly shows the strategic importance of project management and also, but perhaps inadvertently, the strategic value of knowledge management to some degree. It is only when explicit knowledge management strategies and structures are formed, solely or primarily for the purpose of knowledge creation and sharing that one can begin to suggest that the strategic recognition barrier has sufficiently been addressed.

The success of project management and projects is in part due to communication efforts and this highlights the criticality of knowledge management as a complimentary discipline to successful project management. In fact, the topics in this entire chapter and the reason they are being considered are specifically in support of project management success.

Success

But what is success? Success is a highly subjective term defined by one dictionary (McCoy 1986) as a "favorable outcome." But favorable to whom? Another dictionary definition suggests success is the, "accomplishment of what was aimed at."   For the purposes of this thesis we will define success as '*the achievement of a desired goal.'*   As with any new science or discipline, project management has also seen its successes but also too many failures and this leaves those studying project management attempting to understand what influences such outcomes.

Project Success

Project success has no standardized definition or measure (Kezsbom and Edward 2001, p.11). A project may be seen as both a success and a failure dependant upon whose assessment you gain. Generally, the triple constraints or scope triangle have been used to measure a project's success on the traditional elements of "on time, on budget and to the desired performance"(PMI 2004). The Project Management Institute's Body of Knowledge'(2004, p. 8) defines project management as, "the application of knowledge, skills, tools and techniques to project activities to meet project requirements" (meet or exceed ***stakeholder expectations.***[16]" The idea of basing success on meeting stakeholder expectations also began appearing in the literature in the mid 1990s (van Aken 1996). As most projects have multiple stakeholders, each is likely to have their own expectations and this creates the possibility of conflicting views of success (Baccarani 1996; Baccarani 1999). This conflict is usually resolved through the clear identification of requirements that in turn become documented goals. However, even this rigor may leave you with disparate assessments of project outcomes. For example, in a software development project, individual stakeholders may want different functionality and those who have their specifications met will be more likely to declare a project a success while those who are left wanting may be less willing to declare a success.   Both these assessments may be offered even when the project delivers on ninety-five

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[16] Bold italics added.

percent of its required specifications. Those few specifications that are not met may be the difference in assessing a project a success or a failure.

Also, as Baccarani (1996) distinguishes, there is a distinct difference between project success and product success. Similarly, Cooke-Davies (2002) highlight that De Wit (1988) and others (Daniel 1961) distinguish between project management process and project success. It is plausible to have a successful project and produce a product but still have unsatisfied stakeholders. For example, the product may have been produced to specification but not meet the sales expectations of the stakeholders and therefore the stakeholders' expectations were not ultimately met. Conversely, a product may be a success but it may not meet the desired needs of the stakeholders or there may have been cost and time over-runs.

For the purpose of this thesis, we will use the definition of *meeting or exceeding stakeholders' expectations* as the basis for determining project success. However, what variables explain the variance between successful and unsuccessful projects?

Cooke- Davies (2002) also distinguish the difference between success criteria (outcome measures) and success factors (input measures). Critical success factors are about input measures that lead to success that is ideally based on pre-selected success outcomes.

Critical Success Factors

The etiology of success factors was developed by Daniel (1986) and later refined by Rockart (1986) into a typology of four basic types of critical success factors that are goal oriented and measurable. A review of the main bodies of project management literature identifies critical factors necessary for the successful implementation of projects.   White and Fortune (2002; 2006) have conducted two meta studies and in the later publication identify sixty-three articles

addressing critical project success factors. Interestingly, there is little comment on the origin of critical success factors as a construct. To unearth the genesis of this construct in the project management context one needs to consider some of the first writings by the quality management gurus (Ishikawa 1976; Crosby 1979; Juran 1979; Deming 1982; Feigenbaum 1983; Crosby 1984; Ishikawa 1985; Groocock 1986; Garvin 1987; Garvin 1988; Juran 1988; Oakland 1989) as well as several reported case studies (Curtis and Boaden 1988; Dempsey and Hesketh 1988; J.L. and Rigby 1988; Harvey 1989; Porter and Hird 1989; Sugden and Parker 1989; Barker 1991; Cook 1991; Cullen 1991; Houghton 1991).   The organizations reviewed in the case studies were clearly influenced by the ideas of Deming, Juran, Crosby, Feigenbaum, Ishikawa and others. From these writings and the case studies, it is possible to identify a number of critical factors in total quality management (TQM) implementation process that are common to successful TQM programs and projects in general. These are outlined below.

(1) **Necessary senior management behaviors**: clear leadership and vision is required and senior management must demonstrate a commitment to TQM and be actively involved in the process. Management should set an example by managing quality as a key strategic issue and supporting continuous improvement.

(2) **A implementation strategy**: the specific objectives of TQM must be pre-determined. The TQM activity must be incorporated into the organizations' business plans and a means for continuous improvement established.

(3) **Organizational recognition of TQM**: requires an organizational structure which recognizes and rewards involvement and effort in quality improvement.

(4) **Communication for TQM**: communication provides the means of raising quality awareness and involvement and reinforcing the message. It

is also critical as a means of publicizing achievements and rewarding (see 3 above) contributions to quality improvement.

(5) **Education and training**: education and training should be universal throughout the organization to all employees as part of an ongoing process, with the scope and depth tailored to suit each group's requirements.

(6) **Employee involvement**: involvement and engagement in the process is a critical success factor of a successful TQM program. Until everyone is involved in the process of quality improvement, there is a major cost of lost opportunity being carried by the organization.

The six critical factors identified above can be compared with two other assessments of the critical factors of quality management. Saraph, Benson et al. (1989) have attempted to determine the important factors in quality management using a questionnaire technique and factor analysis. The following eight critical factors were identified:

- The role of management leadership and quality policy
- The role of the quality department
- Training of employees
- Product/service design
- Supplier quality management
- Process management
- Quality data and recording
- Employee relations.

The leading American quality standard award is the Malcolm Baldrige National Quality Award (Malcolm Baldridge National Quality Awards 1992) that identifies a similar list of critical factors. As part of the award procedures, examiners assess the performance of the organization against seven criteria.

- Leadership
- Information and analysis
- Strategic quality planning
- Human resource development and management
- Management of process quality
- Quality and operational results
- Customer focus and satisfaction

Many North American organizations are using the Baldrige Award or the National Quality Council criteria to measure their own quality performance. However, the links between quality management's genesis of critical success factors and their application within a project management context has not been clear (Westerveld 2003).

Critical Success Factors (CSF) in Project Management

Well-defined goals are critical to the success of any company, but it is just as important to identify the critical success factors needed to attain those goals. Such CSFs usually are not fully developed at the planning meeting outlining company goals but are hammered out afterward, then communicated to company employees. This is also the unfortunate case in projects, as critical success factors are essential in achieving success but often not discussed until the project's implementation phase. Regardless of this late consideration, critical success factors are important in relation to projects and have been gaining increasing attention from scholars and researchers.

Not surprisingly, the first examinations were to understand what factors contributed to failed projects (O'Connor 1992; Morris 1994; Standish 1995; Cooke-Davies 2002). The last twenty years, has been spent examining similar criteria but with the view of understanding what factors lead to successful project outcomes (White and Fortune 2006). Regardless if we examine groupings of success criteria or we review criterion singularly, seven such criteria are most often identified as being the primary success criteria for most projects. As seen in our summary Table 11, many of the classic studies in this subject area, as well

as a recent by White and Foreman (White and Fortune 2002) identify most of the following items as critical success factors:

1. Senior Management support
2. Realistic Schedule
3. Adequate Resources
4. Clear Goals or Requirements
5. Project Management Organizational Structure
6. Project Management Organizational Cultural
7. Project Manager Competence

As complete as this list is or as detailed the summary appears in Table 11, Westerveld (2003, p.2) reminds us that, "it is impossible to generate a universal checklist of project success criteria suitable for all projects." Depending upon the nature of the project's size and complexity, the nature of the success criteria will also change (Wateridge 1998).

Table 11 - Common Success Criteria found in the Literature

Chronology	1971	1976	1983	1983	1984	1987	1989	1995	2001	2002	2002/04
	Sayles and Chandler	Martin	Cleland and King	Baker, Murphy and Fisher	Locke	Kerzner	Pinto and Slevin	Standish	Lewis	Cooke-Davies	White and Foreman
Management Support	Top Mgmt. Support		Top Mgmt. Support		Project Authority from the top	Executive Commitment	Top Mgmt. Support	Executive Mgmt. Support			Senior Mgmt. Support
Control Systems (schedule: time and cost)	Control Scheduling Systems	Control and information system	Project Schedule	Planning and control	Set up control mechanisms	Commitment to Planning and control			You must control Performance	Scope change control	Realistic Schedule
Financial Support		Allocate Sufficient Resources	Financial Support	Adequate funding					Costs of labour and capital costs		Adequate resources
Goals		Define goals		Clear goals				Clear requirements	Scope	Clear metrics on performance and success (goal)	Clear Goals and objectives
Proj. Mgmt. Framework (organization)		Project organization/ philosophy	Operational Concept							Portfolio and programme practices	
Proj. Mgmt. and Methodologies (culture)	Monitoring an feedback		Project Review		Progress meetings	Corporate Understanding of Project Management					Effective monitoring and feedback
Project Manager competence					Appoint a competent project manager	Project Manager Selection	Personnel Recruitment Characteristics of the Project Team Leader				

Adopted, modified and updated from Belassi and Tukel (1996, p. 143)

There have been many criterion examined and many claim to be critical, in whole or part, to the success and failure of projects. So many in fact, that a number of academics have attempted to group these criterion into large subsets to gain clarity and enhance understanding. Table 12 outlines these attempts.

Table 12 - Grouped Success Criterion Based on Approach

Approach	Year	Author(s)
Hard Criteria vs. Soft Criteria	1996 1997 2002	(Briner, Hastings et al. 1996) (Cooke-Davies 2002)
- Factors related to the Project Manager - Factors related to the Project - Factors related to the Organization - Factors related to the External Environment	1996 2004	(Belassi and Tukel 1996) (Kendra and Taplin 2004)
Project life Cycle	1987	(Pinto and Slevin 1987)
Success as seen by the project teams vs. end users	1998	(Wateridge 1998)
Macro vs, Micro	1999	(Lim and Mohamed 1999)

While these groupings are illustrative, they do not significantly add value to our understanding of critical success factors or to the predictability of successful project outcomes. Whether in isolation or in concert with other critical success factors, the amount of variance explained by these factors is not sufficient to ensure project success. Therefore projects who have all of these critical success factors at play continue to fail and one is left with the realization that there must be other critical success factors present. The premise of this thesis is that one of those factors is project vision.

Conclusion

This chapter has reviewed the areas of leadership, management, knowledge management, change management and critical success factors in relation to project management. Individually, we have reviewed how each of these areas have their own body of knowledge and have direct relationships to project management. Together and clearly reflecting Walker's astuteness when designing the DPM program, all projects need to consider these areas of concern not just to manage change or to manage knowledge but to support the primary mandate of project management in achieving repeatable project successes. Each area also requires leadership and management to maximize its full potential. Together, each discipline in concert with project management bolsters the likelihood of success by bringing a multi-method approach to project outcomes that are supported by keeping one's eye on the critical success factors influencing the desired outcome. This might best be reflected in the following figure or model for managing for results.

Figure 12 - Results Management Model

The multi-faceted nature of the topics at hand that support the thesis topic area strongly supports the use of a multi case study approach to analyzing the construct of project vision as the inter-relationships between these variables are known but their influences have yet to be systematically studied. The literature is also so interrelated that a results management model is common sense if one is to leverage the most out of any given discipline. Project management alone is necessary but not sufficient to achieve the desired successes one wants. One will greatly increase the power of project management when leveraging its processes in concert with processes found in accompanying disciplines such as change and knowledge management. The literature also suggests that each discipline will have both a need for effective management and leadership; or what we termed earlier as stewardship. As such, this model will be invaluable when we analyze our data in Chapter six as it provides a concrete framework from which to approach and explain the data. To implement a strategy for either knowledge or change management, one would likely wish to start with a strong vision.   So too is the case for project management and the focus of our next chapter.

Chapter Three - Exploring the Role of "VISION" in Project Management

Introduction

Chapter two has reviewed the general literature for this thesis and specifically outlined the areas of leadership, management, change management, knowledge management and critical success factors. The area of project management was outlined in Chapter one and together with the general literature review has set the stage, for this the third chapter, on our primary topic area of project vision. Chapter three provides a general literature review of the topic of vision as well as the topic of 'project vision'. The chapter will outline the purpose and value of creating a vision, both in a general business sense and specifically for projects. The chapter suggests a model for logically grouping the varied purpose, attributes and characteristics of a project vision. Lastly, the Chapter ends with a review of different developmental strategies for creating a project vision.

What is Vision

In order to test the proposition that a project vision is a critical success factor for successful project outcomes we need first to determine, what is vision? The dictionary, defines vision as "*the ability to think about or plan the future with imagination or wisdom*" (Oxford 2001, p. 2066). The etymology of "vision" is derived from the Latin word 'vid' to see.   The act of seeing which is distinguishable from the Latin word 'vis' to look. Merely looking is quite different than seeing. Together with the Latin root and the dictionary definition we might suggest that one who envisions is one who has the ability to visualize a future state. Lipton (2003 p. 17) describes vision as "vivid picture of specific dimensions, a desired future, that is both descriptive and challenging." Lewis (1997, p.7) suggests a similar definition in his articulation of a shared vision as "a compelling portrait of a promised land that inspires enthusiasm and excitement in people." These definitions require that a vision be forward looking and progressive as opposed to the ability to see backwards or to be regressive.   This distinction will become important as we investigate the role of project vision and its possibilities!

There has been a plethora of articles, books and audios on the concept of organizational vision (Barker 1985; Senge 1990; Collins and Porras 1996; Kotter 1996; Bennis and Nanus 1997; Lewis 1997; Bennis, Spevietzer et al. 2001; Kouzes and Posner 2002; Lipton 2003) and as many definitions of organizational vision. Kotter (1995) describes vision in terms of something that helps clarify the direction in which to proceed. Christenson and Walker (2004, p. 40) note that "Kotter like many other writers on this subject imbue vision with a transformational quality that enables not only pure transformation of X into Y but doing so with committed purpose and enthusiasm." Bennis and Nanus (1997, p. 82) explain, "…vision articulates a view of a realistic, credible, attractive future for the organisation, a condition that is better in some important ways than what now exists."

The construct of "vision" is often termed as "personal agenda, purpose, legacy, dream goal or vision" (Kouzes and Posner 2002, p. 85). While others will refer to "vision" as long term goals or objectives. Some mistakenly have called vision a mission and given this confusion it is appropriate to direct some attention to what the construct of vision is.

While there is a difference between the concept of vision and mission and vision statements and mission statements, there is also a need for strategic alignment between the two. Nutt and Backoff (1992, p. 3) explain that, "strategic management is applied by leaders to align an organization's direction *(vision)* with the organization's aims *(mission)*.[17]" Lipton (2003, p. 17) clearly delineates between the two and states that vision "is about purpose" and mission is "about what the organization does." Similarly, Lewis (1997, p. 9) states that a mission "determines what people do when they arrive at their workplace. It answers the question, "Why do we exist?"

For the purpose of this paper vision will be defined as the, "statement of the preferred future state" but even this seemingly simple definition requires further examination as we have two constructs in our definition. One that vision is future oriented and secondly that a vision is a statement. In fact this statement can be explicit or implicit. Regardless of their arena, vision

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[17] Italics added

statements can and are often entirely implicit and not documented. The danger of the implicit vision statement is that it will not be understood or consistently conveyed to all stakeholders in an organization. This does not limit the vision statement's power if it is widely known and forms a shared understanding of the preferred future state. However, the idea of a preferred future state suggests that a transition is required from the current state to a preferred future state.   The signalling of a change is one of the purposes of creating a vision but there are many more.

Purpose

A review of the current literature on management and leadership strongly suggests a need to have strong vision statements for strategic planning and as such, supports business outcomes (Sashkin 1992; Bennis and Nanus 1997; Mintzberg, Ahlstrand et al. 1998; Lipton 2003). The vision statement is seen as a critical element to achieving business results and successful business outcomes. As noted by (Kerzner 1987; Cleland 1991; Wheatley 1992) organizations are turning to projects to achieve many of their strategic planning goals and objectives and it stands to reason the project vision statements would be no less important to achieving project results and successful project outcomes. Therefore, it is a worthwhile research endeavour to examine the role of project vision in achieving successful project outcomes that in turn support overall organizational goals.

A vision tells us what the final results will look like and assists us in knowing when a project is finished. A review of project management literature supports the criticality of this particular aspect of project management. As Lewis (2001, p.117) explains: "if everyone does not agree on the vision, each person will try to achieve the outcome he or she imagines, *(often)*[18] with disastrous results".   Therefore, the creation of a common shared project vision is important as a guide to future decision making, to manage scope creep and to direct project activities towards benefit realization. Without this, a project is at risk of failure from the outset.

Common sense supports the wisdom in determining where we want to go but this definition is still lacking.   At first a vision statement should inspire a cause or achievement of the dream

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[18] Italics added

and moves one through a process where they take ownership of the dream itself (Larwood, Falbe et al. 1995; Bechard and Harris 1997). Once project team members and all concerned feel a sense of ownership, they are likely at their highest motivational level to strive for project success. Employee engagement literature also supports this claim (Strelioff 2005; Office 2006).

As suggested in many of the definitions, vision sets direction (Senge 1990; Mintzberg 1994; Kotter 1996; Mintzberg, Ahlstrand et al. 1998). It also identifies a preferred future end state (Lewis 1997). It provides a paradox of setting an organization apart from others while unifying its workforce in a common purpose. A vision assists in future decision making, prioritization and assignment of resources (Drucker 1970; Collins and Porras 1996; Bennis and Nanus 1997; Charan, Drotter et al. 2001). Vision has long been seen as an important element of organizational planning (Mintzberg 1994; Hesselbein, Goldsmith et al. 1996; Mintzberg, Ahlstrand et al. 1998) and is arguably one of the most important deliverables an organization's executives can deliver (Lipton 2003).

The development of a vision, often in the form of a vision statement (Price 2001) does little to achieve business outcomes if the vision is not communicated, maintained and continuously improved (Lewis, 1997) . Scott (1998) suggests that explicit vision statements find their roots back to early evaluation theorists of the 1930s when they were examining individual and organizational behaviour in the private sector. Vision and vision statements did not appear in the public sector until the mid 1950s. However, communication, maintenance and continuous improvement are not the full picture. While an obvious point, a vision must also be developed and of late, with the notable exceptions of Lewis (1997) and Lipton (2003), little has been written recently in the business and leadership literature regarding the development of the organizational vision but the construct of organizational vision seems to be having a resurgence in the literature.

We also find a considerable amount has been written on personal visions to inspire and motivate individual or personal growth (Larwood, Falbe et al. 1995; Glouberman 2003). When considering groups of people or teams, Briner, Hastings and Geddes (1996, p.89)

state that the "most significant success factor for project teams is that they have a common and shared idea of what difference they are trying to make as a result of the project."

Lucas (1998) purports 5 reasons for creating a corporate vision:

1. "**To guide us**……..It also aligns our various priorities and goals and keeps us from fragmenting.

2. **To remind us**. The same organization that can remember one of its mistakes for years can forget what it represents and wants to become in a matter of months….

3. **To inspire us**. People…… are inspired by the purpose of work, the result of work and the transcendent priorities and goals it encompasses.

4. **To control us**. When we get the "crazies" and start wandering into unrelated businesses or core in competencies, our vision statement can snap us back to reality.

5. **To free us**. It's hard to have a forward looking, high-performance organization when we don't know who we are or what we want to become. The events of our past push us along with their inertia, to a chorus of "this is the way we've always done it" in the past. A living vision pulls us loose from that mire and opens the door to a fresh future."

A vision must inspire stakeholders and project team members alike. A vision statement must address the higher end needs as found in Maslow's (1954) "Hierarchy of Needs" or the motivators as identified by Herzberg (1968). In Maslow's model of self actualization, people have to have their basic needs met before they will be able to adopt higher order needs. A person will not be motivated by a vision statement if their basic needs (Maslow – deficiently needs; Herberg's hygiene needs) are not being met. However, once these basic needs are met a person's need for growth and self esteem are endless.   Lewis (2001, p. 45) rightfully suggests that these types of needs are "virtually insatiable." Therefore, a vision statement must inspire passion. A passion that will see the project through when there seems at times little reason to go on. A passion that moves stakeholders and project teams beyond expected performance. A passion that transcends self-interest only to become self-interest. Such a vision can also facilitate a quality culture that transcends quality management to develop a culture where quality is embedded in all processes and mental mindsets of those involved to perform at best-for-project levels as was demonstrated on the National Museum of Australia, a highly successful project alliance construction project (Keniger and Walker 2003, Chapter 8).

Having now gained an understanding of the general purpose of a vision, let's now turn to a closer look at its attributes and characteristics.

Attributes and Characteristics

In Lynn's (1999) examination of the project vision construct and its components, he starts with Hamel and Prahalad's (1989) components of clarity, stability, agreement and management support and reviews a number of other authors (Giordan 1995; Niemes 1996; Vaughan 1997; Baum, Locke et al. 1998; McAlister 1998). Shortly after Hamel and Prahalad's work, Bartlett and Ghosal (1990, p. 134) suggested the best way to combat the silo mentality of many organizations is to create a shared vision. Such a vision state "must be crafted and articulated with clarity, continuity and consistency." The three Cs are essential to the effectiveness of a vision.

Table 13 - 3 Cs of Vision

3Cs	Definition[19]
Clarity	"of expression that makes company objectives understandable and meaningful
Continuity	"of purpose that underscores their enduring importance
Consistency	"of application across business units and geographical boundaries that ensures uniformity throughout the organization

Adapted from Bartlett and Ghosal (1990)

Combined in the following table are other attributes of an effective organizational vision as found in the current literature. In tracking the work to date on the characteristics of an effective vision you quickly realize the seminal nature of Hamel and Prahalad's (1989) work.

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[19] Taken from Bartlett, C. and S. Ghoshal (1990). "Matrix Managment: Not a structure, a frame of mind." <u>Harvard Business Review</u> **68**(4): 138-145.

Table 14 – combined components of an effective organizational vision

Attribute	Hamel and Prahlad	Bartlett and Ghosal	Giordan	Niems	Vaughn	McAlister	Baum, Locke and Kirkpatrick	Lynn
	1989	1990	1995	1996	1997	1998	1998	1999
Clarity	X	X	X	X	X	X	X	X
Stability	X						X	X
Agreement	X				X	X	X	X
Mgmt. Support	X		X					X
Continuity of purpose		X						
Consistency or uniformity		X						
Brevity							X	
Abstractness							X	
Challenge							X	

A review of the frequency of each attribute shows that the most often stated requirement is that of clarity. Clarity is to make something clear or easily understood. Without clarity it would be difficult for others to understand what the direction or the preferred future state looks like. An inability to envision the preferred future leaves one uncertain of their destination, when they have achieved success or when they are done. The second most frequent attribute is that of agreement. If a vision is clear then all those who are stakeholders of the vision have the opportunity to agree to their desire to reach the same destination. Agreement creates a shared vision that all can support. However, if the vision lacks clarity it is possible that all will voice agreement but have different destinations they wish to arrive at. If the vision has both clarity and agreement it becomes a shared vision and driving force to achieve organizational goals. The third most frequent component in the above table finds both "stability" and "management support". One could argue that management support is not an attribute but a necessary condition of a vision to be successful in promoting a successful end. It is also very similar to agreement but agreement and support at the highest level of the organization that is articulating the vision. Stability however is very different and a complex attribute. Stability is the resistance to change and suggests the visions should be resistant to change. One can argue that if the vision is constantly changing that the organization has not

really been successful in creating its vision. A vision needs to be oriented to the future or a horizon that takes time to achieve. A vision that can be achieved too quickly likely does not stretch the organization. If the vision is fickle members of the organization will not be compelled to achieve it.

The other attributes seem to be much less universal and may provide additional value to a successful vision but are likely not critical to the formation of a successful vision.   However, in a more exhaustive listing of characteristics Larwood, Krieger and Falbe (1993) wrote an interesting article examining the characteristics of visions in business schools. The authors claim an extensive literature review in which they culled twenty-six characteristics of a vision. Unfortunately they chose not to reveal the literature review itself but several of their characteristics match the attributes as identified above. Business school visions were measured against the following twenty-six characteristics.

"Difficult to describe	Risky	Bottom line oriented
Flexible	Changing	Conservative
Formalized	Widely accepted	Describes what is taking place
Well communicated	Understood	Detailed
Tactical	Innovative	Product of leadership
Focused	Planned	General
Inspirational	Directs efforts	Integrated with visions of others Purposeful
Strategic	Responsive to competition	
Long term	Action oriented"	

<div align="right">Taken from (Larwood, Kriger et al. 1993)</div>

The attributes of clarity can be found in the characteristics of "Understood" and the reverse of "Difficult to describe." The attribute of Agreement can be found in the characteristics of "Widely Accepted" and the attribute of Stability in the reverse of "Flexibility" and "Changing." When next examining the components of a vision model we will see parallels between the characteristics of Purposeful and Product of Leadership with the organization's raison d'etre. Other parallels are also evident between the attribute of that "Describes what is taking place" with the component of Strategies.

The characteristics of a company vision according to Collins and Porras (1996) make a useful model. A well-constructed vision comprises two elements, the core ideology and envisaged future (Collins and Porras 1996). The core ideology comprises core values and core purpose. Core organisational culture values have been discussed earlier in this paper. Sometimes this is explained in terms of the 'X way'. The envisioned future is what has been termed a big, hairy, audacious goal (BHAG). It is usually described vividly and, as argued by (Collins and Porras 1996), BHAGs are needed as stretch goals to provide a framework for progressing towards the envisioned future. Core purpose is often defined in terms of a mission statement. They also observe that the basic dynamic of visionary companies is to preserve the core culture and purpose and to stimulate progress towards the envisioned future. Stretch goals should not encourage people to work harder but work smarter often through more effectively sharing and leveraging of knowledge (Nonaka and Takeuchi 1995; Davenport and Prusak 2000).

Consistent with this work but enhancing upon it, Lipton (2003) has identified a model for a growth vision that the author suggests is appropriate for any organizational vision. The elements of an effective vision reside in a larger framework. First, the components as described by Lipton are raison d'etere or organizations purpose for existing. Second, it must define the organizations strategy of achieving the vision that distinguishes it from any other venture. Lastly, it must identify the values of the organization for which it subscribes in supporting its strategies and moving toward it raison d'eteré.

These models and the previous discussion of attributes and characteristics are relevant to implicit or explicit visions but it is arguably beneficial to have an explicit vision in the form of a written vision statement. The written vision statement then becomes an artefact that can be discussed, shared and its message assimilated within the culture of the organization.

Artefact

Vision and vision statements have long been recognized as an essential component of strategic planning in business organizations but they have been less recognized in the field of project management. In fact, some claim it is the first step in strategic planning (Mintzberg 1987; Daft 1998; Hitt, Ireland et al. 1999).   Perhaps the reason for this prominence in the strategic planning process is that to develop a strategic plan without a vision leaves one vulnerable to the dynamic environment in which these plans are created. Mitzenberg (1994 p. 209) writes that, "the visionary approach is a more flexible way to deal with an uncertain world."   Morgan (2005) supports this assertion that, "only a vision can help guide one along within a chaotic environment as planning is futile." Mintzberg (1994 p. 210) states that, "if you have no vision but only formal plans, then every unpredicted change in the environment makes you feel like your sky is falling." The articulation of an organization's vision is often made explicit in the development of a vision statement.

As Christenson and Walker (2004) identify vision as an important contributor to the characteristics of culture. The organizational culture literature identifies vision as being an important contributor to the characteristics of a culture. Organizational culture's most visible manifestation (often undecipherable) are artefacts such as stories, history, image, identity and organisational structures. Underpinning these are organisational values and deeper again, are the underlying assumptions (generally invisible) that are shared by the group in that culture. A vision statement may become an artefact, a document describing goals and aspiration. This will not have meaning unless it reflects the values of the culture concerned.

Values are those behaviours that are cherished by members of the culture or sub-culture. For example, if a vision states that people will treat each other with integrity and respect, may go a long way in avoiding blame and litigation. However, if that organization has a history of scapegoating, seeking opportunities for making claims against project supply-chain members and conducting a paper-trail to cover themselves at every opportunity then a conflict arises between the vision statement artefact and the culture's value system. Clearly, there is a palpable link between values and artefacts.

Similarly, values are palpably linked to assumptions. The above-illustrated example of defensive behaviours actions such as creating a paper trail, being unhelpfully bureaucratic or identifying scapegoats may be derived from a strong foundation in assumptions that other supply-chain partners will take advantage of them. The need to expose and unearth such assumptions, so that they can be understood and dealt with, is a fundamental feature of partnering and alliancing - an increasingly popular approach to managing complex projects (Bennett and Jayes 1995; CII 1996; Lenard, Bowen-James et al. 1996; Doz and Hamel 1998; Walker, Hampson et al. 2002).

Project Vision

Once we combine the word project with vision we find a scarcity of research or scholarly writings on the topic with a few notable and recent exceptions. Lynn and Akgun (2001) investigated the relevancy of Hamel and Prahald's (1989) components of on effective organizational vision of clarity, support and stability. Christenson and Walker (2004) use several case study examples to support their argument that, "a significant driver of project management success is effective and intelligent leadership communicated through an inspiring vision of what the project is meant to achieve and how it can make a significant positive impact. Lewis (2002, p. 39) devotes a chapter of his book, "Working Together", arguing superficially "You Must Have a Compelling Vision." This book uses the Boeing 777 airplane project as a case study to support best practices in project management. The chapter addressing vision does so only in cursory terms but does address the meaning and nature of vision. The greatest contribution from this chapter is the tangential introduction of passion or motivation in the general discussion of organizational vision.

Another notable contribution in this area of inquiry is by Pinto, et. al. (1998) who discuss the motivational properties of a project vision based on a control theory perspective. They then provide a brief discussion on the implications of these properties for project leaders.

There have been few articles directly addressing the concept of project vision. One of the first articles was by Clark and Fujimoto (1998) in looking at the role of vision in the new

product division of the automotive industry. This was followed by Lynn's (1999, p. 106) article where he reviews project vision components and suggests, "vision can be critical for successful innovation." While this is promising given the topic of this thesis Lynn neglects to define the construct of project vision and ignores the issue of project or project success. These oversights leave the article wanting and its findings vulnerable to criticism.

While we have seen that the definitions for organizational vision are as varied as the many who have written about them we will revisit our simple definition from the previous section where we suggest an organizational vision is defined as a, "statement of a preferred future." When considering the differences between organization and projects the one striking difference is the time-bounded nature of the project. However, this difference does not in the author's opinion impact the definition itself as one typically embarks upon a project to create something new or different. In essence there is a desire for a change or preferred end state. Therefore, a project vision is also a 'statement of a preferred future' which will be achieved through the completion of a project.

There has been a complete absence of comment on the topic of project vision development with the exception of a journal article by Christenson and Walker (2004). In this article the authors offer a model of project vision development for complex and simpler projects.   (Note: Further information on the development of a vision can be found in the appendix to Chapter 7 – Project Envisioning Workshop).

<center>**Value of a Project Vision**</center>

Surprisingly, with so much written about organizational or corporate vision there has been so little written or researched about project vision. The absence of this address and the expectation of similar value propositions of creating an organizational vision drives this author to investigate if such value extends to the project environment. The linkage between a strong organizational vision and organizational success is well documented (Collins and Porras 1996; Senge, Roberts et al. 1999; Lipton 2003). However, the same linkage between a strong project vision and project success has received very little attention except for two

academic articles by Lynn (1999) and Clark and Fujimoto (1998). While both of these articles attempt to address the linkage between project vision and project success they do so in relation to innovations within high tech and automotive industries. These research papers are also limited in their disregard for the difference between project success and product success which are two very different measures (see Chapter two).

The value of a business vision is almost universally accepted but there are a few that warn of the dangers of creating a vision. Most noticeably, Stacey (1992) who identifies a few, "harmful consequences of vision." These include the utility of creating a vision in transformation projects where the end state may not be fully known. While this is a difficulty it should not limit a broad vision to set direction. Ironically, Stacey suggests that creating a vision limits the manager too tightly to a set direction whereas the author has agreed with Mintzberg (1994) that a vision permits greater flexibility and creativity than does a plan. The author does agree that a poorly developed vision could overly restrict a manager but this speaks more about the quality of the vision than the utility of the vision construct itself. Stacey also suggests that a vision is an imperative for a leader is an unrealistic burden for any one person to bear. This author agrees that leadership in general is not the purview of a charismatic few but is a learned competency and one that can be shared throughout an organization or project. Lastly, Stacey suggests that a vision is a distraction from the real work of personal interactions that need to take place but this author disagrees as a vision can bring direction and purpose to those interactions. Upon reflection of Stacey's cautions, this author remains convinced that the development of a project vision is an imperative for successful project management.

A Suggested Model for an Effective Project Vision

Given the apparent value of a project vision it is important to consider the key components and qualities that one would wish to find a project vision. Consideration for the difference between an organizational vision and that of a project vision should be taken into account but may be more a matter of consideration than a substantive need to differentiate. Also, one should be mindful and resist the distinction of a vision as an artefact or as a process as both

are required to encapsulate the full positive impact of a project vision. Lastly, an argument will be posited that a vision counter balances some of the concerns of project management being overly regimented and bureaucratic. A project vision can actually be the backdrop for a style of optimistic leadership exemplified by possibility thinking and a positive attitude resulting in opportunities and not barriers to practice.

Creating an effective project vision requires excellent communication skills and a deep understanding of both organizational culture and the history and trigger mechanisms that create underlying assumptions of individuals and groups comprising project teams. A project vision can be an artefact that defines the project's soul so that it anchors project participants through their core values to a project outcome that all can relate to. Clearly this is a difficult task requiring intelligence and wisdom on the part of project leaders. Crafting a vision requires insights into the underlying assumptions that determine values and to create artefacts that can be accepted and internalized.

The role of the vision artefact provides an important focus for managing projects. Leading project management commentators have observed, "The most significant success factor for project teams is that they have a common and shared idea of what difference they are trying to make as a result of the project. Such a vision can be built up by exploring questions with stakeholders and project team members, such as:

- How will this project make a difference to the organisation?
- How would we know that this project has been highly successful?
- What in our wildest dreams would you like this project to achieve? "

<div align="right">(Briner, Hastings et al. 1996, p. 89)."</div>

Returning to the seminal work of Bartlett and Ghosal (1990), one may extend their 3Cs work as depicted in the following Table 15. A project vision must have clarity or a clear direction and be strategically aligned within the hosting organization. The project vision may be a lower level vision statement that needs to be aligned with the meta-vision statement of the overall organization. Continuity is required to ensure a sense of meaning and purpose.

There should also be a sense of urgency in most projects as many will be change or transformative projects. Lastly, consistency is required to ensure relevance to all stakeholders within and outside the hosting organization.

Table 15 – 3Cs of Project Vision

3Cs	Definition	Project and Change Vision
Clarity	"of expression that makes company objectives understandable and meaningful"	The project must have a clear direction and be strategically aligned.
Continuity	"of purpose that underscores their enduring importance"	The project must have a sense of meaning and purpose. There must also be a sense urgency.
Consistency	"of application across business units and geographical boundaries that ensures uniformity throughout the organization"	The project vision must be relevant to all parties in the organization.

Adapted from Bartlett and Ghosal (1990)

Clarity, continuity and consistency are arguably fundamental requirements of an effective project vision. To date, only two sets of authors, Christenson and Walker (2004) and Pinto et al. (1998), have commented on key components, characteristics and elements of an effective project vision.

Pinto et. al. (1998) base their project vision development on a feedback or control systems theory model. The development of a project vision or "project envisioning" will be reviewed in Chapter seven, Appendix K and later in this chapter. However, the basis of their model impacts the expected characteristics, components and elements. Pinto et al, (1989) do not deal directly with the components, characteristics or elements of a project vision but state the purpose of the project vision is to;

1. Inspire and engage followers
2. crease a bridge to the future
3. provides direction
4. establishes a standard, and
5. motivates leaders.

Christenson and Walker (2004, p 42.) have identified similar components, characteristics and elements and argue that a project vision should have the following characteristics:

1. It must capture the core purpose, preferred future state and essence[20] of the project objectives, its *raison d'être*—it must be understood*;*

2. It must make a convincing case for following the project vision concept that can be internalised by project stakeholders and that provides a compelling value proposition—it must be motivational;

3. It must be consistent with stakeholder cultures or sub-cultures to appeal at the assumptions and values level so that the vision statement artefact resonates with them—it must be credible;

4. It should be proactive to facilitate teams to work smarter and more effectively, perhaps identifying stretch goals—it must be demanding and challenging.

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When considering the common sense purpose of a vision, its attributes and characteristics as well as the potential value of a project vision, the author suggests that the acronym DRIVES© may be of assistance in logically grouping the varied purpose for creating a vision and its requisite attributes and characteristics.

Decision making - A vision needs to assist in contextualizing future decisions and aid sense making. It assists with strategic alignment, prioritization and resource assignment

Reason for being – A vision needs to identify the purpose of the organization and its uniqueness.

Integrate – A vision unifies disparate systems/functions and unifies people towards a common goal with a common purpose

Values – A vision explains the core values of the organization

Empowers - A vision motivates and inspires people to achieve the purpose of the organization. It can free people to be creative and innovative within chaotic systems.

Strategic Direction – A vision identifies the strategic direction of the organization.

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[20] Vision and mission statements may get confused and understood as synonymous by some academics in this area of study. Mission may be thought of more in **both** terms of goals and objectives in an action sense whereas vision may be thought of as a state of being or end state.

Now that we understand what the purpose of a project vision is and therefore its necessary attributes and characteristics, we can now move forward towards an examination of models that lead to the development of the project vision. The readers are reminded that the research hypothesis that a vision is a critical success factor for successful project outcomes. Therefore, we need to fully understand what it is, how it is developed and how it is maintained. Having examined what it is, we will now move to a discussion of how it is developed.

Developmental Process

The creation of an organizational vision brings you into contrasting views of nurture versus nature perspectives (Larwood, Kriger et al. 1993). Is the vision of the leader or does it reflect the situation? Hambrick and Mason (1984) would suggest it is the former or nurture position in that the vision comes from the person or as Mintzberg and Westley (1992) suggest, the vision is contained in a hypodermic needle that is injected into employees from one person. Alternatively, Greenwood and Hinings (1988) suggest the vision is a creation in reaction to one's environment or from the nature perspective. The creation of the vision is in the nurture perspective responding to the organizational environment and culture. Each of these perspectives may be accurate given one's strategic orientation.

Lewis (1997) suggests a process for building a shared vision that has six phases but is a process compared to a model in that it is an ongoing endeavor that continuously improves upon what it creates. The first phase is the 'organizational audit' or what many have termed an environmental scan of the current state.   The second phase is an anticipatory readiness stage 'preparing for change'. The third phase the 'creation of a shared vision' followed by the fourth phase of 'recognizing the obstacles' or measuring the anticipated impact of the vision. The fifth phase in the actual 'implementation' of the vision and gaining commitment of the entire organization to the vision. Lastly, the sixth phase is a continuous improvement stage of periodically reviewing and updating the vision to ensure it remains current and everyone

remains committed to the vision. Lipton (2003, p. 17) also points out that a vision should be stable. If not, one may not have created an appropriate vision for the organization.

Christenson and Walker (2004) also identify that vision is part of the change process. It is important to discuss the basis of change management because projects are about instigating a process or product change (Cleland 1999). The interesting link between change and vision is that the vision statement clearly seeks to convince its audience that the change is worthwhile and indeed bestows benefits— it also indicates what will be different or describes a different end state (change).

Once developed, whether from the inspiration of a single visionary leader or through one of the above described developmental processes, the project vision needs to be championed. This is to say that, a vision champion is required to promote the idea of the project vision with conviction, persistence and energy to ensure the vision's success. The champion is the individual who brings the vision to life. Projects are unique endeavors and as such needs to be sold widely to senior management and generally to all stakeholders. Even more importantly is the need to sell the idea of the project vision to the project sponsor, project manager and project team. While the project champion is typically self appointed (Howell 2005) the project sponsor is appointed by the organization and is ultimately responsible for the success of the project (PMI 2004). Therefore, the project sponsor has a vested role in propagating the project vision also with the project champion to a point that the project vision becomes a shared vision of all stakeholders. Similarly, the project manager is responsible for ensuring the vision is realized by delivering a successful project. The following figure shows how these three key project roles have a stake in the vision but have different perspectives.

The project champion is focused on promoting the project vision with external stakeholders including senior management within the host organisation. The project sponsor has a dual focus, outward along with the project champion to ensure all stakeholders believe in the project visions as well as an internal focus to ensure everyone is rowing in the same direction toward the predetermined vision. The project manager is responsible for achieving the vision

through the project team and maintains a primarily internal focus to control the triple constraints (time, cost and scope).
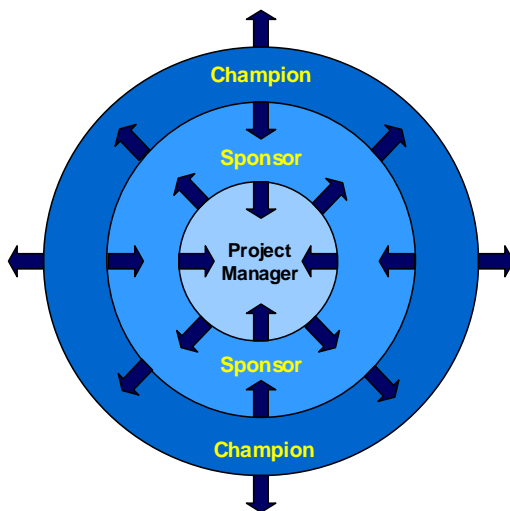
Figure 13 – Project role perspectives

While each has a vital role in promoting and maintaining the vision a growing body of literature is pointing at the criticality of the champion role (Maidique 1980; Howell 2005; Coakes 2007). This in no way limits the documented (Hall and Holt 2003) importance of the

sponsor role to project success nor that of the project manager (Kerzner 1998). In fact, without an effective vision champion, the IT innovation field would suggest a less than three percent chance of success (Coakes 2007) The current literature from this field suggests that this percentage can be greatly improved by developing and ensuring a vision champion role is filled.

Conclusion

Chapter three has identified the criticality of the construct of vision and specifically the import of a project vision. While there has been a considerable amount written on the topic of vision in the general leadership and business literature, little has been written about the topic in the project management environment. This chapter has provided a project vision model, DRIVES© that identifies the varied purpose, attributes and characteristics of an effective project vision. The validation of this model and import of this construct is yet to be determined and will be addressed in following chapters of this thesis beginning with the next chapter that sets out the research methodology to investigate the role of a 'project vision.'

Chapter 4 – Methodology

Introduction

The previous three chapters have set out the structure of the thesis and reviewed the literature that is relevant to examining the topic of project vision. The literature review provides a research value proposition by clearly showing both a gap and an opportunity for a study of project vision. It does not appear that the project vision construct has been given much consideration especially in light of its possible criticality as a success factor to project outcomes. However, vision itself is widely discussed in the general organizational and leadership literature and seen as being necessary for organisational success.

The study has one main research question, "How does project vision impact projects' outcomes?" There are also three propositions that will be addressed.

1. Project vision is an important factor in successful outcomes of change management projects.

2. Effective communication and maintenance of knowledge relating to a project vision will have positive impact on expected project outcomes.

3. Projects represent change and the project vision is an important factor in signaling the change.

The research question will be studied through a research design using a multi faceted approach incorporating both qualitative and limited quantitative methods. The central methodology for the study will be the use of a qualitative multiple case study approach. This design is ambitious but will use triangulation of inquiry on the same construct under investigation through primary and secondary data sources. Figure14 depicts both the qualitative case replication approach as well as the quantitative evaluation approach to the application of the research. The application of the research from the qualitative study will be the development of an awareness raising workshop. The design and evaluation of the workshop will be addressed entirely within Chapter seven. This chapter will cover the
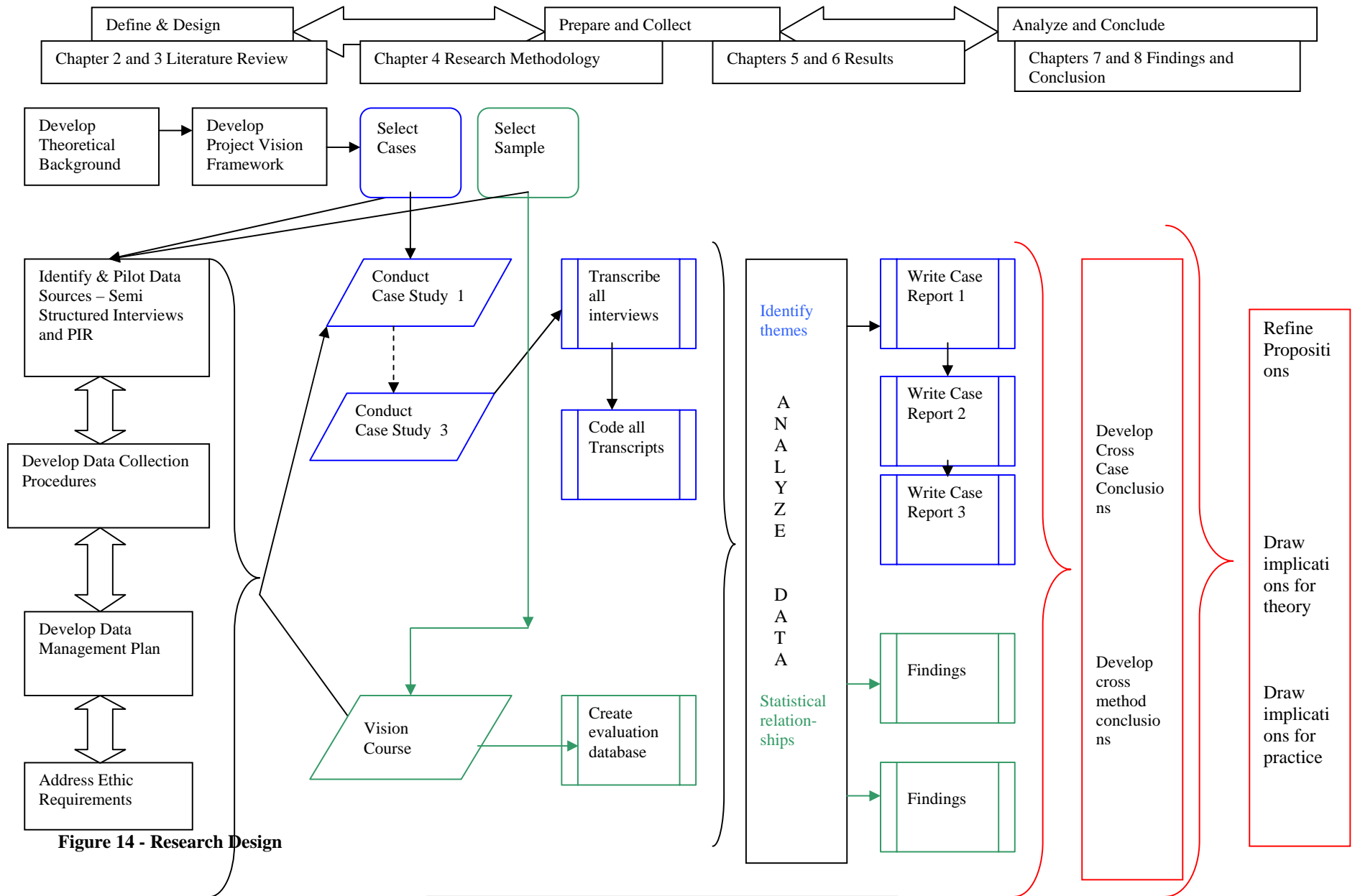
Figure 14 - Research Design

Define & Design	Prepare and Collect	Analyze and Conclude
Chapter 2 and 3 Literature Review	Chapter 4 Research Methodology	Chapters 5 and 6 Results	Chapters 7 and 8 Findings and Conclusion

Develop Theoretical Background → Develop Project Vision Framework → Select Cases | Select Sample

Identify & Pilot Data Sources – Semi Structured Interviews and PIR

Develop Data Collection Procedures

Develop Data Management Plan

Address Ethic Requirements

Conduct Case Study 1

Conduct Case Study 3

Vision Course

Transcribe all interviews

Code all Transcripts

Create evaluation database

ANALYZE DATA

Identify themes

Statistical relation-ships

Write Case Report 1

Write Case Report 2

Write Case Report 3

Findings

Findings

Develop Cross Case Conclusions

Develop cross method conclusions

Refine Propositions

Draw implications for theory

Draw implications for practice

LEGEND
Blue = qualitative
Green = quantitative
Red = combined

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Adapted from [Yin, 1994 #266, p. 49]

research design as seen in the following diagram and discuss case selection, subjects, data collection, data sources, data management and data analysis. The chapter will also include a brief discussion regarding the differences, advantages and disadvantages of qualitative and quantitative research methodologies. This chapter concludes with a discussion of the limitations of the study and relevant ethical considerations.

Research Design

When considering a research design one needs to select either qualitative or quantitative methods or both as each has its advantages and disadvantages. Qualitative and quantitative research has philosophical roots in the naturalistic and positivistic philosophies, respectively. Regardless of their theoretical differences, all qualitative researchers reflect an individual phenomenological or naturalist perspective. Whereas quantitative researchers, regardless of their theoretical differences, reflect the perspective that there is a common reality on which people universally agree.

Douglas (1997) and Geertz (1997) believe that from phenomenological perspective, multiple realities exist and therefore multiple interpretations are available and valid. These realities are social constructs based on a phenomenological perspective. Given ones perspective, one will conduct a study in a given manner and the resultant conclusions a researcher draws from a study will be considerably different from those of a researcher coming from a quantitative or positivist position, which assumes that there is a common and objective reality. The following table by Siegle (2003) summarizes Lincoln and Guba's (1985) perspective on the beliefs and assumptions of the positivist and naturalist paradigms.

Table 16 - Contrasting Positivist and Naturalist Axioms

Axioms About	Positivist Paradigm (Quantitative)	Naturalist Paradigm (Qualitative)
The nature of reality	Reality is single, tangible, and fragmentable.	Realities are multiple, constructed, and holistic.
The relationship of knower to the known	Knower and known are independent, a dualism.	Knower and known are interactive, inseparable.
The possibility of generalization	Time- and context-free generalizations are possible.	Only time- and context-bound working hypotheses (idiographic statements) are possible.
The possibility of causal linkages	There are real causes, temporally precedent to or simultaneous with their effects.	All entities are in a state of mutual simultaneous shaping, so that it is impossible to distinguish causes from effects.
The role of values	Inquiry is value-free.	Inquiry is value-bound.

Among qualitative and quantitative researchers, each of these beliefs are based on different sets of assumptions about what constitutes reality.   Blumer (1998), a phenomenological researcher who emphasizes subjectivity, does not deny that there is a general reality one must attend to. Qualitative and quantitative researchers constantly debate the differences in assumptions about what reality is and whether or not it is measurable. The debate is furthered by a difference of opinion as to how we can best understand what we "know" whether through objective or subjective methods.

Typically, any discussion of research method is dichotomized between a quantitative or a qualitative perspective because the two paradigms have been assumed to be opposite ends of a continuum or for some separate and distinct disciplines. The author conceptualizes science more broadly than either dichotomized positions suggest. The scientific method generally is a process that permits us to acquire knowledge and no one method to acquire knowledge is superior.   There are clear methodological choices that are consistent with those assumptions by which to conduct the research. One, then, can determine whether the qualitative, quantitative or both methodologies is most effective (Glaser and Strauss 1995; Strauss and Corbin 1998; Myles and Huberman 1984).

Each style of methodological approach lends itself to differing types of inquiries and the selection of a research design is in part driven by ones conceptualization of science, however more tactical factors are also important. As Yin (1994, p.38) suggests, "the first and most important condition for differentiating among the various research strategies is to identify the type of research question being asked." In general, "what" questions may either be exploratory (in which case any of the strategies could be used) or about prevalence (in which case surveys or the analysis of archival records would be favored). 'How' and 'Why' questions are likely to favor the use of case studies, experiments or histories. In this study our research question addresses the how of the "project vision" construct and therefore a case study approach is most appropriate.

The case study approach is also appropriate when collecting data and conducting thematic analysis between cases (Lofton 1971). While questionnaires across large numbers of subjects provides for considerable generalizations, the aim of this type of research is to explore in depth the role of project vision. Therefore, the selection of a case study method is particularly useful as Walker (2005, p.62) states, "the research of practice is largely about the particular, making sense of that to generalize lessons that can be learned to improve practice." This is very much consistent with the unique intent of a professional doctorate and in keeping with a major reason of theory building to inform practice.

Having determined the appropriateness of the case study approach, four variations of case studies are available. The four variations of case studies are based on a single case design using a single or multiple units of analysis and a multiple case design using single or multiple units of analysis.

Table 17 - Basic Types of Designs for Case Studies

Design and Units of Analysis	Single Case Design	Multiple Case Design
Holistic (single unit of analysis	Type 1	Type 3
Embedded (multiple units of analysis	Type 2	Type 4

(Yin, 1994. p. 39)

In this study, a Type 3 approach is appropriate given that the study involves collecting data from multiple cases and from multiple participants within each case. Type 3 research designs also facilitate both breadth and depth of inquiry thereby enhancing the generalizability of the findings. This type of research design also minimizes participant bias and supports literal replication (corroborating evidence).

Yin's (1994) case replication design has been adapted in Figure 1 to show the logic flow of steps taken in the design preparation and collection of data, analysis and conclusions. This diagram is very illustrative in that it also provides another visual representation of the structure of the thesis and the many steps required to conduct its research.

Having described the appropriateness of the qualitative multi-case study approach, let us now turn to the mechanics of sample size, sampling and subject selection.

Sample Size, Techniques and Subjects

This section addresses issues and decisions made about case and participant selection where three projects were selected to be investigated as case studies in this thesis. The cases were selected using a non-probability (Kumar 2005, p. 184), purposive (Silverman 2000, p. 104), judgemental technique (Babbie 1993, p. 580; Dyer 1995, p. 107). While this is a multiple case study research design, the unit of analysis are the individuals that worked on the projects and not the projects themselves. The technique is acceptable for Type 3 (Yin 1994) research as it is exploratory and focuses on generalizations (Gomm, Hammersly et al. 2000). The technique was used to identify projects that had significant characteristics of knowledge management, change management and where a "project vision" could be identified implicitly or explicitly.

A number of other considerations were used in the selection of these cases including convenience, project focus, familiarity and accessibility. The author works within an organization in which the selected case study projects were undertaken and therefore had easy access. All the case studies were definitive projects as defined by Project

Management's Institute's (PMI 2004) "Body of Knowledge" (PMBOK) in that they were temporary endeavours undertaken to create an unique product, service or result. The author was also very familiar with each of the projects as he had a role on each of the project teams as a project manager of one component, a member of the steering committee or as a project team member. A brief overview of the three selected projects or cases can be seen in the following table.

Table 18 – Project – Case Descriptions

Project/Case	Description	Participants
Justice Information System (JIMS)	▪ Purpose – public safety ▪ Multi-stakeholder ▪ Creation of a central information repository ▪ Creation of a one-write system	Middle, senior managers and executives
Project Management Centre or Excellence (PMCOE)	▪ Purpose – enhanced organizational performance ▪ Creation of a common methodology ▪ Creation of common tools and templates ▪ Creation of an electronic platform to access and share information	Middle, senior managers and executives
Integrated Service Delivery (ISD)	▪ Purpose – enhanced citizen satisfaction ▪ Improved organizational performance	Middle, senior managers and executives

The selected cases had common characteristics such as multiple stakeholders, crossing multiple organizations and represented significant multi-faceted outcomes. JIMS had stakeholders from various sections of the justice system across the greater public sector, government and not for profit sectors. The ultimate driver and outcome was to increase public safety. The PMCOE had membership from across most government ministries in a public service of over 30,000 employees. The desired impact was improved organizational performance and enhanced development of individual members (project managers). Lastly,

ISD had representation from most ministries, agencies, boards and commissions within a public service of over 30,000 employees. Again, the desired outcome was improved organizational performance but secondarily there was a hope of increased citizen satisfaction with government services.

The population from which the sample was drawn was limited but contained the essential stakeholders for each project enabling a rich description of the project and informed responses to the semi-structured interview questions. The following table shows the number of persons contacted and the number of persons consenting to participate in semi-structured interviews.

Table 19 - Numbers of Participants

Project	Number of Interview Requests	Number of Interviews Conducted	Interview Number
JIMS	8	8	3,4,8,9,10,17,18,20
ISD	7	7	1,2,5,6,7,22,23
PM-COE	8	8	11,12,13,14,15,16,19,21,
TOTAL	**23**	**23**	

The persons interviewed were executive sponsors, project managers and project team members but most were within management ranks of the public service.

Data Collection Procedures

This section outlines the procedures used to engage participants and the instruments used to facilitate the collection of information from those participants. These steps greatly enhanced participant engagement and effective communication (Yin 1994).

Access to use individual projects as cases studies was gained through a formal request to individual project sponsors (Appendix A). The formal requests covered the purpose for the study, time commitments and any benefits that their section of the organization or the broader organization might gain. Once written approval was gained, the author, given his familiarity

with project team members, made a list of project team members for the individual projects. Project sponsors, project managers and project team members with the exception of administrative or technical support team members were selected to be interviewed. As seen above, 23 requests for interviews were dispatched and approvals gained. Individual invitations (Appendix B) were sent to each potential participant with a brief "Plain Language" (Appendix C) description of the research project.

Participants acknowledged their agreement to participate in the study by returning a signed "Consent to Participate in Research" form (Appendix D). This form was reviewed by a lawyer in the author's organization's Legal Services section to ensue it adequately covered intellectual property rights and privacy rights of individual participants. Once an agreement to participate was gained the name and contact information of the participant was sent to a researcher to conduct the interviews. From this point on, the author was not aware of which interviews related to which participant. The interviews were based on a semi-structure interview template (Appendix F) and were administered using a detailed interview protocol (Appendix G) that included appropriate prompts if required.

The semi-structured interview was designed with consideration of the research problem, question and propositions as well as taking into account the four areas of study that formed the core learning for the Doctorate of Project Management program. The interview was piloted by the author on two participants and only minor grammatical changes were made to make the questions easier to ask and easier to understand. No substantive changes were required.

The researcher scheduled all of the interviews (except the two pilots) and administered the interview questions in person. Before conducting the interview, the researcher was fully briefed on the research, the areas of investigation and reviewed a detailed interview protocol (Appendix G). The interviews on average were reported to have taken between 70 and 130 minutes. The interviews took place between November 2005 and March 2006 with the majority being completed in January of 2006. The author was not aware of when the interviews took place but knew they would occur in the participant's own offices. All interviews

were tape recorded on two cassette tape recorders to create a redundancy factor should one tape recorder fail. Except for the odd indecipherable phrase from a participant, no recording problems were experienced.

Before interviews were started, each participant was asked if they wished for the researcher to enter into a signed confidentiality statement (Appendix F). Surprisingly, not one participant required the form to be signed. Before starting the interview the researcher confirmed that the participant knew the purpose of the interview and what would happen with the information collected. The researcher also confirmed with each participant that they did not have to answer any questions, could ask their own questions for clarification or could stop the interview at any point. All participants asked clarifying questions but no one declined to answer a question or chose to stop the interview prematurely.

Once the interviews were completed the participant was asked if they had any questions regarding the content of the interviews. All participants were comfortable knowing that once the interviews were transcribed they would have an opportunity to review the interview and add any additional comments. The opportunity to provide additional comments or clarification to interviews was completed between April and May 2006 and only 3 of the 23 participants had clarifications. Unless new information was required to correct a substantive error, no efforts were made to collect additional information from the participants.

Data Sources, Data Management and Data Analysis

This section describes how data sources are integrated and managed individually and together as a collective data set. The methods to analyze the data are also described. The following diagram, modified from Jugdev (2003, p. 147), depicts the structure of data sources, data management and data analysis.

Data Sources

Interviews follow up interviews Documents Author's Experience

Data Management

Microsoft Excel Read and code (N=23) Microsoft PowerPoint

Atlas ti

Microsoft Word EndNotes

Data Analysis

Code and Interpret Meta Level Codes - categories
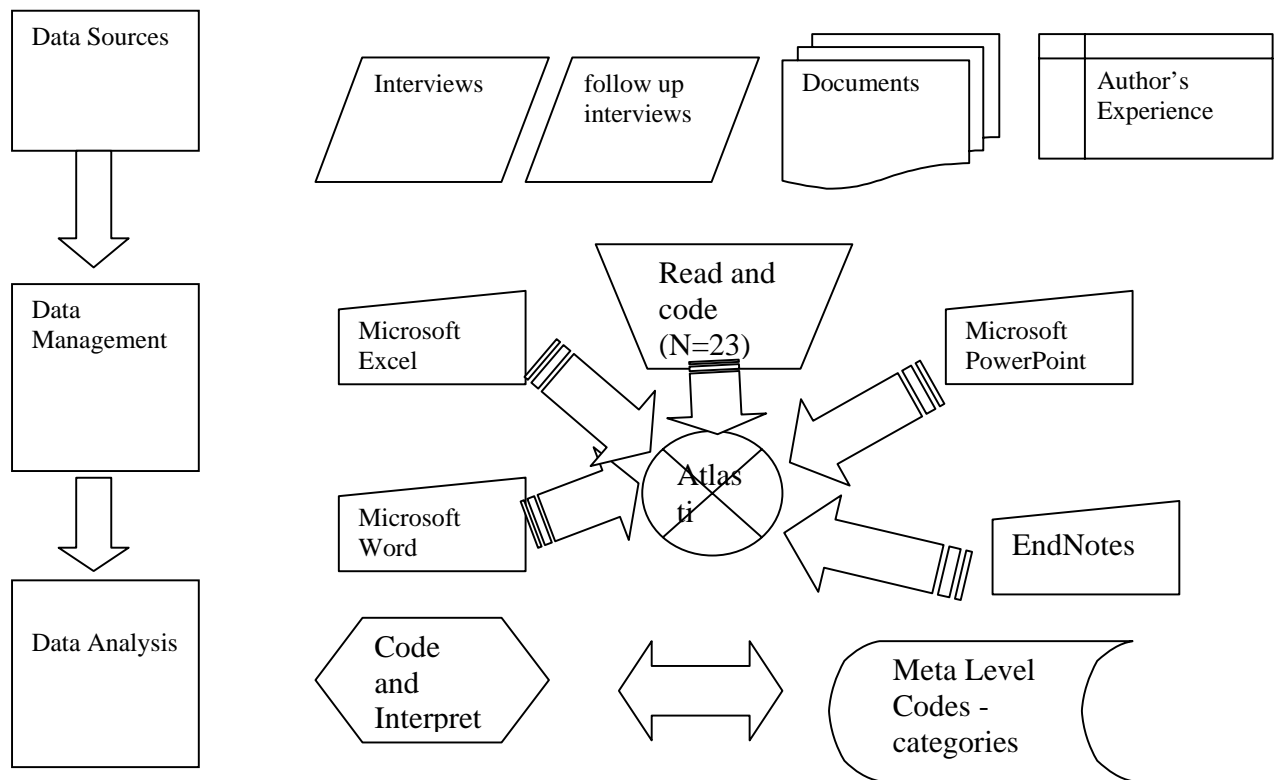
Figure 15 - Data Sources, Management and Analysis

The study used one primary data source and three secondary data sources. The primary data source is the interviews and the secondary data sources are the confirmation interviews, documentation and the author's experience.

Data Sources

Data sources are always suspect due to issues of reliability and verifiability (Olson 2003) and controls should be employed to enhance these critical characteristics. This can be a significant issue in qualitative research methodologies that use interviews to investigate an individual's perceptions of events, feelings or recollections of past events (Babbie 1993). A number of measures can be employed to enhance and safeguard against these methodological challenges.

The main method to protect against these concerns is one of triangulation where the same event or concept is viewed from various perspectives. This then increases the reliability of

the information reported. As Yin (1994, p.11) suggests, triangulation also addresses concerns with construct validity as, "the sources of evidence essentially provide multiple measures of the same phenomenon."

The main data source for this research was a semi-structured interview which covered the following areas:

1. Purpose of the study.
    a. Did the interviewee understand the nature of the research and how the information gathered would be used?
2. The project case study.
    a. What was the nature of the project being investigated?
3. Critical success factors.
    a. Based on the literature, were the common critical success factors (project management framework, control systems, senior management support, etc.) present?
4. Knowledge management.
    a. Did the interviewee understand the concept of knowledge management and how it was applied in the project under investigation?
5. Change management.
    a. Did the interviewee understand the concept of change management and how it was applied in the project under investigation?
6. Procurement.
    a. Did the interviewee understand the concept of procurement and how it was applied in the project under investigation?
7. Project vision.
    a. Did the interviewee understand the concept of project vision and what role it had in the project?
    b. How was it created?
    c. How was it communicated?
    d. How was it maintained?

The use of a survey is always subject to bias, however the use of verification and triangulation with secondary data sources such as supporting documentation protects against this phenomenon. The researcher commented that all of the participants, without exception, were very forthright and exceptionally cooperative to share their information. She commented that, people were "bending over backwards" to participate fully and make themselves available (Whetherill 2005).

Three sources of secondary data were used. The first was the verification of interview responses and content by each interviewee. Participants were given the opportunity to review their transcribed responses and add to the information as they felt was required. This step enhanced the verifiability of the information gathered at the initial interview. Also, another source of information was used, as many of the participants provided background documents to the projects that were being considered. These included briefing notes, training manuals and links to project websites. Lastly, the author was involved in each of the projects under review and therefore had significant corollary knowledge. The documentation and personal experience helped triangulate on areas of inquiry thereby enhancing the reliability of the information gathered during the initial interview.

Data Management

Yin (1994) suggests that to address problems of construct validity and reliability in case studies three principles of data collection should be followed. First, and as discussed, triangulation or multiple sources of evidence should be used to examine the same phenomenon. Second, a chain of evidence should be maintained much like in a criminal investigation where police must show where the evidence was collected, how it was stored and how it was analyzed before being presented in court or in the case of research, a report. Lastly, a database of evidence should be used to hold and store evidence, as Yin (1994, p. 98) states, "a case study database markedly increases the reliability of the entire case study." In this study, and as reported earlier in this chapter, a number of case study databases were used.

The data was managed for textualizaton using Microsoft Word,™ graphically using Microsoft PowerPoint™ and quantifiably using Microsoft Excel. The predominant method of managing the primary data was by using qualitative Scientific Software ™ (Atlas-ti). The use of Atlas-ti revealed 59 codes and 12 categories. Atlas-ti was the main data management system and was selected after reading an article by Barry (1998, p. 7) as he states its' "strengths lie in its inter-connectedness and creativity interface". These attributes were important given the exploratory nature of this thesis research study. Lastly, Endnotes was used to manage the many references that support this thesis.

Data Analysis

Data analysis was completed using Atlas-ti as well as manually coding the individual transcripts. In total, 23 transcripts were imported into Atlas-ti as well as read thoroughly and repeatedly by the author. Both the qualitative analytic software and reflective reasoning were used to analyze the transcripts that ranged from 12 to 25 pages. Data analysis of this research included computer assisted coding that identifies themes within individual transcripts and across transcripts. Data analysis was also assisted by using deductive reasoning by the author. One transcript from each project was exported into Atlas-ti consecutively. The author judged which transcripts were the most thorough from each project and used this and then the second most thorough and so on until all the transcripts were exported and coded. By the entry of the seventh transcript a point of saturation was reached as no new codes were identified or created in the Atlas-ti database. Coding, is the "analytical processes which data are fractured, conceptualized and integrated to form theory" (Strauss and Corbin 1998). The process of coding was iterative and individual (meta) codes and family (groupings) of codes were changed as the transcripts were coded.

Three types of coding were used; open, selective and in-vivo. Open coding occurs where were the researcher assigns the code (Friese 2004) to bring clarity of definition and linkage to common subjects. Strauss and Corbin (Strauss and Corbin 1998) describe this as "the analytical process through which concepts are identified and their properties and dimensions are discovered in the data." Selective Coding or Coding by List (Friese 2004) is a form of

coding that Straus and Corbin (Strauss and Corbin 1998) describe as the, "process of integrating and refining theory."   Lastly, in vivo is the use of direct quotes as codes or "the name may be taken from the words of the respondents themselves" (Strauss and Corbin 1998)."

Methodological Integrity

One can not reasonably address the issue of methodological integrity without returning to the discussion started in the research design section of this chapter examining the differences between quantitative and qualitative research designs.   It is only after one understands the methodological preference of the research design that one has the context to discuss validity and reliability which are the essential elements of methodological integrity.

Quantitative Methods Conceptualization

Quantitative research is frequently referred to as hypothesis-testing research (Kerlinger 1997; Balnaves and Caputi 2001). This represents the traditional or classic pattern of research where studies start with preliminary statements of theory from which research hypotheses are derived. The experimental design is established in which the predetermined dependant variables are measured while controlling for the influence of selected independent variables. Subjects for the experiment are ideally selected at random to mitigate researcher bias and error. The sample of subjects is drawn to be representative of the population. Typically, after the pre-test measures are taken, the treatment conducted, and post-test measures taken, a statistical analysis is conducted to reveal findings about the treatment's effects on the dependant variable under investigation.

Following the treatment and to show the likelihood of repeatable findings, statistical techniques are used to determine the probability of the same differences occurring over and over again. These tests of statistical significance typically explain the amount of variance a treatment has between the application and non-application of the independent variable. Once explanations for variance are discovered or remain absent, the findings are said to

confirm or counter the original hypothesis. Based on the findings, revisions to current theory or new theories are suggested.   This represents the classic scientific experimental model.

Qualitative Methods Conceptualization

Qualitative research means different things to different people (Denzin 1999) However, most will agree that qualitative research is naturalistic approach to its subject matter requiring interpretation. Qualitative researchers attempt to explain the meaning people attribute to phenomenon in the natural settings in which they occur.   Qualitative researchers are concerned with 'context' and believe that human behavior is greatly influenced by its environment and as such the research is often conducted in the subjects' natural setting. This style of research involves the use and collection of a variety of empirical materials including case studies, personal experiences, interviews, observations and historical accounts.   Kaplan and Maxwell (1994) argue that the goal of qualitative research is to understand phenomenon from the perspective of those who experienced the event within their own social and cultural context, or stated colloquially, attempts to have the researcher 'walk a mile in the subject's shoes.'

Patton (1990) defines qualitative data as "detailed descriptions of situations, events, people, interactions, observed behaviors, direct quotations from people about their experiences, attitudes, beliefs, and thoughts and excerpts or entire passages from documents, correspondence, records, and case histories". Qualitative data consists of detailed descriptions including in depth inquiry and direct quotations capturing people's personal perspectives and experiences (Quinn-Patton 1997).   Examples of qualitative data include personal comments, audio recordings, interview transcripts, field notes, photographs, and etcetera.

Qualitative researchers build theory grounded in the data where the theory emerges rather than being abstract in nature (Strauss and Corbin 1998). Qualitative theory building is quite different from that of quantitative theory building. Strauss and Corbin (1998, p. 10-11) state

that, qualitative research'" produces findings not arrived at by statistical procedures or other means of quantification." Compared to the hypothesis-testing method, qualitative grounded theory is instead developed by entering the field without a hypothesis, describing what happens; and on the basis of observation, formulating explanations about why it happens (Patton 1990; Guba and Lincoln 1996). Instead of coming from the conceptual level to the empirical level, they begin at the empirical level (data collection) and end at the conceptual level. Patton (1990, p.278) further distinguishes between the methods when he remarks: "The cardinal principle of qualitative analysis is that causal relationships and theoretical statements be clearly emergent from and grounded in the phenomena studied. The theory emerges from the data; it is not imposed on the data". This is not the author's position as theory does not emerge independent of the person interpreting the data. It is only through analysis that data becomes information and upon reflection information becomes knowledge and theory.

Advantages and Disadvantages of Quantitative and Qualitative

Quantitative methods are concerned with the measurement and analysis of phenomena, that is, whenever we count or categorize, we quantify (Coolican 1998). Quantitative researchers apply mathematical methods of summarizing and analyzing data from various areas of their discipline. Qualitative methods involve emphasizing meanings, experiences, descriptions, feelings, etcetera (Coolican 1998). The data for qualitative research generally consists of descriptions or reports of observed phenomenon, data for quantitative research tends to be numerical or categorical. Social research, or the study of social interactions and relationships (Ragin 1994), has to date been more quantitative than qualitative. There are however distinct advantages and disadvantages of both quantitative and qualitative methods. The main advantages of qualitative research are summarized below.

The design of qualitative research has significant flexibility as it is often unstructured and capable of being adapted to the inquiry as understanding deepens or situations change and allowing the researcher to pursue new paths of discovery as they emerge (Quinn-Patton

1997). Qualitative research typically has high validity. Validity refers to the appropriateness, usefulness of inferences and accurate reflection made by the researcher based upon the data which they collect (Babbie 1993; Fraenkel and Wallen 2003). In other words, qualitative research tends to accurately measure what the researcher claims it does. While this is a strength to qualitative research, it is also its Achilles heel, for it is a disadvantage in that it is often very subjective as the researcher often includes personal experience and insight as part of the relevant data thus making complete objectivity impossible.

The nature of qualitative research inherently has a very low reliability in that it is extremely difficult to replicate a piece of qualitative research due to the fact that it often does not have a structured design and occurs in a natural setting that is ever changing. The main advantages of quantitative research includes its objectivity. Unlike many qualitative researchers, quantitative researchers try to keep a distance from their subjects. They prefer to use subjects unknown to them and they make little attempt to get to know their subjects other than to collect the required data from them (Strauss and Corbin 1998).   Quantitative research methods, if explained in detail are generally very easy to replicate and hence have a high reliability. Reliability as defined by Babbie (1993, p. 583) is, "that quality of measurement method that suggests that the same data would have been collected each time in repeated observations of the same phenomenon." However, quantitative research also has disadvantages.

One of the main criticisms of quantitative research is that it often takes place in an unnatural setting where researchers create an artificial environment in an attempt to control all relevant variables. This creates a concern that the results which obtained in the laboratory will not be generalizable or relevant to the real world. Quantitative research is also criticized for giving narrow, unrealistic information using measures which capture only a small proportion of the concept under investigation that are often taken out of context of the environment in which they occur. This provokes a question of whether the research actually measures what the researcher claims it does. Hence, quantitative research can often have low validity.

Strauss and Corbin (1998) argued against quantitative research, stating that "some things which are numerically precise are not true; and some things which are not numerical are true." They put forward the point that what may be humanly significant may be statistically insignificant. Conversely, what is statistically significant might be of little human significance due to the lack of context or deeper understanding. However, one should realize the advantages and disadvantages of both types of research methods and accept that qualitative methods are appropriate for some types of research. In fact, for the last decade, many have been calling for mixed method approaches   (Kuhn 1970; Patton 1998; Thomas 2003).

While interesting, this examination of the quantification to qualitative continuum is, for the purpose of methodological integrity the same four criteria need to be addressed; "internal validity, external validity, reliability and objectivity (Denzin 1999). Similarly, Kidder and Judd lay claim to the universality of four criteria as tests to assess all social science methods (1986). The following chart, as found in Yin (1994) has been customized to describe the phase of research that each test applies and the tactics that can be used to satisfy the tests.

Table 20 Case Study Tactics for Methodological Integrity

Tests	Case Study Tactics	Phase of research in which tactic are applied
Construct validity – "establishing correct operational measures for the constructs being studied" (Yin 1994, p. 33)	• Use multiple sources of evidence • Establish a chain of evidence • Have key informants review draft case study report	Data collection Data collection Data collection
Internal validity – establishing a causal relationship, whereby certain conditions are shown to lead to other conditions as distinguished from spurious relationships" (Yin 1994, p. 33)	• Do pattern matching • Do explanation building • Do time series analysis	Data analysis Data analysis
External validity - "establishing the domain to which a study's findings can be generalized" (Yin 1994, p. 33)	• Use replication logic in multiple-case studies	Research design
Reliability – "demonstrating that the operations of a study – such as the data collection procedures can be repeated, with the same results" (Yin 1994, p. 33)	• Use case study protocol • Develop case study data base	Data collection Data collection

Construct Validity

In this research study the construct validity test was addressed by:

- Using multiple sources of evidence, both primary interviews, documentation and the author's personal knowledge and experience
- Establishing a chain of evidence through a strict protocol and use of information databases
- Having each interview transcript reviewed by the interviewee for accuracy
- Having each case study reviewed by the project sponsor for accuracy
- The semi structured interview used both open and closed ended questions in the semi-structured interview
- By inviting each participant at the end of the interview to add any information they felt was important.

For the above reasons the author has confidence that the measures used are accurate measures of the constructs under investigation.

Internal Validity

In this research study the internal validity test was addressed by:

- Creating an interview protocol that had pre-determined prompts for the researcher to use to ensure sufficient and relevant information was gathered to accurately assess the measure of the construct under investigation.
- Selecting a research assistant that was a very active listener and investigator as evidenced by the transcripts in using paraphrasing to ensure accuracy of understanding and clarity of intent in answers.

For the above reasons the author has confidence that measures used and understood by the researcher and interview participants accurately measured the constructs under investigation.

External Validity

Subject to a discussion in a following section of this chapter on the limitations of this study the external validity test was addressed by:

- Using multiple cases, in different business units and different types of projects. However all were part of a much larger single federated organization.
- Crafting case reports that were in depth and rich with information to provide readers the opportunity to judge the issue of generalizability for themselves.
- Examining each case through multiple lenses (DPM core learning streams) to enhance the generalizability of comparable contexts.

For the above reasons the author has confidence that within the declared limitations of this study the findings are generalizable to a broader audience and worthy of further specific study in other environments.

Reliability

In this research study the reliability test was addressed by:

- Using the same semi-structured interview template for all interviews.
- Using the same interview case study protocol for al interviews.
- Where possible triangulation methods were used.
- Case study data bases were used and supported by software
- Using plain language statements to ensure understanding of research purpose for all individuals involved
- Having interview participants from all levels of the projects but were consistent across each of the case studies
- Having all materials reviewed by multiple persons to ensure consistency of understanding.

Validity and Reliability

In concluding the issue of methodological integrity, the author is confident that the research undertaken is methodologically sound and transparent in order that readers may judge for themselves on the integrity of the research. Before concluding this section it is also important to recognize that Babbie (1993) notes a tension between reliability and validity. There often appears to be a trade off between quantitative measures and qualitative measures as the latter can often be argued as more valid as it is richer but less reliable because collection methods may be subjective. On the other hand, quantitative measures often lack the depth or breadth of understanding although they are often very reliable. Regardless, the author takes the position that a researcher needs to address each regardless of the methodological design of their study and not acquiesce to a trade off.

Limitations of the Study

The scope of this research was defined in large part by the design of DPM program as described in Chapter one of this dissertation. The research is also guided by the standards of the RMIT Research and Graduate Studies Committee Policy and Procedures (Research and Graduate Studies 2002, p.20).

As described earlier in this chapter the selection of case studies was in part guided by the author's knowledge and involvement in the projects under review. Therefore, the case studies may not be representative of all projects and may be limited to projects within a public sector organization from which they were selected and hosted. Also, the use of case studies was dependant upon the permission of project sponsors but access was unfettered. Lastly, permission and participation was ethically sensitive but did not restrict or constrain the research design.

Ethical Considerations

Ethical considerations are paramount with any research and especially when human subjects are involved. In this study, the author applied (Appendix H) to the Business Human Research Ethics Sub Committee (Research and Graduate Studies 2002) of RMIT University. Participation in this study was entirely voluntary and all data collected was done so through a double blind strategy. Participant's names are not linked to data and their participation was only sought after approval from the projects' Executive Sponsor(s) was obtained. Recordings were used but once transcripts were reviewed, the recordings were destroyed. Participants were informed of the tape destruction. Only one hard copy of the transcripts are kept in a locked file cabinet at the author's work site and one electronic copy on the author's work network under password protection. These records will be retained for a period of five years and then destroyed.

During the interviews, participants had the opportunity to end the interview at any time. Participants were also given a plain language description of the research (Appendix C) and the author fully disclosed how the data would be used and published.

Signed consent forms were gathered from all project sponsors (Appendix A) and participants (Appendix D). The researcher also offered to sign a confidentiality agreement (Appendix E) but none of the participants wished for her to do so.

Given the above procedures, the author is confident the research presented in the thesis was conducted in an ethical manner.

Conclusion

Following the introduction to the thesis and the literature reviews in Chapters two and three, this chapter has set out the research problem, question and propositions to be addressed in the thesis. The study has one main research question, "How does project vision impact projects' outcomes?" The chapter identifies that a multiple case study (n=3) design will be used and declares how the data will be captured and managed. As this is a qualitative research design, the advantages and disadvantages of using qualitative or quantitative methods were discussed. Given the exploratory nature of the research problem and question, a qualitative research design method was selected.

Lastly, the chapter addressed inherent limitations to the study and ethical considerations. A goal of this chapter has been transparency on behalf of the author so that the reader can have confidence in the validity of design and methodology but also be able to make an informed judgement as to the generalizability of the findings that will be discussed in the next chapter.

Chapter 5 – Findings

Introduction

Chapter four explained the research design and methodology used in this thesis. Chapter Five will reveal the resultant findings. These findings will be presented in three main sections. First, raw frequency data will be presented for each case and across all cases for the interview questions that lend themselves to nominal answers (yes/no). Secondly, individual case reports will be presented as constructed from both the primary data (interviews) and secondary data sources (documents) where available. Lastly, the third major section of this chapter will present thematic findings unearthed using the qualitative software and the manual coding of individual interviews.

General Findings

The general findings of this dissertation will report out on the data gathered from the semi structured interviews and does not typically include secondary data sources except where useful for verification. In total twenty-three interviews were conducted over a two month period of time. The longest interview took 100 minutes and the shortest 50 minutes. The transcriptions averaged 5,410 words with the longest being 9,520 words and the shortest being 2,353 words.

The data represented in this section will be given a numeric value of 2 for "yes," 1 for "no," 1.5 for "yes/no" and 0 for "unknown." Quotes are referenced with numbers that represent the following characteristics:

> XX   Interview number
>
> XXXX Project
>
> XXX   Paragraph number

For example, reference number "14-JIMS-34" represents the 14th interview related to the JIMS project and the quote can be found in paragraph 34 of the transcribed interview. There

will appear to be approximately twice the number of paragraphs as is the case as Atlas-ti assigns a separate paragraph number for each space between paragraphs.

As discussed in Chapter four projects were selected to be investigated as case studies in this thesis as was described in Table 15. The three projects in general were all considered a success. Success was self-defined by the interviewees but typically did not include the traditional triple constraints definition of success of time, on budget and to specifications (Belassi and Tukel 1996; Hartman 2000, p . 24; Kerzner 2001). Also, respondents did not refer to a more recent and accepted definition of success of meeting stakeholders' expectations (PMI 2004). Instead, interviewees pointed to meeting objectives as described by one interviewee, "Vis a vis the objectives that were set down, yes I think it was a success. It didn't quite meet all of the objectives, but in some way or other it met most of them that are listed in the charter" (11-JIMS-17). Others pointed to the fact that a project had been made into an operational program, "It meant the primary objectives to implement a standard early case management system, an integrated system throughout the justice partners" (3-JIMS-29). Still others pointed to the fact that other jurisdictions were interested in adopting or purchasing the end product of the project as clear indication of their success, "We have a number of provinces that are currently looking at adopting JIMS or the framework of JIMS in their jurisdictions" (20-JIMS-17).

Not everybody was completely convinced of success as one person answered ambivalently that it was both a success and a failure in relation to PMCOE project (14-PMCOE-17). The answers in response to the question 3.3.4 "Was the project a success?" are displayed in the following table.

Table 21 - Q 3.3.4 - Was the Project a Success?

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	16	0	0	0	16	2
ISD	14	0	0	0	14	2
PMCOE	14	0	1.5	0	15.5	1.94
Total	44	0	1.5	0	45.5	1.98

In addition to enquiring about the general measurers of project success, a number of critical success factors were examined. Interview participants were asked if the project had a project framework, control system, senior management support, funding and project manager competence.

The first critical success factor is the project management framework that Cleland and King (1983 p.73) describes as a, "system operates to ensure that projects which have been evaluated, selected, and funded are appropriately executed on a day-to-day basis." When considering the use of a project management framework, participants responded to question 3.4.1 "Was a Project Management Framework used"? The following table displays the participant's responses.

Table 22 – Q. 3.4.1 Was a Project Framework Used?

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	16	0	0	0	16	2
ISD	12	1	0	0	13	1.86
PMCOE	10	0	3	0	13	1.63
Total	38	0	3	0	41	1.78

Interestingly, the one project you would have expected to have a solid project management framework would have been the Project Management Centre of Excellence yet this is the one that two of the interviewees reported did not have a framework. One interviewee reported that the ISD project did not have a framework. Overall, all reported to have a framework but in examination of the participant's answers one quickly realizes that projects had rudimentary frameworks as reported by one interviewee, "when we built the lifecycle for it, we definitely did have a plan, we had a charter, we had a work plan, so we did things the proper way but a framework, not really" (21-PMCOE-17). Similarly, one of the ISD participants also claimed, "Maybe not as rigorous as what it could have been (22-ISD-28).

One would expect that most project management frameworks would include a project control system. Project control systems generally include methods to control the scope of a project or as White and Fortune (2002, p. 7) state, "traditional aspects of sound project control play a

key role *(in project management[21]).* " Not surprisingly given the rudimentary nature of the project management frameworks reported in the three projects under review, only forty percent reported they had a project control system. However, when elaborating about the control system, most referenced project reporting tools rather than true project control such as a change control board or even change request procedures. When asked in question 3.4.2, "Was a Project Control System used?" respondents reported the following.

Table 23 – Q 3.4.2 Was a Project Control System Used?

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	14	1	0	0	15	1.88
ISD	10	1	1.5	0	12.5	1.56
PMCOE	4	5	1.5	0	10.5	1.32
Total	28	7	3	0	38	1.65

Again, given that a control system is typically part of a sound project management framework, one would not expect a high level of frequency of respondents reporting the presence of control systems given the rudimentary and reported nature of project management frameworks. The reports were directionally consistent with this assumption in that JIMS reported the highest level of framework and highest level of control system. Similarly, PMCOE reported the lowest level of project management framework and the lowest level of control system.

Another critical success factor and arguably, one of the most important critical of success factors, must be senior management support for the project. As Pinto and Slevin (1989, p. 35) state, "it is well accepted that top management can either help or hinder a project………Top management support is most necessary during the Execution phase." Most reported senior management support but at various levels as typified by one reportee, "We would always like to have more of it, but at least we had it" (1-PMCOE-37). However and upon closer examination, one learns that all of the projects lost this support in various degrees throughout some portion of the life cycle. JIMS lost senior management support from a key stakeholder as reported by one interviewee,

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[21] Italicized text added

"Sometimes it seemed like it wasn't there, when you needed it.
At the end of the project it was obvious that other priorities had
senior management support and as a result, funding was withdrawn……
So Individual Executive support changed through out the years but
I think that everyone recognized that an integrated justice and the functions
that we required were certainly important to justice overall,
on the criminal side anyways. So generally, I think it was there, but sometimes
it is hard to tell but eventually we lost senior management focus or priority at
the end of the project" (8-JIMS-84-85).

Senior management support for PMCOE was ever changing and seemingly absent for long periods of time as reported by one respondent, "from time to time…….so maybe once a year the executive sponsor patted us on the head" (11-PMCOE- 54). This sporadic support was verified by another PM-COE participant, who termed the support as "We had different and changing support… spotty upper level support" (14-PMCOE-37). In the case of ISD the level and veracity of senior management support changed significantly with the change of executive sponsor as reported by one reportee, "I think the support changed significantly when the project became an official office under a different Assistant Deputy Minister" (7-ISD-36). Regardless, those interviewed initially reported a high level of senior management support as seen in the following table but later identified limitations to this support during different phases of the project life cycle.

Table 24 – Q. 3.4.3 Was Senior Management Support Present?

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	16	0	0	0	16	2
ISD	14	0	0	0	14	2.
PMCOE	10	0	4.5	0	14.5	1.8
Total	40	0	4.5	0	44.5	1.93

Typically funding commitment accompanies senior management support. If you have senior management support you also usually have the funding commitment. This is true in the projects under review as seen in the following table that is directionally consistent with the previous table.

Table 25 – Q. 3.4.4 – Was Adequate Funding Available?

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	10	2	1.5	0	12.5	1.56
ISD	6	3	0	1	9	1.29
PMCOE	0	7	1.5	0	8.5	1.06
Total	16	12	3	1	31	1.35

PMCOE was originally a committee that formed a voluntary community of practice and as such began without funding. Only now and at the time of this writing has temporary funding for PMCOE been secured.

According to those interviewed, none of the projects had adequate funding and two of the three projects had reported inadequate funding. However, each project was able to raise the funds required to move forward and ultimately become a success. This finding apparently brings into question the criticality of "funding" as a success factor but caution must be born based on the small sample size of this study. At this juncture, it is merely an inquisitive observation for further consideration which is outside the scope of this research study.

The last critical success factor that was considered is that of project manager competence. Given the transformational nature of the change in several of these projects and the community of practice of project management professionals that led the third project, one would expect a fairly high level of project manager competence to be found in these projects. As seen in the following table this was what was reported.

Table 26 – Q 3.4.5 – Was a Competent Project Manager Employed?

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	14	0	1.5	0	15.5	1.94
ISD	6	1	0	4	7	1.75
PMCOE	12	0	1.5	0	13.5	1.69
Total	32	1	3	0	36	1.89

The table suggests that the JIMS project had the highest level of project manager competence but only because of the high level of information, systems and contracted project management competence. The actual business project manager competence was very low or absent in the initial phases as reported by more than one respondent.

"At points in time. And I think where we could have done better. Certainly initially, getting the project up and running. That was true. Partly I guess, because it took so long. Individual branches had project managers for their components, but the overall project management, this definitely was a gap in the early stages of the project" (4-JIMS-77).

In fact, those given the title of project manager were what many term "accidental project managers" (Pinto and Kharbanda 2001) as observed by one interviewee,

"I know that there were people on the government side who were doing a similar type of process (*project management*[22]) to make sure everything was done properly......the person from the private firm probably had the title of project manager, but I can't recall. And it wasn't done in a way, like the projects that I am involved with now, where that person is a defined, discrete professional role but was an accidental project manager" (9-JIMS-61).

Most of these individuals lacked any formal training or experience in project management. Over time these individuals gained considerable experience and many took formal project management training.

Considerable project manager competence was likely very critical given the nature of the change for these projects. As seen in the following table respondents reported the projects significantly changed business processes when answering question 3.6.2, "Did this project represent a change to your organization or its business processes?"

Table 27 – Q 3.6.2 – Did this Project Represent a Change to your Organization or its Business Practices

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	16	0	0	0	16	2
ISD	14	0	0	0	14	2
PMCOE	10	2	1.5	1	13.5	1.68
Total	40	2	1	1	43	1.95

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[22] Italicized words added

Respondents for JIMS and ISD clearly identified that their projects identified a change to their organization and its business practices. In the case of PMCOE, while respondents still indicated a change they did so with less frequency mainly because the change that would be implemented was more voluntary to end users. Also, it was less of a change to stakeholders involved in the project as they were already using the products that were being offered to others to whom a business change would have been more likely.

The preceding has been reporting on general context questions regarding the study and specifically looking at matters related to project success and change. Let us now move to the central focus of the study and that is in the area of project vision. First and as asked in question 3.8.2, "did the project have a 'project vision'?

Table 28 – Q 3. 8.2. – Did this Project have a " Project Vision?'

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	16	0	0	0	16	2
ISD	14	0	0	0	14	2
PMCOE	16	0	0	0	16	2
Total	46	0	0	0	46	2

As indicated in Chapter four, projects were selected because they were believed to have a project vision. Not surprisingly, all respondents reported that their projects had a project vision. Many did report that while their project had a project vision it was implicit in the early stages, "we had an articulated vision of where we want this to go……that is a recent thing (21-PMCOE- 99) this was also confirmed on another project, "I think it was implicit. I haven't seen it written anywhere, certainly it was implicit that I've talked about it, you know a community with still having access to public services" (22-ISD-96).   Also another participant revealed that, "it was sort of implicit within people's minds. But, coming out of the project there was a clear vision of a different state based on their experience" (1-ISD-96).

Table 29 – Q 3.8.6 Was a Written Project Vision Developed?

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	10	2	0	1	12	1.71
ISD	10	1	0	1	11	1.71
PMCOE	16	0	0	0	16	2
Total	36	3	0	2	39	1.86

In the case of the JIMS project there was a written vision statement that had originally been developed in a preceding attempt at the project under a different name as reported by (17-JIMS-13) "I was involved in the risk assessment of that SCIPS project. It eventually lead to it being collapsed and put into mothballs……When I came we did an extensive review of the written vision statement and we actually created a thing called an "'Information Resource Management Plan." According to this document, this vision was to "create a case management data base for the justice system" (Ministry of Attorney General 2001, p. 23). Similarly, the ISD project also had a vision that according to a document entitled, "A Client Centred Service Delivery Framework" was to "support the collaborative development of a cross government implementation strategy for client centred services". While this is really more of the project's purpose than vision, a clearer visionary statement was released just after data collection was completed and states, "Imagine that government services are designed and delivered in a way that takes your needs into account from beginning to end whether you're a citizen, a businessperson or a community volunteer" (http://www.lcs.gov.bc.ca/sdi/Imagine_Future_Feb10_06.pdf.

In the case of PMCOE all interviewees were clear that a written vision statement had been developed. Interestingly, PMCOE was a community of practice and not surprisingly, the vision statement was developed from the bottom up and through a collaborative process as reported by one respondent, "a few of us did a straw vision and we talked about……………then we debated it ….with grassroots input" (11-PMCOE-150) . Similarly, the vision statement for ISD was also a collaborative process that evolved as reported by one respondent, "the living component of it was very much an interactive thing that everybody believed in, we're public servants, right" (2-ISD-97).

When considering the various vision statements, either implicit or explicitly stated, there are certainly qualities that a vision statement may display such as describing the purpose of the project, signalling change and espousing values. In the case of the projects under review, many thought that the vision statements that were developed did express a sentiment as to the purpose of the project as seen in the following table.

Table 30 – Q 3.8.9 – Did the Vision Explain the Purpose of the Project?

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	12	0	0	2	12	1.71
ISD	14	0	0	0	14	2
PMCOE	16	0	0	0	16	2
Total	40	0	0	2	40	1.90

While most agreed the purpose of the project was included within the vision statement, two respondents were not sure if it did or not but they did not elaborate. Most responded with a sentiment similar to the following respondent (16-PMCOE-165) who, "Explained not in detail, but at a high level explained what we were trying to achieve."

In trying to achieve this purpose the projects all represented a change to the organization or to their business practices. In fact, significant or transformational changes as reported by both JIMS and ISD reportees, "I really saw it as kind of a warfare in terms of new ways for government to operate. We butted up against all the norms of governance" (5-ISD-85) and "Fundamental……While people going into the court room could have a minor change because of implementation the people who were assisting in getting ready for that , their entire organizational, operational experience changed" (9-JIMS-89).

So given the existence of the vision statements, participants in the interviews were asked if the vision signalled a change as seen in the following table.

Table 31 – Q 3.8.11 – Did the Vision Signal a Change in Business Practices

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	14	0	0	1	14	2
ISD	14	0	0	0	14	2
PMCOE	10	3	0	0	10	1.25
Total	38	3	0	1	41	1.86

The findings shown in this chart are a bit misleading as it appears that the PMCOE vision did, for many reportees, signal a change. Upon further review of their responses you see they reported in this manner as it did not signal a change or their respective organization as stated by one PMCOE participant, "I don't think it signalled a change in business practice, but identified an opportunity and put forth something tangible that could assist people with promoting themselves or promoting their organizations in the context of project management" (16-PMCOE-165) or the project as they were already using project management practice as reported by one PMCOE respondent, "So the people that were actually involved in this project, I don't think it would have changed their business practices significantly" (15-PMCOE-137). It did however represent and signal a change for overall government in the case of ministries that were not using project management practices. Change does not happen in a vacuum and vision statements often express the values of the host organization.

While expressing the values of the host organization or project is ideal, the author knows from his own experience that this is often difficult to do in a vision statement and often value statements are made separately from the vision statement or are elaborated upon in a separate section of the vision document (Finance 2005). Surprisingly, in the case of the projects under review, there was a fairly high reporting of value inclusion.

Table 32 – Q 3.8.14 –Did the Vision Speak to Values of the Project or the Host Organization

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	14	1	0	0	15	1.88
ISD	10	0	0	2	10	2
PMCOE	16	0	0	0	16	2
Total	40	1	0	2	41	1.84

A closed ended question like this received interesting results in the identification of multiple values by various respondents. For example in the JIMS case one interviewee reported, "It was in the context of access to justice" (20-JIMS-183). While another interviewee reported, "I think the vision, as I said before, is a very politically correct vision" (10-JIMS-161).

The vision statements of these projects seem to have been well developed in that they had many of the important components one would want to see in a vision statement. However, what was its utility? Did they make a difference and were they used?

One of the most valuable uses of a vision is its ability to keep an organization or project focussed and its ability to assist in decision making. The use of the projects under review in relation to their utility in decision making for these projects is reported in the following table.

Table 33 – Q 3.8.1`5 – Did the Vision Assist with Decision Making During the Life Cycle of the Project

Project	Yes	No	Yes/No	Unknown	Total	Average
JIMS	14	1	0	0	15	1.88
ISD	8	0	1.5	2	9.5	1.9
PMCOE	16	0	0	0	16	2
Total	38	1	1.5	2	40.5	1.93

There is high agreement that having a project vision assisted in decision making as typified by one JIMS respondent, "that steered or directed the whole way we did the development, the design of the data model, etc." (18-JIMS-233). Similarly, another JIMS respondent reported that, "if you kept your sight on the vision you were able to move through things *(decisions)* [23] a little easier" (8-JIMS-249).

Having looked at the general findings of the research study let us now take a more in depth examination of the individual case studies.

Case Studies

Following the advice of Yin (1994, p. 128), "a smart investigator will begin to compose the case study report even before data collection and analysis has been completed." Following this advice, this chapter was conceptualized with the design of the research instrument and semi-structured interview in mind.   As such, each case will be reported using the standardized format that loosely follows the flow of the semi-structured interview as follows:

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[23] Italicized text added

1. Purpose of the project
2. Structure of the project
3. Stakeholders
4. Project Success
5. Critical success factors
    a. Project management framework
    b. Senior management support
    c. Funding
    d. Project manager competence
6. Change impact
7. Change management
8. Knowledge management
9. Project vision

As reported in Chapter four, the selected cases had common characteristics such as multiple stakeholders, crossing multiple organizations and represented significant multi-faceted outcomes. Three case studies will be reported. First, the Justice Integrated Management System (JIMS) was a project to create an integrated criminal case management system which had stakeholders from various sections of the justice system across the greater public, government and not for profit sectors. The ultimate driver and outcome was increased public safety. The Project Management Centre of Excellence (PMCOE) was a project to create a supported community of practice that would increase the level of project management maturity across a public service organization of over 30,000 employees and also to increase and support individual project manager competence. The ultimate impact was improved organizational performance and enhanced development of individual members (project managers). Lastly, the Integrated Service Delivery (ISD) project was a project to address government downsizing while increasing citizen satisfaction with government services. With this general overview in mind let us now turn to the individual case studies.

Justice Integrated Management System (JIMS)

Purpose of the project

The case study JIMS had its beginnings in the early 1990's to address the business need, as one respondent reported, "to replace outdated technology that could no longer be supported" (20-JIMS-5). However, when considering this technology replacement project, sponsors also identified an opportunity to look at creating an integrated application across the various branches and agencies that used that information, so that there could be shared information, using the new technology. The idea was to create a central repository of information involving four inter-related elements of a government service delivery system in which data would be gathered about clients that could be shared (subject to strict privacy and confidentiality arrangements) to enhance effectiveness of information management—to benefit both client and state interests. An informal project was initiated to deal with the issue of why individual key stakeholders did not have an effective or uniform means to share information.

This project is typical of the need for many service organisations with many interlinked but separately operating entities to share vital authorised information to avoid duplication, information entry and maintenance errors and wasted management energy in establishing duplicated information systems. The original vision was to develop a simple centralised case management database system. However, as is often the case in developing such systems, as additional requirements was identified the grander idea of a System for Integrated Case Processing (SCIP) was spawned and an official project was sanctioned. Eventually the SCIP project became the JIMS project as reported by one participant, "It *(JIMS[24])* was the second attempt at doing such a project, and on this attempt it was recognized that breaking the project down into modules, or the system down into modules so that you kept the police module, the Crown module, the Courts module, Corrections module separate, would have a greater likelihood of success" (9-JIMS-5). Another participant reported that the purpose of the project remained static with the second attempt, "The purpose of the project was to

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[24] Italicized text added

design and implement an integrated criminal justice application to support the business in the ministry and actually beyond the ministry as well, for the province" (3-JIMS-5). The purpose was also stated more broadly by another participant,

> "The purpose of the JIMS Project is to try to provide an integrated system
> for the province of British Columbia, incorporating the major stakeholders
> that are engaged in the criminal justice process, namely the police, the crown, the
> courts, the judiciary and corrections people. Basically it is to provide an integrated
> system that would, theoretically and practically remove silos on information, and silos
> of jurisdiction of independence and provide a way in which criminal information could
> be readily shared within some kind of jurisdictional authority" (10-JIMS-5).

Given the complexity and multiple stakeholders involved in this project, the structure of the project became very important.

Structure of the project

Although the vision remained fairly constant over the 10-year life of the project, the project management structure matured from a loose group of individuals with a good idea (referring to SCIP) to a formal project management structure with a widely understood vision (referring to JIMS).

This is typical of what has been described as working within the 'whitespace' that is in unofficial projects that test the waters with good ideas being developed in an ideas-incubator before being adopted as officially sanctioned projects 'blackspace' being fully funded, resourced and subject to the relevant corporate management systems (Maletz and Nohria 2001).

With this movement towards greater structure came greater rigidity of decision-making, less creativity in problem solving and ultimately an advocacy positioning of stakeholders. The movement to the "blackspace" was required to develop the business requirements and business case(s) so the project could move forward to an official funding stage of development. The evolution and decision making structure is well stated by one participant,

"The governance evolved over time, but generally there was a project steering committee, and that steering committee included Assistant Deputy Ministers from the various branches, Corrections, Court Services, Criminal Justice Branch as well as directors of Judicial Administrations, the judiciary were represented on the project, as well as senior RCMP and municipal police. Under the steering committee there was a project management committee which included project directors from all of the various respective branches. And then there were a number of working groups, for training development and requirements and planning" (4-JIMS-13).

The formal project management structure was composed of a Steering Committee, various sub-committees (business change council, change request, configuration and training). The Chairperson of JIMS Steering Committee, a senior Executive from one of the core agencies,[25] acted as the executive sponsor. A full-time project manager was assigned from within the ranks of the Information Technology Division, a central agency providing technology support to all government branches. Key stakeholders had representation on all committees and subcommittees. Project managers were selected for each core agency and designated as representative key stakeholders. People selected to be project managers, however, had no formal training to meet their new responsibility and title. Their authority was uncertain within their respective agencies and dubious within the context of the project management structure. It appeared that the executive members of the individual agencies still retained conduct of decision-making and resource allocation and left only routine management functions to the project managers. Figure 16 illustrates the stakeholder relationship of these individual groups to the leadership committee and structure (Christenson and Walker 2004, p. 47).

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[25] A 'core agency" represents one of the major internal stakeholders who has stewardship over a portion of the data in the information system.
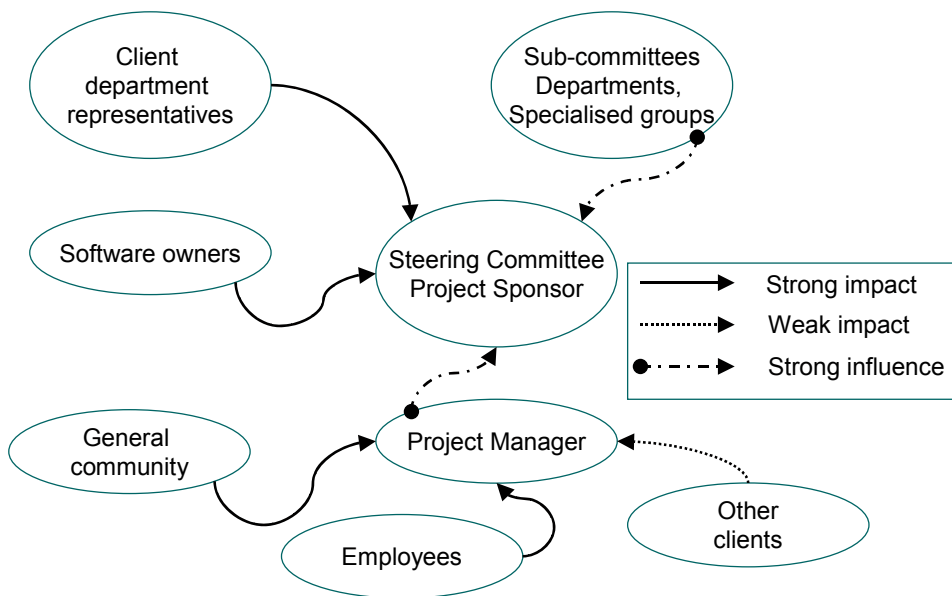
Figure 16 – Stakeholder Relationship to Leadership Committee

Although a formal project management structure was adopted for JIMS, the project seems to have required a more flexible approach to accommodate both the desire of individual stakeholders to have personal influence while mitigating the unforeseen risks that this structure actually allows. As Maletz and Nohira (2001) explain, to mitigate this often requires a creative approach that necessitated moving outside the formal structure but remaining within the boundaries of the original vision. Once again, this reinforces the need for a central vision that is compelling and which everyone will support regardless of the political and organisational issues that arise. Achieving this in practice was not easy when the entire premise of the JIMS system was to link a series of separate and normally serial government processes. For each part of the process, a key stakeholder or core agency needed to input data that was then accepted by another key stakeholder or agency to use or add-value to the information input flow continuing through the service provision business model.

Although the vision was apparently understood, business requirements were identified, project charters signed, design specifications approved and proof of concept modules displayed, front end core agencies participating in the system still had the option to walk away from the project if they didn't like it. It soon became apparent to everyone that the project had only cursory buy-in from one key stakeholder with no firm commitment to the mission. Unfortunately due to the projects leadership structure, there was no mechanism to

preserve their continued participation. Although they remained conceptually committed to the vision they still walked away from the mission of creating a one-write system (to enter data once and then share it across the wider system) in preference to their own system.

It is also unlikely that passion will grow unless there is a strong, core project team. The JIMS project saw little in the way of scheduled, structured or prepared team building. Some cathartic team cohesion occurred as a result of people being together and involved in a common purpose but this fell far short of what was required. The term "project team" is actually a misnomer for the central JIMS project management group as they had few of the qualities necessary for, an effective team as suggested by numerous authors on teamwork (Wageman 1997; Katzenbach and Smith 2005). Katzenbach and Smith (1993) including problem solving, task effectiveness, and maximising the use of all members' resources to achieve the team's purpose. Similarly, team building and the dynamics of group cohesion would likely have made it more difficult and less likely that the problematic stakeholder group would have walked away from the project.

Stakeholders

One respondent described, "It is like a pyramidal structure where the hierarchal thing is to try to have everybody represented" (10-JIMS-9). From this high level structure, individual stakeholder organizations created their own representative committees as described by the same JIMS respondent, "And then you have got the management committees that would manage their own change process or whatever process is required to make the project work. So if you imagine it as a pyramidal structure then you can see all these nodes filtering right down to the grassroots level, where each at individual location that will be affected will have their respective project committee" (10-JIMS-9).

While the structure of key stakeholders attempted to accommodate all stakeholder interests it quickly became apparent that the mission, the ultimate means to achieve this vision, was mired in the dilemma of key stakeholders all desiring separate business requirement sessions. Unfortunately, the central project manager was not yet hired and so the future

contracted developer agreed to facilitate these sessions. The contractor was focused on achieving stakeholder participation and likely did not realise the possible impact this decision might have on the quality of the requirements. It must have seemed an inconsequential decision at the time, yet, as born out in the results of this process, the absence of an authoritative leadership voice (to stress credible motivational incentives for the good of the entire project rather than that of the individual stakeholders) is a critical success-determining factor for any project. Project managers in leadership roles should take this advocacy role seriously and with a high degree of integrity in its execution to ensure successful project outcomes.

In this case and in retrospect, one key stakeholder may not have understood their own needs or, at a minimum, did not appreciate the priority of their operational need for a record management system rather than a case tracking system. The difference between the two systems is not necessarily that significant, but this stakeholder realised that they were investing in a system that would address only twenty percent of their workload whereas eighty percent of their workload is never forwarded to one of the other prime stakeholder agencies involved in this project. This reduced the credibility of the mission for that particular stakeholder because it failed to motivate or inspire them to be part of an information system in which they may be generating front-end effort for data and information entry and yet gaining no tangible benefits or rewards. This attitude is typical in many processes where information that one party can easily gain is not 'paid' for so that it makes little sense to that group (based on a transactional approach) to expend scarce resources to gather data/information that others along the supply chain may benefit from. In this sense, the remedy may be argued to lie in the system rewards and resourcing design and not through demonising or criticising a particular stakeholder for being 'silo-minded' or selfish.

Attempts to influence continued participation were unsuccessful and no structure of dispute resolution was in place or contemplated in the leadership terms of reference. One further complication was that this particular service provision agency shared diffused power and influence across the nation with other regional independent bodies as well as there being a federal body for this stakeholder so that multiple jurisdictions existed nationally and this was

constitutionally designed that way. There is no governing body that has control over all of these entities. In fact, there is a systemic barrier to unified governance within the organisational structure of that stakeholder agency in the province generally. Although most agencies indicated they were committed to the project, an inspection of project documents finds little proof of action on this commitment. An essential element of the foundation necessary to support project success was missing.

Apart from the overall vision issue, there is always the seemingly intractable problem of stakeholder behaviour being more reflective of their individual agency or department interests rather than the good of the overall project. This was seen in Figure 18 above where leadership interests were more proprietary than corporate. This self interest reflected throughout the project as indicated by one JIMS participant, "You have got two divisions fighting with each other" (17-JIMS-81). There were other issues of self preservation in that a new ADM[26] was appointed to the central agency responsible for Information Technology that was coordinating JIMS. She was not a strong supporter at first of the manner in which the project was being conducted as seen in her statement, "My boss when she came in had an audit against it, because she thought we were maybe wasting money. There was a fight going on, so she brought in the auditor general" (17-JIMS-69).

The philosophies of independence exacerbated the divisive nature of key stakeholders' internal agendas. The project yearned for a transformational leader (champion) that could transform self-interest into a corporate mission. However, as the literature suggests and (Bass 1985, pp. 37 and 154) identifies, transformational leaders often appear in a time of crisis. At one point the project was at risk of stalling due to the lack of expected funds in the next fiscal year. This was compounded by the withdrawal of participation by one key and largely uncommitted stakeholder but transformational leaders did appear in the remaining core agencies. Self-interest was put a side for an aggressive roll out schedule. Sacrifices, cooperation and creativity were the call of the day. A renewed focus on the project vision inspired all people in the core agencies to get JIMS implemented to the extent possible, given the remaining time-frame. Thus at this point of inflection, both motivational and inspirational

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[26] ADM is an acronym for Assistant Deputy Minister

vision characteristics were revived and the vision became credible again. The project successfully moved forward.

Project Success

It should be noted, however, that the project (despite not fully meeting all the needs of all stakeholders) was judged highly successful by the remaining core stakeholders and the sponsoring government ministries as reported by many of the research participants, "It was a success in that it delivered what it was to deliver. It has now been fully implemented for over 5 years across the entire province of British Columbia. It is in 400 or 500 office locations. There are roughly 4,000 users. It delivered systems for the police, the crown, the courts, corrections (18-JIMS-25). Similarly, JIMS achieved what other groups of government service providers, in other parts of the continent, could not do. Similar projects had been attempted without success as reported by one respondent,

> " It wasn't on time. It was likely on budget, because when we compare
> it to every other justice initiative from an integrated justice perspective
> across Canada and everywhere, and other places; we have certainly done it in a
> much more cost effective way than anyone else. I don't know
> what the original budget ever was……..   I think there would be people
> of course that would have complained that it cost an awful lot, but
> others that would say "no." Compared to the Ontario experience and
> other experiences across Canada and elsewhere, I think it was likely
> on budget, but I can't speak specifically to what was originally
> allotted" (8-JIMS-29).

JIMS does not fully meet the anticipated functionality for all stakeholders but it was judged by its peer-group developers from elsewhere in the continent to have superior performance to other similar projects at a lower cost and in a shorter development and delivery time. This was believed to be due in no small part to the vision being held together and maintained despite set backs and its birth as a 'whitespace' project in which substantial stakeholder commitment was initially placed and values.

Others agree, JIMS was an overall success, "It really was a success. We actually delivered an integrated system. The police, Corrections, Courts, Crown, immigration, Federal Crown, and the provincial court judiciary. When you take a look at that, in terms of all the different

systems it replaced, I think it replaced 15 different systems, applications and the integration that it allowed, and movement of that criminal case process right from the inception of the initiation by police, right through disposition and handoff to Corrections" (17-JIMS-17).

Integration projects are often represented by a picture of a puzzle that when successful you can see the whole picture. But many pieces needed to fit together in order to create this over all success.

Critical success factors

JIMS was a large scale information technology and change project that was judged by many on differing criteria as a general success. In order for such a project to be a success one would expect a variety of factors were likely critical to the building of this success including a project management framework, senior management support, adequate funding and a competent project manger. Let us examine the first of these critical success factors: project management framework.

<div align="center">

Project Management Framework

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Project management frameworks typically contains an accepted methodology and practices. While there are many best practices documented in the current literature, an example will highlight the value that applying such practices may have had for the JIMS project. Practices such as identifying the need to conduct a stakeholder analysis (Morris 1994; Briner, Hastings et al. 1996; Cleland 1999; Bourne and Walker 2004) may have alerted the central project manager as to the motivation of some project participants and created an opportunity to better manage the risks that these stakeholders presented to the project. Such an analysis also makes imminent sense as the key to project success is meeting stakeholders' expectations. Bourne and Walker (2005) have provided an invaluable tool known as the "stakeholder circle." "This tool can be very useful for project managers trying to understand, and trying to remain alert to the nature of stakeholder impacts" (Bourne and Walker 2005, p. 656).

A project management framework sets out a governance and decision making structure for project managers and their teams. Project managers need to have authority over their domains (Briner, Hastings et al. 1996). In JIMS the central project manager did not have such authority nor did many of the core agency project managers. The central project manager was not given the structure to control or manage the core agency project managers or their individual processes as is highly recommended by (Sauer, Liu et al. 2001). This lack of clear project management authority in a single individual may have contributed to the dissention of stakeholder buy-in and general project ownership.

Having said this, JIMS did use a standard project management framework as reported by most participants and typified by one respondent, "When you look at the organizational structure of the project, obviously it comes from the project management framework principles of governance. For having project teams, specific streams of project activities, managed phases, incremental. All that kind of stuff. Yes, a project management framework was used" (10-JIMS-37).

While many of the JIMS respondents declared they used a project management framework and upon examination it was rudimentary as highlighted in the general findings, the more alarming revelation was that "Definitely we did have a framework that was used, but it wasn't always followed" (3-JIMS-45).

Senior Management Support

At the time, project leadership was clearly being driven by the central support agency based on technological requirements to eliminate a number of different legacy systems. These systems had become undesirable as they were costly to maintain, built with different software applications, unreliable, and did not interface with each other—yet, executive sponsorship was not forthcoming from all of these core agencies as reported by one participant, " Again and most notably, one core stakeholder was fractured in their support. Lack of executive sponsorship as identified by (Ulfelder 2001, p3) is the number one way information technology projects fail, further, "*The problem is that too many business executives view IT*

projects, . . . as mere (albeit expensive) technology challenges." It is very conceivable that JIMS was seen as just such an unwelcome and threatening challenge rather than a welcome process improvement opportunity.

These leadership intentions may have disappeared for a number of reasons, only one of which may be related to the resolution of a shared crisis. However, other reasons seem plausible and worthy of further investigation. Many of these leaders were not leaders by position or level within their agencies and once the project was complete, and the crisis was over, the agency did not require or necessarily want their leadership. Lastly, other crises were in the making within these organisations and other transformational leaders had appeared and were now in the limelight. Not all of these leaders were supportive of the project as indicated by one respondent, "I lost my boss and I was reporting to somebody else and they were not supportive of the project" (17-JIMS-45).

Funding

JIMS received considerable funding but given the goal of the project and relative to similar projects, JIMS was lean. Funding resources were focussed mostly on technical requirements and secondarily on implementation. Having said this, adequate funding was available for training and onsite support during implementation. This level of funding support remained constant during the early stages of implementation and development.

After approximately one eighth of the locations, and one half of the provincial criminal case load was implemented, the project was notified that funding for implementation would not be available for the next two years as planned but would end after one year as indicated by one respondent, "We really got shorted on implementation dollars. It was a struggle to keep the funding. There was real pressures to cut the funding at the end" (17-JIMS-45). JIMS needed to be implemented in half the time with half the money. The criticality of sufficient funding was in questions and severely jeopardized the project.

Project Manager Competence

Lastly, the leadership of the central Project Manager was often driven by technology and resource concerns and not always the business requirements of the project's stakeholders. In a government setting, this is not an atypical behaviour. Project managers for individual stakeholders were very inexperienced as reported in the general findings and were coined 'accidental project managers.' In the case of JIMS, one respondent summed up their inexperience, "And it wasn't done in a way, like the projects that I am involved with now, where that person is a defined, discrete professional role. The person that I am thinking of that was probably doing the project management, and may even of had that title, also did things like assisted in analyzing whether something was an enhancement or out of scope" (9-JIMS-61). Generally, the project suffered from a lack of project management experience and knowledge on many fronts as stated by another participant, "At the project management level, I don't recall anyone having experience really managing projects that size" (3-JIMS-53).

Change Impact

While most projects represent a change in practice or use of a new product or technology, some projects are very much change projects. JIMS was such a project, as it not only introduced a new case tracking system it also introduced new technology. More importantly, it changed and standardized business processes that had been in place for decades. Given our earlier discussion (Chapter two) of the greater and lesser changes, JIMS represented a greater change to multiple stakeholders across the justice system. JIMS was a transformational project whose solutions were not fully known at the outset, but whose problems were quite well known and articulated by the stakeholders.

Change management

Such change required a significant change management strategy to increase the likelihood of the project's success. Unlike many systems and business engineering projects in the public service, an integrated change management plan was developed. It included many features of a common change management methodology but in the simplest of terms can be

characterized by a three legged stool. Each of the legs represented a component of the change strategy. One leg represented end user involvement, another, communication and the third, training. Metaphorically, if any of the three legs is not present, the stool (change management strategy) falls over.

The change management strategy was in many respects a sub project of the overall JIMS project. An integrated change management team was formed with representation from all key stakeholders. The change team reported to the JIMS steering committee. The change team also had its own sub committees responsible for configuration (end user involvement), communication and training.

The strategy also called for change champions and change agents at each of the forty-five implementation sites. These individuals were selected from various stakeholder groups including police, judiciary, prosecution and courts staff. These change agents were a critical vehicle for dissemination of information within their respective organizations.

Knowledge Management

Knowledge management was an area of JIMS that was not adequately addressed during most of the project's lifecycle, although information diffusion was successfully deployed through an intensive training strategy under the change management plan as reported by one participant, "There was quite a bit of effort that was put into change management and distributing information" (3-JIMS-97). Communication was somewhat haphazard as there wasn't a communication plan nor was any type of stakeholder analysis undertaken. In general, only memorandums to the field and limited distribution of meeting minutes were used to share information.

Eventually a newsletter was created and it saw limited circulation and updating only occurred for the first few issues. Also, a website was created that contained similar information and foundation documents. This site soon became out of date and therefore provided limited information utility.

The primary method of knowledge management was in sharing information by implementation teams with the configuration subcommittee. It was through these groups that information was shared, discussions were had, and knowledge was created. However, this was very much a reactionary strategy to resolve implementation problems. The lack of knowledge management strategy has recently been acknowledged now that the project is fully operational in the formation of a project coordination office whose purpose is reported by one respondent as, "one of our primary responsibilities of that office which will be operational before the end of the fiscal will be a communication component across stakeholder groups" (4-JIMS-101).

Project Vision

As reported in the general findings, the JIMS project definitely had a vision that was adopted in part from a previous attempt at the project as found in a draft discussion document 'Innovation in Justice Services with Information Technology: A Vision for British Columbia' (1991, p. 13) where the stated vision was "to design and acquire an integrated case process system that can ultimately be used by most Justice System participants for entering, accessing and updating case-related data across the Province in all types of courts and all types of cases" and as reported by one respondent, "This is version #2, discussion draft only, and I have no idea of where the most current version of it may be, but this was with respect to SCIPS[27], but really the vision (*for JIMS[28]*) wasn't any different" (8-JIMS-181). However an extensive risk assessment of this original vision was undertaken and a consultant reported back that, "I have got good news and bad news." "The good news is that everybody is very supportive of the integrated case processing system." So what's the bad news? "Well there is 60 different views about what it is." (17-JIMS-137). Interestingly, when the project was

[27] Acronym changed to reduce the likelihood of identifying individuals in this research project.

resurrected there seemed to be an even greater shared understanding of the vision although, "It certainly had an implicit vision. You could argue that it didn't have a common explicit vision" (4-JIMS-143). The interviewees without exception, across all stakeholder groups, reflected a similar shared understanding of the vision as stated by this one participant, "At the end of the day, the project vision was clear, to every single person that was involved in the project. It was a picture of a future where the latest, best, most accurate information that was most effectively entered into the system is going to be available to people that needed to make decisions" (9-JIMS-121).

This shared vision is also well stated by one respondent, "the vision was ultimately to have an integrated criminal system used by all the criminal stakeholders in the province to allow them to share, reuse, information"(18-JIMS-137). While most identified the integrated nature of the system, the ultimate goal was often not articulated except for one respondent, "The implicit vision was to improve public safety" (17-JIMS-113). This would be accomplished as stated by another respondent, "It was a picture of a future where the latest, best, most accurate information that was most effectively entered into the system is going to be available to people that needed to make decisions" (9-JIMS-121)

The vision started as explicit but did not have shared understanding amongst all stakeholders. Later and under a new project name, it became apparent that an implicit vision had a greater degree of shared understanding but at varying levels of sophistication. Once implicit, the vision was seldom referred to except to justify funding or when renewed energy was required in a time of crisis. As many writers on leadership agree (Kotter 1998; Senge, Kleiner et al. 1999), vision must be continuously maintained foremost in the minds of project team members and active stakeholders. All too often the project vision is disregarded and attention is misplaced on the business requirements or technical specifications of the system. Similarly, the end benefits are forgotten and all too often the attention is focused on the technology. Had it not been for a deep rooted understanding of the purpose of the project as articulated in the vision, JIMS may have been at risk of failure.

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[28] Italicized text added

Most agreed that the JIMS vision did articulate the purpose, as reported by this participant, "Integrated justice, when you take a look at the things that you can get out of that, you get efficiencies, you get effectiveness in terms of your better public safety" (17-JIMS-53) but few elaborated. Many did however comment that the vision also identified a strategy of approaching the attainment of the vision incrementally as indicated by this same respondent, "In the vision that we would approach this incrementally. We would do things in little chunks. We would not make the big mistake we did in the past *(SCIPS project)* [29]which was set this giant vision and hold everything in abeyance until it was delivered" (17-JIMS-165).

The creation of the JIMS' vision was a joint effort and there was a reasonable expectation that it was also a shared vision. If a larger investment had been made toward team building, the opportunities for the creation of a shared vision through a collaborative process may have increased. "We had the vision from the Information Case Processing System. We worked with executive, we said, we want to align ourselves to your business objectives. They didn't have any. So we ended up driving it out of the information resources management plan, a plan for executive that they participated in, and their folks participated in, forging this high-level vision of where we wanted to be in 5 years" (17-JIMS-129). Others also indicated that the creation of the JIMS's vision was very much a top down endeavour, "That was very much a top down vision. The Assistant Deputy Minister of Court Services at the time, had an overall vision about completely automating all aspects of court and justice processes" (4-JIMS-159).

While almost all agreed to the top down origination of the vision, many also found that the vision needed to evolve over time, "So I think there was a certain amount of organic development of the vision beyond anything that may have been written down as a stated purpose. It was a very clear vision and we stuck to that very clear vision" (9-JIMS-129). Others also commented that the vision needed to be and was flexible as found in this respondent's statement, "The other thing that is important in that type of project management is a sense of reality and flexibility…….. In a project as big as this, and in a sense we are still

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[29] Italicized text in the brackets added

in a project, that is not only operational, but is still being developed and enhanced, you have to have a very, very long vision" (9-JIMS-95).

One person disagreed with the top down approach and raised a very interesting comment, "I think it was collaborative, simply because it would not have worked otherwise. The nature of integrated justice is such that it is like the resource of common…… There can never be a top down approach, remember in justice it is a jurisdiction of independence. The only way for it to happen is a collaboration" (10-JIMS-117). However, this collaboration of independent entities was still done at a senior level and the vision was then communicated downward within their organizations.

Interestingly, some of these transformational leaders remained leaders by position after the system was successfully implemented but the transformational nature of that leadership in their organizations has (at the time of writing) clearly expired. Cooperative joint endeavour has once again returned to self-interest and any vision is restricted to the possibility of enhancing the modules of individual stakeholders. Occasionally a flicker of shared vision is seen but it is snuffed out by the reality of budget constraints. Base self interest characteristics were put aside in the time of crisis and a new style of leadership was able to emerge but once the crisis was over, the transformational leadership disappeared (Bass 1985, p. 41). Upon reflection this atrophy of leadership suggests that the project vision had integrating power.

In addition to the possible integrating nature of the project vision, the project vision was also reported to have been key in assisting leadership with decision making, as seen in one respondent's remarks, "So when the going got rough and decisions had to be made, did people sort of say, "wait a minute, this is our overall purpose…..Pull out the vision" (20-JIMS-225-227). Others also agreed with the decision making utility of the project vision as seen in the following statements:

"That steered or directed the whole way we did the development, the design of the data model, etc." (18-JIMS-241).

"You guys want this or not. One thing we did do part way through, we did cut off the civil component………It was very painful to do, but did it help? Absolutely, because we had the vision that said, paramount is criminal. If we hadn't had that, we couldn't have tossed it out" (17-JIMS-209-213).

"If you kept your sight on the vision you were able to move through things a little easier. I think the vision, even though we had to break it up into smaller chunks, I think the vision was the same. So I think generally, yes, it helped and it helped us to move in the right direction" (8-JIMS-249).

As one sees, the JIMS project was highly influenced by its vision as to the direction it needed to go and the decisions that were made along the way.

Lastly, the JIMS' vision also seemed to motivate individuals and empower them to take action to achieve the vision stated by this one participant, "There were times where we had to basically down tools in order to make it work, and knowing what that vision was enabled you to get over some of the big hurdles, the big challenges that we had, rather than getting mired down in the details" (8-JIMS-249).

Summary

The JIMS project was a complex project with a traditional hierarchical structure. Its purpose evolved as did the understanding of its vision over time and through multiple attempts for its achievement. While there was consistency in purpose, there was also a need for flexibility as this project was transformational and required both technological and business process changes. The findings of this research and the requirement of seemingly opposing concepts of consistency and flexibility might at first challenge the validity of the research findings. Instead, the author argues it is just these qualities that made the JIMS vision so robust and effective. Like a tall tree in a wind storm, the vision could be bent but not broken. The core of this project was a strong vision that reportedly contributed significantly to the project's vision as articulately stated by one participant"

"Yes, the vision plays a part in the success of the project because a
vision that is easily adopted or believed in by the people that you
need to count on to accomplish the project, they share the belief system,
in the same belief system, the same values that are articulated in the
vision, whether explicitly or implicitly, it means that you have a strong
cohesive team with a very focused direction and therefore everybody
is pulling in the same direction" (10-JIMS-169).

The second case study will now be presented. The reader will see that this project shared many similar features to our first case study project but whose primary purpose was to develop a community of practice as opposed to an information technology system.

Center of Project Management Excellence (PMCOE)

Purpose of the Project

The Centre of Project Management Excellence was born out of a request by the Chief Information Officer to create a common project management methodology, tools and templates.   One of the leading ministries in government at the time had a Project Management Office for information technology (IT) projects and their manager was asked to be an interim chair of the group that would become known as the Cross Government Project Management Methodology User Group (CGPMUG). This genesis is succinctly reported by one of the participants, "the government CIO recommended that the Ministry of Health initiate a cross government user group to look at adopting a common project management methodology" (16-PMCOE-17). This group came together and drafted a Project Charter (Calder 2001) to guide and confirm their mandate.   The project charter identified the following five objectives:

- Establish a methodology,
- Develop support tools and templates,
- Investigate a portfolio management solution,
- Investigate a common project tracking and oversight solution and
- Investigate the feasibility of a centre of excellence and competency

The CGPMUG accomplished most of these objectives to differing degrees of completeness. A methodology already in use by the lead ministry was customized to be more generic and was found acceptable to most stakeholders. Similarly, many of the tools and templates in use by these key stakeholders were gathered, reviewed and customized. Most (all but two of forty) of the stakeholders were from IT organizations and not surprisingly, the portfolio management objective became a search for a portfolio management support system. The sub-committee managing this objective created a very detailed set of business requirements for a portfolio management technical support solution. Similarly, the quest for project tracking and oversight was again a search for a system solution. One wonders how a similar group of non information technology project managers would have approached these same objectives. There may not have been such a predominant system solutions orientation but wider consideration of non-system related solutions. Lastly, a sub-committee was formed to investigate what a centre of excellence and competency may look like.

The original purpose of this project was to achieve the aforementioned objectives but this was really only the first phase of a three phase project. Phase One saw the creation of the common methodology, tools and templates as identified in the first four objectives. Phase Three was the creation and maintenance of a centre of excellence. Phase Two was the bridge between the first and third phases to investigate the feasibility of a centre of project management excellence as there was an assumption that one would gain certain benefits from the establishment of such a centre.

Phase Three's purpose is to achieve the dual objectives of the PMCOE as positioned by their vision statement. The first purpose is to advance project management maturity across government. The second purpose is to support the development of individual project managers in government. Both of these objectives are captured in one participant's summary of Phase Three, "The project vision was trying to achieve successful projects and to provide the mechanisms and the knowledge base of information plus the support to enable any project manager in government to have something to draw upon to enable improved success of their project?" (14-PMCOE-97).

The three phases have aligned to create a sustainable project management centre of excellence whose duality of purpose also requires a unique structure that is part community of practice and part of a broad organizational committee.

Structure of the Project

The structure of phases one and two was as a traditional committee structure where the chairperson constructed the agendas and managed the meetings. Once the committee approved the project charter the committee broke into a number of sub committees to investigate each of the objectives. As reported above and by one participant, "We had the committee (CGPMMUG) and then people volunteered to break up into two or three task force groups (sub-committees)" (11-PMCOE-90).

Consistent with this report, the COE sub-committee (Phase Two) drew its membership from the larger CGPMUG and maintained a membership of seven individuals representing the larger ministries within this government. The overall purpose of phase two is succinctly reported by one respondent, "Phase 2 was much narrower. It was essentially building a funding proposal, defining the concepts of what became the Centre of Excellence and trying to get funding for it" (11-PMCOE-86). As this phase determined the future purpose and structure of PMCOE is to spend some time examining how these decisions were made.

The chair selected for this sub-committee was one of the non-IT project managers.   After several meetings, the COE sub-committee presented the following set of objectives to the larger group.
- Investigate the current project management expertise in different ministries,
- Investigate the current use of project management offices in different ministries and
- Define business options for advancing the above two areas through a CoE model

These objectives were decomposed into a work break down structure that when delivered upon would provide a robust investigation of the many forms and functions of a centre of excellence as identified by one participant, "early in the second phase when we were designing and researching the Centre of Excellence itself, we put together a work breakdown structure of the components needed and then sequenced them and then put them into sub phases" (11-PMCOE-50). The work breakdown structure also included a breakdown of tasks that were possible for a COE and as such represented two phases to the development of the COE as seen in Appendix I. Phase one was entitled to "Plan and Build a COE" included three sub-categories of Planning, COE Framework and Building the COE. Phase Two was entitled Operate and Enhance the COE had five sub-categories of best practices/Continuous improvement, Competency Improvement, Procurement Process Standards for Retaining Project Managers, Consulting/Mentoring and Strategic Alignment Integration.

The next step was to examine the current project management maturity within this government to attempt a determination of what form and which functions would have the greatest likelihood of success. The assumption in this critical step was that the sophistication of a knowledge structure needed to match the current project management maturity level of the organization. Therefore one needs to assess the organizational readiness for certain types of knowledge structures in order to increase the likelihood of these structures being successful once implemented. One method to access the organizational readiness is to determine the project management maturity of the organization in which the CoE is to exist.

The group familiarized themselves with the common project management maturity models currently available in the literature or in the private sector. One group member compiled a PowerPoint presentation that outlined the purpose of maturity models and identified a number of available models from Kerzner, Software Engineering Institute (SEI) – Carnegie Mellon, Berkley, European Software Institute (ESI) and the Centre of Business Process that all shared a similar maturity framework as seen in one the following slide:

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
Centre for Business Practice	Initial Processes	Structured Processes and Standards	Initial Processes	Structured Processes and Standards	Structured Processes and Standards
Kerzner's Project Management Maturity	Common Language	Common Processes	Singular Methodology	Benchmarking	Continuous Improvement
Berkley Model	Ad hoc	Planned	Managed at Project Level	Managed at Corporate Level	Learning
ESI International's Project Framework	Ad hoc	Consistent	Integrated	Comprehensive	Optimizing
SEI's CMM	Initial	Managed	Defined	Quantitatively Managed	Optimizing

Figure 17 – Maturity Models

Phase Two also identified the expected benefits one might expect form a centre of excellence:

- "Eliminating project redundancies and duplication
- Standardizing project delivering
- Avoiding the "latest and greatest"
- Improved communications and organizational alignment to strategic goals
- Promotes professionalism
- Avoidance of past mistakes
- Cost savings in the research, acquisition and deployment of tools"
  (Cross Government Project Management Working Group 2003p. 23)

Most of the above referenced benefits were cited from the private sector. The sub-committee investigating the feasibility of a PMCOE set out to convert to suggested benefits that may be realized for a PMCOE within a public sector.

- "Supportive commitment to Core Service Review principles of accountable decision making and sound fiscal management
- Understanding of and commitment to the organizations priorities
- Understanding of and commitment to strong project management
- Better control of the processes that are responsible for spending millions of dollars per year."
  (Cross Government Project Management Working Group 2003 p. 24)

Another group member conducted a non-scientific survey of the current state of project management within the provincial government at the time. It was found that out of twenty two ministries only eight had a project office. Two other PMOs had been set up in past but had since been disbanded. All of the PMOs at the time were housed within Information Technology (IT) sections of ministries. Since this survey the author is aware of four business PMOs and an engineering PMO that have been established inside ministries but apart from IT sections. As such the group determined that the level of project management maturity within the whole of government was at a level one (adhoc) level with very few agencies within the construction (e.g. Ministry of Highways) or systems (e.g. IT departments in the Ministry of Health and Attorney General) area operating at a level two (repeatable processes) of maturity.

Since it was a given that a Center of Excellence model would be used the group investigated the various forms of such CoEs. A search using the Google Search engine on the World Wide Web reveals hundreds of centers of excellence. Most are affiliated with a university, government body or professional group. A number have also been developed to address a specific problem or issue such as a disease. A closer review of the first forty sites (Appendix J) begins to show a common purpose for such sites in that most offer some form of specific information relevant to its membership, education and training opportunities and many offer information regarding best practices.

A similar search for project management centers of excellence reveals significantly fewer results where only one is related to a university with the rest attributable to consulting firms. A more advanced search also finds a number of centers of excellence within major software companies such as Microsoft and PeopleSoft organizations.

Gartner's Decision Framework Model (Light and Berg, 2000) for project management offices was felt very appropriate framework for the identification and development of an appropriate CoE for this public sector organization. Gartner's model is comprised of three options; Repository, Repository Coach and Repository Coach Manager.

The Repository model would find the CoE as an information source on project methodology and standards. The office would likely be virtual, with limited staff support from member organizations. The focus on the methodology would be to maintain it and keep it current. This model is often used as a first step to enfranchise the idea of consolidating and sharing information. Repository models are relatively easy to implement with minimal costs as staffing is minimal and human resources are attained through a committee structure. The only hard cost would be the storage costs if the repository was virtual.

The Respository-Coach model would find the CoE implementing a methodology and standards that was shared across all segments of the organization. This would require that the CoE be staffed to some level and likely could not be manage through a committee alone. In addition, this model includes:

- Project management practices and mentoring relationships shared across business boundaries;
- Best practices documented and shared with the office acting as the communications coordinator;
- Project performance is monitored and results used to raise performance and influence training curriculum;
- Coordination of training, consulting, mentoring across the organization;
- Often helps in coordinating cross-jurisdictional projects and post project reviews; and
- Coordinates requirements, solicitation, selection and assignment of contracted project management resources."

(Office of the Premier 2003, p. 9)

Currently, there are project offices within government that have already adopted the repository-coach model and are performing many of the activities stated above within their own organizations. With an enterprise and coordinating CoE, the benefits can be easily shared across government, ultimately raising the overall maturity level of project management for all of government.

The major impact of such a model is the need for staffing and therefore the need for resourcing. The key to sustainability will be the knowledge, skills and abilities of the staff

person.   The acceptance of such models would likely be high by member agencies but may be lower if member agencies were required to share in its funding.

Lastly, the third option, the Repository-Coach- Manager is the most consolidated model because project management is concentrated within the Centre of Excellence. In addition to managing and maintaining the methodology and coordination of training; other characteristics of this model are:

- "The center is involved in all projects, regardless of size
- Is responsible to coordinate and manage those projects of a certain size, scope, duration and or impact wherever they occur
- Project Managers report directly to the COE and are assigned to projects as needed; and
- The COE assesses scope, allocates resources, verifies budgets and risk assessments before projects are undertaken"

(Office of the Premier 2003, p. 10)

There are project offices within government that have taken on some of the responsibilities described above, but most do not have the buy-in or more importantly the desire within their organization and/or the resources with the requisite expertise to successfully implement a repository-coach-manager model.

In remembrance of the potential benefits, the sub-committee submitted their 'Options Paper" to the larger CGPMMUG. The paper identified that there was a very low level project management maturity across government. It also suggested that given the low maturity that only very basic concepts or function in a CoE would be successful at this time. The organizational readiness for more sophisticated CoE functions was not present based on their very low project management maturity levels. Therefore, the recommendation was to implement a repository model which offered the following products or services:

- Continued development and support of a common methodology, tools and templates,
- Coaching on the methodology, tools and templates,
- Web access to the common methodology, tools and templates, and
- A forum every two months to educate and network amongst those stakeholders in government project management.

(Scott 2004, slide 7)

Phase three structure was based on this work and initiated the repository model supported by a cross government committee. This committee met monthly and also sponsored bi-annual best practice forums to share information. The work of this committee was mostly to maintain the project management methodology and, tools and templates that were hosted on a web-site. The secondary work of this committee was to find sustainable funding for PMCOE.

In the search for this funding a creative idea arose that PMCOE proposed to the corporate learning service branch of the government. Learning Services stewards a corporate learning fund to ensure training is available to all public servants and the money for this training is protected. The current practice is to hire staff that manage a curriculum and are experts in adult basic education and course design. This staff member then procures the subject matter expertise through vendors who also deliver the courses. The idea proposed by PMCOE was to hire a subject matter expert, project management professional (PMP) to direct basic project management training through members of the PMCOE. In return for delivering this training the funds that were used previously to deliver project management training through vendors has been transferred to the PMCOE. At the time of this writing, the PMP has been hired, the curriculum designed, trainers selected and oriented and first course offerings posted.

The insurgence of this funding and of a staff person to direct not only training but the affairs of PMCOE has resulted in a refreshed website, new methodology and monthly training opportunities for all those that attend the monthly PMCOE business meetings. In addition three cross government best practice forums have been designed. Lastly, advanced project management training and project leadership training will continue to be offered though a newly selected and qualified vendor who was a successful proponent on a Request for Proposals. The promise of this new delivery model is to offer more training, including the highly sought after regionally based training, than was possible under the traditional learning services delivery model. While this promise is laudable, the supplementary benefits were not insignificant and included:

- Reduction of waiting lists,
- Enhanced knowledge retention of project managers,
- Mentoring and development opportunities for project managers,
- Greater project manager engagement across government, and
- Greater retention of project managers within government.

(PMCOE 2006, slide 7)

Stakeholders

The primary stakeholder and executive sponsor at the beginning of this project and throughout the duration of Phase One was the province's Chief Information Officer. The project team members during this time were a fairly tight knit group of IT project managers representing the major ministries within government but heavily weighted with the lead ministry's staff. As such, there is little surprise that the lead ministry's project management methodology was adopted by this group for customization.

Phase two saw an even smaller group of individuals but had a wider representation from across all of government. The expansion of representation was largely due to the fact that people were beginning to hear about the project and were interested in joining. Also, during the second phase, a number of non IT project managers began to participate and were likely responsible for the methodology, tools and templates being genericized for general use both within and outside IT environments.

Phase three saw a continued expansion of interest in the centre as membership at monthly business meetings showed moderate growth with up to 30 people in attendance (PMCOE 2005). Also, a continued widening of representation from ministries (from 6 to 14) and agencies was also occurring (PMCOE 2005). The key change in stakeholder was the employ of a staff member to direct basic project management training through the community of practice as well as support PMCOE business. The result has been the ability to move from the Repository model to the Repository Coach model as discussed above. The result within the first six months has been a refreshment of the community's web site, on-gong professional development of members and the launch of the basic project manager training

program. Overall, there is a renewed sense of enthusiasm and promise that PMCOE will be successful in achieving its vision.

Project Success

As reported earlier in the general findings, there was high agreement that this project was a success. One might expect that project participants who are all project managers would have used the triple constraints to measure their success, but only one team member reported, "It wasn't on schedule and we didn't have any money, but we got it done" (15-PMCOE-17). 'It' was meeting the project objectives that were set out in the project charter that this same team member stated that, "Because we actually did what we set out to do in spite of the fact that we didn't have any money to do '*It*' (15-PMCOE-21). Phase one did see the development of a website[30] that supported the common methodology, a number of tools and vast array of project related templates. Phase one was to build it and hopefully potential users in ministries would find the products of value. Evidence purported by one respondent suggests that the project has also been a success from this point of view, "Many ministries are using it. Many ministries have adopted it, or modified toward their own use, but at least it was a starting point" (12-PMCOE-29).

Similarly, Phase two can be seen as a success as a project management centre of excellence was developed as indicated by one participant, "

> The fact that the Centre of Excellence has been going as a part time
> volunteer committee and has been running for over 4-6 years has to
> say something about the success of it and getting it established. We
> have had a number of conferences, which have been extremely well
> attended and have had a very positive feedback from. We are making
> headway in getting a number of the executive to see what we are doing
> and to get excited" (13-PMCOE-29).

The secondary purpose of Phase Two was to find funding to move from a virtual to a staffed PMCOE and this too was accomplished as indicated earlier and as reported by this participant, "In the near future we are actually getting a live body to work as part of the Centre of Excellence" (11-PMCOE-9).

The staff person had not been hired at the time of data collection for this research. However, one can use participation as a success indicator of Phase Three. The participation in the various teams of the PM-COE and the attendance at bi-monthly forums suggest that the PM-COE developed for government is successful. A review of the government's human resource database shows that there are 521[31] employees identified as project managers, project analysts or project administrators. Of these individuals, 15 % regularly attend the PM-COE forums or are involved on one of the various sub-committee or teams. In addition to those employees holding positions with the word "project" in their title, many others attend who also conduct projects but do not have a reference in their title such as policy analysts or program managers.   Nevertheless, continued voluntary participation alone suggests that the PMCOE is participation continues to grow as stated by this participant, "That is part of why I am saying it was a success, is that it has been going. Not only has it been going, but it has been growing" (13-PMCOE-29).

In reference to all three phases, as a community of practice, this project's success can not better be articulated or measured than by the comments of one participant, "I think it has been a success from the point of view that throughout the three phases it had a framework of participation" (11-PMCOE-21). And while completely anecdotal one representative linked their assessment of success back to one portion of the vision, by stating that, "I think as a success, we have improved project management within government" (14-PMCOE-7).

Critical success factors

In meeting the dual goals of promoting project management maturity and supporting individual project managers, voluntary participation is a good indicator of success but as a project to develop the PMCOE there were many critical success factors that needed to come together. Typical for any project, critical success factors include in part, a project management framework, senior management support, funding and project manager competence.

Project Management Framework

A project management framework typically consists of an agreed upon methodology and a control system. Surprisingly, for a group of professional project managers and as reported by one participant, "At times we applied the methodology and then it sort of drifted to the side as we moved on.   But we probably followed many of the principles of it" (11-PMCOE-34). While this was true for Phase One, more rigour was established around using an agreed upon methodology for Phase Two as reported by this participant, "We did a work breakdown structure. All the components for the office, we decided to focus in on certain areas. There was a business plan that was developed……….. But the sub committees, definitely used the project framework. There were terms of references that were established for each of sub committee work. There were project plans that were developed. There was a reporting structure set in" (13-PMCOE-41). At the end of this phase was the deliverable of an options paper for the creation of a centre of excellence.

The CGPMMUG, as reported earlier, selected the Repository model and the project was now ready for commissioning or handover (Healy 1999)[32]. As such, one might argue it is no longer a project and therefore a project framework is no longer required. While this debate is beyond the scope of this thesis, there is a recognition in communications with the project manager hired that, "PMCOE lacks structure. We need to re-focus on what we are trying to achieve and develop a plan around how we will do that over the short and long term. Perhaps a strategic and business plan are in order (Cavelle 2006). Without the project framework the PMCOE seems to be without the required focus but now that a staff person is hired, a number of tasks have been completed in fairly short order, including the development of training curriculum, refreshment of the centre's website and a schedule of professional development events.

Overall, this project could have benefited from more rigour in the area of creating a project framework as summed up by one participant,

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[31] Data gathered from host government's PeopleSoft ERP system
[32] Healy explains on page 194, "Commissioning normally applies to technical projects and getting them up and running. While handover, is the transfer of legal title to the project."

> "We did have a project charter and we certainly had done a lot of stuff around briefing notes and putting in options and that kind of stuff, but in some ways, it was interesting. When you have got a bunch of project managers, "How many project managers does it take to manage the project?." So it was interesting from that perspective, because we all knew what to do, and what the next step should be, but we didn't necessarily write it down…………We certainly had a plan in our heads about what it should be, but there weren't any dates associated with it" (15-PMCOE-37).

The project management framework was developed in part as evidenced by a number of documents including a project charter, work breakdown structure and various project documents, none the least, the Business Options Paper that recommended the design and appropriate style of PMCOE for its host public service organization. And while parts of the project management framework was present much of the overall framework remained quite tacit. This is also the case with senior management support as described in our next section.

Senior Management Support

This project was created with a top down vision and purpose as indicated by most participants including this respondent, "phase one, it was top down. …the Chief Information Officer felt that the project office in the Ministry of Health, where he worked, prior to going the Premier's office was a good thing and there should be more of it in government to increase the success of projects" (11-PMCOE-13). Therefore he requested that a group of individuals work together to create common methodology, tools and templates.

Phase Two was very much a bottom up approach as seen by this participant's statement, "Phase 2, the Chair asked for volunteers. So that was grassroots" (11-PMCOE-13). The idea of creating a centre of excellence was an objective found in the original project charter to create the common methodology but was not part of the CIO's request. This idea came from within the group as another participant identified, "this wasn't top down because it wasn't driven by senior executive, it was more just an initiative by an individual, or a couple of individuals within the committee…" (12-PMCOE-13).

Phase Three had senior management commitment in that the chair of the committee was an executive member within government and as such could lobby for senior management support across government as and when required as seen in the following statements from participants, "He was certainly our eyes and ears about what the pulse was in terms of executive for this thing and he was the one that was keeping this front and centre" (15-PMCOE-64). However, the executive sponsor changed three times as reported by this respondent, "We had three different senior management supports as I said, but we had the support. I think the support was there. We would always like to have more of it, but at least we had it" (14-PMCOE-37). This may have had a more significant impact had the chair of the PMCOE not have been an executive member himself.

Without the desire and a very strong mandate from senior management it is very difficult to successfully develop and implement any project. As PMCOE moved from a top down mandated committee to be more reflective of a self mandated community of practice, the need for senior management support is even greater yet is more elusive. This will continue to be an issue in Phase Three as there is a high degree of education and marketing required to promote and make true the value proposition of a centre of excellence. Having said this, the fact that this is a voluntary community of practice may prevent the risks of a mandated centre of excellence that is often times ignored or seen as adding layers of bureaucracy, hampering performance, causing conflict across organizations and marginalizing career opportunities.

Overall, senior management support was present but as this participant states it was spotty, "We have had spotty upper level support. Nothing as strong as maybe we would have liked it to have been" (14-PMCOE-17). Unfortunately, and until very recently, this senior management support did not really equate into adequate funding as seen in the review of our next critical success factor of funding.

Funding

The CGPMMUG began as mandated committee without a funding source as suggested by one participant, "No, there wasn't adequate funding. Everybody was doing this off the side of

their desk. Everybody had their day jobs and this was something we were doing, really because we thought it was the right thing to do. No, there wasn't the budget for it" (16-PMCOE-51). However, phase one did complete the development of the methodology, tools and templates and host these in a web format. The hosting of the web-site was given to the group free of charge by the central information technology organization.

Once the website was created and a fuller vision was imagined, PMCOE had very little and no formal funding. Some ad hoc funding was found to hold a number of best practices sessions but all efforts to form and support a PMCOE was accomplished without funds as indicted by this respondent, "No funding was available, except for the forums, bringing people in and putting them on, but that was just within the last year. Before that there really was no funding" (12-PMCOE-57). The absence of funding also typifies the nature of Phase Three that saw the launch and maintenance of the PMCOE . Recently, however and discussed previous funding was secured in return of the PMCOE delivering basic project management training. These funds permitted the hiring of a project management professional to direct the training and the affairs of PMCOE. Now with this project professional in place one would suggest that a competent PM is in place for Phase Three but what about the other phases.

Project Manager Competence

Again and given the nature of the project tone would expect very competent manager as many were designated project management professionals. In fact, most participants agreed that there was a high degree of project management competence in the makeup of committees but given the structure no one person was assigned the individual role of project manager as highlighted by this participant, "Yes, in the point of view that the contributing people were competent project managers, but there was no one project manager employed to be the project manager of this project" (11-PMCOE-70). This was very much the case for both Phase One and Two and left the project without a central point of authority and accountability. This resulted in routine matters having to be raised to a steering committee and or executive level in individual organizations for decision causing inordinate project delays awaiting such decisions.

And given the high degree of general project management competence, it is likely the overall competence level will not change with the hiring of a designated project manager. What may change however, will be the capacity to coordinate and lead this group towards their ultimate vision. Prior to this person being identified, members of the community of practice did not have the time to take care of the many tasks required to adequately grow the PMCOE and draw nearer its vision.

Change Impact

The impact of the change created by this project could be quite significant where the common tools and methodologies were seen as a standard as identified by one respondent, "We even referenced the website in our memorandums of understanding. So we have clients that we sign memorandums of understanding……..We actually reference PMI, as well as the PMCOE standard methodology" (16-PMCOE-93). Others, saw the impact as transformational in that what was intended was a culture change, "If you look at it from the government perspective, I would like to think that it did, because that is what we are here for. We are trying to change the culture. We are trying to get a project management culture in place" (14-PMCOE -69).

For others, who may have had project management offices in place the initial phases of the project likely did not have a great change impact, as reported by one respondent, "I think some ministries have been able to take advantage of the products that this project offered, the website, the methodology, the template, forms. Our particular ministry here, we have already had that in place. We shared some of that information" (12-PMCOE-77). Also, one needs to remember that during phase Two and Three this was a voluntary community of practice. Given the selection of the Repository model, the products developed in Phase One were offered on a voluntary basis as reported by this participant, "Well implementation of project management methodology to the BC government, that is one of the things that the Project Management Centre of Excellence has to offer. Have all the organizations in the BC government changed at all. No they haven't. But it is available. The fact that it is available, represents a major change in the practice of the government" (13-PMCOE-97).

The potential impact of the change will not likely be realized for many years to come but the foundation of working differently with new tools and across boundaries is articulately reported by this respondent, and is consistent with PMCOE's vision to promote project management maturity across government, "In part, from the point of view that by the end of Phase One having a website open to the whole of government made tools that were only in one silo in government, available across a much broader span" (11-PMCOE-106). This same respondent later suggests that this horizontal sharing may have been happening at senior levels as a result of this project, "Part of the change has been bringing it horizontally at the upper levels as well" (11-PMCOE-110).

The sharing of information between business units and project managers will continue to be critical as PMCOE aspires to achieve its vision. The potential benefits and change impact of PMCOE is yet to be fully realized and is nicely summarized by this participant, "because one of the areas we have improved and have tremendous potential for improving on, is a better horizontal understanding of how projects work across from one organization to another. This includes the overall business of government, not just a silo like the Ministry of Health. Now we are talking to each other about lots of common things. I think that is a huge thing for government. It has improved the practice, but more importantly, the potential for improvement is really there" (14-PMCOE-81).

Voluntary participation figures predominately within the structure of a community of practice and therefore impacts greatly the need for change management. Regardless of the voluntary nature of the community of practice and its products, change management was still a consideration for PMCOE although not formally acknowledged as seen in the next section.

Change Management

Given the voluntary nature of organizations using PMCOE's methodology, the change management strategy was not formally acknowledged. However, components of a change management strategy were present in PMCOE's repository coach model.

These components included training and coaching in relation to the methodology. PMCOE members volunteered to assist anyone in government with the use and implementation of the methodology. Also, project manager training was offered to all public service employees through government's centralized learning services.

The other typical components of a change management strategy, communications and end-user involvement was only employed as far as individuals wished to participate in PMCOE. Specifically, end-user involvement in the development of the methodology was limited to only a few individuals but represented more than two thirds of the ministries within its government host. Communication was also limited to individual project managers who chose to attend monthly business meetings or semi-annual best practice forums.

The voluntary offering for anyone in government to see the centre's products and for anyone involved in a project or project environment to participate greatly assisted any resistance to the idea of the PMCOE as reported by this respondent "

> "A lot of guidance, mentoring, forums, introducing things a step at a time and not frightening anybody by saying that this is how you must do it. "Here we are, there it is, there is a guideline for you to follow, here are some people you can call if you need some help." That is about all you can really do when you have nobody staffed to it. So you make it known, that you are not here alone, there is something there for you. You don't have to have your own project management office necessarily if you are a small ministry, because we have got some support here" (14-PMCOE-77).

Free sharing of tools, templates and information in a supported environment greatly reduced any change related issues and promoted knowledge transfer.

Knowledge Management

The very purpose, in large part, of creating the common methodology, tools and templates as well as developing a community of practice is to share information. So in essence, the project was about creating a foundation to continuously share knowledge of best practices that could be built into the methodology or through networking of members as reported by this respondent in relation to the final phase of the project, "Phase Three, the Centre of

Excellence itself, had been more, how do you promote project management and best practices and the work of some of the task groups. There had been a number of ways of making that information available. Part of it is through the routine meetings on a monthly or bi-monthly basis, with round tables. Part of it is making task group research papers available through that group as well" (11-PMCOE-85). This was truly a project that "began with the end in mind" (Covey 1989) of creating a knowledge sharing to support knowledge sharing. As Davenport (2001) suggests that the structures that have been created to date have been too sophisticated and complicated and fail to achieve their very purpose of knowledge diffusion.

However, the project itself did not have a formal knowledge sharing strategy and information was shared through a committee and sub-committee structure as reported by one participant, "We would feed the information up, back to the main committee. We would report to the committee, on our progress, the issues that were coming across………… And how we shared information back and forth was at the main committee" (13-PMCOE-81-85). This use of the committee structure was confirmed by another participant the major information sharing structure, "There had been a number of ways of making that information available. Part of it is through the routine meetings on a monthly or bi-monthly basis, with round tables. Part of it is making task group research papers available through that group as well" (11-PMCOE 86). "I have talked to people that, maybe it is their first project, and they were pointed to the site and they have used it and have achieved some better than average results from using it. And that is basically corporate knowledge of best practices. You can either do it easy, and do it through a methodical methodology drive way, or you could try to build one on your own" (13-PMCOE-89). The idea of promoting project management maturity and supporting individual project management competence is predicated on the ability to share information and knowledge.

Project Vision

The original mandate of PMCOE was under the auspices of the CIO to create a common methodology, tools and templates. The group that was first formed was the CGPMMG whose vision was not really imagined as they had a set of objectives to achieve but one could argue was also a preferred future end state. Once these objectives were accomplished, the

imagination of a few members of CGPMMG pondered the idea of leveraging the success of this group into something more.

More, and the determination of more, was the genesis of the community of practice who began to define themselves and in so doing also began the process of visioning. A core group to this fledgling community of practice began brainstorming ideas and desires of what this group could do to support each other and government as a whole in the area of project management. Unwittingly, the vision was born and tacitly began communicating amongst the members of the community of practice. The actual vision itself would not be explicitly detailed until a year later when a concerted effort to engage all members in its creation was facilitated. From a number of workshops and focus groups with key stakeholders that the following vision statement was confirmed, by one respondent and as found on the PMCOE website "Quality and effective project management practices are employed by all sectors of the province of British Columbia, resulting in a project success rate that exceeds government and industry expectations, on a consistent basis and a continuous improvement in project management maturity is realized" (12-PMCOE-101).

By this time, the community of practice was well established and known across government as PMCOE. Before creating the actual vision statement, considerable work was undertaken to determine what was realistic for a volunteer community of practice within the current government environment and political context. While there was a structure, there was no direction of where to take this community of practice or for what purpose. The vision articulated both direction and purpose that was previously vacant as reported by this respondent, "because that was the purpose that was what we were working to. That *(vision[33])* was our goal. So it helped us stay focus on that" (19-PMCOE-153).

With its new self defined mandate and vision, the PMCOE struggled for sustainability but without funding often suffered from apathy. At monthly business meetings that often ended up being bi-monthly and with as few as eight people would attend, other times as many as thirty. While the numbers ebbed and flowed at business meetings, sell-out numbers in

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[33] Italicized text in brackets added

excess of 120 participants attended all best practice events. The core following was approximately a dozen persons who believed in the vision of PMCOE and the many benefits it could provide to individual members as well as to government as a whole. These individuals believed in the vision and never let go.

Had a vision statement not been crafted there may not have been even a flicker of purpose for PMCOE as they struggled for sustainment. The vision may also have been a personal sustainment strategy for individuals as reported by one PMCOE member, "I may have assisted with the decision-making process, but I think it really assisted with people remaining on the project" (16-PMCOE-221).   A core group of the larger PMCOE membership never wavered and eventually as reported earlier secured funding to hire a full time coordinator to manage the affairs of the community of practice.

The top down mandate to create a common methodology (tacit vision) facilitated the grassroots development of an explicit vision that both motivated the achievement of developing the methodology and creating a sustainable community of practice as reported by this participant, "In this type of project, it was really about the leadership, leading volunteers. When you didn't have the direct authority over them, it was all sort of influencing people. It was just pure leadership…… a phenomenal leader, in being able to motivate people. To bring out the best of people and to get them to focus in where they were going. We were all working to the vision" (13-PMCOE-73).

The vision explained the dual purpose of PMCOE and aligned the community of practice's values with that of the host organization as recognized by this participant, "the vision speaks to the values of the project and the host organization which really was PMCOE. Definitely aligned with that, but it also aligned with the BC government's overall vision. It is really to provide something beneficial to the community members as well as the government as a whole" (16-PMCOE-217). All of the participants felt the vision supported the success of the project as seen by the following reports from participants,

"It has a significant role I think in the success of the project" (16-PMCOE-225).

"It definitely made a difference. Yes. Because we need it. Whenever we come back, the reason that we are doing this, which is why the vision is there, you can always come back to that, and say, "that is why we are here, that is what keeps us going." Yes. Fundamental" (21-PMCOE-173).

"Without the documented vision and the implied vision, without understanding of where we are going, I don't think we would have gotten as far as we did. People are too busy in their current jobs, they have too much else on their plate, the fact that people were willing, with everything else that was coming at them from their parent organization, able to go that extra yard to contribute to success in the COE, was definitely a success" (13-PMCOE-205).

Clearly, the vision was instrumental in the success of PMCOE as reported by many of the participants above. Interestingly, was the fact that most found the implicit and explicit vision motivating and directive in what they needed to achieve and what they need to do to achieve this preferred end state.

Summary

From a single mandated tactical purpose grew a collaborative strategic vision for a community of practice. From this vision grew the necessary sharing of information that eventually fuelled the innovative thinking to develop a sustainable funding strategy. Since the time of beginning to write the findings of this research, sustainable funding has been secured. And as reported by all participants, the vision created for PMCOE was instrumental in its success to secure funding and to continue as a viable community of practice that addressed both corporate and individual needs and goals.

Integrated Service Delivery – ISD

The Integrated Service Delivery (ISD) project was, as reported by many of the interviewees, a response to an unintended impact of government downsizing in communities. Several other interviewees noted that it also provided an opportunity to create service enhancements. While these are seemingly opposing business drivers, they both speak to client centricity of service delivery which became the ultimate purpose of the project.

Purpose of the Project

The purpose of this project is inextricably linked to the two business drivers introduced above. A new administration was elected in 2001 following a general election and this new government found themselves in a financial crisis. The deficit for the province was growing exponentially each year and there was an urgent need to change this trend. The new government introduced the Balanced Budget Act and Budget and Transparency Act (Province of British Columbia 2001) which required a balanced budget and enhanced public scrutiny of the budget planning and fiscal reporting framework. Enacting this piece of legislation ensured that the government would have to take drastic measures to meet the new balanced budget targets given the new transparency of planning and reporting, the public would also hold them to account.

There were many strategies used to reduce government spending, but one that was also needed most was a strategy to reduce the size of government or what has been termed "down sizing"(Tomasko 1987). As a result, ministries were required to reduce their staff compliments up to thirty percent over a three year period. In conjunction to this initiative was a "Core Review" of all government operations, to determine what programs were required, what programs were desired and what programs need not be government's responsibility. Flowing from this was both a devolution of programs to organizations external to government and a number of alternative service delivery strategies (outsourcing). An unexpected consequence of this strategy was well articulated by one respondent from the ISD project,

> "So, you had all these ministries working away in their silos, saying 'yup, we're going to restructure our business this way and here's how we're going to deal with 'what we called workforce adjustment', right doing it ministry by ministry. Nobody looked at the sum total impact in any given community of all those ministries working individually and what was happening on the ground and regions, and so some of the unintended consequences of that process were "oh, my goodness" because these folks and these folks and these folks have restructured their business in this way, like for example, Ministry of Forests decided, okay we're not going to have any direct front counter service, we're going to go through electronic service, etc. Inadvertently, we've taken the face of government away in community X – didn't mean to do that! Certainly had

no plans to do that! Wasn't a goal of ours or anything but woops, that's what's happened, right, or, in this community over here, "oh, holy crumb", right, we've just wiped out 75% of the provincial workforce from that community. How on earth are we going to retain the service?" (2-ISD-2)

Similarly, another respondent reports,

"As ministries implemented their targets in the communities, there was no coordination and so, in fact, you could have Ministry X, Y and Z all deleting all of their offices and all of their people and creating community turmoil beyond what was conceived in political turmoil beyond what was thought and so, the *Integrated Service Delivery*[34] project came out as a result of trying to coordinate between and among ministries appropriately which communities were impacted by which ministries and to what degree to preserve a face of government and often times, the human capital in the community which, in large part, could have been in some smaller communities very reliant on public servants in their private lives. So, the project was really important in mitigating the political and community impact to the degree that they could" (1-ISD-4).

Much of this was caused because there was a complete lack of an integrated strategy to these initiatives and ministries went about downsizing and cutting programs without talking to each other. In essence the project was a response to address what one respondent termed, "political chaos" (23-ISD-14).

Where some people see problems, the Assistant Deputy Minister who was assigned to this project saw an opportunity as reported by one of the ISD interviewees, "

"An ADM in the Premier's office was asked to come up with a way of addressing those consequences in communities and she had the vision to go "wow", we've got this huge opportunity to be able to not only look at what was happening in community and try to get government thinking on a community by community basis, but horizontally instead of vertically in our little ministry silos and also, try to address some of those service delivery issues and, I mean, there was immediate needs, there was a bit of a crisis going at the time but also, to look longer term at how could we maybe even enhance what's out there" (2-ISD-2).

Included in this dialogue was the opportunity not just for ministries to talk to each other but line staff from ministries within communities to talk to each other. More importantly and surprisingly for the first time, line ministry staff in communities started to talk to their clients

within the communities about what their needs were. And in most cases line ministry staff did this in partnership with other line ministry staff within the community.

Clients, citizens or taxpayers had local requirements but in general were consistent with the needs identified in the 1998, 2000 and 2003 Citizens First (Spears, Seydegart et al. 2003) national surveys. Clients want convenient access to high quality, seamless services that meet their needs. Specifically, Citizens First 3 (Spears, Seydegart et al. 2003), which is based on a representative sample of 9,000 Canadians in every province and territory, indicated that:

- improving access is an important challenge since citizens say access is one of the biggest barriers to getting government services;
- citizens have increasingly high expectations of government, in fact, they expect as good or better service from governments as from the private sector;
- using multiple channels is now the norm; in half of all attempts to obtain government services, citizens utilize two or more channels.

From this problem of government downsizing and the recognition of an opportunity to better meet citizen needs grew the mandate of the project for ensuring that people have access to government when, where and how they need it. Government gave the ministry responsible for the project the mandate to enable the continuous improvement of government services to ensure they are innovative, client-focused and cost-effective. They were further charged with creating a *Client-Centred Service Delivery Strategy* that would be an enabling tool, to help government as a whole navigate the shift towards more client-centred ways of providing services. Ultimately, this strategy will engage other levels of government so that services can be organized around the needs of clients, regardless of who is delivering them.

When implemented, the *Client-Centred Service Delivery Strategy* would provide a collaborative planning framework for ministries and agencies to work within as they refine the way they deliver their services to be more client-centred. So began the imagining of a preferred future end state or vision for the project that would not change significantly over the course of the project.

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[34] The quote has been changed to use a pseudonym for the actual name of the project.

The shift towards more client-centred ways of providing services holds opportunities for multifaceted benefits. Reorganizing services so that they're delivered in a way that makes sense for the end user also leads to "wins" for the service provider. For example, as reported by one respondent, "the co-location of four provincial ministries in one town has enabled staff there to increase the array of services they offer their clients. At the same time, by sharing resources such as front counter workers they are able to make more efficient use of them" (5-ISD-94). This was confirmed by another participant, "that was happening in a lot of different places and a little aside is, anecdotally, we're hearing from the community in this town, we've got better service now than we had before" which isn't an advertisement for taking 75% of the work force out but that it's possible to do some really quite extraordinary things, you know you always want more resources but what a success story, they were just amazing" (2-ISD-129).

Other benefits to being client-centred include benefits to citizens, operational efficiencies and political return as seen in the following diagram:

Operational Efficiency   **Political Return**

Improved utilization of scarce resources   Enhanced accountability
to citizens

Development of human resources   Better policy making

Streamlined policies and procedures   Positive economic impact

Horizontal accountability   Citizen confidence in
                                                                   government

Benefits to Clients

Improved service quality

Enhanced access

Lower costs

Increased knowledge

(ISD 2003)

Figure 18 – Benefits of Client Centricity

There are always trade offs when attempting to improve client service delivery. You can often have something delivered quicker but at the cost of quality. You might increase quality but take longer to deliver and inadvertently decrease client satisfaction. And what is politically expedient may not be operationally efficient. The meeting of operational efficiency while gaining political returns and giving benefits to clients is no small feat but one that current research is pointing to as an operational imperative for public sector organizations. There is growing acceptance that the measure of an effective public service client satisfaction which in turn address the public sector proxy for profit with the public's confidence in government.

The importance of providing clients with convenient access to high quality, seamless services is further illustrated by current research linking the service experience of client's with their confidence in government. In the province where this study was conducted, 55% of respondents to the 2003 Citizens First (2003) survey agreed or strongly agreed with the statement: "My view of government is shaped to a large extent by the quality of service that governments provide." The same survey found that 53% of province disagreed or strongly disagreed with the statement: "Governments are responsive to the needs of citizens". The issue of citizen centric services is both real and important and the reason for the following ISD project structure.

Structure of the Project

The structure of the project evolved over time but had the sponsorship of the Chair of Treasury Board and Deputy Minister to the Premier.   The project also had a steering committee of Deputy Ministers, who represented most of the ministries that would have front line staff in rural communities.   The project lead was an Assistant Deputy Minister from the Premier's office who brought together a project team who as one respondent reported "could address all those different issues or problems" (7-ISD-7).   As one respondent reported, "the team was of 'varying size depending on what month it was because, of course, we were trying to pull staff in very quickly to help get this priority going" (2-ISD-5). The team typically

consisted of an Executive Director and three or four Directors and an administrative staff person.

Key to this initiative was the forming of local Cross Ministry Work Teams. Teams of staff from a variety of ministries were created in the spring of 2002 to help ministries work together in order to maintain local access to government services in communities hit hardest by ministry restructuring and budget cuts. Local short-term strategies and lessons learned by the Cross-Ministry Work Teams helped inform the long-term, province-wide service delivery strategy. Some of the lessons learned in the thirty-eight pilot communities established up to May 2003 include the following:

- Improving the way services are delivered to clients requires **genuine commitment** from the most senior levels of government. This commitment needs to be communicated throughout the organization.
- Key **decision makers** need to be involved in service delivery changes from the very start.
- An **evaluation framework** is important in order to measure improvements in service delivery.
- **Positive incentives** help encourage staff to be creative in improving service delivery.

Ongoing sustainment of the program is envisioned under the guidance of a line ministry that will facilitate the implementation of the strategy on a long-term basis. Service transformation councils, as well as similar committees established within ministries, will provide leadership, oversight and momentum for service transformation and ultimate attainment of the project vision.

The concept of client-centred service delivery was already built into the province's strategic planning framework. Reforming public services to meet the needs of citizens of the province is one of the key priorities identified in the government's New Era vision for the province. The government's strategic plan for 2003/04 – 2005/06 also identifies the need for focused and efficient delivery of government services as one of its managerial principles. The actual mandate of the ISD project to ensure citizens have access to government when, where and how they need it was given to a line ministry in February 2003.

The experiences of other jurisdictions have shown that it takes time to change the way government works. What was needed is an approach that lays out the "big picture" vision for client-centred service delivery, supported by concrete and practical activities that could be piloted and then rolled out across the system. This strategy needed to apply to all ministries and agencies of the government that have direct service delivery activities with clients (i.e. citizens, businesses and public sector organizations from within and outside the province).

To do this a number of guiding principles were developed including the obvious to be client focused, cooperative and collaborative. Also, the approach must be flexible and adaptive given the need to be applied to very different communities across the province. Lastly, it must be results focused, sustainable and cost effective.

The goal of the Client-Centred Service Delivery Strategy is to meet client needs for convenient access to high quality, seamless services. Five core projects and strategic objectives were identified to help government achieve this goal.

Table 34 – Core Projects and Objectives

Core Project	Objective
Client Awareness, Education & Marketing	To increase client awareness of government services and channels
Service Integration	To enable the coordination and integration of services based on client needs
Channel Integration	To provide integrated access to government services
Performance Focused Infrastructure, Policies and Procedures	To create a flexible and responsive Information management/information technology (IM/IT) infrastructure, as well as financial/general management policies and procedures that enable government to focus on the outcomes and services that clients want
Client-Centric Corporate Culture	To create an innovative public service focused on meeting the needs of clients

ISD 2003

What was proposed is a multi-year strategy that defines the direction for improving service delivery in the province. Activities were presented in three phases: short-term, (by March 2005) medium term (three to five years) and long-term (six to ten years). Detailed work plans for the individual projects under each of the broad activity headings including specific deliverables, timelines, milestones and etcetera were created.

Given the range of projects and activities envisioned, change management will be critical in order to ensure the successful implementation of the strategy. Managing the change process for moving towards client service excellence will help support and increase the government's change capability and will help integrate all related initiatives into a common transformational effort. Given the breadth of this project, stakeholder management will be significant and an important undertaking.

Stakeholders

The project had political stakeholders in that Treasury Board (comprised of politically elected officials) asked that the impact of downsizing in communities be investigated. The investigation was championed by a senior bureaucrat who was politically appointed by the Premier as noted by this respondent, "the sponsor was the Deputy Minister to the Premier. He was the ultimate champion. You don't get much more holy water than that" (5-ISD-11). This senior bureaucrat in turn appointed on of his Assistant Deputy Ministers to lead the project. A Deputy Minster's Committee that acted as the Steering Committee and provided the rest of the senior bureaucratic support. There was also a very senior working committee made up of Assistant Deputy Ministers and Executive Directors. This group represented key stakeholders across government that were responsible key functional areas that supported the delivery of government services across the province.

More importantly the primary stakeholders were the citizens themselves in the impacted communities as well as the frontline workers in these communities. Extended stakeholders were not just the citizens who needed services but all citizens in the community as the

economic viability of entire community was threatened as they were highly dependant of government services and government employees as an economic resource base.

Key to the success of this project was the development of cross ministry work teams at the community level as identified by this respondent, "For the rest of the project what happened was that each team out in a community had a chair, and they also had a support person attached to them, and then they reported into the (central) team. People worked up and they reported up into the team. They were called cross ministry work teams in the beginning" (23-ISD-11) and their effectiveness was critical to local communities and the overall success of the project.

Project Success

As reported in the general findings all respondents considered this project to be a success on a number fronts. The traditional measures for project success such as the triple constraints do not fit well for this project as time and costs were not given baselines. However, client satisfaction and measures similar to those used by the Citizens First (2003) surveys were key when considering the aspects of the service delivery process. These included measures primarily directed at creating satisfied or dissatisfied clients as follows:

- *timeliness* – amount of time it took to get the service
- *knowledge, competence of staff*
- *courtesy/diligence of staff* in ensuring client gets what they need
- *fairness* – degree of fairness with which clients feel they've been treated
- *outcome* – whether or not clients get what they needed

While these measures were of primary concern the project never collected hard data on these factors but relied on anecdotal reports from their cross ministry work teams. These reports were very favourable and the project was converted into an ongoing business unit within government as reported by this respondent, "So, we've got 42 teams representing 57 communities, so despite the fact that we have managed that, developed that reach out into communities from the political level, it was seen as positive, as successful, as helpful - so, they continued to fund us. At the end of the term of the project, we were made into a

permanent initiative" (2-ISD-11). The commissioning of this project into a permanent program strongly suggests that it met or exceeded stakeholder expectations as senior management support remained as they wanted the initiative to continue. However, many factors were at play to bring about this success.

Critical Success Factors

When looking at the major critical success factors for their project, ISD respondents were united in their confirmation of what critical success factors were and were not present. In fact, all agreed that to varying levels, that the project lacked a project management framework and competent project managers but had a high level of senior management support. Funding was also lacking as there was always a case for more.   As with the previous case studies, not all the factors were lacking or present for the entire project as these factors ebbed and flowed throughout the project's life cycle. In addition to these critical success factors that will be examined separately later in this chapter, the project had a number of fundamental approaches that were necessary for such a project to meet stakeholder expectations, especially those who championed or sponsored the project.

The strategic implementation plan considered a number of fundamental approaches in order to be successful including the following:
- Whole of government
- Phased roll-out – the strategy will be rolled out in phases based on the premise of think big – start small – scale quickly. Lessons learned in each phase will be used to guide the development of subsequent phases.
- Quick wins
- Single governance structure
- Priority setting
- Partnerships
- Stakeholder participation

A whole of government approach was critical to ensure the requisite buy in to be able to coordinate all services across government in a given community. A phased approach was used as this was a transformational change project in that the description of the end state was not necessarily wholly known when starting this project. The mantra was as reported by

one participant "think big, start small and scale quickly" (23-ISD-93). There was much to be learned, planned and implemented along the way and lessons learned in one community would need to be considered for the next community. Starting small was necessary but gaining support for thinking big and the vision of the project required quick wins (successes) initially to build credibility for the project and gain support moving forward. Such an approach is consistent with an emergent strategy approach where patterns are realized over time but were not necessarily intended (Mintzberg, Ahlstrand et al. 1998). There is a need for a cross government support and governance in order that decision making impacted all parts off government. While consistency was needed there was also the realization that sectoral strategies may also be appropriate given the diversity of services offered by government. Included in this governance structure was the requirement for a priority setting framework to focus government wide and community service delivery efforts. Also, the need for partnerships between the provincial government, broader public sector, and private sector were necessary to maximize the potential of service delivery options and to meet individual community needs. Lastly, stakeholder participation is always critical in any business change project such as this. The need for stakeholder input is not just to smooth the implementation phase of the project but in this case to help design the project itself.

Performance measures were identified for the overall outcome of the project such as client satisfaction, along with output, quality and efficiency measures that provide a balanced assessment of the success of the strategy. However, client satisfaction served as a primary indicator that the needs of clients are being met and was likely the best indicator of achieving the vision.

To date an evaluation of the project success has not been conducted with clients to determine objectively or quantitatively the success of this project. Given traditional definitions of success related to the triple constraints, the project has met its short term goals. The project has always remained within budget but the budget was not built on a project plan or timeline. Lastly, the project did achieve the objectives it set out to achieve within the timelines it set but these timelines have moved and no baseline has ever been established.

More importantly and more consistent with the vision of the project, was its ability to address business drivers from which it was born. Internally, it mitigated in part the unintentional impact of government downsizing in communities. As one ISD participant remarked, "we've actually renamed them into service delivery networks because it's no longer just provincial ministries there, lots of the teams have federal agencies, municipalities, school districts, community colleges, first nations, community organizations, you name it - they're at the table in some of the communities………I'd say - yeah, we've been pretty successful" (2-ISD-11). Externally, the question of increased client satisfaction brings us back to evaluating against our vision and the answer to this question is still to be determined as indicated above. Nevertheless, anecdotal reports as reflected by this study's participant are consistent with success as reported by one respondent, "It got people thinking differently about how we develop and deliver services….I think the project is ongoing, and still has a long way to go, because government is very much used to developing services in a way that is easy for them to do and not in the way that citizens can best access government's services" (7-ISD-13). The acknowledgement by senior and all public servant stakeholders of having to create client centric services is very significant and a positive step towards achieving the vision of this project. The realization of this need, then set the stage to create a project management framework from which the project could be conducted.

Project Management Framework

Participants reported the presence of a project management framework but upon further review of the interviews it became clear that not much of a project management framework existed, at least in the initial phases of the project. The project management framework, as reported by this respondent, was also representative of comments reported by many of the other participants, "Maybe not as rigorous as it could have been" (1-ISD-28). The very rudimentary nature of this framework is accentuated by this respondent, "When I joined the project I tried to institute, for example, just a basic work breakdown structure because lots of people were doing a lot of really good things, but none of it was connected…………So I tried to introduce a basic work breakdown structure so we knew what the priorities were and some idea of the resources attached to them, and the time lines. So that was a challenge" (7-ISD-

23). While the project framework may have been lacking or less than desired, at the beginning of the project, senior management support was certainly present at some significant issues in the early stages.

Senior Management Support

And while there was very strong support from the Deputy Minister to the Premier and the Treasury Board, not all senior management were champions of this project as reported by one participant,

> "At the beginning there was a very small concentrated group that provided
> support that supported the project. And then there were a lot of fence sitters,
> deputies who looked at me and said, "Are you nuts, do you think you can do this,
> come on. We'll wait and see." And then eventually we got quite huge support
> and we got political support as well. It was one of those unusual situations. You
> were getting bureaucratic support and political support at the same time. For
> some people that idea is heaven. As the project evolved, it is fair to say, I think
> to some extent the project lost its way" (23-ISD-57).

When reading the interviews it became apparent that ongoing support was at least in part due to the successful lobbying of the project manager and ADM assigned to the project. She was also the vision champion and kept this project in front of senior executive. Her re-assignment left senior management support wanting and the vision atrophied without her leadership. The project suffered significantly as reported by this I participant,

> "The fact that we had a project sponsor, or the ADM sponsoring the project, was
> initially part of the premier's office. That made a huge difference, because we
> had the ear of the deputy to the premier………. What would I do differently
> though? The ADM in charge changed, part way through the process and we lost
> the direct connection to the premier's office. I think that hampered the project.
> I think the initial vision that the first ADM had was different from the vision
> that the second ADM had. Changing the sponsor in the middle of the project
> significantly impacted it from my perspective" (7-ISD-20).

This is an interesting observation that links the project manager and project sponsor. It suggests that when this link is broken or weakened it can significantly impact the project. One would also expect that funding levels would be quite consistent with the level of senior management support.

Funding

The ISD project started with a meagre budget that only covered the salaries of a few individuals and was deemed insufficient by many including this one participant, "Adequate funding wasn't available at all through the whole thing, but that was just one of the puzzles to solve as we went along" (23-ISD-61). Soon after the start up of this initiative the ISD project received centralized funding from a 3 year Government Restructuring Fund but the level of funding was inadequate as indicated by this reportee, "Initially, there was not adequate funding. Not at all, they just notionally said we've got to continue with this…. When the initiative came about, there was some sort of an allocation to the initiative and that didn't cover the salaries of the people…..And, it's been a struggle ever since" (23-ISD54 to 55). However, this funding terminated effective March 31, 2004 with the elimination of the Restructuring Fund.   The project has since been operationalized into a program with funding under a Ministry's core budget.

Project Manager Competence

Not surprisingly, the level of project manager competence was lacking as there was a lack of an overall project management framework or strategy. There was however, as reported by one respondent a high degree of general management expertise, " They were competent managers and that's why I think it wasn't maybe as rigorous on the project management discipline as what somebody would coming in and having the charter and the 500 line project plan………I don't think it was that rigorous" (1-ISD-58). In fact, it was very unclear to most of the participants as many did not think they had a project manager but all believed they were working on a project as typified by this participant, "There were no project managers. At least no people who were responsible for tracking the projects and their outcomes" (7-ISD-39). And lastly, as one participant reports, "Everybody was a project manager" (23-ISD-66). It is evident that without the project management framework the project lacked the structure to create clear roles and responsibilities as one would expect in such a complex change project.

Change Impact

The impact of the change for this project was truly transformational as one respondent reported that, "along a continuum from changing what is meant to be easy stuff, which is changing transactional kinds of processes, all the way to big shifts in thinking, transformational change of some kind where you actually are doing something in a completely different way. We were on this latter end of the continuum" (23-ISD-85). While another participant coined this as a cultural change, "its about getting, helping people to change the way they think about their work and the way they do their work in order to support a new vision" (2-ISD-73).

Change as defined in Chapter two is the transition from the current state to a preferred future state. Government need to shift paradigms in order to reach a goal of seamless inter-jurisdictional services organized around the needs of clients. The following figure reflects the transformational change that the ISD project was attempting to implement.

Current State		**Future State**
• Uncoordinated channel silos With varying levels of access across the province	**Accessible**	• Multiple, integrated access channels available province-wide
• Limited feedback opportunities regarding client priorities and expectations	**High Quality**	• Regular client surveys of satisfaction levels and priorities for improvement
• No cross-government service delivery standards		• Government-wide service delivery standards developed based on client expectations
• Silo-based/vertical planning and funding	**Seamless**	• Cross-government planning and resource sharing
• Fragmented service delivery		• Integrated view of the client and coordinated service delivery
• Service delivery limited by jurisdictional boundaries		• Inter-jurisdictional service delivery
• Services organized around government needs		• Services organized around client needs

Figure 19 – Required Transformation Opportunities

ISD 2003

In order to accomplish this transformational change a very sound and thorough change plan needed to be developed and supported by a robust organizational or project structure.

Change Management

Keeping with the transformational theme and nature of this project one respondent classified the different types of change into thresholds of pain the project would cause people. As such, this project would cause the most pain and require that "from a leadership perspective you have to give a compelling case of why you're changing and why the future stake will be different and better than where we're at now" (22-ISD-74). The need for transparency of cause and the end benefits of achieving the desired end state are key factors for managing any change project as discussed in chapter two.

The ISD project was transformational in its concept of working collaboratively across government with a focus on citizen centric services but was also facilitated individual responses to the challenge of downsizing within individual communities. And while there was no formal change management plan many of the components of a change management plan were undertaken upon implementation. For example, given the desire to have cross government buy in, templates and tools were developed to ease the participation of individual communities as reported by one participant, "So some of the staff in our office said, if you are going to try and plan multi-ministry facilities, here is some templates that might help you" (7-ISD-60). More importantly the project began to engage individual stakeholders in the communities as reported by this same respondent, "The staff actually went out to the communities and worked with them, talked to the people, developed relationships and I think that was certainly a key thing" (7-ISD-60). One of the key elements of change management is end user involvement to create the awareness for the change and the desired end state. This sharing of information is also required in a broader context across the project.

Knowledge Management

The diffusion of knowledge was critical to the team lead's ability to effect change in the many impacted communities as well as to promote success across the many work teams involved in this project.

From the external perspective and in order to move the public service towards the future end state, new approaches were required to integrated services as there was minimal coordination of service delivery across ministries. Clients want services that are coordinated and integrated around their needs not governments needs. Also citizens want to be able to access services in a manner of their choosing and this includes web based access. Technology has a key role to play in transforming public service delivery. The way government manages information and technology must be flexible and responsive so that services and information can be integrated and delivered quickly and consistently, while ensuring privacy and security. However, citizens and or clients need to know what services are available and how they can be accessed. This requires client awareness, education and marketing. Improving the delivery of services will require a cultural shift for clients. Government needs to help clients become better educated on what services are available and how they can access them. This will require public service awareness and education and as discussed above, client-centred service delivery also requires a cultural shift for public servants. Building a strong and unifying sense of customer-focused values, developing leaders who are committed to the new norms and practices, and giving staff meaningful opportunities for participation in decision making will help to focus human resources on what clients want in terms of outcomes and services.

Such change for clients and service providers will require a strong knowledge management strategy to ensure everyone is aware of what and how services will be delivered to optimize employee engagement and client satisfaction. Internally to the project, knowledge needs to

be shared across the many work teams as well as amongst central project team members. Knowledge and information sharing was very important to the project and was a key deliverable of individual community project plans as indicated by this reportee, "Across the various teams, who all had their own individual project plans, we used those conference calls to help them understand what each other was doing so they could share with each other, do peer coaching, if they were running into similar problems" (33-ISD-80). But they did not stop at sharing information amongst themselves as this same reportee states, they sought out external resources to enhance their knowledge base, "We invited other people in that we thought were bright and we talked about the dilemma's that we were working with, struggling with and just let the dialogue emerge" (23-ISD-77).

Like the other case study projects this project also had a website to distribute information but it was a static site with no ability to collaborate. Other forms of distributing information were also used including a community newsletter, circulars and etcetera. Similarly, the awareness of the project vision was left to dialogue and only in the latter stages of the project did the vision get circulated in a written format.

Project Vision

When ISD started it did not have a vision but was a project looking for a solution to an unintended problem of service reduction within communities as stated by one participant, "I think it was implicit. I haven't seen it written anywhere, certainly it was implicit that I've talked about it, you know a community with still having access to public services. As a result of the project, I will say there was a document created called the Client Centered Service Delivery, which was a sense of vision. So, it really was the vision which added a very immediate and defined purpose but it was the last document as the project closed" (1-ISD-96). Many of the participants disagreed and suggested there was a written vision statement but in fact this researcher could find no documentation of such a vision except for documents that were published and indicated above, at the end of the project "that simply states the vision as, vision - equals ultimate outcome of satisfied clients" (ISD, 2003).

Interestingly, the lack of a written vision statement and the overwhelming claim that there was one suggests that this project had a very strong and shared vision. The project's vision was credited with binding the project team, motivating them and being instrumental in their decision making as evidenced by this participant,

> "You have to be able to do that vision cuz more often than not, nowadays, where the project is not within our program area it's between and among programs and agencies and governments and you have to have the vision to bind everybody. So, it's just absolutely essential to start it and you will get in a situation where people's interests all of a sudden the scope …..
> and because they'll see - oh, well if we do this where you have to bring them back within the vision but within the scope of what you're trying to do and so, it is a binding end state, it's a binding piece for commitment and galvanizing people to action on a daily basis really. Anytime you have trouble with people, go back to the vision.
>
> <div align="right">(1-ISD-96)</div>

As evidenced by many participants, the vision for this project was outward facing and shared by all members of the project team. One of the ISD study participants stated a similarly simplistic version of the vision statement, "Well the vision was that government services could be responsive to the needs of the people in community, in a very real and practical way" (23-ISD-109).   Stated in other words but similarly simplistic, "In a statement, in a dry statement, it was probably changing the way we develop and deliver services, so they make sense from a client's perspective" (7-ISD-75).

As touched on above in the section regarding change impact, there was an identified and desired end state as described in Figure 21. The reader will remember the definition of a project vision adopted for this thesis was simply offered as "a desired end state." The evidence of mastery can be argued to be the conversion and articulation of the complex into the simple. Similarly, this project masterfully converted a complex desire to change into a simple but powerful vision statement that was shared and widely understood.

The need for the project was mandated from senior management (top down) but the creation of the solution and the vision was a grass roots exercise (bottom up) as noted by this participant, "I think the initial drive for the project was top down. But I think the fleshing out of the vision and what is possible was a combination of the two. Bottom up, here is what is happening in the field, we need your help, and we have a political issue, we need to do something about it. So the two kinds of came together" (7-ISD-98).

The vision of the project was communicated mostly through dialogue amongst stakeholders and team members. The purpose and desired end state was published in the form of a web site and newsletter. However the one method that stood out from the other case studies is that the vision was communicated as part of a structured orientation for new community teams to new team members as reported by this interviewee, "So we put the vision, that idealistic idea in a sense, in the orientation for each of the cross ministry work teams. So each team got an orientation. Not just about what the rules of the project were, but here is this magic thing that we could do, against all odds" (23-ISD-122).

Orientating teams as to the purpose and ultimate goal or desired future end state is an effective way of beginning to ensure everyone knows where they are going. While measuring the success of the project against the vision is a great measure this study wanted to directly know the impact of the vision on success. In this regard ISD respondents were unanimous and stated unequivocally that the project vision had a role in achieving project success as reported by this participant, "I think it was critical. Honestly, we had no money when we started. There were no staff and only half a secretary. So the only thing that I had was this picture of how things could be better. It was everything" (5-ISD-165).

Summary

The ISD project was a solution to an unintended problem of government downsizing that presented an opportunity to better service citizens. As such the project was deemed a success due in large part to the fact that it was made into a permanent program. The vision of

citizen satisfaction still drives the program to significant success by meeting and exceeding stakeholder expectations both centrally across government and in individual communities.

Emergent Themes

The general findings and case studies followed the semi-structured interviews and were reported using this same framework. This structure provides a good basis for reporting expected findings but may leave other significant or emergent themes unattended. In this section we will deal directly with four emergent themes that crossed the boundaries of the three case studies. These were the benefits of an incremental approach, the requirement to address horizontality, the need for sustainment, and lastly the importance of the project's vision leader.

Incremental approach

There is a riddle that asks "how do you eat an elephant?" and the answer is "one bite at a time." Similarly, one of the emergent best practices is the need to conduct complex or large projects in phases (Dvorak 2003; Walker and Johannes 2003; Kerzner 2004) to ensure that the project manager can adequately monitor and control all of the tasks, activities and dependencies. So too was the need for incremental approaches identified in each of the three case studies as typified and reported by the following JIMS participant, "The approach, which was very much an incremental approach. So we didn't do what Ontario did and failed miserably at in trying to do everything at once, in two years. I think all of those things are reasons that it succeeded. Certainly the approach that we are applying now in this other one" (4-JIMS-41). And another participant concurs, "The thing that I would do the same, was we took a very incremental approach to the development. We took an incremental approach not only to the development of the product, the design and the development and implementation of it, but we also this approach to the project structure" (17-JIMS-21).

A phased approach is similar to approaches using prototypes or pilot phases, where stakeholder buy in is built and maintained in an incremental fashion. As one participant

quoted earlier in this section, "think big, start small and scale quickly" (23-ISD-93). Incremental approaches assure stakeholders that the project can and will deliver what has been promised as stated by this research participant "One of the critical success factors is that we did it incrementally, as opposed to trying to everything at once. So what we did was carve off what we can manage and past experience indicated that when a project scope is too big, it takes too long to produce any kind of visible deliverables, and that resulted in scepticism and fatigue in waiting for the system. So what we did was incrementally provide functionality and encasing that deliverable with understanding that this is incremental, that it will provide you with functionality, the basic functionality first and we will improve upon it" (10-JIMS-33).

In the JIMS case, incremental approaches permitted the project team to test the system and the impacts of new business processes in smaller court sites before moving to larger sites. Given that a major part of this project was a systems development initiative it is not surprising that a phased approach was used. As it turned out, this approach was very important as many issues were identified that would have been catastrophic if they were not addressed before a full provincial implementation. Because these issues were resolved and contained in just one court location the project team was able to learn and adjust approaches before moving onto the next location. Interestingly though, the incremental approach was abandoned when future implementation funding was cut for future years. Fortunately, by this time most of the issues around systems and business practices had been resolved enabling the required fast tracked implementation as described in the JIMS case study above.

In the case of PMCOE, a phased approach was created from the very start as seen in the work breakdown structure in Appendix I. Phase one was the planning and building phase with phase two the operation and enhancement phase.   One might argue that this is typical of many projects where there is a handoff to operations after the project is complete. But in the case of PMCOE the project team became a community of practice that made up the operational committee that managed PMCOE. When looking at Appendix I one sees a number of very distinct deliverables at the second order that due to a lack of human resources were also completed in a phased manner as indicted by this participant, "In the first

phase and I will break the project into three phases, the pre-Centre of Excellence……The second phase was initiated by Chair of PMCOE asking for volunteers to work on the concept of a centre of excellence and to put in a funding request…. In the third phase, that is the life of the Centre of Excellence itself from about spring or summer of 2003 onwards" (11-PMCOE-9). Planning was completed with the need and justification for the project. Next, the identification of the necessary components such as sponsorship, funding and the actual environment (virtual or real) that the PMCOE would exist. Once these matters were decided then the final component of Phase One was completed including the design of the methodology, tools and templates. Each component was completed before the next as they were somewhat dependant but this also created a phased or incremental approach that was key in building and maintaining support for this project as relayed by this participant, "I know personally what we tried to do was an incremental approach, to really show how this was of value to people. Everyone can point out a project failure. The point is not to dwell on failures, but to show how something can be done differently and more successfully. If you can show people that there is an easier way to do something, your success rate is bound to increase. We only put in small pieces of the methodology into our own internal branch, so that is what I am referring to in an incremental approach, and we also tried to train people on the processes and documentation as we went along" (6-PMCOE-109).

Similar to PMCOE and in the matter of the ISD project's implementation it was very much an action learning format where the incremental approach permitted the central project team to learn from their experiences in each community and then transfer lessons learned and what became best practices onto the next community and team development site. ISD was a transformational change project and for many of its participants a complete paradigm shift. Working collaboratively with all levels of the private and public sectors, working horizontally across ministries and keeping a client centric lens on all that they do was very different. Consistent with true transformational change one often embarks upon the unknown and uncertain and needs to develop, implement, test and adjust as they go. One strategy to reduce the impact of unknown risks, should they occur is to proceed cautiously and incrementally. Similar to testing the ice on a lake, one tests it at the shallow side before running out in to the middle of the frozen lake. To rush out without testing would be folly and

the possible consequences catastrophic. Failure in the case of the ISD project to many communities would be similarly catastrophic to the economic viability of these communities and people who worked and lived in them. Therefore, a cautious, step-wise (incremental) approach was used.

Horizontality

There is much rhetoric within the public sector about 'busting silos' and working horizontally. There is considerable appeal to working horizontally within an organization as working together has the potential to reduce redundancy, leverage each other's knowledge, processes and systems but experience proves doing so is difficult. While it is hard to argue against a 'two heads are better than one' perspective, in practice effective governance of such horizontal structures has proven problematic. Regardless of this and other difficulties, it is essential to effectively address this issue and others in multi-stakeholder projects that cross traditional and functional boundaries. So too was the case with the projects examined in this research.

In the case of JIMS a multi stakeholder project framework was used including a steering and sub-committee structure with representation of all stakeholders. The common bond between all was both philosophical and functional as all believed in public safety and all were part of a larger justice system. In order to improve public safety, there was an imperative to communicate horizontally across individual business entities as stated by this participant, "This is important because the communication was not just within an agency. It was across agencies. If I could describe it in two ways, there was the horizontal need to communicate across agencies, and then there was a vertical need to communicate within the agencies" (9-JIMS-73). Improved communications required unprecedented cooperation as reported by this participant, "I would say that the vision was pretty high level. Other than showing good cooperation amongst all the players, breaking down the silos, it never really got into, you know, somebody's job wasn't going to change. You have to combine jobs or split jobs that would not have been contained in the vision" (3-JIMS-213). To address the desire of greater public safety required working differently, not just in the case of practices and systems but horizontally as an integrated process as related by this participant, "So in the case of Justin,

that is from that silo paper based model to an electronic integrated justice model so that includes everything from assessing change readiness from a cultural, HR perspective, to a outside training and different ways of delivering training, right down to potential different organizational models and job descriptions and so on and so forth" (4-JIMS-105).

So too was the case with the ISD project as many ministries across government had a stake in trying to preserve the delivery of services to citizens in individual communities as reported by this participant, "So, you had all these ministries working away in their silos, saying yup, we're going to restructure our business this way and here's how we're going to deal with what we called workforce adjustment, right doing it ministry by ministry. Nobody looked at the sum total impact in any given community of all those ministries working individually and what was happening on the ground and regions, and so some of the unintended consequences of that process were "oh, my goodness" because these folks and these folks and these folks have restructured their business in this way, like for example, Ministry of Forests decided, OK we're not going to have any direct front counter service, we're going to go through electronic service, etc. In advertently, we've taken the face of government away in community X - didn't mean to do that!" (2-ISD-2). To address this unintended consequence, ministries and government were necessarily required to create horizontal strategies that cut across business entities and different functional areas of government as reported by this same participant, "we've got this huge opportunity to be able to not only look at what was happening in community and try to get government thinking on a community by community basis, but horizontally instead of vertically in our little ministry silos" (2-ISD-3). The very purpose of the project was to work horizontally within communities and across the broader public sector to achieve client satisfaction as outlined in the project's vision. The steering committee constituted for this project had representation from across all business units in the ministries concerned.

Similarly, the PMCOE project had cross government representation as part of its community of practice make up. The vision of PMCOE was to advance project management maturity across government and to create a common methodology. Common sense would suggest you need representation from across the federated organisation and what eventually

developed was a community of practice with this representation as reported by this participant,

> "I would say yes, because one of the areas we have improved and have tremendous potential for improving on, is a better horizontal understanding of how projects work across from one organization to another. This includes the overall business of government, not just a silo like the Ministry of Health. Now we are talking to each other about lots of common things. I think that is a huge thing for government. It has improved the practice, but more importantly, the potential for improvement is really there" (14-PMCOE-81).

To be successful the PMCOE had to operate horizontally to meet its value proposition and in part, its vision of achieving enhanced project management maturity across government.

Horizontality was part of each project and a necessary condition of success for each. Each project found a way to address the sticky issue of governance and did so satisfactorily for all concerned. JIMS had a common philosophical desire and inclusiveness that included all stakeholders in its governance structure. ISD, had a highly supported mandate that was sanctioned across government at its most senior levels and successful governance was expected of all provincial government stakeholders at the senior and middle management level. PMCOE, was a blend of the above with a highly supported mandate initially but a bottom up growth of a community of practice that through meeting individual needs met the collective good. Therefore, this governance structure was by consensus to meet collective and common needs.

Sustainment

The concept of sustainability was first used by Hanns von Carlowitz in 1712 and became a common term in 1987 through a United Nations report on sustainable economic development (Brundtland 1987).   Sustainability can be defined both in a positive or negative frame as the ongoing existence of the life of a system or as the decline leading to death if the final tipping point for intervention is irreversibly passed. For the purposes of this discussion we will define sustainment as 'the attempt to continue a project until achieving its intended outcomes.'

Sustaiment can be a goal in and of itself as project goals may include a long term operational sustainment strategy as part of the project. Sustainment can be viewed from many perspectives, from senior management support, levels of commitment and funding or combinations of any or all of these. One might speculate that low levels of senior management commitment would in turn result in low levels of senior management support and eventually the withdrawing of funds. However, this was not the pattern that emerged and all three case studies revealed that each of these projects had real sustainment issues at various stages of their project lifecycle. Interestingly and as follows, JIMS had very good senior management support but corporate priorities changed. ISD also had a very high level of support but lost its project funding source. PMCOE never had funding. Sustainment was a constant issue for many of these projects that likely distracted valuable energy from project activities for senior project members. It may however, also have promoted a sense of urgency and generalized anxiety that motivated project team members and sponsors to find sustainable funding as there were very high levels of commitment by these stakeholders to see these projects be successful.

JIMS actually failed once under a different project title and funding was withdrawn. Later, when it was successfully implemented in a number of large sites that accounted for 45% of the provincial criminal case load its three year funding and implementation schedule was truncated to one year as described above in the JIMS case report. JIMS also had some difficulty sustaining the project due to shifting personnel and sponsors as reported by this interviewee, "sustaining sponsors was a problem as well as people that made the work happen, in the sense, of the people that needed to be there to keep pushing and making sure the motivation and everything was kept on track" (8-JIMS-15).

ISD had seed funding that was also withdrawn but the strategies and delivery mechanisms developed have been given long term operational funding. Funding sustainment for ISD was a matter of a temporary political funding program coming to its end and reported in part by this respondent, "At the end of the term of the project, we were made into a permanent initiative" (2-ISD-11). So the end of the funding was not a surprise to the project but the project found it was difficult to identify an alternative funding source. The intent was to

continue the project and the only way to do so was to operationalize it into a functional program. As such, and by definition of a project, the temporary endeavour ended and a program was born. It can be said then the project was a success and proved to be of value beyond its intended scope of dealing with unintended consequences of government downsizing. Had this not occurred, many would have deemed this project a failure as there was so much more left to do to meet its vision. However having said this, the project vision itself was a sustainment mechanism of motivation and hope while looking for the alternative funding source as reported by this interviewee, "…that whole theme of improving and enhancing the quality of service delivery and the vision for that has just become increasingly pronounced and so that's carried us through" (2-ISD-8).

For the IDS project, senior sponsorship was a critical sustainment issue as the ADM that was leading the project was reassigned and the project's champion retired. The former loss of leadership is articulated by this respondent, "The ADM in charge changed, part way through the process and we lost the direct connection to the premier's office. I think that hampered the project. I think the initial vision that the first ADM had was different from the vision that the second ADM had. Changing the sponsor in the middle of the project significantly impacted it from my perspective" (7-ISD-20). The project was reassigned to another ADM who had a different vision as reported later by this same interviewee, "I think the support changed significantly when the project became an official office and shifted under a different ADM" (7-ISD-36). The new ADM took less of a hands on leadership role as she had other portfolios and left much of the leadership to her direct report.

Similarly, PMCOE also had both funding and leadership sustainment issues. PMCOE, unlike the other two cases studies was managed on a voluntary basis by a community of practitioners. The project never had funding and its leadership changed once the original intent of the project was completed and a broader vision was imagined. What was even less stable was its sponsorship as the executive sponsor changed five times. This resulted in no one organization or person really taking full ownership for the project and nobody was accountable for its sustainment. Only at the time of writing of this chapter has longer term

funding been secured for the ongoing operation of the Project Management Centre of Excellence.

The project team was aware of its vulnerability of not having sustainability or stability in funding or leadership as one participant aptly notes, "So what we need to do? We need to build on what we have done already. Develop sustainability in ways to keep it alive for everybody. It is going to be a living thing. Sometimes I am not sure how alive it is. It has moments where it is asleep………………And it needs continuous leadership. Any collaborative, anything that crosses government, anything horizontal, leadership is a challenge and if we don't have it, it doesn't work." (14-PMCOE-178). As noted, the project needed leadership or a leader that had the time to lead if the project was to find sustainment but it needed to become sustainable to provide leadership capacity as partly reported by his participant, "it was to get one of the people to be willing to lead who had the time to actually do some of the leadership and follow up and pushing, and making contacts beyond the group" (11-PMCOE-74). Over time, this need for leadership and sustainability reportedly wore on the participation and motivation of members, The funding proposal in the spring of 2003 didn't go anywhere, so people started asking "why should I bother doing more stuff off the side of my desk," (11-PMCOE-210). Ultimately, as was the case for both JIMS and ISD, the vision was the sustaining factor when other sustaining factors were not present as reported by this participant, "Whenever we come back, the reason that we are doing this, which is why the vision is there, you can always come back to that, and say, "that is why we are here, that is what keeps us going" (21-PMCOE-173).

Interestingly, even with these sustainment issues, each project found a way to survive as reported by these JIMS participant, "There is probably more detail in those. JIMS has of course been operational for 5 years now" (4-JIMS-17) and "I think on the whole, the successfulness of it is the very fact that it is an operational system, it has been for 10 years, and that it has done virtually everything that we had hoped it would do" (9-JIMS-21). Similarly, ISD survived as it too is an operational program as this reportee tells, "At the end of the term of the project, we were made into a permanent initiative" (2-ISD-11). PMCOE has been given temporary but full funding and is incrementally proving its value proposition in

various functional areas, often one stakeholder at a time. It is as if PMOCE is a water glass that is being filled one drop at a time but as time passes the glass is becoming noticeably fuller and its vision is being realized.

Vision Leadership

While in an almost unanimous affirmation by all participants, each of the projects had a strong and shared vision. The sustainment of the vision was reportedly tied closely to the project's leadership. In fact, the vision was reported as being the sustaining driver when other sustainment factors such as funding and leadership were lacking. With the lack of leadership often came the absence of a "vision champion."   The change in vision champion as reported in all three of the case studies had a significant impact on the projects.   When the vision leader for PMCOE did not have the time to maintain and lead the project towards vision attainment the project floundered or as one reported stated earlier, "went to sleep for a while." Similarly, the ISD project suffered "a loss of focus" when its vision champion was re-assigned. Lastly, when the vision champion changed in the JIMS project, it ceased to exist for a number of years but regenerated under another project name with a very similar vision.

Each project identified the criticality of the project's vision champion as seen below,

> The ISD project: "I think the vision of the initial ADM was critical to getting the project off the ground. Her relationships in the premier's office and across government were also critical in moving things forward. I think in government, you can have a really good vision, but if you don't have the ability to influence and deal with people, your project will fail" (7-ISD-130). The change in project lead meant a change in vision champion and not everyone adopting a project is as passionate as those whose idea it originally was as seen in this participant's report, "To me the vision really has to be embodied in who is leading the thing and who is working on it and, I think you can have lovely words on a piece of paper and it really doesn't mean a lot, , unless there's somebody out there who is constantly personifying that vision in their dealings with everybody" (2-ISD-88).

> The PMCOE project: "For this project, it was not the lack of passion or commitment but a lack of time of the project's vision champion to effectively maintain and communicate the vision as seen in the participants statement,   "He (*the project lead*)[35] was the one

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[35] italics and content added

with the passion which is why he has been heading this up for the last 2 or 3 years. He is in a better position to present his vision to executive to try to get sponsors as his time permits" (12-PMCOE-113).

The JIMS project: "So the Assistant Deputy Minister at that time was initially the champion. He was subsequently appointed as Assistant Deputy Minister for Court Services…." (10-JIMS-9). While still championing this project his influence went from a centralized role to that of one of many stakeholders. As such, the person replacing him in his former position was the identified champion of the project but lacked the passion or commitment for as indicated by this participant, "I lost my boss and I was reporting to somebody else and they were not supportive of the project" (1-JIMS-45).

The lesson from this unexpected finding is that regardless of how powerful or shared a project's vision may be, it still requires leadership to be an effective catalyst for the project. Having said this, each project was able to replace or resurrect its project's vision champion and all projects were in the end deemed a success. The role of the vision champion was also discussed in Chapter three.

Summary

The emergent issues that arose out of this study were not entirely expected but upon reflection not surprising. In retrospect, it makes common sense in complex or transformational project environments to proceed incrementally so that a project manager can maintain a sufficient span of control. The very nature of the project's complexity was due in part to the need to involve multiple and often times independent stakeholders from within and outside the host organization and certainly outside of the project manager's power realm. Therefore, the need to address horizontal systems, processes and structures was expected given the nature of the horizontal outcomes desired. Not surprisingly, complex projects that span multiple years struggle for sustainment of funding, resourcing and leadership as priorities from within and without the organization change. The vision needs to be, as more than one participant states, a "living thing" and as such must be maintained to enable its presence to be felt. The communication and maintenance of the visions requires a vision leader. While all of these emergent issues now seem logical they were not necessarily obvious to project managers and as such may be matters worthy of attention in future projects within the public service.

Conclusion

This chapter has provided a great deal of information for current and future project managers to contemplate when considering project success. As suggested in Chapter four, the research design has provided considerable breadth and depth of examination on project management issues related to this study. As with much good research, there are often more questions than answers when reviewing the findings of such research. Regardless, the findings do directly address a number of important issues in general as well as identifying emergent findings that require further examination and research.

The three case studies have provided a rich backdrop to now turn to the next chapter of this thesis which analyses the findings in relation to the research question and propositions. Chapter six will also use the findings from this chapter in addition to other information from the research to deliberate on the suggested models that were derived form the literature reviews provided in Chapters two and three.

Chapter 6 - Discussion

Introduction

The purpose of this chapter is to discuss the validity of conceptual models developed in previous chapters and to answer the research question and research propositions. Specifically, in Chapter one, the research question is formulated and asks, "How does the effective development and communication of a "project vision" impact project outcomes?" In Chapter one the author also proffers three research propositions; (1) project vision is an important factor in successful outcomes of change management projects; (2) effective communication and maintenance of knowledge relating to a project vision will have a positive impact on expected project outcomes; (3) projects represent change and the project vision is an important factor in signaling the change. In an effort to better understand the research question and propositions a literature review was conducted from which two models were suggested to increase our understanding of multiple issues related to the research. Specifically, in Chapter two, the general literature review leads to the suggestion that a number of disciplines in partnership with project management are required to effectively achieve successful results. These included change management, knowledge management and project management. In Chapter three, a literature review related to the thesis topic and construct of project vision led to a conceptualization of a model by which a project vision can be seen as the driving force of a project. The discussion of the research question, propositions and models will be restricted primarily to the research findings as reported in Chapter five with some additional information from the research participants as required to provide clarity and support to research conclusions. Let us now begin with addressing the research question.

Research Question

In Chapter one the author notes that he has observed all of the documented critical success factors as reported in the literature (White and Fortune 2006) in a variety of projects. The author has observed during his ten years working in a project management field, projects where all of the apparent critical project success factors were present yet the project still was

not deemed a success at its conclusion. Conversely and as discussed at length in Chapter two, the author has also observed projects where most of the critical project success factors have not been present at one time or another during the project's lifecycle yet the project was still deemed a success at its conclusion. This raises and forms the studies research problem that the current Critical Success Factors (CSF) identified in the literature are necessary but not sufficient to explain all project success. From this context the author asks the research question of "How does the effective development and communication of a "project vision" impact project outcomes?"

It was determined in the general findings that all of the projects had a vision and although many started as implicit visions most indicated that the vision was eventually explicit. Regardless of the form, the vision was widely articulated to stakeholders and as such assisted in the communication of the project's purpose, its intention to create change and assisted in project decision making.

All reported, the vision did signal the purpose of the project to all stakeholders, at least at a high level. The vision also signaled a change in most cases with the exception for three reportees in the PMCOE case that stated their organization had already made the desired change to using a common methodology and advancing project management maturity and therefore the signaling of change was irrelevant.   Surprisingly, most participants also indicated that the project vision spoke to the values of the project and or host organization.

In the case of JIMS the value was the unwavering belief by all stakeholders in the importance of public safety. The ISD project was based on the values of client centricity and PMCOE the inherent value of project management and in the value of individual project managers. While the purpose was very clear and explicit, objective examination of the vision statements may not lead one to the same conclusion that the value was as transparent. However, upon understanding the nature of the project one could logically conclude the values were embedded within the vision as a primary driver or reason for the project.

Lastly, and not reported in the general findings was that all participants felt the project vision was instrumental in their project's success as seen in the following consolidated table.

Table 35 – Q 3.8.14 – What role did the Project Vision have in the success or failure of the project? (did it make a difference?)

Project	Yes	No	Yes/No	Unknown	Total	Average[36]
JIMS	16	0	0	0	16	2
ISD	14	0	0	0	14	2
PMCOE	14	0	0	0	14	2
Total	44	0	0	0	44	2.0

Had it not been for a strong vision, it is arguably doubtful if the projects would have been able to reach their implementation phase. This was especially evident in the JIMS case where the project died but because of the shared belief in the need and the vision of what could be, the project was resurrected and ultimately judged a very significant success. The project vision held a focus on the need for the desired project outcome as reported by this participant, "If we hadn't had the vision, we couldn't have held people's attention for so long. If we hadn't had the vision and been flexible in that vision, in terms of repainting it for people, we would have definitely lost our interest" (17-JIMS-217). This sustaining vision was a key factor that was recognized and used to resurrect the project and get Treasury Board approval as reported by this participant, "certainly it was what was used for executive and treasury board purposes to be able to continue on with the development and implementation" (4-JIMS-215). The project vision had the ability to convey the interest and value proposition for each stakeholder. In the case of the ISD project, it is doubtful that the unintended negative consequences of government downsizing in communities could have been so successfully addressed had it not been for a shared vision and purpose in this project. There were simply no resources available to address this issue just an opportunistic and positive vision of what could be achieved as reported by this ISD team member, "I think it *(project vision[37])* was critical. Honestly, we had no money when we started. There were no staff and only half a secretary. So the only thing that I had was this picture of how things could be better. It was everything" (5-ISD-165). Lastly, in the PMCOE project it is doubtful that commitment to the

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[36] As described in chapter five, yes = 2, yes/no = 1, and no = 0
[37] Italicized text in brackets added

project would have endured to a point where the project succeeded in securing long term funding without a strong and shared vision as reported by this participant, "It (project vision[38]) definitely made a difference. Yes. Because we need it. Whenever we come back, the reason that we are doing this, which is why the vision is there, you can always come back to that, and say, "that is why we are here, that is what keeps us going. Yes, fundamental to the success of the project" (14-PMCOE-173). The commitment to the vision that endured to eventual success is well stated by this PMCOE team member,

> "Everybody on the project had their support of their parent
> organizations, to some degree. The parent organizations
> weren't really getting much from this other than they were
> getting what the rest of government got. Without the documented
> vision and the implied vision, without understanding of where
> we are going, I don't think we would have gotten as far as we did.
> People are too busy in their current jobs, they have too much else
> on their plate, the fact that people were willing, with everything
> else that was coming at them from their parent organization,
> able to go that extra yard to contribute to success in the COE,
> was definitely a success" (13-PMCOE-205).

We have determined that all of the participants in the three case studies reported that the project vision strongly impacted the project's success and one can deduce that a project vision had therefore been developed and in some manner communicated. In fact, most reportees declare that the project vision was communicated from the top down by individual senior managers or by senior manager committees such as the project steering committees or executive committees within the host organization. As one participant noted (3-JIMS) the project vision was then filtered down through layers of management down through the organization. Most project participants indicated the vision was communicated in a number of ways including articulation from senior management but also in written project status reports, briefing notes, newsletters and electronically on project web sites.

Accordingly, the research participants reported that the vision was often communicated by an executive sponsor to other executive and hopefully down throughout various ministries. But as stated by this one participant on the JIMS project there was not necessarily the belief the

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[38] Italicized text in brackets added

vision always was received or communicated to the end users. As such, many of the project teams took it upon themselves to proliferate the vision of the project as described enthusiastically by this participant, "We champion it all the time. Whenever we speak to anyone from any organization, when anybody asks me about my job they just can't shut me up. They are probably sorry they even asked me, because I really think that the vision is something that people can relate to. I think by making it very simple, it makes sense, and it is personal" (6-ISD-71). Similarly, in another of the projects they too did not assume that executive would effectively communicate the vision throughout the organization as described by this participant, "I think it was communicated basically at a multitude of levels. It was communicated at the very highest level, about what we were trying to achieve and it was communicated at the very ground level, people trying to work through the project and what we were trying to achieve" (9-JIMS-137). How this was done was to routinely make the vision part of all meetings, orientations and publications. The vision needed to be part of the project and drive it to completion as shown in this participant's comments, "Everybody just talked about what it was that we were doing and why we were doing it. That was part of it. It kept coming up in all of the conversations that we had. It came up in every meeting. It wasn't like "okay, we are going to talk about vision now" it was just pervasive in all of the conversations that we had. There was this understanding of what the vision was, even though I don't think anybody ever wrote it down" (15-PMCOE-121). In a sense, the project vision was operationalized and became part of the project and the project was the vision. This operationalization sustained and served to maintain the vision as this participant reports, "Maintaining the vision in essence was to continuously talk about it and make it a living vision not something that sits on the shelf in a document. Maintaining the vision also requires a continuous review to ensure the vision is still what stakeholders desire. As typified by this one participant, all of the projects under review in this research did review their project vision on a continuous basis "Yes, because we talked about it all the time. "Remember why we are doing this" and that kind of stuff. It wasn't necessarily the person who was chairing the meeting who would say that, it would be anyone who is attending the meeting. 'I seem to recall that why we are doing it is for this reason.' And people would nod their heads and yes, that is right" (15-PMCOE-125).

Maintained through continuous communication, verbal and written, but all commented that the vision whether developed at the outset or later in the project's lifecycle was unchanging. This may appear to be a contradiction but in the case of the evolving project vision, the vision remained consistent and was better articulated or refined overtime. The 'preferred end state' never changed and remained a beacon of direction and purpose for all the projects as seen by this JIMS' team member, "So I think that, if you asked people during the initial stages of JIMS, what the project vision was, they would have said it was to replace our existing system. If you asked them half way through implementation, it would be so we don't duplicate entry between crown and courts. If you ask them now, they are all very proud that we have created integrated justice" (4-JIMS-175). "As I said, ultimately the police took a different course, but interestingly enough, the different course that they took led us to ultimately the same vision we had started with. The process, the program, the application were different, but the end result, was in fact consistent with the original vision" (9-JIMS-137).

In answer to the research question it is reasonable to deduce that "the development and communication of a "project vision" supports successful project outcomes. However, the research question was "How does the **effective** development and communication of a "project vision" impact project outcomes?" The determination of effectiveness was not made but one can surmise that given the success of the projects and the reported impact of the project vision on the outcomes of the project that a project vision was effectively developed and communicated. Participants' attribution of the project vision impact on the success of their projects and confirmation that the project vision assisted in conveying important change information and decision criteria, also strongly supports that the project vision was effectively communicated and contributed to project success. However, to support this claim, let us now turn to the research propositions to better understand what and how the effective development and communication of a project vision may have impacted the project's outcomes.

Research Proposition

The research propositions are as follows:

1) project vision is an important factor in successful outcomes of change management projects;
2) effective communication and maintenance of knowledge relating to a project vision will have positive impact on expected project outcomes;
3) projects represent change and the project vision is an important factor in signaling the change.

Let us start our discussion with the third proposition by stating that arguably, projects by definition are about change given that they create a temporary and **unique** product, service or result (PMI 2004p. 5). Also, all of the respondents indicated that the projects in this study were arguably change projects. As such the vision statements were reported to have indicated a change of focus for many of the organizations. In the case of JIMS, an integrated approach was uncommon given the nature of the justice system that is purposely built on separate organizational levels of independence. The levels of independence also act as a check and balance within the overall system to minimize the possibility of anyone being wrongfully convicted of crimes for which they are innocent. However, integration of processing or of case management should not and did not impact the structure to protect the innocent but greatly increased the structure to protect the public. In the case of PMCOE the idea of a common methodology was new and created some angst within the public sector as some already had different methodologies in place an others had nothing but feared excessive bureaucracy. And in the case of the ISD project, the idea of being client centric was not new to some in a federated public service organization but was totally foreign to others. When considering this paradigm shift in service delivery coupled with integrated working processes and relationships (e.g. collocation and sharing of support services) there was indeed significant change being indicated in the ISD project vision.

Signalling change by way of the project vision in each of the case studies supported the successful implementation of the projects. Without this signal, the reason for the change would not be known to end users or those impacted by the project. This transparency of cause for the project likely went a long way in creating trust within the environments where

the projects were implemented and therefore fostered less resistance to the new product or service. A cornerstone of change management is communication and end user involvement. Each of the projects clearly indicated their purpose and the value based reason for their project. Transparency of purpose and cause permits and promotes end user involvement and communicates intent. And while some argue that vision statements are merely symbolic they need not be and can come to life if communicated widely and consistently across all stakeholder groups as was the case in the three case studies. As such, the vision becomes a shared vision and is a catalyst for successful change and therefore successful project implementation.

This leads in nicely and supports our second proposition that effective communication and maintenance of knowledge relating to a project vision will have a positive impact on expected project outcomes. In fact, the knowledge related to the project vision is that of purpose, transparency of cause and identification of the preferred future end state. Simply put, and consistent with leading authorities (Kotter 1996; Senge, Kleiner et al. 1999), the project vision communicates why the status quo is no longer acceptable and where the project will take those involved.   As such, the project vision statement needs to be clearly communicated and maintained to manage stakeholder expectations. This is critical given our definition of a successful project being one that meets or exceeds stakeholders' expectations and it was through communication that this is predominantly accomplished. If the project stakeholders do not understand the reason for the project and its outcomes, then project success will be happenchance.

One powerful way to maintain this communication is through the development and maintenance of a strong and shared project vision. In this research, there were three separate and very different projects that were successful and all had very strong and shared project visions that communicated clearly the purpose and the intent of the project. As such, end user acceptance of the project was high and the implementation of the projects were successful as reported by a wide representation of stakeholders.

Communication of the vision statements and the various components of cause, purpose and intent were consistently communicated by vision champions. In the case of JIMS it was by a very engaged executive steering committee, project champions and project sponsors in the primary stakeholder groups such as the police, prosecutors, courts, and etcetera. This was similar to the ISD project that had a very active and well respected Assistant Deputy Minister who was key in identifying an opportunity and suggesting the project possibilities. She was truly the executive champion that without whom this project may have "remained dormant for future development and implementation (Howell 2005, p. 108). Her leadership was as a guiding force behind this project and she consistently used the project vision to manage stakeholder expectations and to motivate project team members as reported by this participant, " She had a vision and she is absolutely tremendous at articulating that and finding ways of getting it out there but it wasn't a unidirectional thing, I'll put it that way. One of the reasons I think we've been very successful is that on-going conversation between *Headquarters*[39] and frontline staff and regions that I've mentioned and there's always been this back and forth and we've always been very careful to make sure that the front-line staff were informing us and we were informing them and I think that collectively has built a vision that everybody has bought into" (2-ISD-22). Similarly, the PMCOE project had a passionate leader of their community of practice who tenaciously and widely communicated the vision of the project to all whom would listen. Such a role is that of the project champion and sponsor as discussed in Chapter three and as supported in the literature (Hall, Holt et al. 2003; Helm and Remington 2005). The consistency of communicating the vision and its components of cause and purpose was instrumental in maintaining a membership in the community of practice when no one had the time to sustain the community. Ultimately, the vision gained traction and recognition in order that the project was resourced to realize its vision.

The discussion of the second proposition leads in nicely to our discussion of the first proposition which is that of the project vision being an important factor in successful outcomes of change management projects. So we end this discussion where we began but more steadfastly declare that all projects are about change. As such, the projects will impact people and it is essential that consideration of change management principles be considered.

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[39] Generic term 'Headquarters' was used to disguise the location of the project

These considerations include end user involvement, communication of intent and training. However, not all change is equal and some is of lesser and greater impact. There are also projects that set out to create change and projects that result in change because of a new product result or service. It may be semantics but the projects in this research were of the former characteristic where they set out to create a change in business practices and the manner in which business was conducted. As such, the role of the project vision was of paramount importance and as reported by all research participants, a critical factor in the projects' success. And if a shared project vision is widely communicated and maintained, it is reasonable to suggest that there is an increased likelihood that the project will be a success.

This in turn addresses the essence of this research and confirms the author's suspicion that the current critical success factors found in the literature were necessary but not sufficient to explain a considerable amount of variance between successful and failed projects. This research has examined projects that lacked many of the necessary critical project success factors but were still judged to be very successful. The research did not examine projects where the necessary critical success factors were present but the projects failed although from the author's experience he can readily identify several such projects. Regardless, of the types of projects, the research also showed that other critical success factors contributed to project success. This research has made a strong case to suggest one of these critical success factors that have been overlooked is "project vision." In fact, one might even suggest that it is a primary critical success factor or hygiene versus motivating factor, (Blake and Mouton 1964; Herzberg, Mausner et al. 1967) as it can compensate for other critical success factor's impact when they are not present.

An objective inspection of the project visions in the case studies may not lead the reader to the same conclusion as the research participants as each of the project vision are embodied with a context that may not be known to the reader. For example, how does the reader know that integrated justice represents public safety unless one knows the context and extrapolates from the word 'justice'? As such, even when a project visions is explicit, its context may remain implicit. Regardless, the power of the project vision is unleashed when it

forms a shared vision amongst all stakeholders. Therefore, the effective development and communication of a project vision is critical to the construct's ability to promote success in achieving a desired future end state.

Having answered our research question and propositions the research confirms the criticality for the effective development and communication of a project vision. We will now turn to an examination of the models that were developed during the literature review portions of this research study.

Model Validation

In Chapters two and three, two models were offered to bring the literature together in a meaningful way in relation to the topic of project vision and within the parameters of the Doctor of Project Management program. First was a model that showed a logical relationship between project, change and knowledge management juxtaposed against the construct of leadership and management. The second was a model to guide the development and use of a project vision.

The first of the two models that was developed in our general literature review suggests that a number of disciplines in partnership with project management are required to effectively achieve desired results. These are change and knowledge management and both are strongly influenced by the disciplines of leadership and management.

Figure 20 – Relationship of project, change and knowledge management

Given the discussion of the three propositions, an argument has been put forward to assert that project management and change management are inextricably linked. The case has not however been made to also connect knowledge management but a prima facie case does exist in that to meet stakeholder expectations one needs to manage expectations and one of the primary ways of doing this is through communication. Communication is part of a broader project requirement for information such as project status reports as well as knowledge about issues, risks and strategies to promote project success. Without this diffusion of information/knowledge across stakeholder interest groups it would be difficult to address project decisions in an informed manner. As such, the processes built into a project to manage knowledge are critical to meeting and exceeding stakeholder expectations but are also critical to effective change management which in turn is critical to the successful implementation of the project. In the absence of information, people will create their own stories as to why projects are started, how the project will impact them and why they should **not** support the project. This is more than just awareness through the exchange of information but knowledge that is used and influences project decisions. It is also knowledge that is used to create adaptive capacity (as discussed in Chapter two) for the individual end users in the organization in order that they will be able to assimilate the desired changes. Knowledge transfer is also critical in transformation projects as it is only through the

exchange of knowledge that cultures can change as values and beliefs need to be reshaped. Much of culture is tacit and strong project vision can begin to signal a change in culture by making tacit cultural assumptions explicit.

As one participant astutely reported, "there was the horizontal need to communicate across agencies, and then there was a vertical need to communicate within the agencies" (9-JIMS-73). There was a need to communicate and transfer information and knowledge within the project as well as to the many people outside of the project team that would be impacted. This was the case in all the projects as reported by another project participant, "The whole development of the project management methodology was an act of not only sharing the information within the project, but sharing the information throughout government and to other projects with the organization" (13-PMCOE-81).

Both project management and change management are supported by effective knowledge management structures and practices and a method to ensure the project is proceeding as planned with a minimal level of unnecessary disruption to people and end users in the organization. And while the three disciplines fit neatly together they are underpinned by the need for a management/leadership structure as can be seen in the above diagram at the centre of our three concentric circles. The three case studies support this proposal as exemplified in the JIMS project. The assigned JIMS project managers had none of the conditions (organizational capacity or a focus for project managers taking responsibility for development of their career as a project manager) including an organizational career structure to reward project managers, that (Sauer, Liu et al. 2001) indicate is necessary to increase the probability of project success. The lessons to be learned here is to separate the actual leadership structure from the individual skills and capabilities of the managers in those positions as important success factors. The presence or absence of one or the other will negate the positive impact of the other: for instance, the right structure cannot work with the wrong leaders and the right leaders cannot make a flawed leadership structure work. Therefore, a successful project must have both an appropriate leadership structure and the individual leaders must have the leadership skills and abilities, and personal motivation, to

make it work.   Of primary importance to any leader is the development of a vision and so too is it important for a project leader to effectively develop and communicate a project vision.

The second model ties together the many desired components and or characteristics of a project vision. The DRIVES© model was created to explain what should be contained within an effective vision statement and what impact an effective vision statement can hope to have.

When considering the common sense purpose of a vision, its attributes and characteristics as well as the potential value of a project vision, the author suggested that the acronym DRIVES© may be of assistance in logically grouping the varied purpose for creating a vision and its requisite attributes and characteristics.

> **"D**ecision making - A vision needs to assist in contextualizing future decisions and aid sense making. It assists with strategic alignment, prioritization and resource assignment
>
> **R**eason for being – A vision needs to identify the purpose of the organization and its uniqueness.
>
> **I**ntegrate – A vision unifies disparate systems/functions and unifies people towards a common goal with a common purpose
>
> **V**alues – A vision explains the core values of the organization
>
> **E**mpowers - A vision motivates and inspires people to achieve the purpose of the organization. It can free people to be creative and innovative within chaotic systems.
>
> **S**trategic Direction – A vision identifies the strategic direction of the organization".

The research findings from the case studies support that the DRIVES© model is a fair representation of the project vision and its potential impacts. Ninety seven percent of the participants stated that the project vision assisted their projects with decision making as described by this participant, "if you kept your sight on the vision you were able to move through things *(decisions)* [40]a little easier" (8-JIMS-249). All of the participants supported the contention that the project vision clearly indicated that purpose of the project as described by this reportee, "Explained not in detail, but at a high level explained what we were trying to

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[40] Italicized text added

achieve" (16-PMCOE-165). However, the purpose and cause of the project are not synonymous in that a project may have a clear purpose but the underlying cause for the project may not be as transparent. As such, those impacted may understand the purpose of the project but not buy into the need for the project unless they know the cause or reason for the project. As such, the model needs to be amended to be clearer in this regard.

Also, a vision is inextricably linked to the end benefits and should be clearly understood at the outset of the project but with the foreknowledge that both the vision and end benefits are likely to change and evolve throughout the project life cycle. The stakeholder group that abandoned the JIMS project never took exception with the vision of JIMS, it just no longer met their specific needs. Perhaps the vision or mission could have evolved to retain their participation. It is possible that another approach may have been available but was not employed. Remenyi and Sherwood-Smith (1998) have proposed a*n Active Benefits Realisation* approach that is based on a contingency philosophy where an evolutionary approach is used to remain focused on the delivery of end benefits. Stakeholders play a central co-evolutionary and participative roles through the development of the project. All stakeholders focus on end benefits and not just the technology that will get them there. Similarly, as proposed by (Ulfelder 2001); when managing a system with a broad scope, it may be beneficial to apply a micro project concept and allow the concept of the larger undertaking to take shape over time. With either proposed approaches and regardless of their champion's intent, there is likely the risk of loosing clarity in the operationalization of objectives and the approach as may be somewhat susceptible to vision creep. Unlike scope creep that may benefit a project if it helps get closer to the project's vision, vision creep is dangerous as the primary power of the vision construct is for it to be shared and be the unwavering beacon for the project to aim for. A shifting light house would be as disastrous to a sailor trying to find his way as it would be for the project steward trying to complete a project successfully.

The vision also needs to integrate often disparate systems and functions and unify these in a common bond to achieve the project purpose. In essence, the project vision is the 'glue that binds the project together' as stated by this participant, "It really is the thing that links

everything that we do. It is the umbrella. Everything else just fits right underneath" (6-ISD-177). This was seen in all three projects, where the project vision brought various stakeholders together when it was uncommon to work together and kept the stakeholders together to form new processes that have remained to this day. In the case of JIMs, individual stakeholder positions of independence needed to be set aside to join in an initiative to create a system that served all stakeholders. The idea of developing an integrated case tracking system was as much a high-risk endeavour as it was innovative, untried and involved a large number of stakeholders (hence presenting some intriguing stretch goals). The joint vision was seemingly adopted in the very early stages, quite likely before individual stakeholders fully understood their business needs and before technological solutions had conceptual specificity. The importance of the shared vision cannot be underestimated in its importance to promote project success and bind stakeholders to a firm foundation. Similarly, in ISD individual stakeholders in various communities were asked to work together to create a solution and to share service delivery infrastructure, processes and people. Lastly, the PMCOE asked for everyone to lay self interest aside to create a common methodology that could be shared by everyone which required compromise as many had their own methodologies already established.

Integration of disparate bodies is always easier if there is a common belief or value system and a project vision that depicts these common values is likely to be both a facilitator of integration but also more effective in achieving the desired end state as the vision is more likely to be shared. This is based on the author's experience that "culture trumps change;" (Martin 2006) and if your project which will cause change is inconsistent with the culture and values of the organization where it will be implemented it will likely not survive or be implemented successfully.

The research fell mostly silent on the issue of the value attribute as part of the vision but was very much a context from which the vision was created. Having said this, the project vision was consistent with the values of the host organization. What became evident in the research is the need for the project vision not only to represent the desired end state but the 'value proposition' of the project. As such, the DRIVES© model will need to be amended to

have the 'V' (Value) redefined to represent the value propositions as opposed to the cultural issue of value. This is a significant shift from what is suggested in the literature and directs the development of the project vision to consider and make representation of the 'end benefits' of the project.

In transformational change projects the environmental culture will need to be changed in order that it will be in a position to assimilate the changes intended from a project. As such, transformational or culture change projects take longer and require intense change management processes and practices.   Whether a project is a transformational, complex or routine project the work of the project is completed through the efforts of a project team. As such, a high performing team is advantageous to any project and the leadership of the project team is critical (Wageman 1997; Katzenbach and Smith 2005). A strong project has been said to be motivational to team members and whole organizations. This was also the case in the three projects under review in this research.

In the JIMS project there was more than just motivation but a passionate commitment to the idea of an integrated justice system that would improve public safety. In reference to the project vision one JIMS participant reported that, "I think a lot of this had to do with the fact that we had a vision in mind and we are driven people, and we were "damned if we weren't going to make that successful. That was some of what really carried us through" (8-JIMS-41). Similarly, in the PMCOE project the project leader as reported by this respondent was, "a phenomenal leader, in being able to motivate people. To bring out the best of people and to get them to focus in where they were going.   We were all working to the vision" (14-PMCOE-73). Also, another PMCOE participant added that, "Again, in the ISD project as this participant reports, "well if we do this where you have to bring them back within the vision but within the scope of what you're trying to do and so, it is a binding end state, it's a binding piece for commitment and galvanizing people to action on a daily basis really. Anytime you have trouble with people, go back to the vision" (1-ISD-93). This is also consistent with the position taken by Bennis and Nanus (1997) who are leading writers on vision and visionary leadership. While they have written at length about these topics nothing is more poignant than their assertion that a vision must grab the attention of senior management and others.

The author suggests that not only do you need to grab their attention but you must make an emotional impact.

The age-old problem of a functional versus a matrix organization also becomes apparent if full-time resources assigned to a project remain under the supervision of their own organizations rather than reporting to the overall project manager. In some parts of the organizations this changed, but for the most part this dynamic remained throughout JIMS. Assigned project managers therefore only began to have greater moral authority and control over the projects as their experience grew and the host agencies came to accept the expertise of dedicated project managers and the application of project management principles when they experienced the benefits of managing JIMS this way. The credibility of the vision began to unravel as the stakeholders began to question the value of the integrated information management solution while the ability of a project manager with sufficient authority and influence to maintain the original vision waned and declined due in part to the perceived relevance of the project manager position and role. Seemingly, the project vision was a strong motivating and empowering factor according to the three projects under examination in this research.

Lastly, the concept of strategic alignment was identified as a requirement of the project vision as one would expect. If the project vision was not aligned with the organizational vision or goals it would seem unlikely that it would survive. If the project was not aligned as a priority for the organization it would likely lose senior management support, resourcing and general attention to make it successful. One participant in the study did comment that when the project was operationalized into a program area that it was not a good fit and the, "vision was not necessarily consistent with the ministry" (7-ISD-199). In the case of PMCOE one participant did indicate the need for alignment, "the project vision bears in mind that long-term vision, what would the project accomplish towards that organization's vision" (14-PMCOE-89). One participant also identified the need for the project vision to be aligned with government's overall vision and not just their work unit or ministry as seen here, "The vision speaks to the values of the project and the host organization which really was PMCOE. Definitely aligned with that, but it also aligned with the BC government's overall vision. It is

really to provide something beneficial to the community members as well as the government as a whole. It didn't matter which way you cut it down to the individual or the organizational level, the government was definitely benefiting from this and the vision statement certainly took that into account" (16-PMCOE-217).

The necessary or desirable components as compiled from the literature and combined in the DRIVES© model is supported by this research with amendment and provides an appropriate acronym to guide the development of a project vision. The final DRIVES© vision model is again supported by the literature as described in Chapter three (Hamel and Prahalad 1989; Lewis 1997; Lipton 2003) and the following components of an effective vision are represented below.

> **"D**ecision making - A vision needs to assist in contextualizing future decisions and aid sense making. It assists with strategic alignment, prioritization and resource assignment
>
> **R**eason for being – A vision needs to identify the purpose of the project and its uniqueness. *The purpose should include both the reason for the project and the desired end state.*
>
> **I**ntegrate – A vision unifies disparate systems/functions and unifies people towards a common goal with a common purpose
>
> **V**alues – A vision explains the ~~core values of the organization~~ *end benefits of the project*
>
> **E**mpowers - A vision motivates and inspires people to achieve the purpose of the organization. It can free people to be creative and innovative within chaotic systems.
>
> **S**trategic Direction – A vision identifies the strategic direction of the *project and aligns it with the strategic direction of the* organization".

Vision and vision statements have long been recognized as an essential component of strategic planning in business organizations but they have been less recognized in the field of project management. In fact, some claim it is the first step in strategic planning (Mintzberg 1987; Daft 1998; Hitt and Ireland 1999). Perhaps the reason for this prominence in the strategic planning process is that to develop a strategic plan without a vision leaves one vulnerable to the dynamic environment in which these plans are created. Mitzenberg (1994,

p. 209) writes that, "the visionary approach is a more flexible way to deal with an uncertain world."   However, project vision within a strategic framework is more than just an approach. "The value proposition is not so much the success of the project but success of the strategy" (Walker, Arlt et al. 2006, p. 1). However the strategy may be accomplished through a portfolio of projects or the project may in itself be the strategy (Walker, Arlt et al. 2006). However, project management is very much a conscious effort to plan and fits well within the three strategic or prescriptive schools of planning (Mintzberg, Ahlstrand et al. 1998). However, having said this, there are different types of projects (Turner and Cochrane 1993; Shenhar and Dvir 1996) and different types of strategy forming processes based on different strategic management schools of thought. Mintzberg, Ahlstrand and Lampel outline ten different schools of thought, of which several directly address the need for a vision in the strategic planning process. The one that is very dependant on a vision is the entrepreneurial school which is sub-titled, "the visionary process." In this school of thought, the strategy and or vision resides in the mind of the leader (nurture). Whereas, the cultural school also prescribes for the need of a vision but takes a collective (nature) approach where strategy is created in response to the organizational culture.

Vision

The preferred future
– an ideal state

Informs

Mission

The purpose
– what must be done to achieve the vision

Informs

Goals

The operationalised tasks
– defined, generally scoped, milestones
- Linked to the mission
 & measurable (course grained)

Informs

Objectives

Planned detailed tasks
– defined, well scoped, well planned
- Linked to the goals
 & measurable (fine grained)
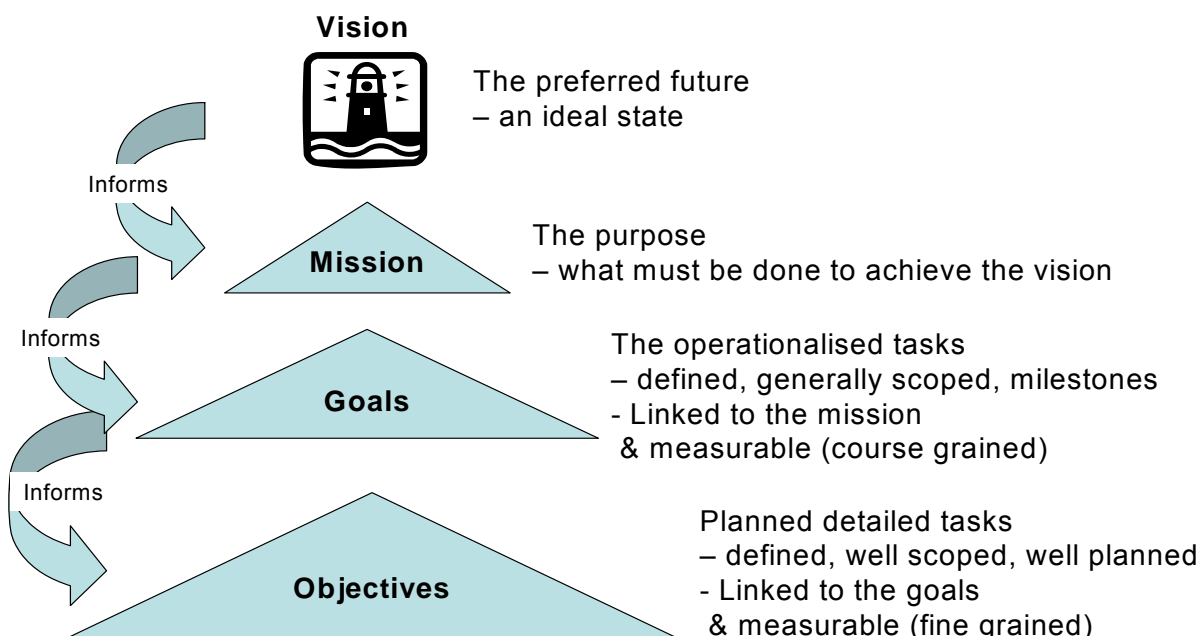
Figure 21 – Strategic Alignment of a Vision

Simply the author suggests that a vision is where an organization wishes to get to in the future where as the mission is what the organization's purpose or reason de etere regardless of ones preference for any one or more schools of strategic management thought. Goals are operationalized and measurable subsets of a vision that are outcome based to move on towards a vision. Similarly the objectives are measurable subsets of the long-term goals as seen in the following figure.

However, this distinction is far from clear for many such as Glueck (1980, p. 35) who describes organization objectives as " those ends, which the organization seeks to achieve by its existence and operations." While goals and objectives may support the longevity of the organization and its operations, they are not related as Glueck (1980) suggests to its mission but better aligned with achieving the corporate vision.

Similarly, goals and objectives may not be sufficient but may only form a plan vulnerable to the vagaries of constant change. Mintzberg (1994, p. 210) states that, "if you have no vision but only formal plans, then every unpredicted change in the environment makes you feel like your sky is falling." So too can it be said of the project vision as a necessary fist step in project planning and a strategy to deal with uncertain project or host environments.

PM operationalises the processes to enact change

CM operationalises the processes to define a change strategy and to plan change

Change Management - CM

VISION (DRIVES)

KM operationalises the processes to understand what needs to be changed and how to do it

Knowledge Management - KM

Vision clarifies the preferred future state and links it to the mission
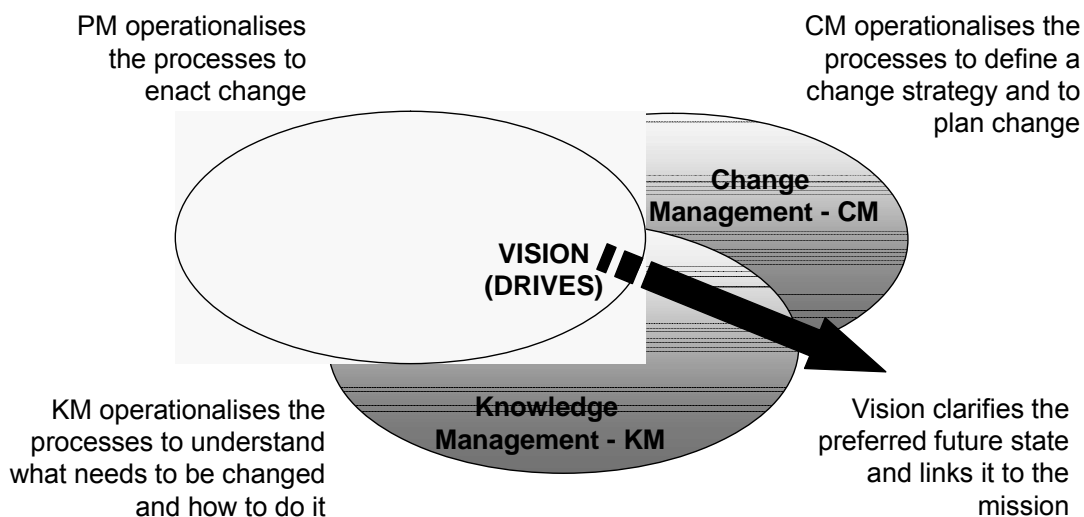
Figure 22 – Project results in relation to project, change and knowledge management

Interestingly, our two models actually fit very well together and form a third model of project results management. The first model is the base showing how the complimentary disciplines come together and at their centre the constructs of leadership and management are replaced with the second model (DRIVES©). The vision drives out results through a combination of project, change and knowledge management.

Conclusion

This chapter has discussed the validity of conceptual models developed in previous chapters and answered the research question and research propositions. Specifically, the findings of the research strongly support the notion that the effective development and communication of a "project vision" can positively impact project outcomes. In fact, all research participants reported that the project vision strongly supported the successful outcome of their projects. Given the unanimity of this report, and the success of these projects in the absence of recognized critical project success factors, the author concludes that a project vision is a critical success factor to successful project outcomes.

The research findings have also supported a model that suggests that to achieve successful project results one needs to be a project steward of a complimentary blend of project, change and knowledge management. The research also supported with some amendment a model of project vision development that uses the acronym DRIVES© to define the desired components and attributes of an effective project vision. Lastly, this chapter has suggested the combination of the two models that shows a project vision that DRIVES© out project success through the collaboration of the three complimentary disciplines of project, change and knowledge management.

In reaching these conclusions and as supported in the general literature review in Chapter two the author also investigated the three research propositions and found that:

1) project vision is an important factor in successful outcomes of change management projects;

2) the effective communication and maintenance of knowledge relating to a project vision had a positive impact on expected project outcomes; and

3) a project vision is an important factor in signaling the change.

While not yet definitive due to the limitations of this study, the findings (detailed in Chapter five) and conclusions (detailed in Chapter six) of this research as presented in this and the previous chapter strongly support the affirmation that the effective development and communication of a project vision statement has a positive impact on the successful outcomes of a project and therefore supports the notion the project vision is a critical success factor for successful project outcomes.

Given the apparent criticality of this new critical project success factor, let us now turn to Chapter seven, where the findings and conclusions of this research will be applied to advance the professional practice of project management.

Chapter 7 - Adult Basic Learning Principles, Workshop Design and Evaluation

Introduction

As stated in the introductory chapter of this thesis, this dissertation is one of the requirements of a professional doctorate which is different from a traditional PhD program. As stated in Chapter 1, the DPM has a dual goal of contributing to both the academic literature and the project management profession. The following figure was also used in Chapter One to describe a model of how this contribution occurs. The author has reflected upon project management as a result of course work and current occupational activities as seen in Quadrant 1. As such, "Quadrant 1 (Q1) indicates the start of the DPM candidate's research journey" (Walker 2006, p. 146). Core course work and reflective learning course papers produce the output and the outcome to move into Quadrants 2 or 3. In the case of this candidate/author, he moved into Quadrant 2 (Q2) to suggest or hypothesize reasons for the difference between what the literature was saying and what the author was experiencing. Next, the author moved into Quadrant 3 (Q3) to further refine and test new ideas in the thesis research. Lastly, armed with the research findings and refined ideas that will now lead into new practices that can be implemented in the field as suggested in Quadrant 4. Evaluations of the outcomes from these implementations are then conducted and the process repeats as a cycle of continuous learning and improvement.…..reflecting, studying, reconciling, applying and evaluating.
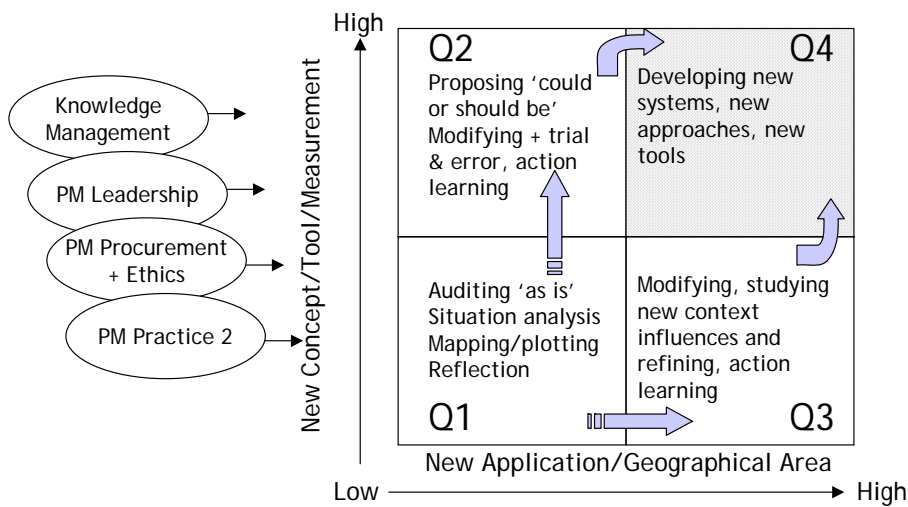
Figure 23 - DPM Course Progression

Having now completed the work represented by quadrants 1, 2 and 3 the candidate author is ready to enter quadrant 4. As such, the additional requirement to contribute to the practice of project management must be met. To do this, the author has developed an awareness workshop for the public service in which the participants' awareness of the need for developing and communicating an effective project vision is raised. The workshop was developed, conducted and evaluated. The findings of the evaluations will be reported. The workshop evaluation are superficial and more research is required if one wants to increase the validity of the evaluation outcomes. The purpose of this chapter is solely to apply some of the grounded theoretical research and findings of this research in a practical way so that it can be transferred into the professional practice of project management. This chapter does not profess to adequately address the concepts of adult basic education, curriculum development, instructional or evaluation. Much of the information in the first section of this chapter is based on the author's experience while he was the Acting Assistant Deputy Minister in a large public service organization responsible for corporate training.

The chapter does provide a simple three step process by which the reader may follow to create a project vision. The chapter does not however profess to adequately provide a complete means for developing an effective project vision (a secondary workshop based on this awareness workshop is about to be piloted) but does provide a high level process to

develop a preliminary project vision. A more fulsome curriculum will be the topic of future papers by the author. Lastly, the chapter will provide a means for improving the practice of project management and the success of projects in general.

The Public Service Learner

Today's public service is not comprised of a single, die-cut-type of individual. It is made up of unique adults, each bringing years of life experience to the table. All have the potential to learn; however, not all of them will learn in the same way or at the same pace. Despite popular belief, one's age is not a determining factor as to the capabilities or speed at which an adult learner absorbs new information (Brookfield 1986). This is fortunate because the public service, not unlike other sectors of the general workforce has a succession crisis. Public service work is also changing at a very fast pace. The succession crisis and pace of change within the public service requires accelerated development programs to bring people to levels of competencies quicker than in the past. To do, this learning activities need to be well suited to adult learners and both course developers and instructors need to keep adult basic education principles in mind.

The instructor and the course designer should acknowledge and accept the unique life experience and knowledge base of each individual. Adult learning occurs best in an atmosphere in which the students are treated with respected equals. The experience and knowledge students bring to the training room can enhance the program. Students should be encouraged to express opinions, share life experiences, and engage in open discussion.

The instructor must respect the students' diverse beliefs, lifestyles, and value systems. Debate and an open exchange of ideas can generate excitement and promote an atmosphere in which the student feels safe to express new ideas and concepts. Keep in mind also that adults generally are not interested in knowledge for knowledge's sake. They need to see the benefits of learning before committing to learning a new skill. By presenting single concepts (i.e. project vision) focusing on practical application, the instructor will increase the likelihood that the material will be retained. The instructor will also find it useful

to clearly explain how the information and skills being taught will benefit the employee on the job. Finally, the instructor should remember that adults prefer to be treated as adults (Zemke and Zemke 1994).

The Adult Learner

Common sense tells us that simply because the class shows up, it does not mean the students will learn. Employees have many responsibilities that compete with the training program for their precious free time and attention. The instructor can motivate students by enhancing their reasons for attending. Primary motivators include the following:

- Social relationships - to acquire new networks of associates and friends
- Meeting expectations - to comply with instructions from a formal authority (for example, may be part of a person's Employee Performance and Development Plan)
- Social welfare - to improve their ability to serve or participate in their community work
- Personal achievement - to achieve higher status or professional advancement

Adults need to see the utility of learning a specific skill or acquiring specific knowledge (Revans 1985). Adult learners do not wish to learn a skill they will never use. Knowledge and skill that can be applied in a timely manner to a current need or problem will increase the depth of learning. Both curriculum development and methods of instruction should be guided by the following accepted adult basic education principles (Bader 1990; Elias and Merriam 1995; MacKerarcher 1996):

Basic Principles of Adult Learning

Teaching or the art or science of teaching is often termed 'pedagogy' (Kaiser 2005). However, pedagogy is from the Greek root of 'ped' for child and therefore the term pedagogy is correctly used and refers to the teaching of children. The teaching of adults is typically termed 'andragogy' (Knowles 1975) and is the focus of this section of principles for adult learning as follows:

1. Adults maintain their ability to learn (Tynjala and Hakkinen 2005)
2. Adults are an eclectic group of individuals with a variety of needs, experiences and skills (Mezirow 1991).
3. Adults have experience with a wide variety of physical/sensory inputs.
4. Experience of the learner is a critical context in learning situations (Schon 1987).
5. Self-concept moves from dependency to independency as individuals grow in responsibilities, experiences and confidence.
6. Adults are more motivated to learn through a variety of factors (Smith 2003).
8. Active participation in learning assists adults to learn.
9. A comfortable, sage and supportive environment is a key to successful learning.

Method of Instruction

The public service instructor should view themselves as a facilitator. When instructing adult learners, one needs to strive to guide them according to each class member's knowledge instead of spoon-feeding raw facts. Instructors need to incorporate students' past experiences, personal needs and feelings into the lesson. Strive to foster an atmosphere of trust, openness and acceptance of different ideas and opiniions.

Establish a rapport with the audience early in the program by explaining exactly what is expected from them and what they can expect from the instructor. This prepares the students for learning. One way to establish rapport is to encourage a friendly, open atmosphere that demonstrates your sincere desire to assist them in the learning process.

A certain level of tension--proportional to the level of the lesson's importance--will be in the room. Most adults learn best under low to moderate stress. Stress can become a barrier to learning. If the lesson has a high degree of importance, such as the mandatory learning of a new piece of equipment or policy, the importance should be communicated to the class. On the other hand, if the degree of importance of the material covered is not critical, explaining that to the class can reduce the stress level.

Learning is accelerated when adult learners can actively participate. Instructors need to create dialogue with questions and ensure learners feel challenged. Material that is too basic will turn off adult learners; material that is too challenging may frustrate them. Establish an appropriate level of difficulty, based in large part on the audience that encourages and rewards direct participation. The adult learner is less likely to ask questions or participate if the environment is judgemental. Treating all questions and comments with respect and acknowledging the student for participating goes a long way of creating a safe learning environment.   Repetitive questions are inevitable and should also be treated with respect. Remember the old adage: 'the only dumb question is the question that wasn't asked.'

The public service is a hands-on business. A review of the course evaluations of most public service training sessions in which new material is presented normally shows an abundance of requests for more hands-on experience. It is difficult to instil confidence in a new skill simply by lecturing. When new policy or procedures are being taught, each student requires sufficient time to practice new skills and apply new knowledge.

Amid this atmosphere of participation and self-direction, the instructor must also maintain control of the classroom. Again, to maintain learning interest the instructor should promote dialogue with open discussion and debate to share student experiences, while balancing the old nemesis the clock. Facilitative controls can be gained by pushing egos to the background and allowing students the freedom to participate. Collectively, most groups of learners will have as much to contribute as the instructor and the instructor must draw this information out so it can be shared.

Providing effective training programs is challenging. Mastering and incorporating the concepts of adult learning into training programs can promote efficient and exciting learing environment for adults. The public service instructor can serve as an advocate for the organization and the student by providing an atmosphere of dignity and respect in the training room. By adhering to some of the principles in the foregoing when conducting public service training programs, the instructor will increase the likelihood of learning occurring. Learning also requires excellent content within the curriculum.

Curriculum Development

The traditional method of providing public service training was to herd students into a classroom and lecture about what they need to do and send them back to their jobs. This traditional approach is only partially effective in today's public service as new and innovative means are required to address the learning requirements of the current succession crisis. The effective instructor should devote time to analyzing the expectations, needs, and objectives of the organization and the students before developing a training regimen.

Keeping in mind that adults must see a reason for learning, the instructor must identify objectives that will directly benefit the student. Most adult learners prefer single-concept courses that focus on the application of a specific concept to their organization's current operation. New information will be more readily accepted if it is associated with what is already known. Information that differs drastically from the organization's accepted practices will be absorbed more slowly and, in some cases, resisted. Instructors should use "conceptual overlap," the integration of new ideas with old concepts to assist the student in assimilating the new information. Similar to best practices information in the proceeding section, curriculum development should consider and incorporate the need for learners to be in charge of their own learning experience by providing ample opportunity for the participant and use of one's own experience. Adult students need to relate new information with their current and past experience in order to make sense of the new information.

Self Directed Learning

Historically, students have been conditioned to be passive learners however adult learners need participation to enhance learning. Adult students need to take control of and be responsible for their own learning. Some authors use the term self-authorship (Pissolato 2003) to describe this process of constructing one's own knowledge versus passively receiving knowledge from others. A recent accelerated development program within the author's own organization aims to develop student self-direction through assessment, feedback on learning skills, competencies and the development of a learning plan to achieve each student's career goals. Students can be empowered to take responsibility for their own learning and increase their learning effectiveness by understanding how they learn best. The adult learner will be more motivated to learn the more relevant and current the information that is being taught is to them (Revans 1985).

Based on this very brief introduction to adult basic education and course design, let us now turn to the development of a workshop for adult public servants based on content taken from this thesis research.

The Workshop

Based on the above principles and information, the literature review and research findings, the candidate author has developed a half day workshop that primarily raises the participant's awareness as to the importance of a project vision and secondarily assists those involved in a project to craft an effective project vision statement. The workshop was delivered through a variety of mediums including PowerPoint presentation, case studies, exercises and video recordings. All of the materials for this workshop were gathered in direct response to the research question and the author's efforts to complete this research thesis. Having said this, there are certainly supplementary materials that would enhance this workshop and over time the author intends to incorporate.

The workshop has been designed in 3 sections (the full course slides and speaking notes can be found in Appendix K).

Section 1:   Introduction to project management – (Based on Chapters 1 and 2) - This section introduces the learning objectives as well as the context of project management including the project phases, leadership, critical success factors, change management and knowledge management. This section will also consider the culture and strategic goals of the host organization. It will examine the type of project environment in which the project will exist as well as the type of project being contemplated.

Section 2:   Project Vision – (Based on Chapters 3, 5 and 6) -This section highlights the purpose and value proposition for creating a project vision. A very high level framework for the development of a project vision is presented in order that participants can craft and asses their own project's vision.

Section 3:   Project Vision implementation and maintenance – (Based on Chapters 2 and 6) - This section addresses the need to widely communicate and review the vision statement. This section also deals with the need to test the vision for its clarity, continuity and consistency as well as for its potential as a means to promote project success.

Let us now look at the purpose, key messages and components of each section.

The purpose of section one is to outline the learning objectives for this workshop such as creating general awareness about the importance of project leadership. This first section also provides a general context that project management should be conducted in the company of complimentary disciplines of leadership, change and knowledge management. The section provides the context that project visions creation is part of the initiation phase in general and flows into the scope statement development.

It is critical at this stage that the participants understand the need for the project and what the desired future end state will look like before moving to a solution. One needs to fully understand the need before jumping to a solution. The risk if one does not heed this advice is that you may have a successful project based on the iron triangle definition of project management success (on time, on budget and within scope) but have a failed project based on our preferred definition, as outlined in Chapter two, of project success being the meeting or exceeding of stakeholder expectations.

To meet stakeholder expectations one needs to address the culture in which the project is to take place. Section 1 explains that all projects are about change given that they are to create a unique service, result or product it is important to understand the culture of the host organization. If the change affronts the present the project will likely not be successful for culture trumps change. Having said this, some projects are intended to be cultural change projects and as such will stake the necessary steps to amend the culture before implementing the project result. Also, the nature and structure of the organization is an important consideration. Has the organization created a vision before? Was it used? Is the organization a highly siloed organization? Has a shared vision been developed in the organization? Does the organization believe in the power of a vision? These are just some of the questions one wants to address before embarking upon the creation of a project vision that will be hosted and sponsored by the larger organization. As Lipton (2003, p. 146) states that there are strong and weak cultures. Strong cultures support a shared organizational vision and belief of themselves. He goes on to state that, "strong cultures are those…………where everyone agrees about the importance of specific, high performance values tied to the vision". Lastly, Section 1 considers the nature, size and complexity of the project needs to be discussed as not all projects need a vision statement the amount of time and effort to create such a statement needs to be appropriate to the size and impact of the project.

Once the learners have examined their organizational condition and the type of project they are contemplating it is time to move toward the actual creation of the project vision. Section 2

shows that project envisioning is formally part of the initiation phase but its acceptance as a necessary project requirement is not generally accepted, known or understood. Therefore a case study approach is used to highlight the value of having a project vision as it is also an accepted and is considered by most to be a fundamental leadership skill. The learners will be introduced to the DRIVES© model of project vision efficacy. During this section of the workshop the participants will be shown both linear and non-linear methods of creating a project vision. While the intent of this workshop is to create an awareness of the importance of the construct of project vision participants will be introduced to a few simple exercises that assist moving teams of individuals towards the development of a project vision.

Having developed a vision and preliminary vision statement, the workshop then turns to issues regarding the implementation and maintenance of the vision. Here learners will become aware of the need to constantly communicate and review the vision statement. The workshop participants will also become aware of the importance and need to evolve the project vision into a 'shared' project vision held by all stakeholders. Lastly, and as a segue into the final section, learners will become aware of the need to continuously review and ensure the vision stays strategically aligned and relevant to the project's host organization.

In the last section or section 3 of the workshop participants will learn skills of how to evaluate the potential effectiveness and quality of the vision statement using a number of tools developed by the author based on the relevant literature. The project vision needs to be evaluated and so too does the workshop itself.

Course Evaluation

There are many training evaluation models but the mostly widely accepted is one developed by Kirkpatrick (1959) and the model is still widely used today (Kirkpatrick 1998). According to a 1999 survey by the publishers of the 1959 Kirkpatrick Model (American Society of Training and Development), 67% of industries training evaluation is being conducted using the Kirkpatrick model. However, the Kirkpatrick model is not without its detractors such as Holton who claims the Kirkpatrick model is not a model at all but a taxonomy (Holton 1996).

Holton suggests a number of limitations of the model but they may be more appropriately called possible enhancements. The intrinsic value of the Kirkpatrick model is in its intuitive nature and simplicity of use and understanding. If an organization requires more sophisticated training evaluations then they may well need to consider Holton's suggestions.

The Kirkpatrick model consists of four levels assessing participant reaction, participant learning, participant behavior and participant results. This is a linear model and as one advances through the four levels the methods of measuring the impact of the training become more complex. Participant learning asks whether the participant was satisfied with the training event. Participant learning assess whether the participant actually acquired new knowledge. Participant behavior enquiries as to whether the learner assimilate the new knowledge and change as evidenced in their behavior and the last level or participant results is whether the new behavior achieved a desired result.

Following the delivery of the above described workshop an evaluation form (end of Appendix K) was given to each of the 25 participants. The evaluation form is based on Level one of the Kirkpatrick model and enquires as to the learners satisfaction with the content of the course and the instructor. It also asks whether they feel the information is useful to their jobs. As all of the participants in the workshop worked in a project management environment the last question is particularly pertinent and indicates that potential for learners to actually assimilate information and use it in their current work environments. This will permit follow up evaluation at a later date to see if the training actually made a difference to participant's abilities to achieve results.

The following table relates the results of the pilot offering of the project vision workshop for which 25 participant attended and 23 returned evaluations. All of the categories were based on a five point Likert scale with (1) representing poor or strongly disagree and (5) representing excellent or strongly agree.

Table 36 - Workshop Evaluations

Question	Excellent/Strongly Agree (5)	Very Good/ Agree (4)	Average Point Score
Overall Assessment of this workshop	18	5	4.78
Overall effectiveness of the instructor	17	6	4.74
The purpose of the course was clear	21	2	4.91
The learning objectives were met	16	7	4.70
The course material were helpful	15	8	4.65

From the preliminary review of the above results the course was seen to be very successful from the participants' point of view.   It appears that the course was clear in purpose and content. Participants were also asked a number of open ended questions and the following is representative of participants' comments.

The best part of the course was ………..

> ……..”the exercises”

> ……..”discussions with other students”

> ……..”interesting and changing format”

> ……..”complex issues made simple”

The course could be improved by………

> ………”more examples of vision statements”

> ………”more time to work on exercises”

Overall the workshop was deemed a success by surpassing the 80 percent learner satisfaction threshold that is required for courses within the public service organization in which this workshop was delivered. This course is now a regular offering within this same public service. One reason for the successful pilot workshop is that it is based on the grounded theoretical research found in this thesis as well as being based on the growing

experience of the candidate author. Often times workshops are designed and appear out of context but this workshop was rich in context, followed adult basic education principles and provided enough depth to permit the application of the new knowledge. It is not surprising that after four years of learning, researching and reflection testing that this workshop received a ninety-six percent stakeholder satisfaction rating and is now a regular course offering within the public service.

Conclusion

We have brought the reader in a complete circle beginning in what Walker described as quadrant one and reflecting on issues related to the practice of project management and through a scientific approach investigated our wonderings to the point of creating grounded knowledge. This creation of knowledge will incrementally advance the body of literature on critical project success factors and in general project management. It will, as required of professional doctorate programs, also benefit practitioners of project management in a tangible and transparent way. This benefit is in the form of a raised awareness of the importance of the construct of project vision and through the application of new tools to develop and communicate an effective project vision. So as the circle closes, we move to our final chapter to bring closure to this research but in turn open the window to the possibilities of future research.

Chapter 8 - Conclusion

Introduction

In this final chapter, the author is "striving for closure" (Eisenhardt 1989). To come to this point, the author identified in Chapter one the importance of project management to both the private and public sectors as a primary means of achieving strategic objectives for their organizations. To support this evolution toward project management as a primary business practice, educational providers have been developing programes to address a need for greater knowledge, research and practical applications of best and next best practices to the field of project management. As identified in Chapter one, the author reflected upon and identified an apparent gap between the theory and practice of project management. The current literature regarding critical success factors for individual projects is not sufficient in its explanation as to why some projects succeed and others do not. Based on the author's experience, this gap may be explained in part by the examination of another critical project success factor known as "project vision". As identified in Chapter two, little had been written about this subject specifically in relation to projects but a considerable body of knowledge exists on the topic of vision in the general management literature. To further investigate this subject, a research question and propositions were developed and research conducted. The findings of this research were reported and discussed in chapter five and six. It is clear from the research that the effective development and communication of a project vision has a significant impact on the outcomes of a project and should be considered a critical success factor for projects.

As this research was part of a professional doctorate it had two additional requirements from that of a traditional PhD program. First, due to the structure of the program it needed to consider a variety of complimentary topics such as leadership, management, knowledge management and a topic of the author's choice which was change management. Secondly, the research needed to be applied in order that it will advance the practice of project management in a practical way. To this end, Chapter seven offers a workshop that stimulates awareness of the importance of a project vision. This workshop also provides a

simplistic manner in which to develop a project vision as well as several tools (templates) to assist the practitioner.

This research has contributed incrementally to the academic literature and practically to the discipline of project management. The cycle of reflection, questioning, exploring and discovering is complete. With the publication of this thesis, the cycle will be ready to be repeated where others can reflect upon the information offered in this research and match that with their experience. Likely, there will be a gap and a need for reconciliation. Reconciliation will require further research and once complete will add incrementally to the body of knowledge and theory in the field of project management. However, before we repeat this cycle we need to first close off this study and research.

Redirecting Research and Striving for Closure

Striving for closure means examining one's research question and propositions within a selected research design to the point where no new findings or analysis brings further enlightenment. The research question of this study asked: How does the effective development and communication of a 'project vision' impact project outcomes? This question was answered in a variety of ways both in Chapter five and Chapter six. The general findings reported that the three case study projects all had a project vision (100% of participants reported this) and most agreed (98%) that it was written. The participants were in high agreement that the project vision assisted in identifying the purpose of the project (95%), assisted in project decision making (97%) and signalled a change in business practices (93%).   It also became clear in the case study reports how powerful the 'project vision' was for each project as all participants reported that the project vision was a significant contributor to the project's success. This impact was exemplified by one JIMS' participant and reported earlier in Chapter five as follows:

> "Yes, the vision plays a part in the success of the project
> because a vision that is easily adopted or believed in by the
> people that you need to count on to accomplish the project,
> they share the belief system, in the same belief system,
> the same values that are articulated in the vision, whether
> explicitly or implicitly, it means that you have a strong

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cohesive team with a very focused direction and therefore
everybody is pulling in the same direction" (10-JIMS-169).

This positive influence was also reported again in Chapter six where it was revealed that 100 percent of participants believed that the project vision had a role in the success of their project.

To further examine the construct of project vision and its role on the outcomes of a project three propositions were examined.

Proposition 1 states that 'the project vision is an important factor in successful outcomes of change management projects'. The discussion in Chapter six strongly supports this proposition with the argument that all projects are about change and the change will occur to varying degrees. As such, the clear identification of a preferred future end state has a significant role in directing and guiding project teams and stakeholders to successful project completion. This is further supported by the fact that as described in Chapter five and discussed in Chapter six the three case study projects represented significant change to their host's business practices and could legitimately be considered change management projects.

Proposition 2 states that the "effective communication and maintenance of knowledge relating to a project vision will have a positive impact on the expected project outcomes." This proposition is supported in the current literature (Kotter 1996) as well as by the findings of this project and reported in Chapter five and six. Chapter five reports that in each of the case studies, communication and knowledge management was haphazard and used a number of methods such as status reports, newsletters and training to push information to stakeholders. All the projects also had a website from which some static information could be pulled by project participants or stakeholders. This was an area of weakness for all of the projects with an exception of the JIMS project that had a fairly complete change management strategy in relation to training.

Support for this proposition is also found in Chapter six where it was noted that all of the project visions were originally tacit and became more explicit over time. Each of the project visions had a vision champion to share and promote the project vision. This promotion and continuous and consistent communication led to the point in which the vision became shared across all stakeholders. Similarly, the need and presence for vision leadership arose as an unexpected or emergent issue of this research. This in turn supports the general literature about the positive impact of a shared vision (Kotter 1996; Kouzes and Posner 2002) as well as the positive influence of a vision champion (Maidique 1980; Howell 2005) but squarely places the positive nature of the impacts within the project management environment.

Proposition 3 states that "projects represent change and the project vision is an important factor in signalling the change". As conceptualized in Chapter two, reported in Chapter five, discussed in Chapter six and can be deduced from Proposition 1 above, project management and change management are inextricably linked. The project vision by definition of being a 'preferred future end state' suggests one is not satisfied with the status quo and as such desires a change. The fact that somebody develops and communicates a project vision suggests that one is signalling change. In the case of the three project case studies examined in this research, ninety-three percent of the participants reported that the project vision did in fact signal a change in business practices. The import of this is further discussed in Chapter six whereby signalling the need for change promotes transparency of purpose and therefore assists end users in knowing early that change is afoot. This can be an important impetus for discussion between project team members and end users that creates awareness about the change and the real impacts of the project thus protecting against unnecessary disruption to end users based on incorrect assumptions and lack of accurate information. This in turn assists in the project's change management efforts in preparing to successfully implement the project.

Before declaring closure on this research it is important to also briefly outline other emergent issues that arose. As was discussed in Chapter five, three issues emerged from the research which were not entirely expected but in retrospect not surprising. There was general support by many participants that one needs to proceed incrementally especially when embarking

upon large or complex projects.   Also, what led to the complexity of the case study projects under review was the participation of multi stakeholders from across a variety of independent and interdependent business organizations sometimes from within and often outside the public sector. This highlighted the need to have the ability to set up horizontal systems, processes and structures. Also identified as a factor of complexity for these projects was the duration of the project; many spanning multiple years. This required that a strong and sustainable vision be developed, communicated and championed. This fact also identified the need and value of having effective vision leadership (as seen in all of the case study projects) that contributed to project success.   Lastly, detailed planning is a hallmark of project management and can sometimes stifle creativity and innovation. A strong project vision can be a counter balance to this rigidity and facilitate creative and innovative problem solving by permitting project team members the freedom to create multiple options for arriving at one's preferred future destination. Simply put, if troubles arise as they inevitably do, and a person has only a plan, then you are forced to re-plan. However, when troubles arise and you have a strong vision of your destination, creative individuals will find other routes without having to undertake major re-planning processes.

Successful implementation of projects is the primary reason for project management whether considering it theoretically or practically. The purpose of this chapter is to strive for closure or to confirm that a point of theoretical saturation as been achieved where:

> 1) the research question has been answered,
> 2) the propositions have been satisfactorily supported or refuted, and
> 3) all relevant findings and emergent issues from the research have been revealed.

These conditions have been achieved and the author is satisfied that this research has reached closure. And while the research has concluded it is appropriate to reflect upon how it could have been improved and provide this insight for others who may wish to replicate this research.

Areas for Improvement

There are always a number of perspectives on ways to improve research based on one's philosophical underpinnings. Laying such arguments aside and accepting the merits of the qualitative design as presented in Chapter four, there are opportunities for improving this research. The first is in the area of the research instrument and protocol and the second is in the area of the methodology.

The research instrument was created to form a semi-structure interview framework. The instrument was piloted and no substantive changes were suggested to this instrument. However, when using the instrument over the entire sample population a number of participants appeared not to be entirely clear as the intent of a few of the interview questions as follows:

1) Knowledge management questions often elicited responses constrained to communications and the answers did not seem to appreciated the fullness of knowledge creation, diffusion and application.

2) The question of effectiveness was deduced from the interviews given the participants' stated positive impact of the project vision on the over all project, but this questions was not sufficiently addressed in the interview and required extrapolation of conclusions.

3) The survey seemed a bit long for some participants as their answers became shorter as the survey proceeded. Some seemed to take advantage of the closed ended nature of the questions and gave very short or one word answers.

4) The interview protocol was not prescriptive enough to ensure further enquiry when answers were truncated.

Improvements to the research instrument and protocol should include greater awareness of what key definitions and concepts used in the research mean. For example, if the participants appreciated a fuller definition for knowledge management than just communication then fuller and more complete answers may have been offered. The research instrument needs to be amended to enquire about the effectiveness of the project vision directly and not leave it to extrapolation from other interview questions. The interview

instrument could also be shortened to be more surgical in this enquiry of participants in future research endeavours but may have been quite appropriate given the exploratory nature of this research. Lastly, the interview protocol that is used by the interviewer should be more instructive or prescriptive to guide the interview or to be more inquisitive when answers seem overly short in response.

Methodologically there are often benefits to larger sample populations or in greater numbers of cases. Future examination of the issues studied in this research would benefit from a larger and more diverse population. A larger sample size may discern greater variances in responses however, each case study did have approximately eight participants. The case studies were drawn from within a public service and research findings may have been more generalizable had the case studies been drawn from both the public and private sector. Having said this, the purpose of this research, as set out in Chapter one, was to be exploratory, proposition generating and was not intended to test a hypothesis. Lastly, a greater number of cases would permit greater literal replication and greater polar comparisons. While this is true, the research design did attempt to select three very different types of projects to provide meaningful cross case comparisons.

The research had room for some improvement as outlined above but this in no way limits the contribution that this research will make to the field of project management.

Study contributions

The contributions for this research can be separated into two groups of theoretical and practical contributions. This grouping is consistent with the purpose and design of the professional doctorate and the contributions should be evident for each group.

Theoretical Contributions

The theoretical contributions for this research are in the conceptualization of two models and the incremental advancement of the taxonomy and efficacy of critical project success factors

for project management. The general literature review for this thesis found in Chapter two supported an interrelationship between project, change and knowledge management. The literature further supported that at the centre of this interrelationship was the need for leadership and management for any of these complimentary disciplines to be successful and even more importantly when they were working in concert. In Chapter six, there was a suggestion that what was a central driving force of these disciplines when brought together was that a strong project vision that drives the related project to successful completion.

The need for a strong project vision was identified in Chapter one and a model of an effective project vision was proffered in Chapter three. In Chapter three this model was examined and discussed based on the findings of this research study. The model was subsequently amended based on the research findings.

The second model acts as an internal driver of the first model and is described as follows:

> **D**ecision making - A vision needs to assist in contextualizing future decisions and aid sense making. It assists with strategic alignment, prioritization and resource assignment.

> **R**eason for being – A vision needs to identify the purpose of the project and its uniqueness. The purpose should include both the reason for the project and the desired end state.

> **I**ntegrate – A vision unifies disparate systems/functions and unifies people towards a common goal with a common purpose.

> **V**alues – A vision explains the end benefits of the project

> **E**mpowers - A vision motivates and inspires people to achieve the purpose of the organization. It can free people to be creative and innovative within chaotic systems.

> **S**trategic Direction – A vision identifies the strategic direction of the project and aligns it with the strategic direction of the organization.

These two models provide a significant contribution to the theoretical foundations of project management by:

1) providing a theoretical framework in which to consider the interrelationship of project, change and knowledge management;
2) providing a suggested driver of successful projects that combine project, change and knowledge management;
3) further delineating the difference between project management and project leadership;
4) further exploring the nature of project change management;
5) further exploring the nature of communities of practice as effective knowledge structures;
6) identifying another variable that impacts upon project success; and
7) identifying the components of an effective project vision

The other specific theoretical contribution is in its incremental advancement of understanding as to the nature of critical project success factors. The research idea behind this study was based on the author's reflection that the critical project success factors in the literature were necessary but not sufficient to explaining all of the variance of project success and failure observed. This research has contributed significantly in accounting for more of the variance between successful and failed projects by identifying project vision as a significant critical success factor for individual projects.

Practical contributions

The practical contributions for this research to project management are in the areas of promoting a greater likelihood of project success through the development of a clear and consistent project vision. The research has shown the positive impact that creating and communicating an effective project vision has on a project's outcomes. Similar to other critical success factors for a project as discussed in Chapter two, the project manager needs to ensure they are all in place for the duration of the project. The research has shown that as important as ensuring senior management commitment, proper resourcing, realistic schedule, etcetera, so too is the need to ensure that as identified in this research that one manages this new critical project success factor of 'project vision' created and maintained during the life of the project.

One of the most used reference texts for project management is the Project Management Institute's Body of Knowledge (PMBOK)(PMI 2004). This is the primary text that individuals

review to prepare to write their professional designation exam. The PMBOK does not mention the need to develop a project vision and this is a gap in the body of knowledge.

The author suggests that creating a vision statement properly belongs in the first of PMBOK's three phases; "initial, intermediate and final" (2004, p. 23).   In order to properly scope out a project one needs to fully understand where one wants to be at the end of the project. Therefore, the creation of a project vision should form part of the scope management of the project which is also one of the nine areas of knowledge in PMBOK. Ideally, the project vision would be identified as a sub heading in all project charters. Once the project vision is created it needs to be communicated and this requires communication planning which takes the practitioner into the second phase of project management according to the PMBOK. For the project vision to be truly effective it needs to be widely communicated in a consistent and continuous manner to ensure the project vision becomes a shared project vision.   The very adoption of the vision by all stakeholders supports the notion of project success in the meeting or exceeding of stakeholder expectations which is our preferred definition of project success as described in Chapter two.

The structure of the Doctorate of Project Management program requires a practical application and this was presented in Chapter seven with the development and pilot implementation of a project vision awareness workshop. Contained in the workshop is the application of the DRIVES© model as well as a three step process to guide in the creation of an effective project vision. From the suggested application of the research, project management practitioners will have the tools to develop and communicate an effective project vision for their projects. Additionally, the delivery of the vision workshop as developed and refined by this research work was acknowledged by the host organization as an important innovation and will be a regular learning service's offering. First, because it enabled team members to be empowered and more affectively committed. Second, because it provided a framework for sponsors and project champions to communicate the project's vision to executive and other stakeholders needing to be engaged.

Assuming the reported impacts of managing this new critical project success factor remains consistent with the findings of this research, the practitioner will have a new and powerful tool to support the successful completion of their projects.

Areas for Further Research

They say that with every answer one typically finds more questions and that is the case with this research. While the author can think of many avenues of research, the main direction of research coming from this study is in the area critical project success factors. This research has shown that the effective development and communication of a project vision has positive outcomes for projects. Or to phrase differently, the effective development and communication of a project vision supports project success. One might also wish to apply quantitative methods to measure the amount of variance that can be explained by this new critical project success factor and its impact on project success.   There is a need to continue to test the impact of the project vision on projects but to do so more widely than this study provided and test the construct's impact in other environments beyond the public sector.

Similarly, and following the findings of this research, project management and change management are inextricably linked and project vision was seen as a driving force for the successful completion of such projects. Research into the interrelationships and interdependencies between project management and change management would be useful to determine the degree to which these relationships exist.

Lastly, if one is to effectively develop and communicate a project vision, do project managers have the necessary competency to envision? Future research could determine if this is a competency that most project managers have and if not, as this author suspects, determine how such a competency can be developed. Research could further be conducted to determine whose role it is to develop and communicate and effective project vision; is it the project manager, project sponsor, project champion or combination of all three? While this may be a competency that others need to learn, the candidate author has learned much during this research.

Personal Learning and Impacts

The personal learning from this research project are many. The topic of vision and in particular "project vision" has been examined in this qualitative research and reported in this thesis. Almost poetically, Strauss and Corbin (1998, p. 8) identify, "the importance of this methodology (*qualitative research*)[41] is that it provides as sense of vision, where it is the analyst wants to go with the research. The techniques and procedures (methods), on the other hand, furnish the means for bringing the vision into reality." This was very much a journey of exploration and research that had a strong vision upon its inception. That vision was to gain an understanding of the construct termed a 'project vision.' This vision and vision of the research have been reached and in its attainment new horizons have been formed that inspire the author to conduct further research to gain even greater understanding.

The most difficult learning of this research was to maintain a balance between complete immersion into the data and staying objective to the story that the data had to tell. The researcher believes using a research assistant to collect the data and the use of qualitative software assisted in managing this tension. The tension nevertheless remained throughout the life of this research project and challenged the researcher to remain objective. The final determination if these two matters were kept adequately separate will be in the judgement of the reader of this thesis.

Having completed this research, the author candidate has gained a greater appreciation for the distinction between the science and the art of project management. Similar to the distinction made between leadership and management and discussed in Chapter two, a successful project requires leadership and management, as well as the application of the science and art of project management to increase the likelihood of achieving project success. The learning is to realize the difference and talent is to know when to apply either.

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[41] Italicized text in brackets added

Much of the art comes from the complimentary disciplines discussed in Chapters two and six and has enriched the personal competencies of this author.

Learning to write in a manner that is acceptable to others to publish was also a significant challenge and through this research the author has learned what is required to publish research and academic papers as reported and evidenced in Chapter one. The author has also learned of the important role of the academic supervisor and has acquired a model of supervision excellence to aspire to.

Lastly, this research has been akin to a criminal investigation where the suspect was the project vision. There was an early report that the project vision may be responsible in some way for project success and the investigation began in a methodical, inquisitive and objective manner. The investigation has concluded and strongly suggests that the perpetrator (project vision) is responsible in a significant way for driving project success. The author has attempted to provide a transparent investigation that has not unduly influenced the evidence that is now presented in this thesis. This evidence is now presented to you the reader who will be the jury as to the validity of the research and the accuracy of its conclusions. Similar to a jury, the reader will determine if the investigation was conducted in an objective and fair manner. And most importantly, the reader will judge the study's general applicability and value proposition to the field of project management.

Conclusion

This Chapter, the eighth and final chapter, has brought this research and its reporting to a close. The author has answered the research question and addressed the research propositions. Further analysis of the data collected from the interviews provides no greater enlightenment and theoretical saturation can be declared. The author has suggested areas where this research can be improved if replicated in the future as well as to provide further transparency as to the conduct of this research. As one finds answers, one is often led to more questions and suggestions for future research have been offered. The chapter has also outlined the study's contribution to both the theory and practice of project management. And

we end where we began, in personal reflection as to the personal learning acquired from this research journey.   The real measure of learning is often in the results that the application of learning has achieved or facilitated.

To this end, the vision of Project Management Centre of Excellence (PMCOE) has been realized and the author has been assigned to operate the PMCOE branch of government supporting successful project management practices across the public service. The effective development and communication of this project's vision has driven the project to successful completion and holds the same promise for other projects.

References

Ackerman, L. and D. Anderson (2001). <u>The Change Leader's Roadmap: How to Navigate Your Organization's Transformation</u>. New York, New York, USA, Pfeiffer.

Allee, V. (2000). "Knowledge Networks and Communities of Practice." <u>Journal of the Organization Development Network</u> **32**(4): 15.

Allen, R. E. (1990). <u>The Oxford Dictionary</u>. Oxford, UK, Oxford University Press.

APM (2004). APM Body of Knowledge. High Wycombe, Bucks, UK, Association of Project Management.

Armenakis, A. A. (1988). "A review of research on the change typology." <u>Organisational Development Journal</u> **12**(3): 17-22.

Babbie, E. (1993). <u>The Practice of Social Research</u>. Belmont, CA, Wadsworth.

Baccarani, D. (1996). "The Concept of Project Complexity - A Review." <u>International Journal of Project Management</u> **14**(4): 201-204.

Baccarani, D. (1999). "The Logical Framework Method for Defining Project Success." <u>Project Management Journal</u> **30**(4): 25-32.

Bader, H. (1990). "Reasons for Non-participation in Adult Basic Education." <u>Adult Education Quarterly</u> **40**(4): 207-218.

Baker, B. and D. Murphy, et al. (1987). <u>Factors affecting project success in Project Management Handbook.</u> New York, New York, USA, Van Nostrand Reinhold Co.

Balnaves, M. and P. Caputi (2001). <u>Introduction to Quantitative Research Methods: An Investigative Approach</u>. Thousand Oaks, California, USA, Sage Publications.

Barker, R. (1985). <u>Using basic tools</u>. The 4th TQM International Conference, Bedford, UK, IFS Ltd.

Barry, C. (1998). Choosing Qualitative data analysis software: Atlas ti and Nudist compared. <u>Internet Journal 3, 3</u>. **2006**.

Bartlett, C. and S. Ghoshal (1990). "Matrix Management: Not a structure, a frame of mind." <u>Harvard Business Review</u> **68**(4): 138-145.

Bass, B. M. (1985). <u>Leadership and Performance Beyond Expectations,</u>, Free Press, New York.

Bass, B. M. and R. M. Stogdill (1990). <u>Bass & Stogdill's Handbook of Leadership : Theory, Research, and Managerial Applications</u>. New York, London, Free Press ; Collier Macmillan.

Baum, J., E. A. Locke, et al. (1998). "A longnitudinal study of the relation of vision and vision communication to venture growth firms." Journal of Applied Psychology **83**(1).

Bechard, R. and R. Harris (1997). Organizational transitions. Reading, MA, USA, Addison-Wesley.

Belassi, W. and O. I. Tukel (1996). "A New Framework for Determining Critical Success/Failure Factors in Projects." International Journal of Project Management **14**(3): 141-151.

Bennett, J. and S. Jayes (1995). Trusting the Team. Reading, UK, Centre for Strategic Studies in Construction, The University of Reading.

Bennis, W. (1989). On Becoming a Leader. San Francisco, Peresus Publishing.

Bennis, W. (2000) Managing the Dream: Reflections of Leadership and Change. Da Capo Press. New York, New York, USA

Bennis, W. and B. Nanus (1997). Leaders Strategies for Taking Charge. New York, Harper Business.

Bennis, W., G. Spevietzer, et al. (2001). The Future of Leadership. San Fancisco, Jossey-Bass.

Blake, J. and R. Mouton (1964). The Managerial Grid. Houston ,Texas, Gulf Publishing.

Block, T. and J. Frame (1997). Evolution of Project Offices. California, USA, Thompson Crisp Learning.

Blumer, H. (1998). "The convergent methodological perspective of social behaviorism and symbolic interaction." American Sociolgical Review **45**: 409-419.

Bontis, N., M. Crossan, et al. (2002). "Managing An Organizational Learning System By Aligning Stocks and Flows." Journal of Management Studies. **39**(4): 437.

Bounfour, A. (2003). "The IC-dVAL approach." Journal of Intellectual Capital **4**(3): 396 - 413.

Bourne, L. and D. H. T. Walker (2003). Tapping into the Power Lines-A 3rd Dimension of Project Management Beyond Leading and Managing. 17th World Congress on Project Management, June 3-6, Moscow, Russia, Moscow, Russia.

Bourne, L. and D. H. T. Walker (2004). "Advancing Project Management in Learning Organizations." The Learning Organisation **11**(3): 226-243.

Bourne, L. and D. H. T. Walker (2005). "Visualising and Mapping Stakeholder Influence." Management Decision **43**(5): 649-660.

Bridges, W. (1980). Making Sense of Life's Changes - Transitions - Strategies for coping with the difficult, painful and confusing times of your life. Reading, Massachusetts., Addison-Wellesy Publishing Company.

Bridges, W. (2003). Managing Transitions - Making the Most of Change. Cambridge, Massachusetts, De Capo Press.

Briner, W., C. Hastings, et al. (1996). Project Leadership. Aldershot, UK, Gower.

Brookfield, S. D. (1986). Understanding and Facilitating Adult Learning. San Francisco, Jossey-Bass.

Brown, J. S. and P. Duguid (1991). "Organisational Learning and Communities of Practice: Towards a Unified View of Working, Learning, and Innovation." Organisational Science 2(1): 40-57.

Brundtland, G. H. (1987). Our Common Future. World Commission on Environment and Development (WCED). Oxford, UK, United Nations.

Burns, J. M. (1978). Leadership. New York, Harper & Row.

Calder, D. (2001). Project Charter of the Cross Government Methodology User Group. Victoria, Province of British Columbia: 16.

Carlson, S. (1951). Executive Behavior: A study of the work load and working methods of managing directors. Stockholm, Strombergs.

Carver, J. (2000). Leadership Resources. North Carolina, USA, Centre for Creative Leadership.

Cavelle, J. (2006). Project Manager, Project Management Centre of Excellence. Victoria.

Charan, R., S. Drotter, et al. (2001). The Leadership Pipeline: How to Build the Leadership Powered Company. San Francisco, USA, Jossey-Bass.

Chesbrough, W. and D. Tecee. (1996). Harvard Business Review. Jan-Feb. 65-73.

Christensen, D. a. W., D. H. T. (2003). Project Stewardship: The Convergence of Project Leadership and Management. Proceedings of 17th World Congress on Project Management,, Moscow, Russia.

Christenson, D. (2004). Knowledge Management Vision. Melbourne, Australia:

Christenson, D. and D. H. T. Walker (2003). Vision as a Critical Success Factor to Project Outcomes. Proceedings of 17th World Congress on Project Management, Moscow, Russia,.

Christenson, D. and D. H. T. Walker (2004). "Understanding the Role of "Vision" in Project Success." Project Management Journal 35(3): 39-52.

Christenson, D. and D. H. T. Walker (2005). The Project Management Office a Centre of Knowledge Excellence? Proceedings of the CITC-III Conference, Construction in the 21st Century,, Athens, Greece.

CII (1996). The Partnering Process - Its Benefits, Implementation, and Measurement. Austin, Texas, CII, Bureau of Engineering Resources, University of Texas at Austin.

Clark, D. (2006). Concept of Leadership. Big Dog's Leadership Page. **2006**.

Clark, K. and Fujimoto (1998). Overlapping Problem Solving in Product Development. Cambridge, MA. USA, Harvard Business Publishing.

Cleland, D. (1991). "The age of project management." Project Management Journal **22**(1): 19-25.

Cleland, D. and W. King (1983). Systems Analysis and Project Management. New York, New York, USA, McGraw Hill.

Cleland, D. I. (1999). Project Management Strategic Design and Implementation. Singapore, McGraw-Hill, Singapore.

Cloke, K. and J. Goldsmith (2002). The End of Management and the Rise of Organizational Democracy. California, USA, Jossey-Bass.

Coakes, E. (2007). "Developing communities of innovation by identifying innovation champions." The Learning Organisation **14**(1): 74-85.

Collins, J. and J. I. Porras (1996). "Building Your Company's Vision." Harvard Business Review **74**(5).

Conner, D. and H. Harrington (2000). Project Change Management: Applying change management to improvement projects. New York, New York, USA, McGraw Hill.

Cook, D. C. (1991). TQM research: Beyond the first flush of enthusiasm--sustaining success with total quality. The 4th TQM International Conference, Bedford, UK, IFS Ltd.

Cooke-Davies, T. (2002). "The "Real" Success Factors on Projects." International Journal of Project Management **20**(3): 185-190.

Coolican, H. (1998). Research Methods and Statistics in Psychology. London, England, Hodder and Sloughton.

Covey, S. (1989). 7 Habits of Highly Successful People. New York, New York, USA, Fireside.

Crawford, L., J. Pollack, et al. (2006). "Uncovering the trends in project management: Journa lemphases over the last 10 years." International Journal of Project Management **24**: 175-184.

Crosby, P. B. (1979). Quality is Free. New York, New York, USA, McGraw-Hill Book Company.

Crosby, P. B. (1984). Quality without tears. New York, New York, USA, McGraw-Hill Book Company.

Cross Government Project Management Working Group (2003). Project Management Centre of Excellence: Business Options Document. Victoria, British Columbia, Canada, Province of British Columbia**:** 35.

Crossan, M. M., Lane, H. W. and White, R. E. (1999). "An Organizational Learning Framework: From Intuition to Institution." Academy of Management Review. **24** (3): 522-537.

Cullen, J. M. (1991). "Conditions for success." The Total Quality Management Magazine **3**(3): 153-156.

Curtis, B. and S. Boaden (1988). Quality--making it happen. The 1st TQM International Conference, Bedford, UK, IFS Ltd.

Daft, R. L. (1998). Organization theory and design. Cincinnati, Ohio, South Western Publishing.

Dai, C. X. (2002). The Role of Project Management Office in Achieving Project Success. PMI Annual Seminars and Symposium, San Antonio, Texas, United States.

Daniel, D. (1990). "Hard problems in a soft world." International Journal of Project Management **8**(2): 79-83.

Daniel, R. (1961). "Management Information Crisis." Harvard Business Review(Sept-Oct).

Davenport, T. H. (2001). Knowledge Workers and the Future of Management. The Future of Leadership - Today's Top Leadership Thinkers Speak to Tomorrow's Leaders. W. Bennis, G. M. Spreitzer and T. G. Cummings. San Francisco, Jossey-Bass**:** 41-58.

Davenport, T. H. and L. Prusak (2000). Working Knowledge - How Organizations Manage What They Know. Boston, Harvard Business School Press.

Davis, K. (1992). Human Relations at Work - The Dynamics of Organizational Behavior,. Toronto, Canada., McGraw- Hill.

Davis, J., Schoorman, F. and D. Donaldson. (1997) Toward a Stewardship Theory of Management. Academy of Management Review. 2(1): 20-47.

De Wit, A. (1988). "Measurement of project success." International Journal of Project Management **6**.

Deming, E. (1982). Out of Crisis. Cambridge, Massachusetts, U.S.A., The MIT Press.

Dempsey, P. and M. Hesketh (1988). Total Quality Culture--Five Years On and Counting. The 1st TQM International Conference, Bedford, UK, IFS Ltd.

Denzin, N. K. (1999). "Evaluating qualitative research in poststructural moment: The lessons James Joyce teaches us." Qualitative Studies **7**(4): 295-308.

Dinsmore, P. C. (1998). How Grown Up is Your Organization? <u>PM Network</u>. **12:** 24-26.

Donaldson, L. and J. Davies. (1989) CEO governance and shareholder returns: Agency theory or stewardship theory. Academy of Management Conference. Washington, U.S.A.

Donaldson, T. and L. Preston. (1995) The Stakeholder theory of the corporation: Concepts, evidence and implications. <u>Academy of Management Review</u>. 20: 65-91.

Donnelly, A., A. Gibson, et al. (1987). <u>Fundamentals of Management</u>. Homewood, Illinois, USA, BPI Irwin.

Douglas, J. (1997). <u>Investigative social research</u>. Beverly Hills, California, USA, Sage Publications.

Doz, Y. L. and G. Hamel (1998). <u>Alliance Advantage - The Art of Creating Value Through Partnering</u>. Boston, Harvard Business School Press.

Drucker, P. (1970). "Entrepreneurship in Business Enterprise." <u>Journal of Business Policy</u> **1**(1): 3-12.

Drucker, P. (1993). <u>Post-Capitalist Society.</u> Oxford, U.K, Butterworth-Heinemann.

Dunphy, D. and D. Stace (1988). "Transformational and coercive strategies for planned organizational change: Beyond the O.D. Model." <u>Organization Studies</u> **9**(3): 317-334.

Dvorak, P. (2003). "Best Practices For Managing Projects." <u>Machine Design</u> **75**(14).

Dyer, C. (1995). <u>Beginning Research in Psychology: A Practical Guide to Research Methods and Statistics</u>. Oxford, UK, Blackwell Publishing.

Eisenhardt, K. M. (1989). "Building Theory from Case Study Research." <u>Academy of Management Review</u> **14**: 488-511.

Elango, A. and W. Rowe (2005). Senior Manager and Executive Competencies. Victoria, British Columbia, Canada, Victoria University, Royal Roads University and Camosun College University.

Elias, J. and S. Merriam (1995). <u>Philosophical Foundations of Adult Education</u>. Melbourne, Florida, Krieger Publishing.

Englund, R. L. and Bucero, A. (2006). <u>Project Sponsorship : Achieving Management Commitment for Project Success</u> San Francisco   Jossey-Bass.

Evans, M. (1970). "The effects of supervisory behaviour on path goal relationship." <u>Organizational Behaviour and Human Performance</u> **5**: 277 - 298.

Farr, J. (2002). Leadership vs. Management: Do You Know the Difference? **2002**.

Feigenbaum, A. V. (1983). Total Quality Control. New York, New York, USA, McGraw-Hill Book Company).

Fiol, C. and M. Lyles (1985). "Organizational Learning." Academy of Management Review 10(4): 803-814.

Ford, M. (2000) A model of change process and its use in self-assessment. Unpublished doctoral dissertation , University of Cincinnati.

Fraenkel, J. and N. Wallen (2003). How To Design And Evaluate Research In Education, McGraw-Hill.

Friese, S. (2004). User Manual for Atlas-ti 5.0. Berlin, Scientific Software Development: Qualitative Analysis.

Ganesh, B. (2000). Building a Learning Organization. Boston, Massachusetts, Harvard Business School Press.

Garvin, D. A. (1987). "Competing on the eight dimensions of quality." Harvard Business Review, 65(6): 101-109.

Garvin, D. A. (1988). Managing Quality. New York, New York, USA, The Free Press.

Geertz, C. (1997). Thick descriptors: Toward an interpretive theory of culture. New York, New York, USA, Basic Books.

Ghiselli, E. (1963). "Managerial Talent',." American Psychologist: 631-641.

Giddings, Sherry (2006) Understanding The Behaviors Experienced By Individuals During An Organizational Change Effort: A Delphi Analysis Utilizing the Five Sages Grieving Model. PhD Dissertation Cappella University, March 2006

Giordan, J. (1995). "That vision thing." Research Technology Management 38(5): 8-9.

Glaser, B. and A. L. Strauss (1995). The discovery of grounded theory. Chicago, Illinois, USA, Aldine Press.

Glouberman, D. (2003). Life choices, life changes: develop your personal vision. London, UK, Hodder & Stoughton.

Glueck, W. F. (1980). Strategic Management and Business Policy. Boston, McGraw Hill.

Golebiewski, R., K. Billingsley, et al. (1976). "Measuring change and persistence in human affairs: Types of change generated by OD designs." Journal of Applied Behavioral Science 12: 133-157.

Goleman, D. (1994). Emotional Intelligence - Why it can mater more than IQ. New York, New York, USA, Bantam Books.

Goleman, D. (2000). "Leadership that Gets Results." Harvard Business Review **78**(2): 78-90.

Gomm, R., M. Hammersly, et al., Eds. (2000). Case Study Method. Thousand Oaks, Sage Publications Inc.

Gongla, P. and C. Rizzuto (2001). "Evolving communities of practice: IBM Global Services experience." BM Systems Journal - Knowledge Management **140**(4): 19.

Greenleaf, R. (1979) Teacher As a Servant: A Parable. New Jersey, U.S.A., Paulist Press.

Greenwood, R. and C. Hinings (1988). "Organizational design types, tracks and the dynamics of strategic change." Organizational Studies **9**: 293-316.

Grenier, L. (1972). "Evolution and revolution as organizations grow." Harvard Business Review **50**(4): 37-46.

Groocock, J. M. (1986). The chain of quality. New York, New York, USA, John Wiley & Sons.

Guba, E. G. and Y. S. Lincoln (1996). The contenances of fourth generation evaluation: Description, judgment and negotiation. Evaluation Network, Toronto, Canada.

Hall, M. and R. Holt (2003). "Project Sponsors under New Public Management: lessons learned from the frontline." International Journal of Project Management **21**(7): 495-502.

Hambrick, D. and P. Mason (1984). "Upper Echelons: The organization as a reflection of tis top managers." Academy of Management Review **9**: 193-206.

Hamel, G. and C. K. Prahalad (1989). "Strategic Intent." Harvard Business Review **67**(3): 63-76.

Hansen, M. T. and B. von Oetinger (2001). "Introducing T-Shaped Managers - Knowledge Manment's Next Generation." Harvard Business Review **79**(3): 107-116.

Hartman, F. (2000). Don't Park Your Brain Outside: A Practical Guide to Improving Shareholder Value with SMART Management. Newton Square, Pennsylvania, Project Management Institute.

Hartman, F. and G. Skulmoski (1998). "Project Management Maturity." Project Management Journal **4**(1): 74-78.

Harvey, C. and J. Denton (1999). "To Come of Age: the antecedents of organizational learning." The Journal of Management Studies **36**: 897-918.

Harvey, G. (1989). The strategic implementation of total quality management. The 2nd TQM International Conference, Bedford, UK, IFS Ltd.

Healy, P. (1999). Project Management: getting the job done on time and in budget. Sidney, Australia, Butterworth.

Helm, J. and K. Remington (2005). "Effective Project Sponsorship and Evaluation of the Role of the Executive Sponsor in Complex Infrastructure Projects by Senior Project Managers." Project Management Journal **36**(3): 51-61.

Hemphill, J. (1960). Dimensions of executive positions. Ohio, U.S.A., Bureau of Business Research, Ohio State University.

Hernandez, M. (2007). Stewardship: Theoretical Development and Empirical Test of its Determinants. PhD Dissertation, Duke University, USA

Hersey, P. and K. Blanchard (1982). Management of Organisational Behaviour. New York, Prentice Hall International.

Herzberg, F., B. Mausner, et al. (1967). The Motivation to Work. New York, John Wiley and Sons.

Hesselbein, F., M. Goldsmith, et al. (1996). The leader of the future: New visions, strategies and practices for the next era. San Francisco, USA, Jossey-Bass.

Hill, G. (2004). Florida, USA, CRC Press Ltd.

Hinings, C. and R. Greenwood (1988). The Dynamics of Strategic Change. Oxford, England, Basil Blackwell.

Hitt, M. A. and R. D. Ireland (1999). Strategic Management: Competiveness and globalization. Cincinnati, Ohio., South Western Publishing.

Hofstede, G., B. Neuijen, et al. (1990). "Measuring Organizational Cultures: A Qualitative and Quantitative Study across Twenty Cases." Administrative Science Quarterly **35**: 286-316.

Hofstede, G. and J. Spangenberg, Eds. (1987). Measuring individualism at occupational and organizational levels. Growth and Progress in Cross Cultural Psychology. Lisse, Netherlands, Swets and Zeitlinger.

Holton, E. (1996). HRD Quarterly **7**(1): 5-21.

Houghton, H. (1991). World class quality. The Total Quality Management Magazine. **3:** 27-31.

House, R. and T. Mitchell (1974). "Path Goal Theory of Leadership." Journal of Contemporary Business: 81 - 97.

Howell, J. (2005). "The right stuff: Identifying and developing effective champions of innovation." Academy of Management Executive **19**(2): 108 - 199.

ISD (2003). A Blueprint for Excellence. Victoria, British Columbia, Province of British Columbia**:** 30.

Ishikawa, K. (1976). Guide to quality control. Tokyo, Japan, Asian Productivity Organisation.

Ishikawa, K. (1985). What is total quality control?--the Japanese way. New Jersey, USA, Prentice-Hall).

Jensen, M. and W. Mieckling. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3: 3-14.

J.L., R. and P. Rigby (1988). Total quality control--the Hewlett-Packard way. The 1st TQM International Conference, Bedford, UK, IFS Ltd.

Johns, T. (1998). "On Creating organizational support for the Project Management Method." International Journal of Project Management **17**(1): 47-53.

Johnson, D. (2001) Creating a healthy workplace for today's stressed out employees. Industrial safety and Hygiene News. Retrieved June 22, 20007 from http://www.ishn.om/cda/artcileinformation/coerstory/bncoverstroyitem/0,2164,62212,00.html).

Jugdev, K. (2003). Developing and Sustaining Project Management as a Strategic Asset: A Multiple Case Study Using the Resource Based View. Department of Civil Engineering. Calgary, Alberta, Canada, University of Calgary.

Jugdev, K. and J. Thomas (2002). "Project Management Maturity models: The silver bullets of competitive advantage." Project Management Journal **33**(4): 11.

Juran, J. M. (1979). Quality control handbook. New York, New York, USA, McGraw-Hill Book Company.

Juran, J. M. (1988). Juran on planning for quality. New York, The Free Press.

Kaiser, D. (2005). Pedagogy and the Practice of Science. Cambridge, Massachusetts, USA, Massachusetts Institute of Technology.

Kaplan, B. and J. A. Maxwell (1994). Qualitative Research Methods for Evaluating Computer Information Systems. Evaluating Health Care Information Systems: Methods and Applications. J. Anderson, C. Aydin and S. Jay. Thousand Oaks, California, USA, Sage,**:** 45-68.

Katz, R. (1955). "Skills of an effective administrator.'" Harvard Business Review January - February: 33 - 42.

Katzenbach, J. and D. Smith (1986). "The Wisdom of Teams." Harvard Business Review: 76-81.

Katzenbach, J. R. and D. Smith (2005). "The Discipline of Teams." <u>Harvard Business Review</u> **83**(7/8): 162.

Katzenbach, J. R. and D. K. Smith (1993). <u>The Wisdom of Teams - Creating the High-Performance Organization</u>. Boston, Harvard Business School Press.

Kendra, K. and L. Taplin (2004). "Project Success: A Cultural Framework." <u>Project Management Journal</u> **35**(1): 30-45.

Keniger, M. and D. H. T. Walker (2003). Developing a Quality Culture - Project Alliancing Versus Business as Usual. <u>Procurement Strategies: A Relationship Based Approach</u>. D. H. T. Walker and K. D. Hampson. Oxford, Blackwell Publishing**:** Chapter 8, 204-235.

Kennedy, C. J. (2002). Studying Organizational Change: A change response model with readiness factors, a case study, and research implications. <u>Management</u>. New York, Binghampton University. **167**.

Kerlinger, F. (1997). <u>Foundations of behavioral research</u>. New York, New York, USA, Holt, Rinehart and Winston.

Kerrisk, J. (2003). Knowledge Management - Lecture 1 - Introduction to Knowledge Management. <u>Masters of Business Innovation and Graduate Diploma in Document Management</u>. Melbourne, RMIT University**:** 10-28.

Kerrisk, J. (2003). Knowledge Management - Lecture 8- Communities in Knowledge Management. <u>Masters of Business Innovation and Graduate Diploma in Document Management</u>. Melbourne, Australia, RMIT University**:** 18.

Kerzner, H. (1987). "In search of excellence in project management." <u>Journal of Systems Management</u> **38**(2): 30-40.

Kerzner, H. (1998). <u>In Search of Excellence in Project Management - Successful Practices in High Performance Organizations</u>. New York, Van Nostrand Reinhold - International Thomson Publishing Company.

Kerzner, H. (2001). <u>Project Management- A Systems Approach to Planning, Scheduling, and Controlling</u>. Toronto, John Wiley & Sons Inc.

Kerzner, H. (2003). "Strategic planning for a project office." <u>Project Management</u> **34**(2): 13-25.

Kerzner, H. (2004). <u>Advanced Project Management: Best Practices on Implementaion</u>. Mississauga, Ontario, John Wiley and Sons.

Kezsbom, D. and K. Edward (2001). <u>The New Dynamic Project Management - Winning through the competitive advantage</u>. New York, John Wiley and Sons Inc.

Kidder, L. and C. M. Judd (1986). Research methods in social relations. New York, Rinehart and Winston.

Kirkpatrick, D. (1959). "Techniques for Evaluating Training Programs." Journal for the American Society for Training **Nov - Feb**.

Kirkpatrick, D. (1998). Evaluating Training Programs: the four levels, Berrett-Koehler.

Knowles, M. (1975). Self-Directed Learning. Chicago, Follet.

Koontz, H. and R. Fulmer (1975). A Practical Introduction to Business. Homewood, Illinois, U.S.A., Richard Irwin Inc.

Kotter, J. P. (1990). "What Leaders Really Do." Harvard Business Review **68**(3).

Kotter, J. P. (1995). "Leading change - Why Transformation Efforts Fail." Harvard Business Review **73**(2): 59-67.

Kotter, J. P. (1996). Leading change. Boston, Mass., Harvard Business School Press.

Kotter, J. P. (1998). Leading change - Why Transformation Efforts Fail. Harvard Business Review on Change. H. B. Review. Boston, Mass., Harvard Business School Press**:** 1-20.

Kotter, J. P. (1998). What Leaders Really Do. Harvard Business Review on Leadership. H. B. Review. Boston, MA, Harvard Business School Publishing**:** 37-60.

Kouzes, J. and B. Z. Posner (2002). The Leadership Challenge. San Francisco, USA, John Wiley and Sons.

Kubler-Ross, E. (1969). On Death and Dying. New York, New York, USA, Macmillan Publishing Company.

Kuhn, T. (1970). The Structure of Scientific Revolutions. Chicago, University of Chicago Press.

Kumar, R. (2005). Research Methodology: A Step by Step for Beginners. London, UK, Sage Publications Inc.

Kwak, Y. and C. Ibbs (2000). "Calculating project management's return on investment." Project Management Journal **31**(2): 38-48.

Larwood, L., C. Falbe, et al. (1995). "Structure and Meaning of Organizational Vision." Academy of Management Journal **38**(3): 749-769.

Larwood, L., M. Kriger, et al. (1993). "Organizational Vision: An investigation of the vision construct-in-use of AACSB Business School Deans." Group and Organization Management **18**(2): 214-236.

Lave, J. and E. C. Wenger (1991). Situated Learning - Legitimate Peripheral Participation. Cambridge, Cambridge University Press.

Lawrence, T., M. Mauws, et al. (2005). "The politics of organizational learning: Integrating power into the 4I framework." Academy of Management Review. **30**(1): 180-191.

Lee, A., W. Green, et al. (2000). Organisational Knowledge, Professional Practice and the Professional Doctorate at Work. Research and Knowledge at Work, Perspectives, Case-studies and Innovative Strategies. J. Carrick and C. Rhodes. London, Routledge**:** 117-136.

Legatski II, T. (1998). "Downsizing, down-scoping, and restructuring: Classifying organizational change." Research in Organizational Change and Development **11**: 253-270.

Lenard, D. J., A. Bowen-James, et al. (1996). Partnering - Models for Success. Adelaide, Australia, Construction Industry Institute Australia.

Levy, A. (1986). "Second Order-planning change: definition and conceptualization." Organisational dynamics **15**(1): 5-20.

Lewin, K. (1951). Field Theory in Social Science. New York, New York, USA, Harper and Row.

Lewin, K., R. Barker, et al. (1941). Frustration and Regression. An experiment with Young Children. Studies in Topological and Vector Psychology II. Iowa, USA, University of Iowa**:** 216 - 219.

Lewis, C. (1997). Building a Shared Vision: A Leader's Guide to Aligning The Organization. Portland, USA, Productivity Press.

Lewis, J. (2001). Project Planning Scheduling & Control. New York, New York, USA, McGraw-Hill.

Lewis, J. (2002). Working Together: Twelve Principles for Achieving Excellence in Managing Projects, Tems and Organizations. New York, USA, McGraw-Hill.

Liebowitz, J. and I. Megbolugbe (2003). "A set of Frameworks to aid the project manager in conceptualizing and implementing knowledge management initiatives." International Journal of Project Management **21**(3): 189-198.

Light, M. and T. Berg. (2000). The Project Office: Teams, Processes and Tools. Gartner Inc. August 1, 2000.

Lim, C. and M. Mohamed (1999). "Criteria of project success: an exploratory re-examination." Project Management Journal **17**(4): 243-248.

Lincoln, Y. S. and E. G. Guba (1985). Naturalistic inquiry. Newbury Park, California, USA, Sage Publications.

Lipton, M. (2003). Guiding Growth: how vision Keeps Companies on Course. Boston, Harvard Business School Press.

Locke, K. (2001). Grounded Theory in Management Research. Thousand Oaks, California, USA, Sage Publications.

Lofton, J. (1971). Analyzing Social Settings. Belmont, California, Wadsworth.
Loo, R. (2002). "Working towards best practices in project management: a Canadian study." International Journal of Project Management **20**: 93-98.

Lucas, J. (1998). "Anatomy of a vision statement." Management Review **87**(2): 22-27.

Lynn, G. (1999). "An Exploratory Study of Project Vision: Its Components and Impact on Innovation Success." International Journal of Innovation Management **3**(1): 91-109.

Lynn, G. and A. Akgun (2001). "Project Visioning: Its components and impact on new product success." The Journal of Product Innovation Management **18**: 374-387.

Machlup, F. (1980). Knowledge: Its Creation, Distribution and Economic Significance. Princeton, Princeton University Press.

MacKerarcher, D. (1996). Making Sense of Adult Learning. Toronto, Canada, Culture Concept Inc.

Maidique, M. (1980). "Entrepreneurs, Champions an Technological Innovation." Sloan Management Review **21**(2): 59- 76.

Maitland, A. (1999). Management Knowledge Management: Lessons can be learned from failed attempts to capture and use employees' knowledge. Financial Times, UK**:** 13.

Maitland, A. (2001). If downsizing, protect the corporate memory. Financial Times, UK**:** 18.

Malcolm Baldridge National Quality Awards (1992). Application Guidelines National Institute of Standards and Technology. Gaithersburg, USA.

Maletz, M. and N. Nohria (2001). "Managing the Whitespace." Harvard Business Review **79**(February).

Malone, D. (2002). "Knowledge Management: A model of organizational learning." International Journal of Accounting Information Systems **3**(2): 111-123.

Mann, F. (1965). Toward an understanding of the leadership role in formal organizations. Leadership in Organizations. J. Yukl. New Jersey, U.S.A, Prentice Hall:**:** 253.

Manu, C. and D. H. T. Walker (2006). "Making sense of knowledge transfer and social capital generation for a Pacific island aid infrastructure project." The Learning Organisation **13**(5): 475-494.

Martin, M. (2006). Consultant. Victoria, Canada.

McAlister, J. (1998). "Vision precedes success." Military Review **78**(1): 24-29.

McCoy, E. A. (1986). Measuring Success: establishing and maintaining a baseline. PMI Annual Seminar and Symposium, Montreal, Canada.

McDermott, R., C. O'Dell, et al. (2001). Building and Sustaining Communities of Practice." American Productivity and Quality Council Case Study Report. Houston, Texas, American Productivity and Quality Council.

McKenzie, K. (2003). "Leveraging Organisational Tacit Knowledge." International Journal of Knowledge, Culture and Change Management **3**: 355-369.

Meredith, J. and S. Mantel (1995). Project Management: A Managerial Approach. New York, New York, USA, John Wiley and Sons Inc.

Meyer, J. P. and N. J. Allen (1991). "A Three-Component Conceptualization of Organizational Commitment." Human Resource Management Review. **1**(1): 61-89.

Mezirow, J. (1991). Transformative Dimensions of Adult Learning. San Francisco, USA, Jossey-Bass.

Miller, D. and P. Friesen (1982). Structural change and performance: Quantum versus piecemeal - incremental approaches.

Miller, J. (1998)). Project Office - One of the Fastest Growing Segments in Information Systems. Proceedings of the 29th Annual PMI Seminars and Symposium, Long Beach, California, USA.

Ministry of Attorney General (2001). Information Resource Management Plan. Victoria, British Columbia, The Province of British Columbia.

Ministry of Attorney General (1991). Innovation in Justice Services with Information Technology: A Vision for British Columbia. Victoria, Province of British Columbia**:** 13.

Ministry of Finance (2005). Service Plan and Annual Report Guidelines. Victoria, British Columbia, Canada, British Columbia Provincial Government.

Mintzberg, H. (1973). The Nature of Managerial Work. New York, New York, USA, Harper & Row.

Mintzberg, H. (1975). "The Manager's Job - Folklore and Fact." Harvard Business Review **53**(4): 49 - 61.

Mintzberg, H. (1987). "Crafting Strategy." Harvard Business Review **65**(4).

Mintzberg, H. (1994). The Rise and Fall of Strategic Management. London, Prentice-Hall International (UK).

Mintzberg, H., B. Ahlstrand, et al. (1998). Strategy Safari: The Complete Guide Through the Wilds of Strategic Management. London, UK, Prentice Hall.

Mintzberg, H. and F. Westley (1992). "Cycles of Organizational Change." Strategic Management Journal 13: 39-59.

Morgan, G. (2005). Managing in Chaos. Creating Futures. D. Christenson. Victoria, BC Public Service Agency.

Morris, P. W. G. (1994). The Management of Projects A New Model. London, Thomas Telford.

Morris, W., Ed. (1982). Canadian Dictionary of the English Language. Markham, Ontario, Canada, Houghton Mifflin Canada Limited.

Myles and Huberman (1984). Qualitative Data Analysis. Age Publications, London, UK.

Needleman, J. (1990). Lost Christianity: A Journey of Rediscovery to the Centre of Christian Experience. Shaftesbury, UK, Element Books.

Nickols, F. (2004). "Change Management." 101.

Niemes, J. (1996). "Team members must have vision, trust confidence." Orlando Business Journal 12(42): 15.

Nonaka, I. and N. Konno (1998). "The Concept of 'Ba': Building a Foundation for Knowledge Creation." California Management Review 40(3).

Nonaka, I. and H. Takeuchi (1995). The Knowledge-Creating Company. Oxford, Oxford University Press.

Nutt, P. and R. Backoff (1992). Strategic management of public and third sector organizations: A handbook for leaders. San Francisco, USA, Jossey-Bass Publications.

Oakland, J. S. (1989). Total Quality Management. Oxford, England, Heinemann Professional Publishing Ltd.

O'Connor, M. (1992). "Quality projects in the 1990's: a review of past projects and future trends." International Journal of Project Management 10(2): 107-114.

Office of Project Management , I. P. (2006). The Benefits of Project Management, The University of Queensland: 4.

Office of Government Commerce (1989). **Pr**ojects **In C**ontrolled **E**nvironments (PRINCE 2). Norwich, England, UK Government.

Office of the Premier (2003). Project Management Centre of Excellence Business Options. Victoria, Province Of British Columbia.

Olson, J. (2003). Data Quality: The Accuracy Dimension. San Francisco, California, USA, Elevier Science.

OPM3 (2003). Organizational Project Management Maturity Model. Newton Square, Pennsylvania, USA, Project Management Institute.

Oxford (2001). The New Oxford Dictionary of English. Oxford, UK, Oxford University Press.

Page, R. (1985). 'The position description questionnaire'. Minneapolis, Control Data Corporation.

Patton, M. Q. (1990). Qualitative Evaluation and Research Methods. Newbury Park , California, USA, Sage Publications Inc.

Peters, T. and R. Waterman (1982). In search of excellence. New York, New York, Harper & Row.

Pettigrew, A. (1979). "On studying organizational cultures." Administrative Science Quarterly **24**: 570-581.

Pettigrew, A. (1985). The Awakening Giant. Oxford, England, Basil Blackwell.

Pinto, J. K. and O. P. Kharbanda (2001). Successful Project Managers. New York, New York, Van Nostrand Reinhold.

Pinto, J. K. and D. Slevin (1987). "Critical Success Factors in Successful Projects." IEEE Trans. on Engineering Management **34**(1): 22-27.

Pinto, J. K. and D. Slevin (1989). "Critical Success Factors in R&D Projects." Research Technology Management **32**(10): 31-35.

Pinto, J. K., P. Thoms, et al. (1998). Project Leadership from Theory to Practice. Sylva, N.C., Project Management Institute.

Pissolato, J. E. (2003). "Developing Self-Authorship: Exploring the Experiences of High Risk College Students." Journal of College Student Development **44**(6): 797-812.

PMCOE, S. C. (2005). Minutes of Proceedings. Victoria, Government of British Columbia.

PMCOE, S. C.-. (2006). Project Management Centre of Excellence: innovation and performance proposal. Victoria.

PMI (1996). A Guide to the Project Management Body of Knowledge. Sylva, NC, USA, Project Management Institute.

PMI (2004). A Guide to the Project Management Body of Knowledge. Newton Square, Pennsylvania, Project Management Institute.

Polanyi, M. (1967). The Tacit Dimension. New Yok, New York, USA, Anchor Books.

Por, G. (2003). Building a Case for Communities of Practice: What makes communities of practice an economic imperative?

Porter, L. J. and M. J. Hird (1989). A systematic route to excellence--The Tioxide approach. The 2nd TQM International Conference, Bedford, UK, IFS Ltd.

Powell, W. W. and P. DiMaggio (1991). The New Institutionalism in Organizational Analysis. Chicago, University of Chicago Press.

Price, W. (2001). Vision and Change: The Relationship Between Vision Statements and Strategic Change in Organizations. Business Administration, Nova Southeastern University**:** 209.

Province of British Columbia (2001). Budget Transparency and Accountability Act.

Quinn-Patton, M. (1997). Qualitative evaluation and research. Newbury Park, California, USA.

Ragin, C. (1994). Constructing Social Research: The Unity and Diversity Method. Thousand Oaks, California, USA, Pine Forge Press.

Remenyi, D. and M. Sherwood-Smith (1998). "Business Benefits from Information Systems Through an Active Benefits Realization Programme." International Journal of Project Management **16**(2): 81-98.

Research and Graduate Studies, C. (2002). Policies and Procedures for a Degree of Professional Doctorate. Melbourne, Australia, RMIT University**:** 23.

Revans, R. (1985). Action learning : its origins and nature. Action Learning in Practice. M. Pedler. Aldershot, USA, Gower.

Robbins, S. (2001). Organizational Behavior. Upper Saddle River, New Jersey, USA, Prentice Hall.

Rockart, J. (1986). A Primer on Critical Success Factors. The Rise of Managerial Computing: The Best of the Center for Information Systems Research. C. Bullen. Homewood, Dow Jones-Irwin.

Roos, G. and J. Roos. (1997). Measuring your Company's Intellectual Performance. Long Range Planning. 30: 413-426.

Rouda, R. (1995) Background and theory for large scale organizational change methods. University of St. Thomas. Retrieved June 24, 2007 from http://www.alumni.caltech.edu/~rouda/backgrund.html

Saraph, J., G. Benson, et al. (1989). "An instrument for measuring the critical factors of quality management." Decision Sciences **20**(4): 811-829.

Sashkin, M. (1992). Strategic leadership competencies: An introduction. Charismatic Leadership. J. Conger and R. Kanugo.

Sastry, M. (1997). "Problems and paradoxes in a model of punctuated organizational change." Administrative Science Quarterly **42**: 237-275.

Sauer, C., L. Liu, et al. (2001). "Where Project Managers are Kings." Project Management Journal **Vol. 32**(4): 39-49.

Sawaya, N. and P. Trapanese (2004). "Measuring Project Management Maturity." SDM **34**(1).

Schein, E. H. (1993). "How can Organisations Learn Faster? Lessons from the Green Room." Sloan Management Review **34**(2): 85-92.

Schein, E. H. (1996). "Three Cultures of Management: The Key to Organizational Learning." Sloan Management Review **38**(1): 9-20.

Schlichter, J. (2001). Organizational Project Management Maturity Model: Emerging Standards. 32nd Project Management Institute Annual Seminars and Symposium, Nashville, Tennessee, Project Management Institute.

Schon, D. (1987). Educating the Reflective Practitioner. San Francisco, USA, Jossey-Bass.

Schwalbe, K. (2004) Information Technology Project Management. Course Technology. 3rd Edition. Boston, Massachusetts, USA

Scott, D. (2004). Promoting project management maturity by meeting organization and individual development needs. Victoria.

Scott, W. (1998). Organizations rational, natural and open systems. Upper Saddle River, New Jersey, USA, Prentice-Hall.

Senge, P., A. Kleiner, et al. (1999). The Dance of Change: The Challenges of Sustaining Momentum in Learning Organisations. New York, USA, Doubleday.

Senge, P., C. Roberts, et al. (1999). The dance of change: the challenges of sustaining momentum in learning organizations. London, Nicholas Brealey Publishing.

Senge, P. M. (1990). The Fifth Discipline - The Art & Practice of the Learning Organization. Sydney, Australia, Random House.

Shenhar, A. and D. Dvir (1996). "Toward a Typological Theory of Project Management." Research Policy **25**(4): 607-632.

Siegle, D. (2003). Qualitative versus quantitative.

Silverman, D. (2000). Doing Qualitative Research: A Practical Guide. Thousand Oaks, California, USA, Sage Publications Inc.

Singh, J., R. House, et al. (1986). "Organizational change and organizational mortality." Administrative Science Quarterly **31**: 587-611.

Smith, P. (2003). "Workplace learning and flexible delivery." Review of Educational Research **73**(1): 53-88.

Smith, R. (1985). Learning How to Learn: Applied Theory for Adults. Chicago, Follet Publishing.

Snowden, D. (2002). "Complex acts of knowing: paradox and descriptive self awareness." Journal of Knowledge Management **6**(2): 100-111.

Spears, G., K. Seydegart, et al. (2003). Citizens First 3. Toronto, Canada, The Institute of Public Administration.

Spears, L. C., Ed. (1998). Insights on Leadership: Service, Stewardship, Spirit and Servant-Leadership. New York, New York. USA, John Wiley & Sons,.

Stacey, R. (1992). Managing Chaos: Dynamic Business Strategies in an Unpredictable World. London, UK, Kogan Press.

Stacy, R. (2001). Complex Responsive Processes in Organizations: Learning and Knowledge Creation. London, UK, Routledge Publishing.

Standards Australia (2001). Knowledge Management: A Framework for Succeeding in the Knowledge Era, Standard/Guideline. Sydney, Standards Australia, HB 275-2001**:** 55.

Standish, G. (1995). Chaos Report. New York, New York

Stewart, T. A. (2001). The Wealth of Knowledge: Intellectual Capital and the Twenty-First Century. London, Nicholas Brealey Publishing.

Stogdill, R. (1948). "Personal Factors Associated with Leadership,." Journal of Applied Psychology: 35-71.

Stogdill, R. M. (1948). "Personal Factors Associated with Leadership." Journal of Applied Psychology: 35-71.

Straus, S. and J. Corbin (1998). Basic Qualitative Research: Techniques and Procedures for Developing Grounded Theory. Thousand Oaks, USA, SAGE Publications.

Strelioff, W. (2005). Building a strong public service: reassessing the quality of the work environment in British Columbia's public service. Victoria, Canada, Office of the Auditor General**:** 89.

Sugden, R. A. and J. R. Parker (1989). <u>Xerox supplier total quality strategy</u>. The 2nd TQM International Conference, Bedford, UK, IFS Ltd.

Sveiby, K. (1994). "Towards a knowledge perspective on organisation. PhD dissertation. University of Stockholm.

Sveibly, K. (1997) The New Organizational Wealth - Managing and Measuring Knowledge-Based Assets. Berrett-Koehler. San Francisco, USA.

SW-CMM (1984). The SEI Capability Maturity Model for Software (SW-CMM). Pittsburgh, Pennsylvania, USA, Software Engineering Institute - Carnegie Mellon University.

Szulanski, G. (1996). "Exploring internal stickiness of knowledge transfer of best practice within the firm." <u>Strategic Management Journal</u> **17**: 27-43.

Szulanski, G. (2003). <u>sticky knowledge</u>. London, UK, Sage Publications.

Tannenbaum, R. and W. H. Schmidt (1958). "How to Choose a Leadership Pattern." <u>Harvard Business Review</u> **36**(2): 95-101.

Tecee, D., Pisano, G. and A. Shuen. (1997) Dynamic Capabilities and Strategic Management. <u>Strategic Management Journal</u>. 18: 509-533

Thiry, M. (2001). "Sensemaking in value management practice." <u>International Journal of Project Management</u> **19**: 71-77.

Thomas, R. (2003). <u>Blending Qualitative and Quantitative Research Methods in Theses and Disertations</u>. Thousand Oaks, USA, Corwin Press.

Thorpe, J. (1998). <u>The Information Paradox</u>. Toronto, Canada, McGraw-Hill Ryerson limited.

Tiwana, A. and A. Bush (2001). "A Social Exchange Architecture for Distributed Web Communities." <u>Journal of Knowledge Management</u> **5**(3): 242-249.

Tiwana, A. a. B., Ashley (2001). "A social exchange architecture for distributed Web communities." <u>Jounal of Knowledge Management</u> **5**(3).

Tomasko, R. (1987). <u>Downsizing</u>. New York, New York, USA, American Management Association.

Toney, F. and R. Powers (1997). Best practices of project management groups in large organizations. Upper Derby, Pennsylvania, Project Management Institute.

Tuchman, B. W. (1965). "Developmental Sequence in Small Groups,." <u>Psychological Bulletin,</u> **63**.

Turner, J. R. (2006). "Towards a theory of project management: The nature of the project governance and project management." International Journal of Project Management **24**: 93-95.

Turner, J. R. and R. A. Cochrane (1993). "The Goals and Methods Matrix: Coping with Projects With Ill-defined Goals and/or Methods of Achieving Them." International Journal of Project Management **11**(2): 93 - 102.

Turner, J. R. and A. Keegan (2001). "Mechanisms of Governance in the Project-based Organization: Roles of the Broker and Steward." European Management Journal **19**(3): 254-267.

Tushman, M., and E. Romanelli (1985). Organizational evolution: A metamorphis model of convergence and re-orientation. Research in Organizational Behavior. L. Cummings and V. Staw. Greenwich, Conneticut**:** 171-222.

Tynjala, P. and P. Hakkinen (2005). "E-learning at work: theoretical underpinnings and pedagogical challneges." The Journal of Workplace Learning **17**(5/6): 318-336.

Ulfelder, S. (2001). "The Dirty Half-Dozen, Six Ways IT Projects Fail-and How You Can Avoid Them." Darwin Magazine (www.darwinmag.com), Project Management.(June).

van Aken, T. (1996). De weg maar proejct success: eerder via werkstijl dan instrumenten, De Tijdstroom.

Vaughan, J. (1997). "Vision and Meaning." Executive Excellence **14**(3): 11-12.

Verma, V. and M. Wideman (1994). Project Manager to Project Leader and the Rocky Road Between..... Project Management Institute's 25th Annual Seminar and Symposium, Vancouver, BC. Canada.

Verzuh, E. (1999). The fast forward MBA in project management. New York, New York, USA, John Wiley and Sons Inc.

von Krough, G. (1998). "Care in Knowledge Creation." California Management Review **40**(3): 133-153.

von Krough, G., K. Ichijo, et al. (2000). Enabling Knowledge Creation. Oxford, Oxford University Press.

Wageman, R. (1997). "Critical Success Facotors for Creating Superb Self-Managing Teams." Organizational Dynamics **26**(1): 49-60.

Wagner, J. and H. J. (1998). Organizational Behavior: Securing Competitive Advantage. Upper Saddle, New Jersey, Prentice Hall.

Walker, D. (2001). An Introduction to KM Concepts - Version 1. Melbourne, CRC-CI, Project 2001-004-2**:** 38.

Walker, D. H. T. (2002). "Reflective Learning and the Doctor of Project Management Program." ultiBASE(August): on-line.

Walker, D. H. T. (2005). Research methodologies. Melbourne, Australia, RMIT University**:** 48-73.

Walker, D. H. T. (2006). Welcome Guide to the DPM Program. Melbourne, Australia, RMIT University**:** 22.

Walker, D. H. T., M. Arlt, et al. (2006). The Role of Business Strategy in Project Management Procurement. Procurement Systems - A Cross Industry Project Management Perspective - Chapter Five. London, UK, Taylor and Francis.

Walker, D. H. T. and D. Christensen (2005). "Knowledge Wisdom and Networks: A Project Management Centre of Excellence Example." The Learning Organization **12**(3): 275-291.

Walker, D. H. T., K. Hampson, et al. (2002). "Project Alliancing vs Project Partnering: A Case Study of the Australian National Museum Project." Supply Chain Management **7**(2): 83-91.

Walker, D. H. T. and K. D. Hampson (2003). Procurement Strategies: A Relationship Based Approach. Oxford, Blackwell Publishing.

Walker, D. H. T. and D. S. Johannes (2003). "Preparing for Organisational Learning by HK Infrastructure Project Joint Ventures Organisations,." The Learning Organisation, MCB University Press. UK **10**(2): 106-117.

Walton. (1985). "From Control to Commitment in the Workplace." Harvard Business Review: 77-94.

Ward, J. (1963). John Keats: The Making of a Poet. London, UK., Secker and Warsburg.

Wateridge, J. (1998). "How can IS/IT projects be measured for success?" International Journal of Project Management **16**(1): 59 - 63.

Watzlawick, P. (1978). The Language of Change. New York, New York, Basic Books.

Weick, K. E. (2001). Making Sense of the Organization. Oxford, Blackwell Publishers.

Wellens, R., P. Bernthal, et al. (2004). Employee Engagement: The Key to Realizing Competitive Advantage. Toronto, Canada, Development Dimensions International**:** 33.

Wenger, E. (1998). "Communities of Practice - Learning as a Social System." Systems Thinker.

Wenger, E. C., R. McDermott, et al. (2002). Cultivating Communities of Practice. Boston, Harvard Business School Press.

Westerveld, E. (2003). "The Project Excellence Model: linking success criteria and ctical success factors." <u>International Journal of Project Management</u> **21**(6): 411-418.

Wheatley, M. (1992). "Inside management: The quality factor." <u>Today</u>: 88-93.

Whetherill, A. (2005). Research assistant. Victoria, Canada.

White, D. and J. Fortune (2002). "Current Practice in Project Management - An Empirical Study." <u>International Journal of Project Management</u> **20**(1): 1-11.

White, D. and J. Fortune (2006). "Framing of project critical success factors by systems model." <u>International Journal of Project Management</u> **24**: 53-65.

White, K. and D. Yosua (2001). Describing Project Management Maturity, PM Solutions.

Yeo, K. T. (1996). "Management of Change - from TQM to BPR and beyond." <u>International Journal of Project Management</u> **14**(6): 321-324.

Yin, R. (1994). <u>Case Study Research</u>. Thousand Oaks, California, Sage.

Yukl (1998). <u>Leadership in Organisations</u>. Sydney, Prentice-Hall.

Zaleznik, A. (1977). "Managers and Leaders Are They Different." <u>Harvard Business Review</u> **55**(3).

Zemke, R. and S. Zemke (1994). "30 Things We Know for Sure About Adult Learning." <u>Innovation Abstracts</u> **18**(March 9, 1994): 23 - 28.

Appendices

Appendix A – Sponsors' Invitation

Dear ???

I am a research candidate in the Doctorate of Project Management (DPM) program from RMIT University in Melbourne, Australia. My supervisor is Dr. Derek Walker, Professor of Project Management. The final phase of this degree is to complete a research thesis. During the course work of this doctoral program and upon reflection, I have identified a research problem that suggests that the current Critical Success Factors (CSF) in project management identified in the literature are necessary but not sufficient to explain all project success. In fact, I believe there is another variable or critical success factor that may impact upon the success of projects. This reflection suggests that the construct of "project vision" has a role in project success. The research question to be answered then is, "How does "project vision" impact project outcomes?

I am writing to you at this time **to ask your authorization** to use the JIMS project as one of the case studies for my research thesis. I have selected this project for a number of reasons. First, I have intimate knowledge of the project and its stakeholders. Perhaps more importantly, I believe the project's "vision" had a significant role in the success of this project. While this is my belief I must separate this belief from my research endeavor and let the case study speak for itself. To give an objective account I will employ significant scientific rigour to the research to control any researcher bias and promote a credible account. To do this, I wish to invite several members of your organization and JIMS project team members to participate in an interview to examine the above mentioned research question.

By granting authorization to the JIMS project I believe the impact of such authorization will be as follows for your organization and a few key participants:

- Key stakeholders will be requested to participate in an individual semi-structured interview of 60 minutes.
  - ➢ The interviews will be recorded.
  - ➢ The recording will be transcribed.
  - ➢ The recording will be destroyed after transcription.
  - ➢ The transcription will be securely stored in my residence under lock and key for a period of five years after which time they will be destroyed.
  - ➢ The respondent (interviewee) will be notified in writing of disposal of both the tape recording and the transcript.

- Participants will be requested to participate in a debriefing session to confirm the information gathered and to validate the interpretation of the case report.

- Findings will be published but neither the project nor individuals who participate in this research will be identified. Persons who know of the project may be able to guess the project but individuals will remain completely anonymous.

As a member of the Public Service and in return for the general support I am offered by the Leadership and Leaning Centre, I will also use the research findings to:

- develop a workshop/course on creating and maintaining a project and organizational vision, and
- support best practices and to improve project management practice within the public service.

CONFIDENTIALITY AND ANONYMITY

All participants will be requested to sign a Consent form (Appendix A). If any participant so desires, the researcher will enter in a Confidentiality Agreement (Appendix B). The intent of the research is to disguise the project's name with a pseudonym and not identify the geographic location in which the project occurred. No information will be attributed to individuals who have been interviewed or will such respondents be identified in the thesis.

I hope you can authorize this request to use the JIMS project as one of my case studies in my thesis research. I have attached a signature block for your convenience to indicate your decision in this regard. If you do approve the use of the JIMS project for this research, I ask that you please sign and return this letter to me.   I will follow up with a telephone call in a few days to answer any questions or concerns you may have.   Please feel free to contact me at 250- (days) or 250- (evenings).

I fully respect your right to withdraw your voluntary support of my research at any time. In addition, should you wish to clarify any issues regarding my research, please contact either my research supervisor, Professor Derek Walker, Research Development Unit, Business Faculty, RMIT University (phone: 03-9925 1414) or the Business Faculty Human Research Ethics Committee, phone: (03) 9925 5594, fax: (03) 9925 5595, email: rdu@rmit.edu.au.

Thank you for your consideration of this request!

Yours sincerely,

Dale Christenson,
Doctor of Project Management candidate,
RMIT University

Consent to Research

I **approve/do not approve** the use of the JIMS project for use in this doctoral research.

_____   _____
                                          Date
Chief information Officer/Operating Officer

Appendix B – Participant invitation

FACULTY OF	**BUSINESS**
DEPARTMENT OF	**RESEARCH DEVELOPMENT UNIT**
Name of participant:	**???????**
	Court Services Branch
Project Title:	**JIMS**
Name(s) of researchers:	Phone:
(1)	
(2)	**Dale Christenson, PMP** **250-**
(3)	
(4)	

Dear ???????,

I am a candidate in the Doctorate of Project Management (DPM) program from RMIT University in Melbourne, Australia. My supervisor is Dr. Derek Walker, Professor of Project Management. The final phase of this degree involves the completion of a research thesis (Appendix C - Plain Language Description). During the course work of this doctoral program and upon reflection, I have identified a research problem that suggests that the current Critical Success Factors in project management identified in the literature are necessary but not sufficient to explain all project success. In fact, I believe there is another variable or critical success factor that may impact upon the success of projects. This reflection suggests that the construct of "project vision" has a role in project success. The research question to be answered then is -How does "project vision" impact project outcomes?

????????has given her permission to use the JIMS project as one of the case studies for my research thesis. I have selected this project for a number of reasons. First, I have intimate knowledge of the project and its stakeholders. Perhaps more importantly, I believe the project's "vision" had a significant role in the success of this project. While this is my belief I must separate this belief from my research endeavor and let the case study speak for itself. To give an objective account I will apply significant scientific rigour to the research to control any researcher bias and promote a credible account. To do this, I wish to invite you as a member of the JIMS project team to participate in an interview to examine the above mentioned research question.

If you are able to participate, I anticipate the semi-structured interview will take approximately 60 minutes. The interviews will be recorded and transcribed. The recording will be destroyed after transcription and the record of the transcription will be securely stored in my residence under lock and key for a period of five years after which time they will be destroyed. Once destroyed, I notify you in writing of the disposal of both the tape recording and the transcript.

I will also send you a copy of the transcript for you to review and comment on its accuracy. You will have an opportunity to clarify any and all information from the transcription.

Findings from the research will be published but neither the project nor individuals who participate in this research will be identified. Persons who know of the project may be able to guess the research case studies selected but individuals interviewed will remain completely anonymous in name and position within the project and sponsoring organization.

As a member of the ??????????????and in return for the support I have been offered by the?????????????, I will also use the research findings to:

- ❑ develop a workshop/course on creating and maintaining a project and organizational vision, and
- ❑ to improve project management practice within the public service.

CONFIDENTIALITY AND ANONYMITY

All participants will be requested to sign a Consent form (Appendix A). If any participant so desires, the researcher will enter into a Confidentiality Agreement (Appendix B). The intent of the research is to disguise the project's name with a pseudonym and not identify the geographic location in which the project occurred. No information will be attributed to individuals who have been interviewed nor will such respondents be identified in the thesis.

I hope you can participate in this research as the JIMS project is a very important case study in my thesis research. If you do agree to participate, I ask that you please sign and return the Consent Form to me.   I will follow up with a telephone call in a few days to answer any questions or concerns you may have.   Please feel free to contact me at ???- (days) or ???- (evenings).

Following receipt of your Consent Form, the following will occur:

- ❑ One of the researchers identified above will be assigned to conduct the interview,
- ❑ ???? from my office, will be contact with you to set up a convenient time for the interview, and
- ❑ I will send you a copy of the interview questions.

I fully respect your right to withdraw your voluntary participation in this research at any time. In addition, should you wish to clarify any issues regarding my research, please contact either my research supervisor, Professor Derek Walker, Research Development Unit, Business Faculty, RMIT University (phone: 03-9925 1414) or the Business Faculty Human Research Ethics Committee, phone: (03) 9925 5594, fax: (03) 9925 5595, email: rdu@rmit.edu.au.

Thank you for your consideration of this request!

Yours sincerely,

Dale Christenson,
Doctor of Project Management candidate,
RMIT University
c/o 2005 Hannington Road,
Victoria, B.C.   V9B 6R6

Appendix C – Plain Language Description

Research Proposition:
The current Critical Success Factors (CSF) related to project management and identified in the literature are necessary but not sufficient to explain all project success.

During the course work of the doctoral program and upon reflection, the candidate author has identified another variable or critical success factor that may impact upon the success of projects. This reflection suggests that the construct of "project vision" has a role in project success. This reflection has led to the research question that is to be addressed by the proposed study.

Research Question
How does "project vision" impact project outcomes?

The DPM program requires that the research thesis consider four areas of inquiry as identified by Walker (Bourne and Walker 2003),

5. Project management/leadership,
6. Knowledge management and innovation diffusion
7. Advance project management practice (guided individual research for which the author chose to investigate change management)
8. Project management ethics and procurement,

Given these four program focuses, the research question is extended through four research propositions.

Research Propositions

4. The communication and maintenance of a project vision will have a positive impact on expected project outcomes.
5. Project vision is an important factor in successful outcomes of knowledge management projects.
6. Project vision is an important factor in the ethical practice of project management.
7. Project vision is an important factor in successful outcomes of change management projects.

The reader will see that the four propositions directly relate to the four areas of inquiry above and form a sufficient and robust breadth for the inquiry as seen in the following table. Together the areas of enquiry form a response framework to address the study's research question. The other subsequent benefit of this approach is the study's likely contribution to parallel disciplines (knowledge management, change management, etc.) and to components that operate within the larger context of project management.

Response Framework to the Research Question

How Does Project Vision Impact Project Outcomes	

	Area of Inquiry	Research Propositions
B **R** **E** **A** **D** **T** **H**	Project management/leadership	The communication and maintenance of a project vision will have a positive impact on expected project outcomes
	Knowledge management and innovation diffusion	Project vision is an important factor in successful outcomes of knowledge management projects.
	Change Management	Projects represent change and the project vision is and important factor in signaling the change.

DEPTH

The approach as depicted in the above table has an advantage as it guides the research towards greater breadth and depth of response to the research question.

Inherent in the research problem, research question and proposition is a preliminary logic model as follows:

1. Projects are about change to a new direction.
2. Project vision signals and symbolizes this change.
    a. Project visions must be developed.
    b. Project vision must be communicated and maintained throughout the duration of the project.
3. Change management is about the impact projects have on people
4. If people are impacted by a project and arguably its vision, the vision must be ethically sensitive.

One of the key goals of the DPM is to advance the discipline of project management theoretically in order to gain a better understanding of relevant issues but also pragmatically advance the practice of project management in a meaningful and substantive way. To

achieve both of these objectives, information and findings from the research will be instructive in developing the following support model.
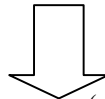
Case studies likely will show the importance of vision as a critical success factor in projects
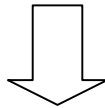
If, vision is an essential leadership construct for projects and organizations. Leaders need to be able to develop and communicate a shared vision for their projects, business units or organizations.

Develop a course to create a shared and compelling

Evaluate the course (satisfaction)

Key concepts: *Leadership, Management, Critical Success Factors, Vision, Competencies, Knowledge Management and Change Management.*

RESEARCH METHOD

Introduction

In order to research the potential role of vision as a critical success factor for project management, a number of preparatory steps will be taken including a literature review. The next step is to select three case studies that will provide information as to the role and importance of a project vision in achieving success. The researcher is aware of three projects within the public service where he suspects that project vision was a key contributing factor to the success or failure of the projects.

Research subjects will need to be knowledgeable of the projects under study, accessible and willing to participate. Having identified suitable research subjects satisfying these criteria and gaining appropriate permission to use individual projects the researcher will embark upon a process of identifying/measuring/evaluating intangible and tangible information related to the research question under investigation.

Participants' opinions will be sought, recorded and documented through the process for each case study. The researcher will then analyse (contrast and compare) participants' opinions

from each of the different case study environments. The above will take place in an evolving action research context in which data will be gathered from participants and a log of reflective learning maintained by the researcher.

Based on this analysis, and dependant on the outcome of the research question and propositions, the researcher will investigate the construction of a project management vision competency. If proven needed, this competency will be supported by the development of a course to support the development, diffusion and maintenance and ethical application of a project vision. The competencies and the supporting workshop will both be evaluated and the results fed back to further enrich the research findings as they relate to the research question. The application of the research results to the practice of project management will be validated and commented upon by project stakeholders within the competency building and course development focus groups.

The intent of his doctoral research is to incrementally add to the discipline's body of knowledge regarding successful project management and to contribute to the profession with the development of a critical competency and accompanying course. While the research will be focused within a project environment it is anticipated it will have general applications for organizations and their leaders beyond the project context.

Appendix D - Participant Consent Form

Form No 2b   HREC
RMIT HUMAN RESEARCH ETHICS COMMITTEE

Prescribed Consent Form For Persons Participating In Research Projects Involving Interviews, Questionnaires or Disclosure of Personal Information

FACULTY OF	**BUSINESS**
DEPARTMENT OF	**RESEARCH DEVELOPMENT UNIT**
Name of participant:	
Project Title:	**The Role of Vision as A Critical Success Factor for Project Management**
Name(s) of researchers:	**Dale Christenson** Phone: **250-**

1.   I have received a Plain Language statement explaining the general purpose, methods and demands of the study.
2.   I consent to participate in the above project, the particulars of which - including details of the interviews or questionnaires - have been explained to me.
3.   I authorise the researcher or his or her assistant to interview me.
4.   I acknowledge that:
   (a)   Having read Plain Language Statement, I agree to the general purpose, methods and demands of the study.
   (b)   I have been informed that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied.
   (c)   The project is for the purpose of research and/or teaching. It may not be of direct benefit to me.
   (d)   The confidentiality of the information I provide will be safeguarded. However should information of a confidential nature need to be disclosed for moral, clinical or legal reasons, release will only be made with either the consent of participant (moral or clinical reasons) or a court order (legal reasons).
   (e)   The data collected during the study may be published, and a report of the project outcomes will be provided to me. All responses to questions will be considered public and may be cited in the Doctoral Dissertation and related publications. Any information which will identify me will not be used.
   (f)   The project for which I am being interviewed will be disguised and when referred to identified as project "X" or a pseudonym.

Participant's Consent

Name: _____   **Date:** _____
                    (Participant)

Name: _____   **Date:** _____
                  (Witness to signature)

Participants should be given a photocopy of this consent form after it has been signed.

Appendix E - Confidentiality Form

Confidentiality Form For Researcher/Investigator Participating In Research Projects Involving Interviews, Questionnaires or Disclosure of Personal Information

UNIVESITY	**RMIT University, Melbourne Australia**
FACULTY OF	**BUSINESS**
DEPARTMENT OF	**RESEARCH DEVELOPMENT UNIT**
Name of participant:	
Project Title:	**The Role of Vision as A Critical Success Factor for Project Management**
Name(s) of researchers:	**??????** Phone: **???-**

1. Although your organization may know who participated in the interviews for this research, I will not share this information with other participating organizations. Nor will I share attributable details of information with your supervisor or others within your organization.

2. I will protect your identity as a participant in this study and any other information about you collected during the study will be kept confidential and never made public. I will use pseudonyms in all data collection and reporting methods. Geographic locations will be limited to continents.

3. The information gathered from this study will be kept in a locked filing cabinet in Dale Christenson's office (??????Street, Victoria, B.C.) while the research findings are being gathered and thereafter in a locked filing cabinet at his residence (??????, Victoria, B.C.).

4. While interviews will be tape recorded, the tapes will be destroyed once they have been transcribed. Dale Christenson will notify you of their destruction once completed.

5. All data must be kept for 5 years and only Dale Christenson and his research supervisor, Dr. Derek Walker will have access. It is highly unlikely that a research supervisor would access the data but it is a remote possibility. After five years, all data will be destroyed. Dale Christenson will notify you once the data has been destroyed.

6. The Researcher Undertakes to abide by the above conditions.

Name: _____   **Date:** _____
                (Researcher)

Name: _____   **Date:** _____
                (Witness to signature)

Participants should be given a photocopy of this confidentiality form after it has been signed.

Appendix F – Interview Template

Case Study Interview Questions

3.1   Background (collect during interview scheduling)
    3.1.1   What is the Participant's name?
    3.1.2   What is the Participant's organization?
    3.1.3   What is the Participant's position in the organization?
    3.1.4   What is the Participant's relationship to the project?
        ❑ *(Prompt) Project champion, sponsor, manager, external stakeholder, etc.*

3.2   Purpose of the study
    3.2.1   Do you understand the purpose of this study/research?
    3.2.2   Have you reviewed and signed the prescribed consent form?
    3.2.3   Do you wish for me to sign a Confidentiality Agreement?

3.3   The Project
    3.3.1   What was the purpose of the _____ project?
    3.3.2   What was the organizational structure of the project?
        ❑ *(Prompt)* Who were the project champions?
        ❑ *(Prompt*) Who were the project sponsors?
        ❑ (Prompt) Who were the project managers?
    3.3.3   How was the project selected?
    3.3.4   Was the project a success?
        3.3.4.1 Why do you believe it was or was not a success?
    3.3.5   What would you do differently?
    3.3.6   What would you do the same?

3.4   Critical Success Factors
    3.4.1   Was a Project Management Framework used? (Sayles and Chandler 1971) (Cleland and King 1983) (Locke 1984) (Kerzner 2001) (White and Fortune 2002)
        ❑ *(Prompt) Is there a project management culture in this organization or in the host organization?*
        ❑ *(Prompt) Were you aware of a project life cycle?*
        ❑ *(Prompt) Were you aware of a project charter, business case, business requirements, project plan, etc.?*
    3.4.2   Was a project Control System used?
    (Sayles and Chandler 1971) (Cleland and King 1983) (Kerzner 1987) (Standish 1995) (Martin 1976) (Baker 1987) (Lewis 2001) (Locke 1984)
        ❑ (Prompt) was a tracking system used to control time, cost and risks, etc.?
    3.4.3   Was Senior Management Support present?
    (Sayles and Chandler 1971) (Cleland and King 1983)   (Kerzner 1987) (Pinto and Prescott 1988) (Standish 1995) (Locke 1984) (White and Fortune 2002)

3.4.3.1 Was this support present for the entire life cycle

3.4.4 Was Adequate Funding available?
 (Martin 1976) (Cleland and King 1983) (Baker 1987) (Lewis 2001) (White and Fortune 2002)
  ❑ *(Prompt) Did funding levels change during the project?*

3.4.5 Was a Competent Project Manger employed?
 (Locke 1984; Kerzner 1987; Pinto and Slevin 1987)
  ❑ (Prompt) What behavioural qualities would have been desirable for a competent PM?
  ❑ (Prompt) What Knowledge would have been desirable for a competent PM?
  ❑ (Prompt) What skills and abilities would have been desirable for a competent PM?

3.5 Knowledge Management (Kerrisk 2003)
  3.5.1 What does the concept of knowledge management mean to you?
  3.5.2 How did you share information within the project?
  3.5.3 How did you share information across projects?
    ❑ (Prompt) current and/or future

3.6 Change Management (Conner and Harrington 2000)
  3.6.1 What does the concept of change management mean to you?
  3.6.2 Did this project represent a change to your organization or its business practices?
    ❑ *(Prompt) Describe the change.*
    ❑ (Prompt) What was the relative size of the change?
  3.6.3 What steps were used to help others cope with the change?
    ❑ *(Prompt) Steps to reduce resistance?*
    ❑ *(Prompt) Steps to increase the organization threshold or capacity for future change?*

3.7 Procurement (Walker and Hampson 2003)
  3.7.1 Was procurement used within this project?
  3.7.2 If yes, for what?
    ❑ (Prompt) What form of solicitation was used?
    ❑ (Prompt) What type of contract was used?

3.8 Project Vision (Christenson and Walker 2004)
  3.8.1 What does the concept of Project Vision mean to you? (Gary and Ali 2001)
  3.8.2 Did this project have a "project vision"?

IF NO

  3.8.3 Would a project vision have assisted this project?
          NOTE: GO TO QUESTION 3.9

IF YES

  3.8.4 What was the project's vision

313

❑ (Prompt) describe what the project vision was trying to achieve.

3.8.5 How was it developed? (Lewis 1997) (Larwood, Falbe et al. 1995)
❑ *(Prompt) From the top down (autocratic)*
❑ *(Prompt) From the bottom up (participatory/collaborative)*

3.8.6 Was a written project statement developed? (Price 2001)

3.8.7 How was the project vision communicated? (Lewis 1997)
❑ *(Prompt) By whom, Exec, Snr. Mgmt. Mgmt/Supervisor*

3.8.8 How was it maintained?
❑ (Prompt) Was the vision reviewed at any time during the project?

3.8.9 Did the vision explain the purpose of the project? (Lipton 2003)

3.8.10 Did the vision identify or suggest how this purpose will be achieved? (Lipton 2003)
❑ *(Prompt) Did the vision suggest a strategy as to how the purpose would be achieved?*

3.8.11 Did the vision signal a change in business practice?

3.8.12 Did the vision assist with your change management efforts?

3.8.13 Was the project vision sensitive to the people impacted by the project? (Note: while it would be best to ask those impacted by the project – it is equally important to get the views of those with control within the projects to assess your awareness of the following issues)

3.8.13.1 Was the reason for the change/project understood? (Goldratt 1990)
❑ *(Prompt) Would those impacted have come to the same conclusion for the need for the project (not necessarily the solution).*
❑ *(Prompt) Was the purpose of the project transparent?*

3.8.13.2 Do you believe the people impacted by the project feel they were being treated fairly?
❑ *(Prompt) While understanding the reason, did people feel the change was required - Did we get what we deserved?*

3.8.13.3 Did people feel they were treated fairly by how the project was managed and implemented?

3.8.13.4 Did people feel there concerns were being addressed? (Rawls 1971)

3.8.13.5 Did people trust their superiors to do what was right?
❑ *(Prompt) Did people trust their superiors to treat people fairly?*

3.8.14 Did the vision speak to values of the project or the host organization? (Lipton 2003)

3.8.15 Did the vision assist with decision making during the life cycle of the project?

3.8.16 What role did the project vision have in the success or failure of the project? (Christenson and Walker 2004)

❑ *(Prompt) Did the project vision make a difference in the success or failure of the project?*

3.9   General Comments

Are there any general comments you would like to make?

Appendix G – Interview Protocol

It is important that all interviews are conducted the same way in order that cross interviews and cross case studies can be compared and contrasted. To this end, this case study protocol will assist all of us to maximize our efforts for similar approaches.

The following protocol contains definitions for many of the terms use in the interview but it is always best to have the participation what they believe is meant by a term.

Introduce your self!

CONFIRM

3.1 Background (collect during interview scheduling)
  3.9.1 What is the Participant's name?
  3.9.2 What is the Participant's organization?
  3.9.3 What is the Participant's position in the organization?
  3.9.4 What is the Participant's relationship to the project?
    ❑ *(Prompt) Project champion, sponsor, manager, external stakeholder, etc.*

REVIEW (Participants have received the Plain Language Request to participate and Research Backgrounder)

3.10 Purpose of the study
  3.10.1 Do you understand the purpose of this study/research?
  3.10.2 Have you reviewed and signed the prescribed consent form?
  3.10.3 Do you wish for me to sign a Confidentiality Agreement?

3.11 The Project
  3.11.1 What was the purpose of the _____ project?
  3.11.2 What was the organizational structure of the project?
    ❑ *(Prompt)* Who were the project champions?
        Typically Executive members who believe in project
    ❑ *(Prompt*) Who were the project sponsors?
Typically a senior manager/executive who is ultimately accountable for the project outcomes
    ❑ (Prompt) Who were the project managers?
Typically a person responsible for the day to day operations of the project and one that reports to the project sponsor
  3.11.3 How was the project selected?
    ❑ Service Plan, IRMP, Top down, bottom up, middle up top down, customer request, client request?

  3.11.4 Was the project a success?

There are many definitions of success.. traditionally on time on budget and to specifications….another definition is that the project met or exceeded stakeholder expectations

3.11.4.1 Why do you believe it was or was not a success?

3.11.5 What would you do differently?

I never want to do ??????this again……..Even better if

3.11.6 What would you do the same?

3.12 Critical Success Factors

Key factors identified in the literature that support project success, many are considered necessary but few considered sufficient to ensure project success.(see summary chart at Appendix A)

3.12.1 Was a Project Management Framework used? (Sayles and Chandler 1971) (Cleland and King 1983) (Locke 1984) (Kerzner 2001) (White and Fortune 2002)

- ❑ *(Prompt) Is there a project management culture in this organization or in the host organization?*
- ❑ *(Prompt)* Were you aware of a project life cycle?
- ❑ *(Prompt)* Were you aware of a project charter, business case, business requirements, project plan, etc.?

3.12.2 Was a project Control System used?
(Sayles and Chandler 1971) (Cleland and King 1983) (Kerzner 1987) (Standish 1995) (Martin 1976) (Baker 1987) (Lewis 2001) (Locke 1984)

- ❑ (Prompt) was a tracking system used to control time, cost and risks, etc.?

3.12.3 Was Senior Management Support present?
 (Sayles and Chandler 1971) (Cleland and King 1983)   (Kerzner 1987) (Pinto and Prescott 1988) (Standish 1995) (Locke 1984) (White and Fortune 2002)

3.12.3.1 Was this support present for the entire life cycle

3.12.4 Was Adequate Funding available?
 (Martin 1976) (Cleland and King 1983) (Baker 1987) (Lewis 2001) (White and Fortune 2002)

- ❑ *(Prompt) Did funding levels change during the project?*

3.12.5 Was a Competent Project Manager employed?
 (Locke 1984; Kerzner 1987; Pinto and Slevin 1987)

- ❑ (Prompt) What behavioural qualities would have been desirable for a competent PM?
- ❑ (Prompt) What Knowledge would have been desirable for a competent PM?
- ❑ (Prompt) What skills and abilities would have been desirable for a competent PM?

3.13 Knowledge Management (Kerrisk 2003)

Knowledge

Dictionaries offer a number of definitions for "knowledge" such as the Houghton (1982) where knowledge is defined as, " that which is known; the sum or range of what has been perceived, discovered or inferred." Davenport and Prusak's definition as highly comprehensive and all embracing" Davenport and Prusak (Davenport and Prusak 2000) state that:

"Knowledge is a fluid mix of framed experience, values, contextual information and expert insight that provides a framework for evaluation and incorporate new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines"

Knowledge Management

The operationalization a KM shows no sign of slowing as can been seen in the recent definition offered by Liebowitz and Megbolugbe (Liebowitz and Megbolugbe 2003) who state, "knowledge management is the process of creating value from a organization's assets. Simply put, knowledge management deals with how best to leverage knowledge internally and externally." Regardless of the many definitions that abound and for the purpose of this research, we will rely on a definition of knowledge management as that stated in the (Kerrisk 2003),

" Knowledge Management then, is the development of processes to link knowledge requirements to business strategies, as well as to plan for, generate, represent and provide access to individual and organizational knowledge."

3.13.1 What does the concept of knowledge management mean to you?
3.13.2 How did you share information within the project?
3.13.3 How did you share information across projects?
  ❑ (Prompt) current and/or future

3.14   Change Management (Conner and Harrington 2000)

CM is defined by Connor's (2000) states, "change management refers to the application of behavioral science to decision-making, planning, execution and evaluation phases of he change process, all focussed on the management of unnecessary disruption."

3.14.1 What does the concept of change management mean to you?

3.14.2 Did this project represent a change to your organization or its business practices?
- ❑ *(Prompt) Describe the change.*
- ❑ (Prompt) What was the relative size of the change?

3.14.3 What steps were used to help others cope with the change?
- ❑ *(Prompt) Steps to reduce resistance?*
- ❑ *(Prompt) Steps to increase the organization threshold or capacity for future change?*

3.15   Procurement (Walker and Hampson 2003)

Procurement has many stages and many forms but typically refers to the overall process of acquiring a product or service. Depending on the circumstances, it may include some or all of the following: identifying a need, specifying the requirements to fulfill the need, identifying potential suppliers, soliciting bids and proposals, evaluating bids and proposals, awarding contracts or purchase orders, tracking progress and ensuring compliance, taking delivery, inspecting and inventorying the deliverable, and paying the supplier. The term "procurement" is most often used within governmental organizations. The government and corporations may also refer to the more specific terms of "purchasing" or "acquisition."

3.15.1 Was procurement used within this project?

3.15.2 If yes, for what?
- ❑ (Prompt) What form of solicitation was used?
- ❑ (Prompt) What type of contract was used?

3.16   Project Vision (Christenson and Walker 2004)

What is vision? The dictionary definition of vision is "*the ability to think about or plan the future with imagination or wisdom*" (Oxford 2001, p2066). Kotter describes vision in terms of something that helps clarify the direction in which to proceed (Kotter 1995)—this makes sense as the word has implication of the sense of sight. However, Kotter like many other writers on this subject imbue vision with a transformational quality that enables not only pure transformation of X into Y but doing so with committed purpose and enthusiasm. As Bennis and Nanus explain, "…vision articulates a view of a realistic, credible, attractive future for the organisation, a condition that is better in some important ways than what now exists." (Bennis and Nanus 1997, p82). The concept of vision becomes one of a tool or means to engender passion and meaning to a project to meet the envisioned end manifestation.

The role of the vision artefact is well recognised as a focus for managing projects. Leading project management commentators have observed, "*The most significant success factor for project teams is that they have a common and shared idea of what difference they are trying to make as a result of the project. Such a vision can be built up by exploring questions with stakeholders and project team members, such as:*

- How will this project make a difference to the organisation?
- How would we know that this project has been highly successful?
- What in our wildest dreams would you like this project to achieve? "
(Briner, Hastings et al. 1996, p89).

3.16.1 What does the concept of Project Vision mean to you? (Gary and Ali 2001)

3.16.2 Did this project have a "project vision"?
- ❑ (Prompt) explicit or implicit

IF NO

3.16.3 Would a project vision have assisted this project?
NOTE: GO TO QUESTION 3.9

IF YES

3.16.4 What was the project's vision?
- ❑ (Prompt) describe what the project was trying to achieve!

3.16.5 How was it developed? (Lewis 1997) (Larwood, Falbe et al. 1995)
- ❑ *(Prompt) From the top down (autocratic)*
- ❑ *(Prompt) From the bottom up (participatory/collaborative)*

3.16.6 Was a written project statement developed? (Price 2001)

3.16.7 How was the project vision communicated? (Lewis 1997)
- ❑ *(Prompt) By whom, Exec, Snr. Mgmt. Mgmt/Supervisor*

3.16.8 How was it maintained?
- ❑ (Prompt) Was the vision reviewed at any time during the project?

3.16.9 Did the vision explain the purpose of the project? (Lipton 2003)

3.16.10 Did the vision identify or suggest how this purpose will be achieved? (Lipton 2003)
- ❑ *(Prompt) Did the vision suggest a strategy as to how the purpose would be achieved?*

3.16.11 Did the vision signal a change in business practice?

3.16.12 Did the vision assist with your change management efforts?

3.16.13 Was the project vision sensitive to the people impacted by the project? (Note: while it would be best to ask those impacted by the project – it is equally important to get the views of those with control within the projects to assess your awareness of the following issues)

3.16.13.1 Was the reason for the change/project understood? (Goldratt 1990)
- ❑ *(Prompt) Would those impacted have come to the same conclusion for the need for the project (not necessarily the solution).*
- ❑ *(Prompt) Was the purpose of the project transparent?*

3.16.13.2 Do you believe the people impacted by the project feel they were being treated   fairly?

- ❑ *(Prompt) While understanding the reason, did people feel the change was required - Did we get what we deserved?*

    3.16.13.3 ***Did people feel they were treated fairly by how the project was managed and implemented?***

    3.16.13.4 ***Did people feel there concerns were being addressed? (Rawls 1971)***

    3.16.13.5 ***Did people trust their superiors to do what was right?***

    - ❑ *(Prompt) Did people trust their superiors to treat people fairly?*

    3.16.14 Did the vision speak to values of the project or the host organization? (Lipton 2003)

    3.16.15 Did the vision assist with decision making during the life cycle of the project?

    3.16.16 What role did the project vision have in the success or failure of the project? (Christenson and Walker 2004)

    - ❑ *(Prompt) Did the project vision make a difference in the success or failure of the project?*

3.17 General Comments

Are there any general comments you would like to make?

CLOSING

Ask if there are any background materials that you could access that describe the project and any other documents that support any of the areas of interest raised in the interview

Once transcribed, the interview will be forwarded to them for review and confirmation of its contents.

Confirm that once the interview transcription is confirmed that the tape recording will be destroyed and that they will be notified.

Thank the participant.

Appendix H – Ethics Application

BUSINESS HUMAN RESEARCH ETHICS SUB-COMMITTEE

APPLICATION FOR APPROVAL OF PROJECT INVOLVING HUMAN SUBJECTS

Note:
1. **All Applications must be typewritten**
2. **This form is available on Disk from the Research Development Unit, RMIT Business. It is also available on The RDU Website at: www.bf.rmit.edu.au/RDU/currents/currents.html**
3. **This form should only be used for No Risk and Minimal Risk projects. At Risk projects should use the RMIT Human Ethics Application Form, also available from the Research Development Unit, RMIT Business. The At Risk Form is available on The University Website at: www.rmit.edu.au/departments/secretariat/hrec.html**

Section A: Approvals and Declarations

Project Title: Using Vision as a Critical Success Factor In Project Management

Complete this column if you are undertaking **Research for a Degree at RMIT or another university.** (Bachelor/Masters/PhD).	Complete this column if your **Research is Not for Any Degree.**
Principal Investigator	**Investigator**
Name: Dale Christenson	Name:
Student No: 3027493	Qualifications:
Qualifications: DPM candidate, Grad Dip. (Project Mgmt.), MA (abd), BA. , Diploma Criminology.	School:
School: **Research Development Unit**	Phone:
Address: **2386 Arbot Road, Nanaimo , British Columbia,**	Email:

Canada	
Phone: 1-250-716-0313	
Email: dchristenson@shaw.ca OR Dale.Christenson@gems1.gov.bc.ca	

Degree for which Research is undertaken: **Doctor of Project Management (DPM)**	
Supervisor:	**Other Investigator/s:**
Name: **Professor Derek Walker** Qualifications: PhD, MSc. Grad Dip (Mgt Systems) School: Research Development Unit	Name/s: Qualifications: School:
Phone: 03-9925-1414	Phone:

Declaration by the investigator(s):

I/We, the undersigned, accept responsibility for the conduct of the research detailed below.

Signed: _____ Date: _____
Signature of Principal Investigator

Signed: _____ Date: _____
Signature of Supervisor
(if applicable)

For completion by the investigators as an attachment

Please refer to the detailed instructions for completing these sections which are given in the Guidelines.

Section B: Project Particulars (See Appendix 3)

1. Title of Project Title of Project
   Using Vision as a Critical Success Factor for Project Management
2. Project description
   See Appendix 3
3. Proposed commencement of project and commencement of data collection
   Pilot study data collection commencing in Early 2004.
4. Proposed duration of project; proposed finish date
   Early 2005 to Mid 2005

Funding

5. Source of funding (internal and/or external) **NIL**

6. Project grant title; proposed duration of grant (where applicable) **NIL**

Section C: Details of Subjects

1.	Number, type, age range, and any special characteristics of subjects
The nature of the DPM research is to interview colleagues, clients and members of project teams associated with projects under examination. Generally they will be in small groups, of mature age (over 21 often in their 30's and 40s) and   consenting aware adults. However the research population will likely consist of 15 to 30 individual interviews and 5 to 6 focus groups with up to 15 people in each group. Therefore the total population may range from 70 to 120 individuals.

2.	Source of subjects (attach written permission where appropriate)
Each participant will be provided with a briefing of the research project. The nature of the DPM is such that it is mainly case study work using unstructured and semi-structured interviews, short surveys of Likert style measures and action learning programs where feedback is sought.

Subjects will all be given a Plain Language Invitation to participate and asked to sign the attached written consent form (Appendix 2).

3.	Means by which subjects are to be recruited
3 case studies will be used for the qualitative interview portion of the research. The project sponsor will be contacted and permission requested to contact key individuals within the 3 projects. Individual invitations to participate will be sent to each subject once permission to use the case study/project is obtained. As all subjects are present and/or former colleagues and co-workers of the researcher within the public service, all will have complete freedom to decline participation.

4.	Are any of the subjects "vulnerable" or in a dependent relationship with any of the investigators, particularly those involved in recruiting for or conducting the project?

NO

The Principal Investigator knows 90 percent of the individuals that will be interviewed. However there is no direct or indirect reporting relationships between the investigator and the subjects at this time nor is one likely in the future.

If YES, attach a statement explaining the relationship and the steps taken by the investigators to ensure that the subject's participation is purely voluntary.

## Section D:	__Project Classification and Estimation of Potential Risk to Subjects__

1.	Please identify the project classification by assessing the level of risk to subjects
No risk		**Minimal risk**			(please circle}

2.	Please explain why you believe there are minimal or no risks to the subjects.

None of the information sought will be identifiable or attributable to any individual as a person or to their organisation rather organizations will be identified as Organisation A or by way of a pseudonym, etc.

3. Please explain how the potential benefits to the subject, or contributions to the general body of knowledge, outweigh the risks.
    This research is part of the DPM program in which professional practice is to be advanced, as there is no significant risk to participants and benefits clearly outweigh risks. The contribution to the practice of project management will also be generalizable to a wider body of knowledge regarding leadership and management.

4. Please detail any other ethical issues which may be particularly associated with this project. A checklist of possible ethical issues is given here as a **guide only**

    (a) Is deception to be used?   **NO**

    (b) Does the data collection process involve access to confidential data without the prior consent of subjects?   **NO**

    (c) Will subjects be video taped?   **NO**

    (d) If interviews are to be conducted, will they be tape-recorded?   **YES**

    Tapes and transcripts will be kept secure and available to only the researcher and supervisor. Summaries will be clarified with interviewees for verification that they are consistent with their intended meaning.

    If focus groups are to be held, will they be tape-recorded?   **Generally NO**

    (e) Do you plan to use an interpreter?   **NO**

    (f) Does the research involve any tasks, investigations or processes which may be experienced by subjects as stressful or unpleasant during or after the data collection?   **NO**

    (g) Are the subjects in any sort of dependent relationship to the investigator/s?   **NO**

    (h) If you are collecting data using questionnaires or surveys will you be using a code identifier to track respondents or non – respondents for follow up?
    NO

    (i) Are you using an organisation external to RMIT to assist in the data collection?
    YES

A number of research assistants may be used for data collection and if so will conduct themselves within a strict interview protocol.

(j)   Are subjects asked to disclose information which may leave them feeling vulnerable or embarrassed?   **NO**

(k)   Are there, in your opinion, any other ethical issues involved in the research?
NO

Where you have ticked 'YES' to any of the above questions, please give details and state what action you intend to take to ensure that no difficulties arise for your subjects:

Section E: Informed Consent

1.   Attach to your application-

(a)   if you sending a postal survey, a copy of the letter to subjects giving information in plain language about the research (see Appendix 1). This should normally be on RMIT letterhead.

(b)   if you are undertaking personal interviews or are personally administering a questionnaire to a group of subjects, a copy of the plain language statement (see Appendix 2) and the appropriate prescribed consent form (see Appendix 3). If you are not obtaining consent in writing, please explain why.

2.   Dissemination of results

Will participants be informed that results from the study may appear in publications?
YES

If yes, this information should be included in the plain language statement.

Section F: Confidentiality of Records

1.   Describe the procedures you will adopt to ensure confidentiality.
All records will be kept under secure conditions (lock and key) in the researcher's home office. Identification of organisations and individuals will be masked by codes (numbers or letters).

2.   Who will be responsible for security of confidential data?
The DPM candidate/Principal Investigator

3.   How long will data be held?
       5 years statutory time limit.

4.   Who will have access to the data, and for what purpose?
       The DPM candidate and the DPM supervisor only!

PRIVACY

5.   Does this project involve the use of personal information obtained from a Commonwealth department or agency?

       NO

       If YES, you may need to comply with the requirements of the Privacy Act 1988.

Section G: Other Issues

PAYMENT TO SUBJECTS

1.   Do you propose to pay subjects? If so, how much and for what purpose.

       NO

PLACE FOR CONDUCT OF PROJECT

2.   Where will the project be conducted?
.
       Principally in Victoria, British Columbia, Canada

OTHER DECISIONS REGARDING THIS PROJECT

3.   Is this project being submitted to another Human Research Ethics Committee, or has it been previously submitted to a Human Research Ethics Committee?

       NO

       If YES please supply details.

For any further detail about completion of this form, or for additional supporting material, please contact the Secretary of the Faculty Human Research Ethics Sub Committee
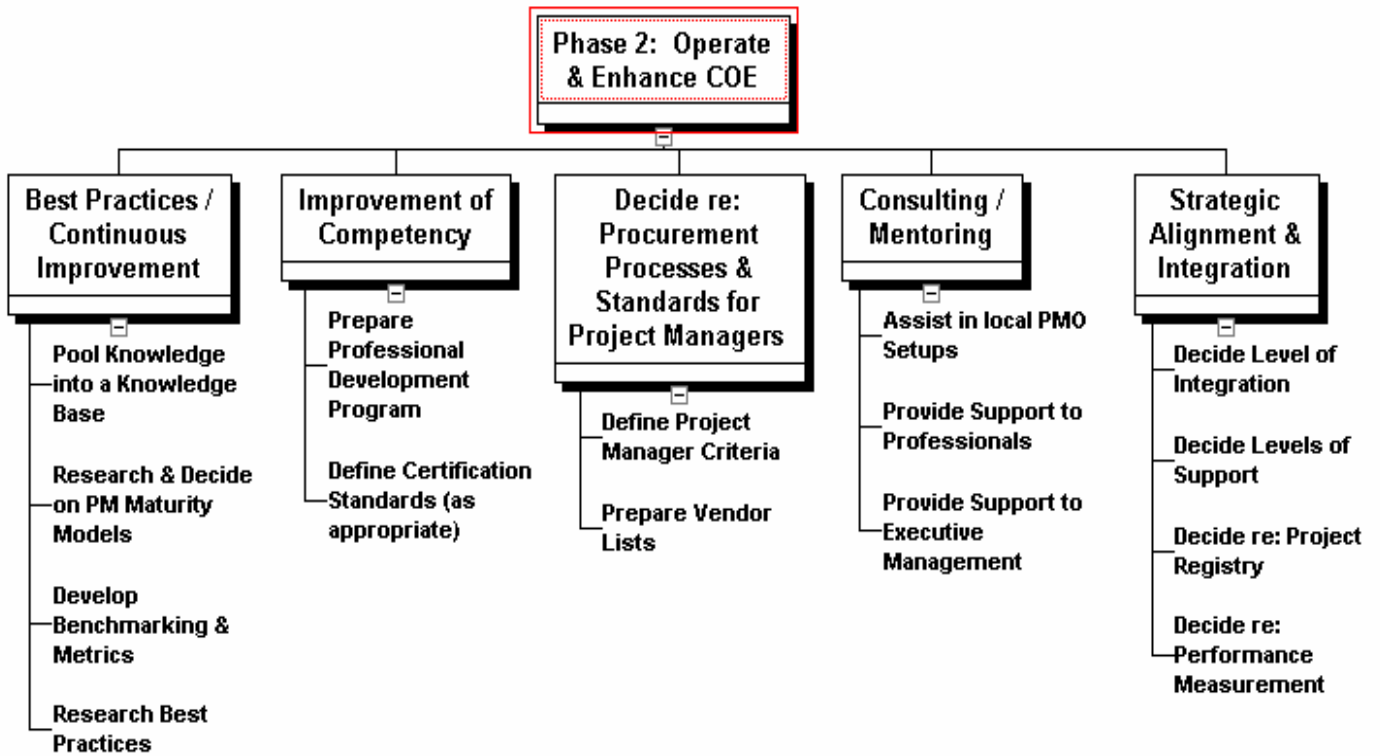(9925 5594)

Appendix I - COE Work Breakdown Structure

Phase 1: Plan & Build COE

COE Framework

Sponsorship
- Identify Potential Sponsors, Champions & Partners
- Determine Benefits / Value / Business Case
- Prepare Briefing Note & Presentation
- Prepare COE Charter

Funding
- Establish Operational Budget
- Establish Funding Mechanisms
- Identify Resources (People, H/W, S/W)

Environment
- Determine Level of Virtual vs Physical COE
- Establish/Confirm Ownership & Authority Levels
- Assign Resources
- Determine Change Control Procedures

Communications
- Develop Marketing / Communication Strategy
- Design & Develop COE Website
- Announce Launch of COE

Build COE

Common Methodology (CG-PMM Implementation sub-project)
- Populate Website
- Communicate Website Availability
- Establish Help Desk (short-term)

Education
- Develop & Provide Initial Training in use of Methodology
- Determine Requirements for Project Management Education
- Determine Requirements for PM Tool Training

Common Tools
- Determine Requirements
- Determine Methods for Research
- Conduct Research (? this phase or next phase?)
- Determine Methods for Procurement (? this phase or next phase?)

Best Practices
- Determine Requirements
- Determine Methods for Research

Develop PM Organization Framework
- Define Terminology of Project Office (PMO, PSO, PCO, etc.)
- Define PM Role Types and Responsibilities (mgmt, admin, etc.)
- Develop Models (Where PMO located in org.)

Communications
- Follow Communication Plan
- Enhance COE Website
- Plan PM Forums

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Phase 2: Operate & Enhance COE

Appendix J – Web Search of top 40 COE Hits

Centre of Excellence Google Search

Possible Website Classification Categories

      A. Academic Institution
      B. Health
      C. Women's Health
      D. Children's Health
      E. Youth
      F. Technology and Science
      G. Government Agency
      H. Environment
      I. Immigration
      J. Other

Please note that there may be more than one classification code assigned to each website.

Top 40 Search Results on March 21, 2007

1. Networks of Centres of Excellence / Réseaux de centres d'excellence
   Website: www.nce.gc.ca/
   Classification Code: G

2. The Provincial Centre of Excellence for Child and Youth Mental Health at CHEO
   Website: http://www.onthepoint.ca/index_e.htm
   Classification Code: B, D, E

3. B.C. Centre for Excellence in HIV/AIDS
   Website: www.cfenet.ubc.ca/
   Classification Code: B

4. Ontario Centres of Excellence
   Website: www.oce-ontario.org/
   Classification Code: F

5. CEECD - Centre of Excellence for Early Childhood Development
   Website: http://www.excellence-earlychildhood.ca/
   Classification Code: B, D, G

6. Centre for Excellence for Youth Engagement
   Website: http://www.tgmag.ca/centres/
   Classification Code: B, D, E, G

B.C. Ministry of Health

7. Regional Centres of Excellence: Improvement through Efficiency
   Website: http://www.rcoe.gov.uk/rce/core/page.do?pageId=1
   Classification Code: J

8. BC Centre of Excellence for Women's Health – Still Making Waves
   Website: http://www.bccewh.bc.ca/
   Classification Code: B, C

9. Centres of Excellence, Vision, mandate, media press releases
   Website: http://www.phac-aspc.gc.ca/dca-dea/allchildren_touslesenfants/centres_main_e.html
   Classification Code: B, G

10. Prairie Women's Health Centre of Excellence
    Website: http://www.uwinnipeg.ca/admin/vh_external/pwhce/
    Classification Code: B, C

11. Bison Centre – Home of the Bison Producer of Alberta
    Website: http://www.bisoncentre.com/
    Classification Code: J

12. Metropolis Toronto Centre of Excellence for Research on Immigration and Settlement
    Website: http://ceris.metropolis.net/
    Classification Code: I

13. Centre of Excellence for Children and Adolescents with Special Needs
    Website: http://www.coespecialneeds.ca/
    Classification Code: B, D, E, G

14. Centres of Excellence Women's Health
    Website: http://www.cewh-cesf.ca/en/index.shtml
    Classification Code: B, C

15. Edmonton Waste Management Centre of Excellence
    Website: http://www.ewmce.com/
    Classification Code: F, H

16. Centre of Excellence for Child Welfare
    Website: http://www.cecw-cepb.ca/home.shtml
    Classification Code: B, D

17. Metropolis - Site des Prairies / Prairie Site
    Website: http://pcerii.metropolis.net/
    Classification Code: A, I

18. The Centre for Excellence in Communications
    Website: http://www.comcec.com/
    Classification Code: J

19. The Provincial Centre of Excellence for Child and Youth Mental Health at CHEO
    Website: http://www.onthepoint.ca/
    Classification Code: B, D, E

20. Centre for Operations Excellence (Sauder School of Business, UBC)
    Website: http://www.coe.ubc.ca/
    Classification Code: A

21. Prairie Centre of Excellence
    Website: http://pcerii.metropolis.net/frameset_e.html
    Classification Code: B, D, E

22. Sun Center of Excellence for Visual Genomics
    Website: http://www.visualgenomics.ca/
    Classification Code: A, F

23. Centre of Excellence for Child Welfare
    Website: http://www.cecw-cepb.ca/
    Classification Code: B, D, G

24. Centre of Excellence for Women's Health
    Website: http://www.cewh-cesf.ca/
    Classification Code: B, C

25. Metropolis - The Elora Centre for Environmental Excellence
    Website: http://www.ecee.on.ca/
    Classification Code: F, H

26. The Canadian Forces Centre of Excellence for Peace Support Operations Training
    Website: http://armyapp.dnd.ca/pstc-cfsp/main.asp
    Classification Code: G

27. Maritime centre of excellence for women's health (Page no longer exists)
    Website: http://www.medicine.dal.ca/mcewh/
    Classification Code: J

28. Centre of Excellence - Nova Scotia Mi'kmaw Language
    Website: http://kinu.ns.ca/excellence/
    Classification Code: A

29. Cardiovascular Research - Heart and Stroke Richard Lewar Centre of Excellence
    Website: http://www.hsrlce.on.ca/
    Classification Code: A, F

30. Centre of Excellence for Youth Engagement (Page no longer exists)
    Website: www.tgmag.ca/centres/index_e.html
    Classification Code: J

31. AUTO21 Network of Centres of Excellence
    Website: http://www.auto21.ca/
    Classification Code: F

32. Centre of Excellence
    Website: http://www.ldcsb.on.ca/schools/cfe/
    Classification Code: A

33. Atlantic Centre of Excellence for Women's Health
    Website: http://www.acewh.dal.ca/
    Classification Code: B,C

34. School of Business - Centre for Excellence in Operations (University of Alberta)
    Website: http://www.bus.ualberta.ca/ceo/
    Classification Code: A

35. The British Columbia Centre of Excellence for Women's Health
    Website: http://www.bccewh.bc.ca/default.htm
    Classification Code: B, C

36. Centre of Excellence in Family Medicine (McMaster University)
    Website: http://www.fhs.mcmaster.ca/cefm/
    Classification Code: A, B

37. Centre of Excellence for Children and Adolescents With Special Needs
    Website: http://www.unbc.ca/centreca/
    Classification Code: B, D, E, G

38. Le Centre d'excellence pour la santé des femmes / Centre of Excellence for Women's
    Health (Consortium Université de Montréal)
    Website: http://www.cesaf.umontreal.ca/
    Classification Code: A, B, C

39. Centre of Excellence for Youth Engagement
    Website: http://www.engagementcentre.ca/
    Classification Code: B, E, G

40. Centre for Self-Employment Excellence
    Website: http://www.self-employmentexcellence.com/

Classification Code: J

Please note there are situations in which a website is listed more than once in the Google Search Result..

Website Classification Categories Count Total

Code	Classification Category	Count Total
A.	Academic Institution	9
B.	Health	18
C.	Women's Health	7
D.	Children's Health	9
E.	Youth	7
F.	Technology and Science	6
G.	Government Agency	9
H.	Environment	2
I.	Immigration	2
J.	Other	6

Please note that there may be more than one classification code assigned to each website.

Classification Category Count Total

Count (y-axis): 0 to 20

Bars:
- Academic Institution: 9
- Health: 18
- Women's Health: 7
- Children's Health: 9
- Youth: 7
- Technology and Science: 6
- Government Agency: 9
- Environment: 2
- Immigration: 2
- Other: 6

Classification Category
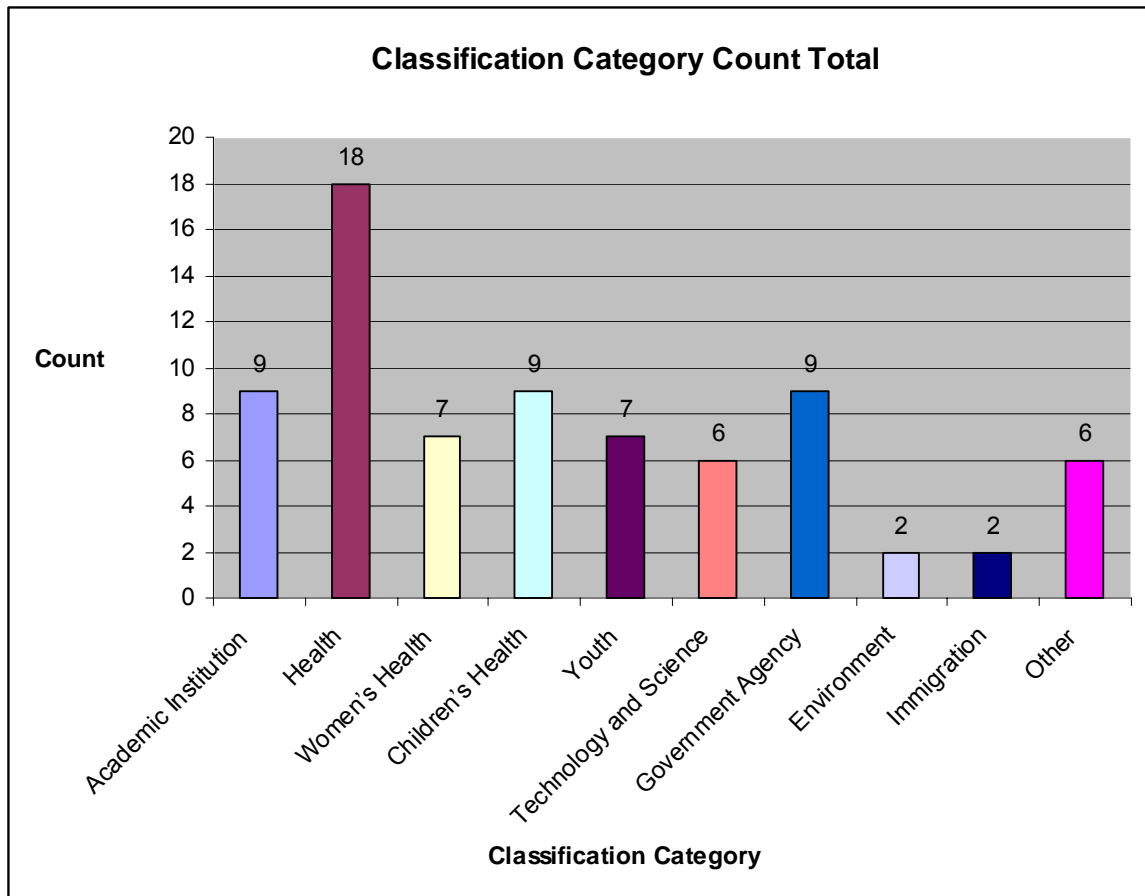
Appendix K – Project Vision: A Critical Success Factor Workshop
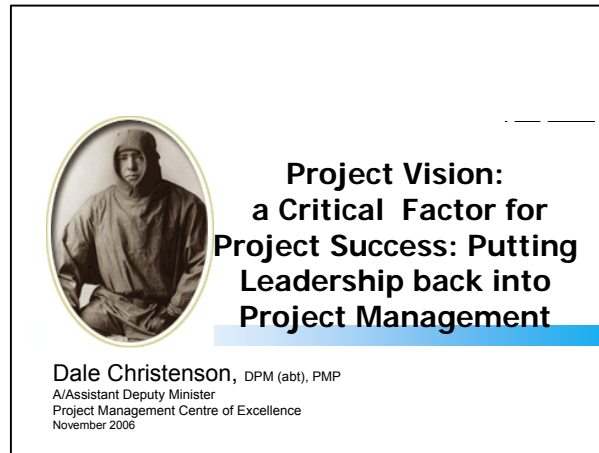
In constant thought and reflection about the direction of this presentation I thought of Alice and Wonderland because the presentation that I have crafted for you has been changing. As I learn more and more about project management, I am convinced of the importance of creating and communicating a strong project vision. If we are going to be talking about leadership and people or what some call the softer skills it is important that we perhaps take a different approach.   Leadership is about challenging the status quo and I think that looking at things different ways even through the looking glass of Alice's Wonderland is not such a bad idea. The value proposition, grossly simplified for a project vision can be found in Lewis Carol's classic

   Read from page 81 Any road will do

BRIDGE: The creation of this presentation has been a long road in the making and a journey. Having now traveled along this journey and reached out destination I would like to share with you a few of the points of interest that caught my attention along the way.

Introduction

- What is Project Management
- The Value Proposition
- Critical Success Factors
- What is a Project Vision
- Why have a Project Vision
- How do you develop a Project Vision

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Based on the current literature and the finding from a DPM research study I want to discuss with you the following topics:

What is Project Management?
The Value Proposition
Critical Success Factors
What is a Project Vision?
Why have a Project Vision
How do you develop a Project Vision

Before getting started I wanted to comment on the sub-title of this presentation to set the context.

"Putting the leadership back into project management." This is not a pessimistic as it sounds but based on the literature that is available there has been over 25,000 books written over the last 20 years on leadership and there appears to be not slowing. The same expansion has been seen in our academic programming where universities are now offering degrees in leadership at alarming rates. Also there have now been hundreds of books, maybe thousands of books written on project management and there too we see no slowing in books, articles as and educational programming. Oddly there was a marriage of the two, project management and leadership in the late 1990's with notable books dedicated to the topic such as Pinto and Trailer (Leadership Skills for Project Managers 1998) and Pinto et al (Project Leadership from Theory to Practice 1998) and Brie r Hastings and Geddes (Project Leadership 2nd edition 1997). There have been articles throughout the years but the real focus ahs been, in my opinion taken away from the core value of what makes projects successful. Project management in its most basic form as represented in PMBOK is a methodology or framework to which we often add tools and templates. We focus on scheduling and planning and status reporting and more recently there has been a shift toward developing high performing teams to create better outcomes.

Bridge: While covering the topics you see on this slide I hope to meet a number of learning objectives:

Learning Outcomes

- Create awareness for the need for project leadership as well as project management
- Create awareness for the need to develop an effective project vision
- Create awareness for the need to communicate and maintain the project vision
- Create a skill to apply tools to measure the vision statement potential and impact

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Review Learning Objectives

Bridge: Before attempting to create awareness of this topic lets first check out the current level of awareness for this topic and project management in general

PARTICIPANT INTRODUCTION

- Name
- Position and organization
- One thing you would like to take away from this course
- What does the concept of "Vision" mean to you?

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Note: Capture course objectives now for review at the end of the day.

Note to Instructor: As the attendees relate their project stories it is important to acknowledge them and add to the discussion by commenting on the example, drawing from your personal experience, and emphasizing that the course will "touch on" various factors such as stakeholder relations, change management, knowledge management, communication strategies, etc.

Bridge: So let us start with brief discussion about project management itself.

Project Management

- What it is
- What it is not
- The framework (4 phases, 5 processes and 9 areas of knowledge) PMBOK
- Complimentary disciplines

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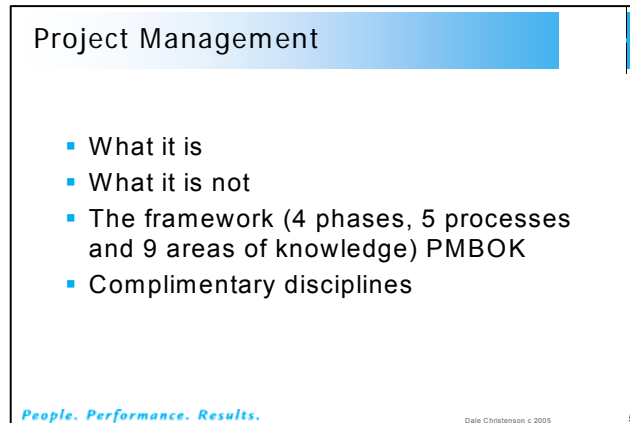
(CHAPTER 1)

Instructor led discussion: Ask the question before flashing the slide.

Prompt discussion about what makes a project unique from ongoing operations. Your project could be two weeks or two years, with no formal budget or a $20 million dollar budget. Project management processes can still be successfully employed

•Temporary means that the project has an end date. Unique means that the project's end result
    Is different than the results of other functions of the organization.

It may seem like a stupid question, as everybody thinks they can recognize a project when they see one. When we talk specifics however, there is a broad interpretation of the word, leaving many fringe areas in the definition. The most generic definition can be derived from Project Management Institute's *Body of Knowledge as:*

A project is a series of tasks, arranged in a defined sequence or relationship that produces a pre-defined output or effect. A project always has a start, middle, and an end.

Projects are about change – in fact projects are inextricably linked to change as they create a **unique** purpose, service or result.

Project Management is not therapy for control freaks. It is not another layer of bereaucracy. It does not guarantee success on its own but provides a framework from which you can realize your project vision

Project management involves the balancing of competing demands among:

- Time, cost and deliverables (sometimes called the triple constraint)
- Stakeholders with differing needs, expectations and priorities (will discuss stakeholders later in the day)
- Resource requirements and availability

4 Phases (Initiation, planning, Implementation and close-out)
5 Processes (Initiating, planning, executing, closing a monitoring and controlling
9 Knowledge areas (Integration, scope, time, cost, quality, human resource, communication

Benefits of PM
Goals are clearly defined at the beginning
  - Clear requirements
  - Clear scope definition
Increase productivity
Reduce risk to project and organization
Repeatable project successes

Project management alone is often a silent trumpet without the accompaniment of complimentary disciplines of change and knowledge management

But all rely on the good management and leadership skills of competent project stewards

BRIDGE: Let me explain

Complimentary Disciplines

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Each of these areas has a body of knowledge and could be viewed as separate disciplines.

Each has a direct relationship to project management.
• change management and project management are inextricably linked
• stakeholder relations are required to meet or exceed stakeholder expectations therefore the number one KM method is communication

All projects need to consider these areas of concern not just to manage change or to manage knowledge but to support the primary mandate of project management in achieving repeatable project successes. Each area also requires leadership and management to maximize its full potential. Together, each discipline in concert with project management bolsters the likelihood of success by bringing a multi-method approach to project outcomes that are supported by keeping one's eye on the critical success factors influencing the desired outcome. This is reflected in the model presented on this slide.

Bridge: together these disciplines will assist us achieve project success. So what is project success?

Project success has no standardized definition or measure (Kezsbom and Edward 2001, p.11). A project may be seen as both a success and a failure dependant upon whose assessment you gain. Generally, the triple constraints or scope triangle have been used to measure a project's success on the traditional elements of "on time, on budget and to the desired performance" (PMI 1996). The Project Management Institute's (PMI 1996, p.8) 'Body of Knowledge' defines project management as, "the application of knowledge, skills, tools and techniques to project activities in order **to meet or exceed stakeholder expectations** from a project".

Also, as Baccarini (1997) distinguishes, there is a distinct difference between project success and product success. As Shenar, Levy and Dvir (1961) point out, it is plausible to have a successful project and produce a product but still have unsatisfied stakeholders. For example, the product may have been produced to specification but not meet the sales expectations of the stakeholders and therefore the stakeholders' expectations were not ultimately met. Conversely, a product may be a success but it may not meet the desired needs of the stakeholders or there may have been cost and time over-runs.

Bridge: Let us begin by taking a look at the IMPORTANCE of centre of the model or diagram: Leadership and Management

So what are some common definitions of Leadership and Management?

There are almost as many definitions of leadership as there are persons who have attempted to define the concept

- Leadership over human beings is exercised when a person with certain motives and purposes mobilize, in competition or conflict with others, institutional, political, psychological and other resources so as to arouse, engage and satisfy the motives of followers" Burns (1978)

- Leadership is a complex process by which a person influences others to accomplish a mission, task, or objective and directs the organization in a way that makes it more cohesive and coherent" Clark (2002)

Yukl surveys the literature and creates the following definition: Leadership is the process of influencing others to understand and agree about what needs to be done ad how it can be done effectively, and the process of facilitating individual and collective efforts to accomplish the shared objectives.

A key requirement of leadership is followership. Leadership is a reciprocal process between those who aspire to lead and those who choose to follow. But you can't follow someone who isn't credible, who doesn't truly believe in what they are doing and how they are doing it.

As Kotter points out, "leadership is not mystical or magical. It has nothing to do with having charisma or other exotic personality traits. Kouzes and Posner agree and argue that leadership is an identifiable set of skills and practices that are available to all of us, not just a few charismatic men and women.

BRIDGE: So, this gives us a superficial look at but a sense of what some feel leadership is! So what is management?

Characteristics of success

The three most significant characteristics of successful leaders and their organizations include:

- ❑ Vision
- ❑ Willingness to learn
- ❑ Commitment to continuous Improvement

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Review slide

The three most significant characteristics of successful leaders and their organizations include:

Vision – knowing where you are going

Willingness to learn – and to create a learning organization to ensure that we are doing the right things the right way (best and next practices)

Commitment to continuous Improvement – always changing an always improving to keep a competitive advantage

Bridge: So what about Management ?

There are many definitions and management topics include:

- Supervising, planning, organizing, decision making, monitoring, controlling, representing (the interests of someone/group), and administration

Management is the process undertaken by one or more individuals to coordinate the activities of others to achieve results not possible by one individual acting alone. However perhaps the simplest definition is the most illustrative and distinguishing as that found in Webster's Dictionary (1988, p. 466), "the act, manner or practice of managing (to direct or control the use of) handling, or controlling something".

This something is the mission of the organization.

The mission is how we get to our vision and we do that by managing our resources. This includes planning, budgeting, prioritizing, monitoring, reporting, etc.

Kotter suggests that Management is about coping with complexity….practices and procedures are largely in response to this complexity and without good management complex enterprises tend to become chaotic in ways that threaten their existence.

BRIDGE: So are we any closer to distinguishing if Leadership is different than Management

COVER COMPUTER LENS

Leaders   **Managers**
Inductive   Deductive
Initiative   Direction
Risk   Rules

Taken from Bennis'
•   1989 earlier work drawn from corporation after corporation
•   2001 continues this theme with many others and identifies differences between these two domains.

First row in relation to planning. Many people think that planning is a leadership function when in fact it is a management function to create order. The leadership function is to set direction. Planning is a deductive (a conclusion reached by logical deduction) exercise whereas setting direction is an inductive (to determine by induction; *specifically*: to infer from particulars)

Second Row Leaders takes initiative or creates a change through innovations whereas Managers are likely to implement a change that has been decided upon by others again maintaining orderly change

Also the last row: Zaleznik suggests that for those who become managers a survival instinct dominates the need for avoiding risk. Whereas Kotter suggest that leadership is about change and taking risks to achieve a vision.

So are Leadership and Management different. I will leave that up to you to determine! My opinion and it is only mine not necessarily my colleagues or that of the Leadership and Learning Centre is that yes they are different in perspective! Managers work within the system (inward) and leaders work on the system (outward). But there is no doubt as Bennis states that Leaders need to Manage and Managers need to lead.

So Management at every level **yes** and Leadership at every level **yes**. The talent required is knowing which tool to use in which situation. So I am ascribing to a situational or contingent theory of leaderships and management with a strong bias the one is inward looking to create order and the other is outward focused dancing on the edge of chaos but both operating in very complex environment.

BRIDGE: So in a project management context what should we be looking at?
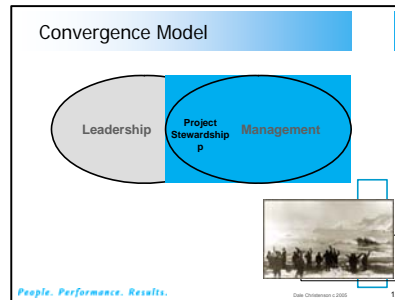
The term I use here is stewardship which was first used in the project management context by Verma and Wideman. Actually much to my dismay as I had not seen their article before using the same term and submitting it in a paper. As it turned out they used it differently - **Whew- close call**

So why Stewardship?
A person employed to manage another person's property (estate)
'ward' from 'house-hall' i.e. important assets in a property sense of many centuries ago

Therefore a steward or stewardship is about a duty of care, special nurturing and responsible care for the effective and productive use of a highly valuable asset

In this case we view the asset to be project success and leadership of all assets employed to realise the project vision

Why do these roles shift? – Project life cycle initiating, planning, executing, closing & controlling each of these demands different skills, emphasis and focus of energy.

We need to use the best tool in our tool kit for the job at hand at any given time.

At different times of our project life cycle our emphasis on Leadership and management will change. In the initiation we will see more leadership, in closing, we will see more management but in planning and implementation we will see a great need for both skill sets.

BRIDGE: The literature also instructs us that other factors come into play that impact the success of a project and these are know as Critical Success Factors.

Critical Success Factors

- Management Support
- Financial Support
- Project Management Framework
  - Methodology
  - Control systems
- Project Management Competence

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See Chart – Table 8 Chapter 2

Also another way to categorize CSFs

Approach	Year	Author(s)
Hard Criteria vs. Soft Criteria	1996	Briner et al
Factors related to the Project Manager	1996	Belassi and Tukel
Factors related to the Project		
Factors related to the Organization		
Factors related to the External Environment		
Project life Cycle	1988	Pinto and Prescott
Success as seen by the project teams vs. end users	1995	Wateridge
Macro vs., Micro	1999	Lim and Mohamed

BRIDGE: While these CSFs are critical I want to share a case study with you that illustrates that, while powerful, there are other factors that may be as important or more important to impacting project success.

JIMS Case study

- JIMS began in the early 1990's to address the business need for a central repository of information. The vision was to ***create an integrated criminal case tracking system***.

- Varied Stakeholders with different needs, Police, Crown Counsel, Courts and Corrections

- JIMS is an integrated information database that enters data only once and is re-used by various agencies as the criminal case moves from investigation through to post disposition.

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JIMS began in the early 1990's to address the business need for a central repository of information. The vision was to ***create an integrated criminal case tracking system***.   The first project attempt failed but another project resurrected itself with same vision.
Varied Stakeholders with different needs, Police, Crown Counsel, Courts and Corrections
JIMS is an integrated information database that enters data only once and is re-used by various agencies as the criminal case moves from investigation through to post disposition.

JIMS is an integrated case tracking system and central repository This Information database operates an electronic one-write that enters data only once and is re-used by various agencies as the criminal case moves from investigation through to post disposition. It is currently used by all criminal justice agencies in one provincial jurisdiction with key stakeholders identified as the police, prosecutors, courts and corrections. One can extrapolate from the case and imagine the complexity of these stakeholder requirements and the project leadership challenge managing this process would present. Therefore and given the breadth of the requirements and expectations of these diverse stakeholders, the issues of a shared common vision and stakeholder management arises as the key issue in our case study.
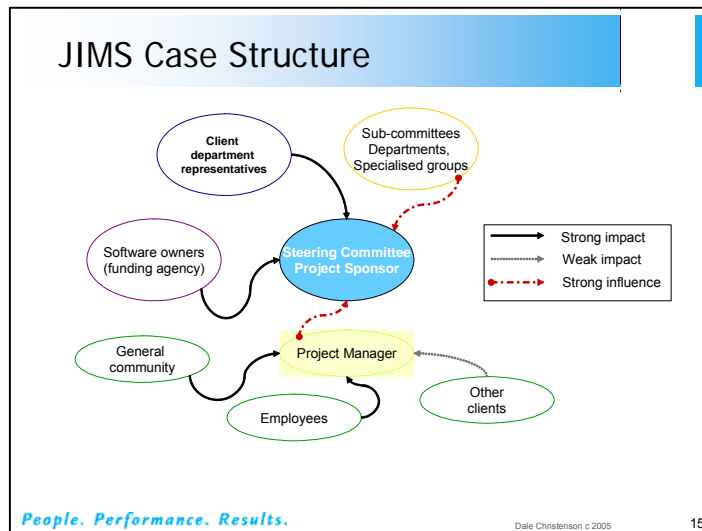
Explain slide and consideration of the complexities of the stakeholder environment
In addition to these (use Flip Chart) to identify typical project stakeholders (champion, sponsor, team, etc.)

In terms of overall project leadership, the formal project management structure was composed of a Steering Committee, various sub-committees (business change council, change request, release configuration, training, security and access) as seen in the following table 3.

The Chairperson of JIMS Steering Committee, the Senior Executive member for one of the core agencies, often acted as the executive sponsor for the entire project. A full-time Project Manager was eventually assigned from within the ranks of the Information Technology Division, a central agency providing technology support to all government branches. Key stakeholders had representation on all committees and subcommittees. Project Mangers were selected for each core agency and were representative key stakeholders. So far, there is nothing unusual in this traditional project team design.

A 'core agency' represents one of the major internal stakeholders who have stewardship over a portion of the data in the information system.

BRIDGE: While this gives us a good idea of the project structure and the purpose of the project how was it doing in relation to the Critical Success Factors we spoke of earlier

JIMS Case Study (2)

- Vision remained constant
- All recognised that it would make a significant positive impact
- Problems with incomplete criminal records provided a mutual sense of an URGENT need for change
- Project Mangers were selected for each core agency and were representative key stakeholders.
- Project Managers had no formal training to meet their new responsibility and title
- Support from core stakeholders was mixed and time-variable so the steering committee as a guiding coalition lacked commitment

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Vision remained constant, the project management structure matured from a loose group of individuals with a good idea to a formal project management structure with a widely understood vision
All recognized that it would make a significant positive impact
Problems with incomplete criminal records provided a mutual sense of an URGENT need for change
Project Mangers were selected for each core agency and were representative key stakeholders.
Project Managers had no formal training to meet their new responsibility and title
Support from core stakeholders was mixed and time-variable so the steering committee as a guiding coalition lacked commitment

Continued

JIMS – Summary

It is evident that in the case of the JIMS project, many of the success factors identified in the literature were not met or only met in part. Stakeholder support was totally withdrawn in the case of one major stakeholder (police), absent in representation of resources by another (Corrections) and ultimately withdrawn form the whole project prematurely by the funding stakeholder. A realistic schedule was in place but given the expected withdrawal of funding became maniacal. Funding was minimal for the development of the project and minimal for all but one stakeholder for implementation and support.

One would have expected that given the above challenges on critical success factors, the inexperience of the project's project managers and the relative newness of using project management methodologies within highly functional and professionally independent organizations that the project would have failed: but it did not. On most accounts and from the reports of project sponsors, funders, developers and end users, the project was a SUCCESS.

Compared to most success factors cited in the literature and especially against the four most common as identified above, the JIMS project should have failed. While project resources, support, requirements and funding all changed, one construct remained constant. Even when the original project (SCIPS) stalled, seemingly failed, JIMS arose from the proverbial ashes and ultimately succeeded. In the author's opinion, the one sustaining, tenacious and often assumed construct that survived from inception was the project vision **to create an integrated criminal justice case tracking syste**m.

An integrated criminal justice case tracking system would form a central repository of information to facilitate enhanced police investigations, more informed charge assessment, better tracking of court events and better management of offenders: in essence enhance public safety. Add to this the idea of saving time and increasing accuracy by having an electronic one-write system and you had a compelling reason to succeed. Some never forgot the background of the vision or the vision itself. Those who did not forget were the project leaders and managers. It was the leaders who created the vision and communicated the vision. It was the committed and impassioned project managers who maintained the vision and ultimately saw it become a reality.

Bridge: The project vision was powerful as it remained constant – SO WHAT IS VISION?

What is a Vision

- "something that helps clarify the direction in which to proceed"
- "…vision articulates a view of a realistic, credible, attractive future for the organisation, a condition that is better in some important ways than what now exists"

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The dictionary defines vision as "*the ability to think about or plan the future with imagination or wisdom*" (Oxford 2001, p. 2066). The etymology of "vision" is derived from the Latin word vid "to see." The act of seeing which is distinguishable from the Latin word vis "to look". Merely looking is quite different than seeing. Together with the Latin root and the dictionary definition we might suggest that one who envision is one who has the ability to visualize a future state. Lipton (2003 p. 17) describes vision as "vivid picture of specific dimensions, a desired future, that is both descriptive and challenging. Lewis (1997 p. 9) suggests a similar definition in his articulation of a shared vision as" a compelling portrait of a promised land that inspires enthusiasm and excitement in people." These definitions require that a vision be forward looking and progressive as opposed to the ability to see backwards or to be regressive.

There has been a plethora of articles, books and audios on the concept of organizational vision and as many definitions of organizational vision. Bennis and Nanus (1997, p. 82) explain, "…vision articulates a view of a realistic, credible, attractive future for the organisation; a condition that is better in some important ways than what now exists."

BRIDGE: With so many definitions do any really capture the intent?

Vision is a key component of leadership: it is that mental journey from the known to the unknown, creating the future from the montage of current facts, hopes, dreams, risks and opportunities.

- Hickman and Silva

A statement of a preferred future end state

A vision tells us what the final results will look like and assists us in knowing when a project is finished. A review of project management literature supports the criticality of this particular aspect of project management. As Lewis (2001, p.117) explains: "if everyone does not agree on the vision, each person will try to achieve the outcome he or she imagines, *(often)* with disastrous results".   Therefore, the creation of a common shared project vision is important as a guide to future decision making, to manage scope creep and to direct project activities towards benefit realization. Without this, a project is at risk of failure from the outset.

Common sense supports the wisdom in determining where we want to go but this definition is still lacking.   At first a vision statement should inspire a cause or achievement of the dream and moves one through a process where they take ownership of the dream itself. Once project team members and all concerned feel a sense of ownership, they are likely at their highest motivational level to strive for project success.

As suggested in many of the definitions, vision sets direction (Kotter 1996). It also identifies a preferred future end state (Lewis 1997 p.23). It provides a paradox of setting an organization apart from others while unifying its workforce in a common purpose. A vision assists in future decision making, prioritization and assignment of resources. Vision has long been seen as an important element of organizational planning and is arguably one of the most important deliverable an organization's executives can deliver (Lipton 2003).

When considering groups of people or teams Briner, Hastings and Geddes (Briner, Hastings et al. 1996 p.89) state that the "most significant success factor for project teams is that they have a common and shared idea of what difference they are trying to make as a result of the project."

BRIDGE: How do we make sense out of the varied purposes of the vision and its potential value proposition?

Vision – Drives ©

- **D**ecision making
- **R**eason for being
- **I**ntegrate
- **V**alues
- **E**mpowers
- **S**trategic Direction

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Decision making - A vision needs to assist in contextualizing future decisions and aid sense-making. It assists with strategic alignment, prioritization and resource assignment

Reason for being – A vision needs to identify the purpose of the organization and its uniqueness.

Integrate – A vision unifies disparate systems/functions and unifies people towards a common goal with a common purpose

Values – A vision explains the core values of the organization

Empowers - A vision motivates and inspires people to achieve the purpose of the organization. It can free people to be creative and innovative within chaotic systems.

Strategic Direction – A vision identifies the strategic direction of the organization.

BRIDGE: So having a project vision was an important leadership Lesson learnt. But how do we develop project vision?

Project Vision Development

- Linear- Strategic planning (science)

- Non Linear - Creative (art)

- Video – 'Everyday Creativity'
                              by Dewitt Jones

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See developmental process in final Chapter 7

Show Video clip - KEY POINTS
- "Creativity often is thought of as a phenomenon that is larger than life or out of the ordinary – something that belongs only to certain people. It is not and it is much more accessible - **it is an attitude**
- Creativity to see a vision is a matter of perspective. **-** if you don't have the right perspective, you have **no** chance of seeing an extraordinary outcome
- The perspective is that there is more than one right answer and more than one perspective – different perspective –different right answers BUT don't stop at one right answer, **look and imagine other right answers**

Bridge: Let's look at a blended model and adaptation of C. Patrick Lewis' work from his book entitled, "Building a Shared Vision: A Leaders' Guide to Aligning the Organization"

There are others, Lipton's Guiding Growth 2001 (4 steps)
                    Kouzes and Posner Leadership Challenge 2002 (8 steps)

Building a Shared Project Vision

A 4 step process:
- Step 1 – Host Organization audit
- Step 2 – Vision Development
- Step 3 - Communicating the Vision
- Step 4 – Continuous Improvement

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5 step process:

Step 1 – Where will the vision be?
Step 2 – Vision Development – How do we create the vision?
Step 3 - Communicating the Vision – How do we effectively
        communicate the vision until it is a shred vision?
Step 4 – Continuous Improvement – Is the visions working and can it be
        improved?

Let us now begin by examining Step 1 – The Host Organization Audit

1: Host Organization Audit

❏ Does the organization have a vision statement?
❏ Can participants write a brief statement of the organization's vision?
❏ Does the organization have a mission/purpose statement?
❏ Identify strengths, weaknesses, special skills
❏ Identify organization's unique characteristic or competence
❏ Exercise 1 – The Organizational Audit

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One needs to know and understand the organization before embarking on a project. As all projects will introduce change and if the change is too sever or affronts the organizational culture as 'culture will trump the desired change' (Mary Martin 2005). The organizational audit for culture has a number of steps that can be adapted from Lipton (2002) work in Guiding Growth:

Discuss as class exercise
- Define the business problem in the organization (the need for a project)
- Review the concept of Culture and conduct an archaeological dig
- Level one - Artefacts
- Level two - Espoused values
- Level Three - Shared but unspoken assumptions
- Identify organization's values, beliefs and norms
- Compare values with artefacts
- Asses shared assumptions based on analysis of step 7
- Recommend a course of action (if necessary or desired)

Step 1: Host Organization Audit cont'd

❑ Describe scope of the current project under consideration

❑ Will current projects be impacted or cancelled due to this project?

❑ Are there plans for new projects?

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Step 2 - Crafting a shared vision

- ❑ Linear planning – knowledge or the science of vision creation is important
    - ❑ Role of driving force/logic
    - ❑ Prioritize vision options
    - ❑ Agree on the best
- ❑ Non lineal approach – Creativity or the art of vision creation
    - ❑ Remember video – Everyday Creativity with Witt Jones
- ❑ Exercise - Prepare statement that focuses on the future and inspires enthusiasm and commitment

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Review
> Linear planning (science)
> Non-linear - Creative reflection (Art)

Vision creation is part of the initiation and as such will feed into the scope development process

Exercise:
> Linear:
> > What is the need?
> > What is the solution?
> Non-linear
> > What will your office/organization look in 6 months, one year or when you plan to finish the project?
> > How will it be different?
> > Do you have the right solution?
> > If not, what would the right solution look like?

Bridge: Let's try our hand at creating a project vision

Exercise:

Use a blended model

One person explains their intended project based on the answers to the questions discussed in the previous slide

    Linear:

        What is the need?

        What is the solution?

    Non-linear

        What will your office/organization look in 6 months, one year or when you plan to finish the project?

        How will it be different?

        Do you have the right solution?

        If not, what would the right solution look like?

Complete the vision statement template.

Use your table as your project team and stakeholders. (Try to use a current project)

Assessment – Structure and the 3Cs

3Cs
- Clarity — "of expression that makes project objectives understandable and meaningful
- Continuity — "of purpose that underscores their enduring importance
- Consistency — "of application across business units and geographical boundaries that ensures uniformity throughout the organization

Adapted from Bartlett and Ghosal

Exercise 3 – Does it meet the 3Cs?

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Exercise 3 - 3Cs

Clarity   "of expression that makes project objectives understandable and meaningful

Continuity   "of purpose that underscores their enduring importance

Consistency   "of application across business units and geographical boundaries that ensures uniformity throughout the organization

Adapted from Bartlett and Ghosal

Exercise 4 - Does the Project Vision
DRIVES© project success?

"**D**ecision making - A vision needs to assist in contextualizing future decisions and aid sense making. It assists with strategic alignment, prioritization and resource assignment

Reason for being – A vision needs to identify the purpose of the project and its uniqueness. *The purpose should include both the reason for the project and the desired end state.*

Integrate – A vision unifies disparate systems/functions and unifies people towards a common goal with a common purpose

Values – A vision explains the core values of the organization *end benefits of the project*

Empowers - A vision motivates and inspires people to achieve the purpose of the organization. It can free people to be creative and innovative within chaotic systems.

Strategic Direction – A vision identifies the strategic direction of the *project and aligns it with the strategic direction of the* organization".

Complete Vision Assessment template

Step 3 – Implementing the Project
Vision

Preparing for change

❑ What are the key issues?
❑ Who must be satisfied?
❑ How will everyone know when they get there?
❑ Will there be limitations?

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Preparing for change and the Reality check

What are the key issues?
Who must be satisfied?
How will everyone know when they get there?
Will there be limitations?

Preparing for change
What are the key issues?
Who must be satisfied?
How will everyone know when they get there?
Will there be limitations?
Become futurists
Preparing for change
What are the key issues?
Who must be satisfied?
How will everyone know when they get there?
Will there be limitations?
Become futurists

Death dying and project management

Continued

Death dying and project management

On of the greatest drivers of employee engagement is the issue of "trust". If employees trust their leaders they are apt to be more committed and therefore more apt to work above and beyond. Similarly if team members trust their team lead and project sponsor then it is more likely they with follow them to the successful completion of the project. There are many ways to build trust and just as many ways to erode it. One of the common ways of building trust as identified by many scholars is the 'walk the talk' and 'model the way'. However, my research is showing that transparency is a significant driver of trust and impacts significantly on engagement. Let's take a very brief moment to look at transparency in a project environment and see how it sets up not only enthusiasm but also unprecedented commitment.

1. Disruption - one definition of change management by Conner et al., is to eliminate unnecessary disruption…so we are trying to cause some disruption. In fact, most projects have a preferred end state suggesting they are no longer satisfied with the status quo.
2. Anxiety – two types ….. one that debilitates and one that motivates. It is this latter one we desire and is similar to what Kotter said is required in a sense of urgency

Grief Recovery – Dr. Kubler-Ross (1969)

Denial and Isolation, Anger, Bargaining, Depression and, Acceptance

Current organization audit [cont.]
Are current structures, resources, processes, policies, and information systems adequate to support this project?
Do key people *know* the direction and *agree?*
What is the current driving force?

Vision in action
Action and commitment

Action gives it life

Commitment needed if people are to buy in and understand what it means personally

Senior management must demonstrate personal commitment

Senior management apply vision to all actions and decisions

Look for opportunities to communicate vision

Step 4 – Continuous Vision Improvement

❑ Evaluation and refinement of the vision
❑ Evaluation based on performance of vision for specified time
❑ Review steps involved in crafting the vision
❑ Review new critical issues
❑ Determine need for revision
❑ Revise/refine vision statement
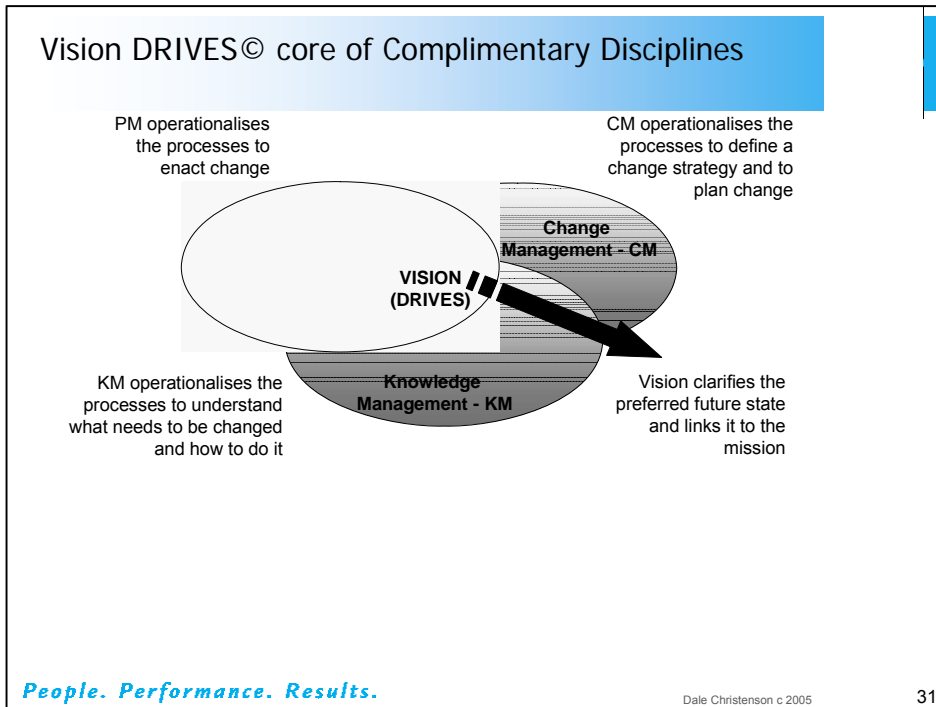
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Evaluation and refinement of the vision
Evaluation based on performance of vision for specified time
Review steps involved in crafting the vision
Review new critical issues
Determine need for revision
Revise/refine vision statement

Vision DRIVES© core of Complimentary Disciplines

PM operationalises the processes to enact change

CM operationalises the processes to define a change strategy and to plan change

Change Management - CM

VISION (DRIVES)

Knowledge Management - KM

KM operationalises the processes to understand what needs to be changed and how to do it

Vision clarifies the preferred future state and links it to the mission

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Let me show you an amazing display of transparency that in part sets a foundation for trust. This is a story of transparent, visionary leadership that employed effective knowledge, change and project management all DRIVEN by a shared vision

Play Shackelton Video clips
 Advertisement – Transparent
 Vision – Everyone returns home safe
 Actions – "Walked the talk" - Men first – trust
 Strong unwavering vision saw them thru

Follow Up – Did we address the one thing you wanted from this course?

- Review Parking Lot of what people wanted out of the workshop
- Review how the workshop fits with their experience
- Review if participants can see the value of developing and communicating an effective project vision

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Vision Isn't Just a Fancy Word

It's Critical to the Success of Your Project

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Vision isn't just a Fancy Word – It is critical to the Success of Your Project

READ FROM ALICE IN WONDERLAND PAGE 81

Questions and Feedback

- Thank you for your time

- Please complete the course evaluations before you leave

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Vision Statement Template

Exercise 2
VISION STATEMENT TEMPLATE

Step 1 - Linear:
What is the need?   What is the solution?
Step 2 - Non-linear:
What will your office or organization look like when your project is complete?   How will it be different?
Step 3 - Vision Statement (craft your vision statement)
Step 4 - Do you have the right solution (project) to achieve your preferred end state?
  IF NO, Repeat 1 thru 4 above IF YES, Congratulations you are ready to test your vision in future exercises!

Exercise 3 and 4
Project Vision Assessment Tools

Vision Statement

(write your vision statement here)

Internal Validity - 3Cs (adapted from Barlett and Ghosal, 1990)

		Yes/No
Clarity	of objectives as being understandable and clear	
Continuity	of purpose within organizational priorities	
Consistency	of application across business lines or of fit within the organization	

External Validity - DRIVES© - Vision Value Potential

Component	Weak (1)	Moderate (3)	Strong (5)	Score
D – will it assist in decision making?				
R – does it explain the reason for the project?				
I – will it unify people across the host organization?				
V – does it explain the value proposition?				
E – will it motivate and empower people?				
S - does it signify the strategic direction and alignment with the host organization?				
TOTAL				_____ /30

Less than 20 points requires revision of vision statement
Greater than 20 points suggest vision statement has a high value proposition to lead to project success

Workshop Evaluation Form
LEVEL 1 COURSE EVALUATION (FEEDBACK) FORM

Course Name:	Date:
Location:	Ministry (Optional):
Instructor:	Participant Name (Optional)

Your feedback is important. By completing this form you will help Learning Services evaluate this course. Please place a checkmark in the column that best represents your opinion on each item below. Feel free to expand on your responses in the comment section below or on the back of the page.

	Excellent ↓ 5	4	3	2	Poor ↓ 1	N/A ↓
Overall assessment of this course?						
Overall effectiveness of the instructor(s)/facilitator(s)?						
Overall assessment of the facilities?						

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	N/A
The purpose of this course was clear						
The learning objectives were met						
The course was relevant to me in my job						
The course was well designed						
The course materials were helpful						
The pre-course information (registration, location, parking etc.) was clear and helpful						

This course is part of my learning plan   Yes   No   N/A

I attended this course because

_____
_____
_____

The best part of this course was

_____
_____
_____
_____

This course could be improved by

_____
_____
_____
_____
_____

The next course I plan to take is

_____
_____
_____

Additional Comments

_____
_____
_____
_____
_____

Appendix L - About the Candidate/Author

Before embarking upon the Doctor of Project Management the candidate/author completed both undergraduate and graduate studies in the field of Criminology and Counselling Psychology and a Graduate Certificate in Project Management. Following this certificate program and while enrolled in the DPM the author has had increasingly senior project related positions and including the title of Acting Assistant Deputy Minister of a provincial government Public Service Agency (Business Transformation Division). The candidate author also is an associate faculty member at two universities where he teaches graduate level courses in project management.

While enrolled in the DPM and preparing a literature review for this thesis the candidate/author has published the following relevant refereed conference and journal papers:

1. Christenson, D. and Walker, D. H. T. (2003). "Vision as a Critical Success Factor to Project Outcomes ', Proceedings of 17th World Congress on Project Management, June 3-6, Moscow, Russia, (CD-ROM session 5, paper 30). (Christenson and Walker 2003)
2. Christensen, D. and Walker, D. H. T. (2003). "Project Stewardship: The Convergence of Project Leadership and Management," Proceedings of 17th World Congress on Project Management, June 3-6, Moscow, Russia, (CD-ROM session 5, paper 10). (Christensen 2003)
3. Christensen, D. and Walker, D. H. T. (2004). "Understanding the Role of "Vision" in Project Success." *Project Management Journal*. 35 (3): 39-52. (Christenson and Walker 2004). Note in 2006 this paper was translated into Russian and published in two parts by *Sovnet* the Russian Project Management Institute journal УПРАВЛЕНИЕ ПРОЕКТАМИ И ПРОГРАММАМИ (2006) Христенсон Дайы, Уокер Дерек, 'Значєнє видєния проєкта для єго успєха', **6**, (2) 108-121 for part 1 and (2006), **7**, (3) 208-221 for part 2
4. Walker, D. H. T. and Christensen, D. (2005). "Knowledge Wisdom and Networks: A Project Management Centre of Excellence Example." *The Learning Organization, MCB University Press*. 12 (3): 275-291. (Walker and Christensen 2005)
5. Christenson, D. and Walker, D. H. T. (2005). "The Project Management Office a Centre of Knowledge Excellence?" Proceedings of the CITC-III Conference, Construction in the 21st Century, September 15-17, Athens, (CD-ROM page 99).(Christenson and Walker 2005)

Several other refereed conference proceedings have also been offered on the topic.

1. Christenson, D. (2004). Death, Dying and Project Management. International Symposium on Spirituality and Meaning. Vancouver, Canada. July 25.
2. Christenson, D. Gelling, E and Scott, Don. (2004) Building Effective Project Offices. Project World. Vancouver, Canada. November 11.
3. Christenson, D. (2005). Putting Leadership Back into Project Management. Third Annual Strategic Project Management Conference, Conference Board of Canada, Calgary, Canada. November 20.
4. Christenson, D. (2006). Project Leadership. Project World. Vancouver, Canada. November 6.
5. Christenson, D. (2007). Project Management Centre of Excellence – From Vision to Sustainability.   Fifth Annual Strategic Project Management Conference, Conference Board of Canada, Calgary, Canada. February 7.

The development of these papers and the completion of course work added to the author's extensive experience in project management. During this experience, both academically and occupationally, the author has repeatedly learned of the importance of an organization's vision.

Appendix M – About the Doctor of Project Management Program

The Doctor of Project Management (DPM) and combines thirty-three percent coursework with sixty–seven percent research.

As Walker (2002) points out, "the DPM grew out of a perceived need for the profession of project management to move beyond generating technique based knowledge to one of researching how the practice of project management may be improved through studying and improving the way that project management techniques are currently applied". It is firmly in the camp of advancing the practice of project management at both the strategic business level and academic doctoral level. In this way it follows the aims and objectives of other professional doctorates including that described by Lee et al. al (2000) including the use of academic and business mentors. The academic mentor supports the candidate with developed course work that extends the candidates' knowledge of strategic studies that more highly leverage organizational learning. These include courses in knowledge management, project management leadership, ethics, procurement and a further course that is negotiated between the candidate and the academic mentor to support their particular research interest. The research philosophy is to have four core courses in these specific areas followed by a course of reflection to develop a research problem and question. A series of research courses then follows to examine the research problem and propose answers to the research questions. Ultimately, this research folds into a thesis as is being presented here.
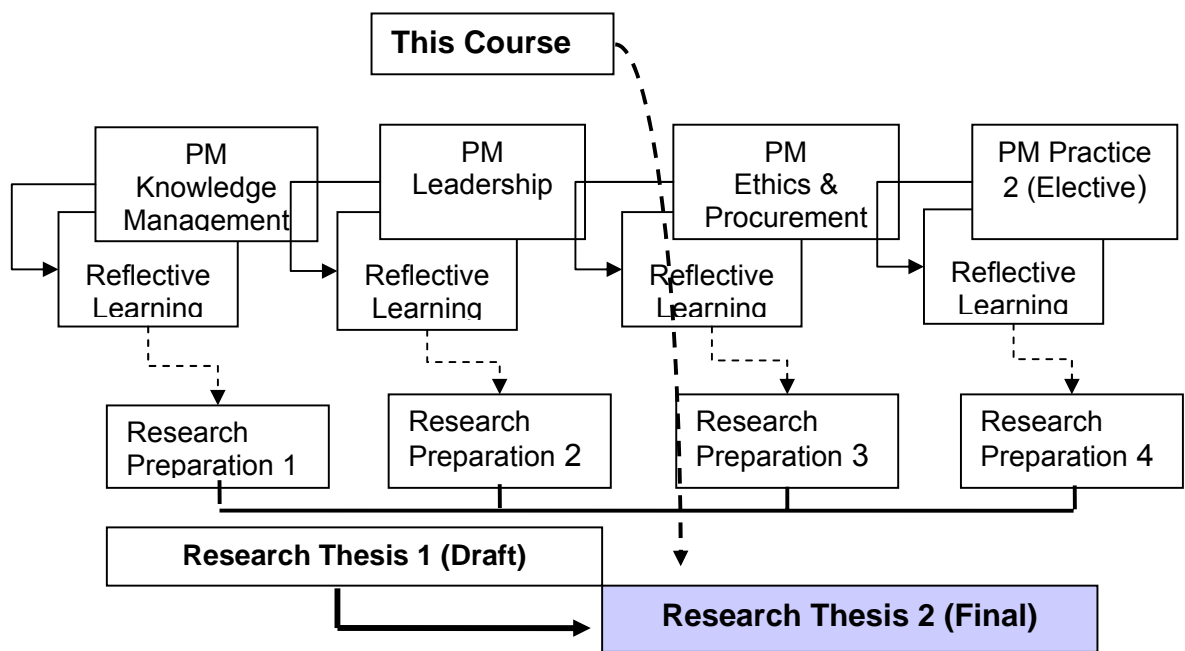
Amended from (Walker 2002; Walker 2006)

Figure 24 – The Doctor of Project Management Program

As prescribed by the Doctor of Project Management program the candidate must consider four areas of inquiry while completing course work and completing the thesis. While this can errantly be viewed as a constraint it can also be more appropriately viewed as a compass to provide direction to critical elements within project management and as such will assist the author in gaining the breadth of enquiry necessary to mine new knowledge and promote the discipline of project management.

An important **outcome** for the organizations and people supporting candidates throughout their studies will be their exposure to new theory and a challenging and rewarding exercise in participating in studying project management practice.

This also fosters a learning organization environment and will provide professional development for all concerned in a project management milieu.

Lastly, and as eluded to above, the DPM has a dual goal of contributing to both the academic literature and the project management profession by advancing the practice of project management through grounded research. The following figure describes a model of how this contribution occurs. Initially or in Quadrant 1 the candidate will be reflecting upon project management as a result of course work and current occupational activities. This can be considered an auditing function whereby the candidate begins to measure what is currently happening on projects that they are involved in juxtaposed against the literature and learning that is occurring as part of the DPM program. As such, "Quadrant 1 (Q1) indicates the start of the DPM candidate's research journey" (Walker 2006, p. 3).
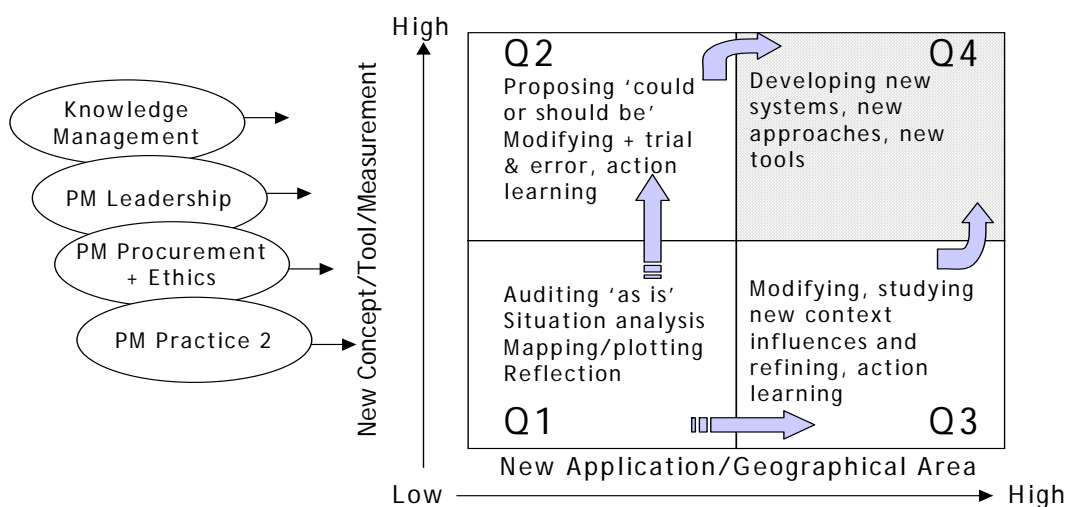
Figure 25 - DPM Course Progression

Core course work and reflective learning course papers produce the output and the outcome to move into Quadrants 2 or 3. In the case of this candidate the author moved into Quadrant 2 (Q2) to suggest or hypothesize reasons for the difference between what the literature was saying and what the author was experiencing. Next, the author moved into Quadrant 3 (Q3) to further refine and

test new ideas to reconcile the difference. Lastly, armed with refined ideas, new applications and practices were implemented in the field. Evaluations of the outcomes from these implementations were then fed back into Q2 to further reflect upon the success or challenges of the application and a cycle of continuous improvement begins….reflecting, studying, reconciling, applying and evaluating.