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THE ADOPTION OF PROJECT METHODOLOGIES TO MEET BUSINESS GOALS

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Abstract

Much contemporary research in project management has emphasised the adaptive management styles to improve project outcomes. This process-oriented approach is particularly suited to smaller projects because it enables improved interaction between stakeholders. Previous research with Tasmania Police has identified their success in developing and implementing projects. This research undertook a series of case studies of projects implemented and developed by the Tasmania Police ranging in size and origin as a vehicle to investigate and reveal the extent to which adaptive management contributed to these successes.

Using themes derived from these case studies, the projects were compared for agreement and disagreement. These results were then compared with formal and informal methodologies to identify similarities and anomalies in the way that Tasmania Police implement and develop projects.

This case study research reveals

- *the adaptive style of Project Management employed by Tasmania Police to achieve their identified organisational goals.*
- *project size is not the governing factor for Tasmania Police when selecting methodologies for project development or implementation.*

Keywords: Project management

Introduction

The traditional view of project management has been a technique-oriented one, which traditionally has been assigned to new managers as a “baptism of fire” (Pinto and Kharbanda, 1995). These assignments are made in an ad hoc manner with little or no training (Pinto and Kharbanda, 1995). Project managers are expected to display competence in; time management, cost management, scope management, risk management, human resource management, quality management, contract management and communications management and to understand the specific context of the project (Duncan, 1996, Frame, 1994). To assist in the fulfilment of these roles sets of methods (methodologies) have been developed.

Previous research conducted by Thomas, (2001) has identified that Tasmania Police are successful in how they implement and develop projects. Traditionally projects are evaluated by triple constraints of cost, time, and quality. This research steps outside these traditional constraints with a view to discover other factors that may influence the adoption of a project management methodology to meet the organisational business goals.

The study attempts to explore the influencing factors when Tasmania Police adopt a project management methodology.

Definitions

Core	Primary policing duties.
Method	A way of doing something in accordance with a definite plan (The Macquarie Dictionary Revised Edition, 1985).

Methodology	A series of related methods or techniques (Cockburn, 1999)
Non-core	Support functions for core policing duties.
Project	A temporary endeavour undertaken to produce a unique product or service (Duncan, 1996).
Sworn	A Sworn and serving member of Tasmania Police.
Un-sworn	A civilian employee of Tasmania Police.

Literature Review

Project development methodologies have been developed from methodologies employed in the construction industry (Evarieto and van Fenema, 1999) and by the American Department of Defence (Frame, 1994). These methodologies were designed for large critical projects. The Department of defence manages complexity through an elaborate set of procedures and methods. The criticality of these projects requires high-level documentation (Frame, 1994). Detailed guidance in the method of application resides in project management documentation (Frame, 1994).

Through detail provided in these documents, the success of projects undertaken by the Department of Defence is closely tied to the discipline employed (Frame, 1994). A 1990 study into Department of defence projects, (in Frame, 1994), found 70% of tasks involved in these projects were administrative rather than productive activities. This has led to the situation where a \$10 hammer can cost \$400 when the formal channels are followed (Frame, 1994), and DeMarco and Lister, (1987) highlight the possibility of “malicious compliance”, where the use of documentation might be used to delay or disadvantage a project.

Other potential problems with this prescriptive style of project management that have been identified are:

- the “punish or reward” concept based on the achievement of identified outputs of project managers has led to project managers “cutting corners on quality to satisfy cost accountants” (Pinto and Kharbanda, 1995).
- the concept of “bloating” a project by the project team members to pursue individual endeavours on another (unauthorised) project until the unauthorised project can be justified. This practice has been termed “skunkworks” (Tampoe and McDonough III, 1992).

Current literature stresses teamwork and stakeholder management as primary functions of the project manager (Armour, 2001, Ewusi-Mensah, 1997, Frame, 1994, Pinto and Kharbanda, 1995, Schwabe, 2002, Thomsett, 1989). These echo the earlier work of DeMarco and Lister, (1987), where methodologies are described as being either “big M or small m”.

Big ‘M’ methodologies are described in the work by DeMarco and Lister, (1987; p 116) as an attempt to centralise thinking to “force work into the fixed mould and guarantee:

- *a morass of paperwork,*
- *paucity of methods,*
- *absence of responsibility and*
- *the general loss of motivation.”*

Small ‘m’ methodologies focus on getting the job done and have two parts “a tailored plan, and the people to get the job done” (DeMarco and Lister, 1987; p 116).

Cockburn, (1999) proposes a methodology per project. Through a grid, with axes being the criticality of a project and the number of people in the project team, the degree of criticality of the project to the organisation is mapped and the appropriate methodology described. This concept is supported by proposals made by Evarieto and van Fenema, (1999). In this proposal, a different set of problems and potential project management techniques may apply, depending on the project in the management team context.

Project management style per project objective (Tampoe and McDonough III, 1992), introduces the concept of a methodology bound to the strategic goals and structure of an organisation. Shenhar and Widemam (2000) in the exploration of project success describe a variant of Tampoe and McDonough III's (1992) proposal by matching project management style to the project type.

Tasmania Police

Tasmania, a State of Australia, has a Police force of approximately 1100 sworn officers and a population of 500,000 living in small towns and rural properties scattered over two thirds of an island roughly the size of Wales. The remaining third is a world heritage area. The crime rate in Tasmania has traditionally been low, but has risen in the past decade. At the same time, the cost of policing has risen leading to greater emphasis on improving efficiencies and cutting costs.

The state is divided into four policing districts: Northern, Western, Eastern, and Southern. Tasmania Police requires the sworn officers to accept transfers and move between districts. To enhance promotional opportunities, an officer should work in more than one district. Each district has a distinctive culture. However, to maximise the use of its sworn human resources, the organisation, makes frequent use of temporary secondments.

In the mid 1990's, the State government guaranteed to keep police numbers stable but would not increase the budget to expand policing activities. To resolve this deadlock Tasmania Police undertook a re-engineering exercise with a view to making efficiency gains. These gains were calculated on the basis of full-time equivalents (FTE's), meaning that the gains would result in police being freed up to do policing rather than administration.

Rather than undertake a full-scale Business Process Re-engineering (BPR) exercise, consultants (together with members of the organisation) prepared a four phased plan to strategically realign the organisation. The plan was given the name of BATON (Business Alignment of Technology to Operations Networks). Project BATON was a Tasmania Police initiative to make Tasmania the safest State in the nation, and to gain recognition as a first-class police organisation.

Research by Thomas, (2001) found that Tasmania Police are successful in the way they develop and implement projects. In this study, we seek to identify the factors contributing to the successful development and implementation of projects by Tasmania Police.

Projects Reviewed

Project Selection

In consultation with Tasmania Police and my Supervisor five projects were selected as representative projects based on their size, origin, and desired project outcomes.

The five projects selected for the purpose of this research were:

- The Call Centre project, one of the final stages of a state-wide business process reengineering exercise undertaken by Tasmania Police.
- IR/ACID (Information Report/Australian Criminal Information Database) project, a data collection and information sharing tool to interface with the national criminal information database.
- The EPIRB (Electronic Personal Indicator Rescue Beacon) project, a response to a situational crisis and political demands for action.
- Firearms Re-Licensing project, the development of an appropriate system to service a regular, but intermittent, increase in firearms licence renewals.
- Red Light Cameras project, a project sponsored by another Department that could negatively impact on Police resources.

Of these projects:

- The Call Centre project was developed in response to staffing restriction imposed by the state government and was to reduce the time spent by police on non-policing matters, thereby improving efficiency of available resources. Senior police proposed this project; external consultants, with strict reporting and documentation procedures to adhere to, conducted its governance.
- The IR/ACID project, proposed by an officer of Tasmania Police, had its origins in the need for improved internal information recording and sharing procedures between the four Policing districts (Thomas, 2001) within the state and with the national recording body. The motivation for this project relied on the individual drive of a single officer with tacit approval for its investigation and development granted by senior management of Tasmania Police until a suitable and affordable solution was identified.

- The EPIRB's project was implemented in response to public concern when a bushwalker disappeared in the Tasmanian wilderness. This disappearance raised the interest of interstate media and politicians. Local politicians, in response, requested Tasmania Police to develop and implement a project to deploy these devices, already in use elsewhere, to assist in preventing this type of situation recurring. The perceived public need for these devices aided by sponsorship from local politicians led to rapid implementation of this project and deployment of these devices by police.
- Firearms re-licensing, a cyclic phenomena brought about through the massacre at Port Arthur (Tasmania), involves a dramatic increase in the demands placed on police resources for a short period. The need for an improved system to deal with this event, although privately accepted as necessary by senior police, was not externally acknowledged. When a digitised licensing proposal was put forward by another Government Department, and the inclusion of firearms licensing provisions proposed, the support provided by police was contingent upon service delivery and security concerns.
- Another Department within the state Government sponsored the Red Light Cameras project. This project, identified as "small", had the potential to negatively impact on the already stretched Police resources. Police extensively researched this project, with respect to its impact on police resources, and produced full, formal, project documentation.

Data Collection

Tasmania Police have kept excellent documentation on the development of these projects (Thomas, 2001). This gave the researcher access to thorough documentation and range of projects to review, the origins and maturity of which, cover a broad spectrum. By seeking to discover the reason for the success of the projects rather than starting with a hypothesis, this research sought to identify actual methodologies used and the motivation for variance (if present) when compared with published methodologies. The primary research techniques employed were research of the documentation and preparation of multiple case studies.

Through observation and unstructured interview any social or organisational factors that may have impacted on methodology(s) used by Tasmania Police have been identified by way of understanding the social context and 'norms and values' of the organisation implementing and developing these projects. To achieve this the researcher undertook the role of non-participant observer by establishing a regular presence in the office and commitment of time to this project. Once project managers and initiators of these projects were identified, a reiterative series of unstructured interviews were undertaken in order to identify the process by which these projects were spawned and nurtured to successful development or implementation. Secondary research techniques used were unstructured interview and observations.

Thematic Coding

All projects were analysed to identify thematic codes, derived from the available data. Prior to coding, the researcher had limited exposure to the literature, this was beneficial in eliminating bias from the codes identified. While there is literature available, relating to thematic coding, it normally has a strong positivist approach to the method.

The coding process involved a number of iterations to allow the data to drive the process. Raw codes were generated from the data. Once all case studies had been coded, the raw codes were examined to remove duplication or group similar codes. The process of grouping continued until the themes representing the data relating to project management and development emerged, being careful not to group to a high level thereby overlooking significant steps in the process. During the analysis, the top level themes were used to discuss the case studies. However when comparing these themes to the literature methodologies, sub themes from the data were adopted to facilitate the comparison. The whole process of thematic coding is subjective and deciding where the process stops was for the researcher to determine.

A table of agreement was constructed to graphically represent the themes relating to each of the case studies. Orthodox (commercial/described) methodologies were then researched and a similar methodology described and coded. It is at this stage that the researcher undertook a literature review because to "carefully cover 'all' literature before commencing research increases the probability of brutally destroying one's potentialities as a theorist" (Glaser *et.al.* (1967) in Walsham, 1995).

The sub data themes were then compared with the literature methodology themes. These themes from the data set and the literature have been compared and areas of agreement and disagreement identified.

Case Studies

Based on the research of project documentation and interview, rich case studies were prepared for each of the nominated projects. These rich case studies were structured using the project documentation to describe the processes involved in the development of each project. Information gleaned through interview and observation was used to develop the richness of the implementation procedure. To provide a basic framework for comparison each case was written-up in terms of background, origins, timeframe, management, project control, and outcomes.

Each case was researched independently, first by review of formal project documentation; these findings were then compared to available secondary information (newspapers, Hansard, or other sources). Results of this research were then verified in interview with participants involved in the particular project. Transcripts of interviews were prepared and in consultation with documentation, case studies were written and the next case researched.

On completion of the case studies, each was individually coded and results compared. The results of this coding were then tabulated and common or similar codes combined. These codes were grouped for discussion but the original codes were used for comparison with the prescribed methodology as appears in "A guide to the Project Body of Knowledge", (Duncan, 1996).

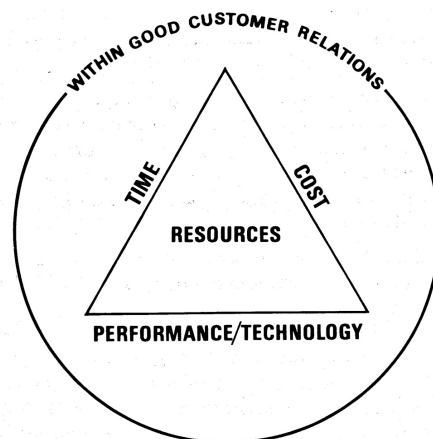
Findings

The research has revealed that most of the methods that Tasmania Police employ in the implementation and development of projects can be mapped directly to the formal project methodology as described in "A guide to the Project Body of Knowledge", (Duncan, 1996).

Traditionally criterion for assessing the success of a project is the triple constraints of time, cost, and quality (Kerzner, 2000, Schwabe, 2002). Evidence gained through this research indicates that in a number of the cases reviewed at least one of these constraints was set aside. Tasmania Police, by displacing one of the triple constraints and selection of an appropriate methodology for the development of these projects have been able to achieve their primary goal of increasing the efficiency of sworn officers in the performance of their duties or releasing sworn officers from non-core actives.

Tasmania Police have modified the traditional project methodology, a common practice today (Pinto and Kharbanda, 1995, Cockburn, 1999, Roe and Elton, 1998, Shenhar and Wideman, 2000) in the application of project management. What has emerged through this research that is of interest is the way that Tasmania Police have modified this methodology.

Diagram 1 Overview of Project Management (Kerzner, 1982)



Overview Of Project Management.

Tasmania Police operate under strict staffing restrictions imposed by State Legislation in 1995. This has resulted in police proactively seeking ways to reduce the burden of non-core policing tasks placed on sworn officers.

The Red Light Cameras project was presented to police as a fully scoped project with State Government approval granted. The project had been instigated by another government department who had used available accident statistics as the basis for decision-making in the scoping of the project. The police appointed a project manager who subsequently conducted a public presentation in one of the district. Discussion at this presentation revealed a significant flaw in the project brief. Once identified, police decided to undertake a critical analysis of the entire project. This analysis revealed that the original application of the technology was not feasible. Police re-scoped the project still using the selected technology along with analysis of site locations as stipulated in the original brief. The newly scoped project called for 3 cameras at 3 locations as opposed to 8 cameras over 23 locations. Interestingly enough the critical analysis revealed lack of portability of the technology. Rescoping of this project by police might be viewed as “malicious compliance” (DeMarco and Lister, 1987). While accident statistics were used in the original scoping the technology has the capacity to also detect speed. This was not taken into consideration. Under normal circumstances, this project may have been rejected. The project had to proceed as government funding and support had already been granted.

In most of the projects reviewed, the release from non-core tasks and maximising effective use of resources is evidenced as the primary motivation. State Government supported a proposal for a statewide digitised licensing project. This project had implications for a number of government departments which resulted in a collaborate approach to its development and implementation. Police had been investigating methods to service a significant increase in the number firearms licenses expected to fall due for renewal in the immediate future. The Digitised Licensing project offers police a mechanism to provide the service delivery component of firearms re-licensing. Validation and re-issue of these licenses requires the provision of an interface, for the service provider, with the police firearms databases. While potentially beneficial to police, until strict security and service delivery requirements are met, their commitment has been cautious. Police require verification of the reliability and security of the system before totally committing to this project.

The technology for the EPIRB project had been under investigation by police prior to instigation of this project. When political pressure, in response to public concern, required police to make a rapid and decisive response, this project was implemented. Through this projects implementation, police achieved the benefit of efficiency gains in the performance of their “core responsibilities” inline with their mission to “make Tasmania the safest State in the nation”. This project was expedited with a minimum of documentation or collaboration; it was simply a response to a situation while achieving the corporate goal of improved efficiency of police in the conduct of core tasks.

The IR/ACID project has been allowed to “evolve” from an individual’s vision by senior management. This tacit approval of a project is similar to what is described by Tampoe and McDonough III, (1992) as “skunkworks”, where a project is allowed to develop to a suitable degree of maturity before official approval is granted. The IR/ACID project in its current form achieves the organisation goals of improved efficiency in the conduct of core policing tasks and has gained official sanction.

The Call Centre project, the most formally controlled project reviewed, had a stated goal to reduce the effort of sworn police on non-core policing tasks.

Conclusions

Of the five projects investigated, the Call Centre project was the only project with stated aims of supporting sworn officers in the performance of their duties as well as the transfer of some non core policing activities to unsworn staff. Two projects, IR/ACID and EPIRB, support sworn officers in the performance of their duties. The Firearms project provides a mechanism to bypass a potential impact on sworn officers. The most interesting project in terms of outcomes is the Red Light Camera project. This project does not support the achievement of Tasmania Police’s business goals and fails to offer either efficiency gains or the transfer of duties to unsworn personal.

The findings of this research provide insight into the reasons why Tasmania Police are successful in the development and implementation of projects. Tasmania Police employ a combination of formal and informal project methodologies to maximise benefits to Tasmania Police. The criteria for success of these projects is measured not in terms of the triple constraints but in terms of increased productivity or a reduction in the demands placed on sworn officers for non core duties.

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