

GOVERNANCE OF PROGRAMMES AND PORTFOLIOS FOR STRATEGIC SUCCESS – IMPLICATIONS FROM A STUDY OF THE STATE OF VICTORIA

Completed Research

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Abstract

This paper has used a study into the role of projects within the Victorian public sector as a lens to evaluate innovations in project management. The Victorian public sector was expected to be at the forefront of practice but the study suggested billions of dollars are invested in projects with few of the expected strategic benefits being realised. Project governance, programme and portfolio management, the innovations with the most potential to increase project success rates, were found to be inadequate in their current state to be widely adopted to overcome the issue. The paper provides justification for a concerted research effort to find more appropriate programme and portfolio management approaches. A further contribution has been to frame the interrelationships between best-practice approaches to show how they contribute to different success criteria.

Keywords: public sector best-practice, project governance, programme management, portfolio management, projects and strategy, public sector projects.

Introduction – the limitations of project management and potential new directions

The theories of project management have been applied mainly to the domain of new product development (Arto, Martinsuo, Gemünden, & Murtoaro, 2009). However, since the mid-1980s, both the management and project management literatures have noted a significant new application to the domain of strategy implementation (Kwak & Anbari, 2009) (Crawford, Pollack, & England, 2006). This broadening of scope is exposing the limitations of project management and there has been an explicit differentiation between project management success (on-time on-budget) and project success (delivery of benefits) (Cooke-Davies, 2002)(Thomas & Fernández, 2008). Project success is slowly being acknowledged as more important (Baccarini, 1999) and there is an increasing recognition that project success is not strongly related to project management effort (Thomsett, 1989)(Markus, Axline, Petrie, & Tanis, 2000). However, this is a very confronting finding for the project management profession and most have ignored the implications and continued to focus on the factors they can control (Currie & Galliers, 1999). Unfortunately the result is an enormous number of largely untested and apparently ineffective methodologies (Checkland, 1981) (Strassmann, 1995).

There is an IT blind-spot (Standards Australia, 2006). IT project failure remains poorly understood despite having been an issue almost since the dawn of business computing (Caminer, 1958) and 40 years of intensive study (Lucas, 1975)(Sauer, 1993)(Sauer, 1999).

There are few studies of the more important criterion: project success, and there is no widely accepted understanding of how to increase success rates. One of the more highly regarded studies suggests that fewer than 10-20% of projects ever deliver the expected benefits (Clegg et al., 1997). At least one other credible study supports this with the suggestion that 30-40% of projects are implemented without any discernable benefits whatsoever (Willcocks & Margetts, 1994). Industry studies focus on project management success but even they show that 15-25% of projects are cancelled before implementation with the trend deteriorating since 2002 (Standish 1994-2009).

Project management researchers and practitioners continue to promote project management solutions (Morris & Pinto, 2007) but others are suggesting programme management has more potential to deliver strategic benefits (Pellegrinelli & Bowman, 1994). An IBM survey of Fortune 1000 CIOs supports this conclusion with the suggestion that more effective project management would only reduce value leakage by 15% (Watters, 2004). The IBM survey suggested 52% more value could be realised through strategy, portfolio and programme management and another 33% through asset and architecture management. Key members of the IT Governance Institute cite the IBM study to justify the approach taken in their latest guidelines: ValIT and COBIT 4.0 (Thorp). A parallel development has been the identification of project governance as an area of high potential because of the undisputed need for top management support (Raymond Young & Jordan, 2008). This last development has culminated in two new guides for boards and their delegated authorities: ISO38500 – an international Standard on the corporate governance of IT, and AS8016 – an Australia Standard on the corporate governance of projects enabled by IT. However none of these alternative approaches have had much influence to date and it is difficult to assess whether they genuinely overcome the limitations of project management, improve project success rates or deliver the desired strategic benefits.

The issue is particularly important in the context of a new advanced course in IT project management being developed at the School of Information Technology at the University of Sydney. It seemed important that an advanced course should not overly emphasise mainstream project management approaches because on balance the evidence suggests they are ineffective. The focus needed to be on approaches which had the most promise to increase project success rates. However, there is little consensus on what these approaches might be.

The research

An opportunity to evaluate the latest developments in project management arose through a consulting assignment with the Victorian Auditor-General's Office (VAGO). One of the authors was recognised by VAGO as an authority in project governance and able to bring an independent perspective to help shape their thinking on the relative priorities for audit attention. This paper reports on the findings of the consulting assignment and discusses the implications in terms of what might be the most promising approaches to increase project success rates.

The VAGO consulting assignment had two objectives. The first was to evaluate the role of projects within the Victorian public sector and the second was to evaluate the appropriateness of the Victorian investment frameworks. The assignment was significant because the Victorian government in Australia is considered to be one of the

international leaders in New Public Management and frequently compared to the UK, Canada and New Zealand¹. Their key investment frameworks, partly based on tools developed by the UK's Office of Government Commerce, were expected to be at the forefront of practice.

Context of the research sponsor

VAGO is a statutory office established by the *Audit Act 1994 (Vic)*. The Auditor-General, as an independent officer of the Victorian Parliament, exercises his mandate and powers through the resources that he controls through this office.

Broadly, the purpose of VAGO is to be the external auditor of the Victorian public sector (which has annual outlays of some A\$33 billion), and provide independent assurance directly to the Parliament. This assurance is delivered through two types of audit activity: Financial audits and Performance audits.

The financial audit work program, is the traditional work of audit and defined by the number of public sector entities in existence at any point in time (some 625 entities in 2008). In contrast, performance audits examine the effectiveness, efficiency and economy of public sector programs and entities, as well as compliance with any applicable law. The performance audit program is developed through a strategic planning process which attempts to define what audit coverage can be achieved in any given year. The strategic planning process is a knowledge intensive process which is based on the following key inputs:

- Sector environmental scanning – each performance and financial audit director has joint strategic responsibility for their 'sector' for which they need to maintain a watching brief and current issues awareness using media monitors and other general research tools
- Stakeholder views and discussions – from semi-formal discussions with agency audit committees, parliamentarians, heads of agencies and community stakeholder groups
- Public interest matters – usually driven by press or expert commentary, submissions from parliamentarians, as well as letters or tip-offs from the public.

The aggregation of these inputs is developed into a 3-5 year rolling 'sector plan' which is updated on an annual basis, and is then used to help define audit topics to be explored over a three year rolling program. The programme is published in VAGO's Annual Plan, which is tabled in Parliament and published on the office's web site (www.audit.vic.gov.au). This becomes a key communications tool for parliamentarians, stakeholders and agencies, as VAGO can then point to areas of audit interest, so that agencies can start focusing their resources to prepare for a major external audit in that area.

Methodology

The public sector is required to have high levels of transparency and information is often readily available. In researching this sector, it is important to know what is available, where to find it and how to interpret it. This study was therefore predisposed to success because it was commissioned, guided and partly resourced by VAGO who have an intimate knowledge of the workings of government.

VAGO deemed a desktop study of publicly available documents (i.e. literature review), supplemented by interviews with key stakeholders adequate to gain an overview of the research area. VAGO planning considerations required that the study be completed within one month. To manage this constraint, the chief researcher requested and was provided with a VAGO analyst to help locate and interpret the most relevant documents.

The chief researcher read and analysed the key documents independently. The analysis of investment frameworks was based on the project management literature and informed by detailed briefings provided by the project sponsor based on his familiarity with the frameworks. The analysis of financial data was performed initially through simple spreadsheet consolidation. Further spreadsheet analysis was identified as necessary after additional publicly available documents were sourced with the guidance of VAGO staff. The additional analysis was validated through

¹ <http://www.apsc.gov.au/leadership/emergingissues.pdf>

phone interviews with managers of the Victorian Department of Education and Early Childhood Development with whom the chief researcher had access to through another consulting assignment.

The sponsor of the research was presented with the initial findings. The sponsor, in his capacity as a sector director within VAGO, then arranged and led several interviews with key stakeholders within the Victorian government that had particular insight into the role of projects within the public sector. The chief researcher attended these interviews and asked questions when appropriate.

The final report was drafted with extensive consultation with VAGO performance audit managers to ensure language and content would enhance credibility and comprehension. The final report was then presented to VAGO senior managers for validation and discussion. The final report was accepted and resulted in some amendments to the portfolio of performance audits planned for 2010, and future years.

Results

The role of projects within the Victorian public sector

The crucial role of the public sector has been highlighted through government-led responses to overcome the global financial crisis. The Australian response is particularly significant because, unlike other OECD nations, it appears to have been effective in preventing the economy from entering into recession.

The Australian approach to government is relatively proactive. The State of Victoria is particularly proactive and undertakes many innovative initiatives. Their broad objective is to create an environment that increases the capacity of the State to compete in the context of the rapidly evolving basis for production (globalisation) and economic, demographic and climate-change constraints which limit the capacity to provide services. In this sense they are the same as any corporate entity but with larger scale and broader ambitions. Formal vision statements have guided effort since 1992 and 'Growing Victoria Together' (GVT) their most recent 10-year vision released in 2001 is expressed in terms of a number of outcomes; the most tangible are listed below (Victorian DPC, 2009):

- Grow the economy to increase number and quality of jobs
- Reduce crime by 5% and have Victorians feel safer, reduce the rate of growth of the prison population and reduce re-offending
- Improve health services by reducing waiting times (emergency, elective and dental services)
- Improve the level of education by: increasing literacy and numeracy, have 90% of young people complete Year 12 or equivalent, and increase adult participation in vocational education and training
- Improve roads and public transport by: reducing commuting times, increasing public transport use (in Melbourne) from 11% to 20% by 2020, increasing the proportion of freight transported by rail from 10% to 30% by 2010
- Improve the environment by: significantly improving the health of Victoria's rivers by 2010, reducing Melbourne's water usage by 15% by 2010, reducing the impact of salinity and soil degradation to improve the condition of our land

Asset investments

Asset investments are recognised in Victorian Budget papers to be "vital to future prosperity". The highest quality public information focussed on asset investments and itemised specific expenditure on roads, bridges, public transport, hospitals, buildings, computer systems, etc. Figure 1 taken directly from Budget papers shows that from 1999 to 2005 \$1b - \$2b was spent annually on asset investments. From 2006 to 2008 this climbed to \$4b pa. In 2009 this doubled to almost \$8b with the additional fiscal stimuli at State and Federal levels to overcome the global financial crisis. This is projected to reduce slowly and return to around \$4b pa by 2012.

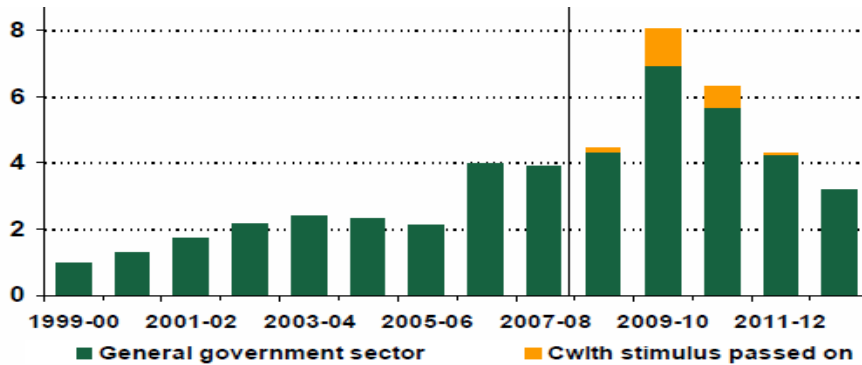


Figure 1: Annual Project Expenditure on Asset investments (\$billion)

Reported Project Investments (Asset and non-asset)

However the strategic goals sought by the Victorian government will not be achieved by asset investments alone. Asset investments in new buildings, computer systems, roads, etc., will generally only be an enabler to help realise strategic goals. New assets alone rarely reduce crime, increase literacy or reduce waiting times.

The types of projects that will have the most impact on the strategic goals are funded in Victorian public sector as ‘Output Initiatives’. These are soft-projects and relate to initiatives such as organisational and business process change, staff training and public awareness campaigns to change behaviour to use new facilities, exercise more, etc.

Information on non-asset investments was not of the same quality as information on asset investments. Interviews with key stakeholders responsible for very large project portfolios confirmed that Output Initiatives or soft-projects were outside their area of direct concern. However some information was available as appendices to Treasury budget papers listing non-asset investments (2004-05 to 2007-08 Service Delivery Budget Paper 3 and 2008-09 budget Update). These are combined with Treasury papers listing asset investments (2007-08 and 2008-09 Budget Information Paper 1) and summarised in Table 1. The findings from the analysis that might be more generally applicable are summarised below and shown in the left columns of the table (framed with solid lines).

- Of the total annual budget in 2008-09 to be spent by the Victorian Budget Sector Agencies included in the analysis (\$33.5b), at least 19% is spent on projects.
- The amount spent on Asset investments is 11% of total budget.
- The amount spent on Non-asset initiatives is at least 8% of budget.
- The relative amount individual agencies spend on projects ranges from 11% to 46% of their annual budget.
- Health, Education and Transport spend the most on projects
 - Only Transport and Environment projects are dominated by asset investments.
 - The project work in the other agencies is characterised more by soft-projects.
 - Project work within other agencies, Health and Education in particular, represents a relatively small percentage of their total expenditure. There is a risk that these agencies will not have the depth or quantity of project management expertise to manage large or complex soft-projects.

Table 1: Estimated project expenditure on asset, non-asset and strategic initiatives

Budget Sector	2008-09 Budget Data /\$m				Hypothesised		
	Budget Total	Projects		% projects	Project-like Initiatives in strategic plan	Total Projects	
		Asset investment	Non-Asset initiatives			Initiatives in strategic plan	% projects
Health	13,102	480	936	11%	936	2,352	18%
Education	7,312	491	512	14%	512	1,515	21%
Transport	4,345	1,756	244	46%	244	2,243	52%
Justice	3,581	244	228	13%	228	701	20%
Environment	1,305	303	180	37%	180	663	51%
Other	3,864	434	580	26%	471	1,485	38%
Total	33,509	3,708	2,680	19%	2,571	8,959	27%
	100%	11%	8%		8%		
		41%	30%		29%		

Unreported Project Investments (internally funded strategic projects)

There was strong evidence to suggest that projects are also internally funded and not reported separately as projects. The main evidence is that the projects reported in Budget documents are significantly less in scope than the projects listed in the strategic plans of each Agency. Our interpretation confirmed by interviews with managers within Education is that many strategic projects are funded internally rather than externally. We were told that with external funding Treasury might provide 75% of the necessary funding and Agencies would fund the remaining 25% from their operational (recurrent output or service delivery) funds. We were told that Agencies would typically fully fund many strategic internal projects in the same way and not present them to Treasury for separate funding. It is difficult to know without further investigation how widespread this practice is, nor how much project work is internally funded and not reported on separately as project work. Based on our experience of Education specifically and anecdotal evidence of 'skunk works' being prevalent in the private sector, we believe that the reported projects account for no more than half of the projects being undertaken in the Victorian public sector. The implication is that at least another 8% of budget is spent on project work. Our hypotheses are shown in Table 1 in the right hand columns framed with a dashed border.

Investment tools and conceptual frameworks

The investment tools and conceptual frameworks used in the State of Victoria have been developed mainly by the Victorian Treasury. Their focus is mainly to support portfolio level decisions to fund projects strategically. Tools are provided to the Agencies to specify the format of project proposals and the objective is to ensure proposals are aligned with strategic goals and benefits are identified.

The tools and frameworks are firstly listed then described briefly below. They will be described further and evaluated in the discussion to follow.

- *investment lifecycle guidelines*
- *investment management standard*
 - *Investment Logic Map*
- *Asset management framework*
- *Gateway*
- *Project Alliancing Practitioners guide*
- *Project governance guidelines*

The *investment lifecycle guidelines* provide a framework to help agencies understand the criteria that are used to select projects for funding. The guidelines appear to have captured many of the latest insights in the project management literature and specifically differentiate an investment from a project by defining the objective of an investment to be the realisation of benefits and the objective of a project to be the delivery of a product. The *investment management standard* operationalizes the lifecycle guidelines by documenting the practices expected to be followed to define the reason for an investment, shape the solution and track the delivery of benefits through the investment lifecycle. The practices include problem definition, solution definition, benefit definition, business case development, investment reviews, benefit reporting, project management and asset management. The *Investment*

Logic Map is a specific tool mandated by Treasury requiring asset investments to specifically identify the benefits which they will enable and the additional initiatives that need to be undertaken to realise the benefits.

The *asset management framework* was developed to enable the key decision-makers to control the Victorian Government’s asset base more strategically. It along with *Gateway*, which was originally developed by OGC in the UK, was established to drive better government asset investment. The *asset management framework* has a service strategy, asset strategy and a multi-year strategy. The *Gateway* initiative is characterised by reviews of specific investments and a 10-year multi-year strategy to prioritise investments to help meet the service strategy.

There are also two guidelines published by Treasury. The *Project Alliancing Practitioners guide* provide guidelines for risk sharing when the expertise of private sector organisations is required to help deliver complex and high risk infrastructure projects. The *Project governance guidelines* clarify however, that departments and agencies are accountable for service delivery to achieve government outcomes even when private sector organisations assist in delivery.

We could not find any public information on the *project management* practices in use in the Victorian public sector. The frameworks do not seem to focus on how projects are delivered. Our assessment of the project management methodology developed within the Department of Education is that it is world class. We were advised that most other agencies use either PMBOK or PRINCE2.

Discussion

This paper started with the observation that projects are increasingly being undertaken to implement strategy. It continued by differentiating between project management success with efficiency goals such as on-time and on-budget and project success which is measured by effectiveness goals such as the realisation of benefits. The discussion of the investment frameworks and the strategic objectives of the state of Victoria suggest that project success might be better understood by differentiating between the realisation of any benefits at all and the realisation of the overriding strategic goals. We have framed this below as a two by two matrix with one dimension representing effectiveness and the other representing efficiency. We have also populated the matrix with well known projects that might typify each cell.

Efficiency		High No duplication of effort High Asset utilisation	Betamax, IBM PCjnr, OS/2, Vista	Virgin Air Ticketing System
		Medium On-time on-budget	London Ambulance Service Computer Aided Despatch	SABRE, Sydney Opera House
Low Neither on-time, nor on-budget. No benefits.			Medium Some benefits realised	High Strategic goal realised
			Effectiveness	

Figure 2: Analytical framework based on success criteria

Using this framework we believe the Victorian Investment Management frameworks only support medium levels of efficiency and effectiveness. Their strength is that they emphasise a portfolio approach to choosing projects and using benefits as the selection criteria for investment rather than simply focussing on on-time on-budget delivery. Their weakness is that they are directed at mainly at asset investments (Investment Lifecycle Guidelines Overview version 1.0, July 2008, p4) and do not focus on soft-projects even though the majority of project expenditure appears to be on soft-projects. Our consulting work within several Victorian Agencies has suggested there is significant duplication of effort because the Agencies were large and it was difficult for staff to know what all the different parts of an organisation were doing.

It was noted earlier that asset investments alone are unlikely to deliver the strategic benefits. An example of this weakness in the investment frameworks can be seen in the example used to illustrate the *Investment Logic Map* tool: an investment in finger-print recognition software, was justified because it led to the benefit of reducing processing time. However there was no requirement in the tool to ensure that the soft-projects were actually undertaken to

reduce processing time. More significantly there was no requirement for the investment to be linked to a strategic plan of action to achieve a strategic goal such as reducing crime.

The Victorian tools and frameworks are influenced by OGC whose methodologies were originally focussed on overcoming IT failure. There is an assertion that the tools and frameworks broadly apply to non-asset investments but there is no evidence that the assertion is justified. The majority of investments are not IT related. There is little or no evidence to show that strategic goals have been realised. Reporting against strategic goals is not formalised. A 2009 VAGO audit of literacy and numeracy found that 10 years of effort by the Victorian Education Department had only lifted literacy in the early childhood years and numeracy had actually declined. There seems to be a similar pattern for Health services where waiting times appear to have remained either static or increased.

Our conclusion is that although the Victorian Investment Management frameworks focus on benefits, the emphasis is to ensure an asset is aligned to a benefit rather than the actual realisation of a benefit and there is no focus on realising higher order strategic goals. This conclusion needs to be understood in the context of the perceived leadership role of Victoria in the field of Education and in New Public Management. The high level strategic goals have been clearly defined and relatively stable for at least 10 years. If one of the best performers did not have the tools to help it achieve its strategic goals, what are the implications for the rest of us?

Further Discussion

The evidence suggests that either the frameworks are either not generally applicable or that there are deficiencies in the frameworks. The latter seems more likely because portfolio concepts appear to be applied weakly and the concept of having inter-related programs of projects to realise a strategic goal is absent.

We have undertaken additional studies of the reporting practices of companies listed on the Australian Stock Exchange and reviewed accounting standard reporting requirements. Our initial findings have revealed that in 2008, less than 8% of ASX listed companies (178 of 2224) report their IT investment in any form at all, and IT is usually considered an asset investment. We have found no evidence of any formal reporting of soft-projects and no requirement to report these projects. This leads us to suspect our comments on the Victorian investment tools and frameworks are generally applicable to all organisations.

We have a high opinion of the Victorian government and our findings were a revelation to both us and VAGO. We believe the State of Victoria compares very favourably to the other states in Australia and internationally. It was quite confronting to suggest that tens of billions had been spent on projects over the past decade with few if any strategic benefits being realised. This conclusion challenged us to ask why concepts of programs, portfolios and governance had not influenced one of the innovators in New Public Management. The theory suggests programme management has the most potential to ensure projects are structured to deliver strategic benefits. Portfolio management is supposed to reduce duplication. The promise of project governance is that strategic goals are not only aligned to investments but also realised in practice. Why have these approaches not had any influence in Victoria or more broadly? Our conceptual understanding of the potential of these various approaches is mapped schematically below.

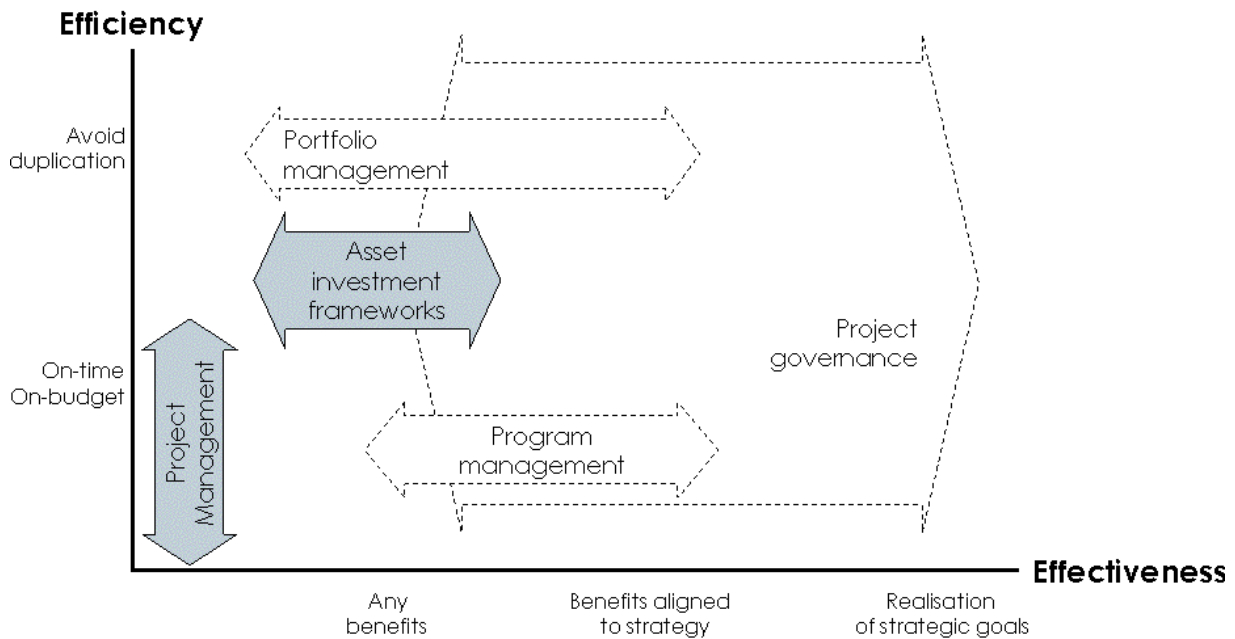


Figure 3: The inter-relationship between project governance and project, program and portfolio management

Portfolio management

Project portfolio management (PPM) is a well established field, particularly in the US. It has an extensive literature and is supported in industry by an established and growing PPM software market. Portfolio management has its conceptual foundations in portfolio theory applied to the selection of financial investments to reduce risks and increase returns (Markowitz, 1952). This theory was applied to the domain of project portfolio management to select IT projects (McFarlan, 1981) and PPM software vendors market on the basis of being able to reduce risk and increase returns on a portfolio of project investments (CA, 2009).

However, questions have been raised on whether PPM actually adds any value (Reyck et al., 2005). Portfolio selection has been justified in the context of selecting new product development projects (Jamieson & Morris, 2007), but it is far less convincing when applied to the implementation of strategy. A significant problem arises because there is a disconnect in the way strategy is developed and way the strategic is planned (Mintzberg, 1994). Strategy development is fluid and emergent. Strategic planning, especially when following the current approaches to PPM is relatively inflexible and mechanical. Project selection tends to be based on first degree criteria identified through risk management tools (Thiry & Deguire, 2007). In contrast upper level strategic decisions have traditionally relied on non-linear and much higher level considerations. As a result relatively few organisations use PPM strategically. Fewer than 33% of organisations using PPM report they diversify to reduce portfolio risk (Reyck et al., 2005) and in our experience PPM is never used to inform or implement strategy. PPM is mainly used to manage project resource issues.

The potential of PPM software appears to only be justified when other aspects are in place such as top management commitment, agreed benefits measurement and a willingness to deal with project interdependencies and resource constraints (Reyck et al., 2005). Some believe that PPM, because it is meant to deal with fairly stable environments, can only be effective if combined with programme management which is meant to deal with more turbulent environments and emergent strategies (Thiry & Deguire, 2007). We would agree and add that by definition, strategic outcomes can only be achieved when a whole program is undertaken. If strategic outcomes are to be realised, it makes no sense to select individual projects because selection criteria must be at the program level.

The Victorian public service investment frameworks are quite closely aligned to the concepts of project portfolio management because they emphasise selecting the right projects. VAGO has observed in its work that agencies treat the tools and frameworks as better practice guidelines with little voluntary application and little influence in practice. This discussion goes some way to explaining why PPM concepts have not had more influence or lead to

the realisation of strategic benefits. The crucial deficiency seems to be the absence of meaningful linkages to programme management.

Programme Management

Programme management in contrast to portfolio management is not a mature discipline. There are less than a dozen textbooks and almost all of them start with by commenting on the dearth of available guidance. This situation may have arisen because the origins of program management were in the US aerospace and defence industries where it was kept secret for decades. It was only in the 1980s as people moved did program management take hold in the commercial sector but even then it was sometimes only the *term* being misapplied to the management of large or multiple projects (Millosevic, Martinelli, & Wadell, 2007). The US understanding is probably best captured by the Project Management Institute's (PMI) recently published *Standard for Program Management* with its focus on new product development. However, the way programme management is being understood internationally focuses more on the delivery of change and is dominated by the UK's Office of Government Commerce product: *Managing Successful Programmes* (MSP) developed in the late 1990s (Pellegrinelli, Partington, Hemingway, Mohdzain, & Shah, 2007).

There remains considerable confusion (Stretton, 2009). Some successful project managers have been promoted into programme roles only to flounder (Pellegrinelli et al., 2007). It was an important clarification to find that project management and program management had different theoretical foundations and that programmes could not be treated as scale-ups of projects (Lycett, Rassau, & Danson, 2004). It was found that project management had been applied successfully mainly in the domain of new product development. Program management was characterised more as a tool for strategy implementation in domains that included manufacturing, quality, organisational change, change in work and industry and product development (Arto et al., 2009). It is not well understood that programme management competence relates more to general management skills and generic leadership qualities than to project management skills (Partington, Pellegrinelli, & Malcolm Young, 2005).

A problem has arisen because strategy is becoming more complex and is increasingly less about the technical skills to develop new products and more about the leadership skills to introduce organisational changes to react to rapidly changing environments. A strategy may sometimes require development of new products and services but to be effective the strategy will still require organisational change to develop the capacity to deliver new services (Williams & Parr, 2004). What is emerging is the realisation that the programme management practices that we have inherited are not particularly supportive of strategic thinking and inadequate for strategy implementation.

Programme management practice has yet to reflect the insights from thirty years of experience with strategic planning. Strategic planning has been found to be fundamentally different to strategic thinking (Mintzberg 1994). The WWI battle of Passchendaele is an example of how a strategically desirable option was found to be tactically impossible. After four months and the loss of over a quarter of a million lives, the generals eventually found they were sending their men through a sea of impassable mud. This particular failure was inexcusable, because the map is not the reality and the general should have seen for himself. However, corporate leaders do not have this option because they are rarely dealing with a physical environment that can be inspected but a future environment which cannot. It is necessary for a strategy to be informed by the results of a strategic plan. A chosen strategy must be tested on an ongoing basis, whether it is working as expected, or whether an alternative strategy is a better option. The level of certainty that exists with strategy is less than the practitioners of strategic planning and programme managers have traditionally assumed. It is not appropriate to work on the basis that top managers set a strategy and programme manager implement the strategy. There must be some level of questioning, feedback and dialogue.

This insight is rarely if ever reflected in practice. Mainstream programme management is strongly influenced by the project management tradition and programme management practices may have been codified too rigidly. Practice tends to be programme-centric and a clear boundary between the project and business domains is maintained (Thiry & Deguire, 2007). Guidelines suggest a level of documentation rigour that works as a disincentive to challenging and redefining the program as new information comes to hand and the guidelines underemphasise the need to adapt to the context in which a programme operates (Pellegrinelli et al., 2007). Responsibility for the realisation of benefits is often assigned to business managers outside a narrowly defined programme (CCTA, 2000). One major text provides an example of a program to develop a new product independent of another program to market the product without emphasising the need to coordinate decisions to realise a strategic goal such as profitably entering a new market (Millosevic et al., 2007). When organisations view programmes in this way, they tend to shoe-horn

programmes into project-level thinking, fail to focus adequately on building and maintaining support for the strategic programme goals and lose most of the benefits sought in setting up programmes in the first place (Pellegrinelli, 1997)(Pellegrinelli et al., 2007)

Effective programme managers have been shown to frequently adapt the formal guidelines in subtle and creative ways, or ignore or contradict them completely. Arguably the common guidelines have been found by them to either be not useful or not make sense. They seek more to engage stakeholders than to manage them as the methodologies might suggest. The current codification into a common set of transferable principles and processes appears to be inadequate and some question whether it is possible (Pellegrinelli et al., 2007).

The conclusion is that programme management is far from uniform and is immature as a discipline. It is as much about coping as it is about planning and rational decision making, as much about re-shaping the organisational landscape as it is about delivering new capabilities. There is the suggestion that the tendency towards prescription based on 'one size with minor variations' approach may warrant re-examination (Pellegrinelli et al., 2007). These insights may explain why programme management concepts have not had more influence or lead to the realisation of more strategic benefits within the Victorian public sector or beyond. This would appear to be a crucial deficiency that justifies further research. It does not seem acceptable to allow governments or corporations to continue to invest tens of billions of dollars and not realise the strategic benefits that we expect of them. This finding seems particularly important in the context of the massive fiscal stimuli being funded by governments around the world to counter the GFC.

Project governance

Project governance is only just emerging as another approach with high potential to increase project success rates. It too is confused because the project management literature and major methodologies such as PMBOK, PRINCE2, MSP, etc. tend to discuss project governance in the context of governance structures to oversee individual projects (Weill & Ross, 2004). A more promising approach has been framed in the context of the need for top management support and is consistent with both the corporate management literature and the discussion above on the need to focus on the implementation of strategy (Young and Jordan 2008). Guidelines framed in this more promising approach have tended to be principle-based and exemplified by a handbook published by Standards Australia emphasising the six key questions boards and top managers need to address to influence projects to succeed (R. Young, 2006).

The strength of a governance approach aligned with corporate governance principles is that it is flexible, able to incorporate the experience of boardroom directors and top managers, and be perceived at the senior levels as an extension of their job rather than another onerous burden to comply with (R. Young, 2008). However, the major weakness that has been revealed through this paper is that there needs to be effective tools that managers can turn to assure themselves that a key principle has been adequately addressed. Program and portfolio management tools appear to be major areas of deficiency because the dominant methodologies are framed too rigidly and do not seem to support the iterative, emergent nature of strategy development. In the project management parlance, they seem to require scope to be locked in too soon, and require too much effort to update plans to reflect new information as it becomes available. Mintzberg alludes to the problem by pointing out to the need for 'flexible-plans' and then observing the term is an oxymoron.

Conclusion

This paper has used a study into the role of projects within the Victorian public sector as a lens to evaluate the emerging approaches with the most potential to increase project success. The Victorian public sector provided a particularly suitable context to study the issue because it is considered one of the international leaders in New Public Management and their investment frameworks were expected to be at the forefront of practice.

The findings were surprising because assuming the state of Victoria is at the forefront of practice, the forefront of practice was found not to have been significantly influenced by the approaches with the most potential to influence project success. The study suggested billions of dollars were been invested in projects in both Victoria and in the corporate sector, with few of the expected strategic benefits being realised. The tools with the most potential to address this issue (portfolio management, programme management, project governance) were found to be too immature in their current state to be widely adopted and overcome the issue.

Portfolio management practice was found to operate mainly at a first degree level consistent with risk management practitioners but not at the strategic level needed to engage top management. It was suggested that portfolio management could only be effective in turbulent environments and situations requiring emergent strategy when combined with programme management. However programme management was found to be problematic because the dominant approaches had codified programme management too rigidly to help increase the realisation of strategic goals. It was suggested that project governance did not suffer from the same deficiencies if it was applied at a high level and as an extension to corporate governance. However, it was suggested that this high level approach would be limited unless the tools of programme and portfolio management could be used with confidence to assure decision-makers that the key governance issues were being adequately managed.

This paper lays the ground to justify concerted research effort to find more appropriate programme and portfolio management approaches that can be adopted with confidence by senior decision-makers. A significant contribution has been to frame the interrelationships between best-practice as portrayed by the state of Victoria, project governance and project, programme and portfolio management and show how the different approaches contribute to different success criteria.

Limitations

The research into the role of projects within the Victorian public sector was mostly reliant on publicly available documents. The interpretation was validated by key stakeholders within the Victorian public sector and by senior managers within the Victorian Auditor-General's Office. However, the study was performed within a specific context and it is possible it may have influenced the findings. It might be valuable for the study to be repeated as a purely academic exercise in another state to see if similar conclusions might be drawn. It is recommended however, that a knowledgeable insider contributes to the study to ensure the interpretation of the data, particularly the financial data, is valid.

The analysis of the dollar value spent on projects can only provide a broad indicator of the relative effort expended on projects. This is because in a few cases the dollar values are reported with negative dollar values because they related to initiatives relate to projects to generate cost efficiencies or reduced spending.

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