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#### Recommended Citation

Aileen Koh. (2011) "Portfolio management: roles, responsibilities and practices - A qualitative study" 8th Annual Project Management Australia conference (PMOz): Project management at the speed of light. Sydney, Australia. Aug. 2011.

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## Portfolio Management: Roles, Responsibilities and Practices A Qualitative Study

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#### **Abstract**

The increasing use of project and programs by organizations to achieve business strategy has led to the need to understand portfolio management. Along with the increasing diffusion of portfolio management a new managerial role evolves: the portfolio manager. This new role is pivotal in planning and controlling complex project landscapes more effectively and more efficiently, in implementing portfolio management practices as a management innovation.

The practices of portfolio management, together with the associated roles, responsibilities of portfolio managers were investigated. This paper presents the first stage qualitative study, using an inductive interview based approach with six portfolio managers from six organizations in Australia. The results from the qualitative study are used to validate the research model developed on the basis of previous research and develop the constructs for the concept of portfolio context and the roles, responsibilities and practices of portfolio managers in the research model for the next stage, a quantitative study. It therefore offers practitioners an initial point for designing organizational governance structures and job descriptions to increase the portfolio management performance. For scholars this article paves the way for an empirical study on the managerial and theoretical implication on portfolio management.

#### Introduction

Portfolio management has been acknowledged by the project management community as a tool for optimizing the organizational returns from project investments by improving the alignment of projects with strategy and ensuring resource sufficiency. It aims to optimize the outcomes from project investment across a portfolio and it is also regarded as the governance method for selection and prioritization of projects or programs. Organizations that do not align their project portfolio with organizational strategies and governance will tend to increase the risks of running projects that are low priority initiatives. As a result, there will be critical resource shortages, and investments will not be optimised. Therefore, application of the techniques of portfolio management within the context of organizational governance provides reasonable assurance that the organizational strategy can be achieved.

Portfolio management, however, presents a challenge for middle managers to manage its processes, people and practices. The portfolio management role is supposed to be pivotal in planning and controlling complex project landscapes more effectively and efficiently. Literature indicates that the roles and practices of portfolio managers vary and need to be adapted to organizational situations.

This paper presents results of a qualitative study using an inductive interview based approach with portfolio managers from service and manufacturing organizations in Australia. To assess the validity and reliability of past research, we pose the following research questions:

What are portfolio manager's roles and responsibilities in service and manufacturing organizations in Australia? Are there any differences in roles, responsibilities and practices between service and manufacturing organizations in Australia?

The unit of analysis is portfolio managers in service and manufacturing organizations in Australia. This study summarizes the work and study of an inductive qualitative study which will be followed by using a web based questionnaires. The results from the qualitative study will contribute the questionnaire design for the subsequent quantitative study.

The next section of this paper reviews the previous research literature on portfolio management and describes the research methodology in the qualitative study. The results and implication of this stage (qualitative study) will be discussed for the overall research project.

#### Research Into Project Portfolio Manager's Roles, Responsibilities and Practices

The importance of adopting portfolio management to achieve business or strategic goals has been recognised by academic and practitioners (Crawford & Helm 2009, Killen et al. 2008, Blomquist & Muller 2006, PMI 2008).

Portfolio management, however, presents a challenge for middle managers to manage its processes, people and practices. The managerial problems in buisness development portfolio identified by Elonen and Artto (2003) and Engwall and Jerbrant (2003) have prompted further research on the need for more clarity about portfolio manager's roles, responsibilities and practices. The research of Drake and Byrd (2006) and Olsson (2008) indicates that this role is the owner of certain portfolio management tasks, such as risk management with focus on analysis. Blomquist & Muller (2006) research identifies that portfolio manager roles, which aims for improvement of the organization's overall results, start early in business cycle with business planning and followed by project selection, They also discovered that the portfolio management role can be an administrative or strategic position that enables them to influence and shape the company's future. However, the result of their research indicated that portfolio management's intertwined relationship with traditional line management roles and no clear evidence of governance structures and the corresponding roles and responsibilities implemented in different organizations. Thus, has prompted further research to allow better understanding of these manager's rationale for decision making and provide a more intergrative picture of the various tasks of middle managers in different region and industries.

#### **Governance and Transaction Cost Economics**

Portfolio management can be seen as providing governance structures adopted to minimize the overall costs in converting "input" to "output" through projects. When viewing projects as transactions, these costs are known as transaction costs, which are the sum of all costs for governing projects. Several researchers, such as Muller and Turner (2005) and Blomquist and Muller (2006), have proposed that transaction cost economics or TCE theory provides one theoretical framework for explaining the project and portfolio phenomenon.

The foundation of this study is based on Oliver Williamson's TCE theory. Williamson proposes that costs are comprised not only of production costs (i.e. the cost of capital, labour, and materials) but also transaction costs. Transaction costs, which are synonymous with co-ordination cost, consist of the costs of monitoring, controlling and managing transactions. Thus, total costs (production cost plus transaction costs) will be considered when selecting among sourcing alternatives or making decisions. According to Williamson (1985), there are two human factors (bounded rationality and opportunism) and three environmental factors (frequency of occurrence, asset specificity and uncertainty) that lead to transactions costs from the make or buy decision. The first human factor is bounded rationality whereby humans are unlikely to have the abilities or resources to consider every state-contingent outcome associated with a transaction that might arise. Based on Simon's (1957) bounded rationality argument "when transactions are conducted under conditions of uncertainty/complexity, the bounded rationality constraint (that humans exercise intended, but only limited, rational behavior in decision-making) is binding and an assessment of alternative organizational modes, in efficiency respects, becomes necessary". Williamson (1985) argues that it is bounded rationality in relation to the condition of the environment that occasions the economic problem. Therefore, governance structures seem to differ by the degree of complexity of an organization's environment. The second human factor is opportunism whereby humans will act to further their own self interests. Organizations presumably administer an efficient system of rewards and punishments to discourage employee opportunism. In contrast,

organizations must incur transaction costs during contract negotiations, monitoring to prevent vendor opportunism. Using Transactions Cost Economics (TCE), the proposed research model (as shown in Figure 1) will be adopted for this study. An inductive qualitative study has been designed to test the model and build constructs for the concepts within the model.

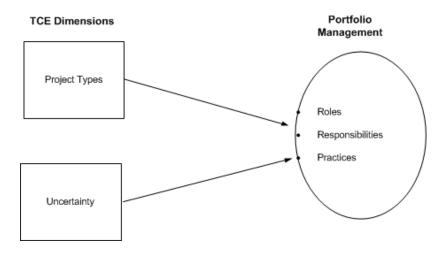


Figure 1: Research model on Porfolio Management roles, responsibilities and practices

#### Rationale of the research

This research is important for several reasons. The first reason is identification of a theoretical gap in the area of portfolio management particularly concerning the role of managers in portfolio management. As stated by Elonen and Artto (2003) and Blomquist and Muller (2006), the manager's roles & responsibilities in multi-projects vary, are unclear, and characterized by a lack of resources, low levels of support or commitment and poor information flow. This suggests a need to investigate and improve practices of portfolio management. Good portfolio management is becoming a key competence for organizations handling numerous projects simultaneously (Martinsuo and Lehtonen 2007) and needing the capability to produce products or services to compete globally (Killen et al. 2008). The third reason is to investigate the portfolio management learning capability. As stated by Killen et al. (2008), portfolio management is thought to be a human-centered capability and people are highlighted as an important organizational resource that must be nurtured, developed and allocated effectively through the portfolio management capability.

#### **Qualitative Data Analysis and Results**

The results from the data analysis of the qualitative study is presented in this section. The explanation of the TCE dimensions, sub-dimensions and their components that generated from the interview are as follows:

#### **Project Types and Uncertainty**

Our interviewees from manufacturing organisations describe their project types as product development or projects, mainly for external delivery with both short and long term goals. The project size is categorised as medium and large. It is determined by several criteria such as budget, duration or resource allocation. If the project has high budget, then the project is categorised as large project. The environment is dynamic that require experiential product development using frequent iterations, testing and milestones. The environment is complex in certain decision making on the product development and research and development projects. Therefore, the use of portfolio management planning in manufacturing organizations assist in aggregating business for strategic analysis, repositioning and guide diversity away from low growth sectors. After implementing portfolio management, the three manufacturing organizations that involved in this study has indicated the portfolio management process improved their market position substantially relative to their competitors.

Whereas our interviewees from service organizations describe their project types as service projects mainly on internal delivery with both short and long term goals. The project size is categorised as small, medium and large. It is determined by several criteria such as budget, duration or resource allocation. The environment is dynamic that require frequent iterations, control, testing and milestones. The environments are generally complex in decision making on the projects. Therefore, the use of portfolio management planning in service organizations assist to aggregate business for strategic analysis and repositioning and guide diversity away from sectors that deliver low value or benefits. After implementing portfolio management, the three service organizations that we interviewed has indicated improvement in value delivery and investment.

In this study, it is discovered that though criteria were the same in service and manufacturing industries, but the thresholds changed dramatically due to the nature of the industries. For example, one of the interview involves a service organization, it is discovered that budget that is lower than a\$1 million, it was considered as a small project and a\$ 5 million is considered as a large project. Any budget from a\$1 million to a\$5 million will be considered medium size project. On the other hand with a manufacturing company that also used budget as the criterion for judging project size, had different threshold. When the budget is lower than a\$100 million, the project size is considered small. If is higher than \$2 billion, the budget will be considered as large and budget in between \$100 million and A\$ 2 billion is considered as medium.

The result shows that different project types and dynamics in the organizations require the use of portfolio management which was found in (Blomquist & Muller 2006). This result provides the direction to develop the constructs and measurement scales for the concept of portfolio context. The result can help to measure how supportive the portfolio context and will contribute to the questionnaire design in the quantitative study in the next phase.

#### Portfolio Roles, Responsibilities and Practices

The roles of portfolio managers for both service and manufacturing organizations in Australia are found at medium and higher levels in the organization structure. Their responsibilities generally involve aligning projects/program/products with strategy, prioritization, and resource management across portfolio. The portfolio managers for both manufacturing and service organizations are report or work closely with corporate financial services to achieve financial objectives in managing their portfolio. The portfolio managers for both industries are required to achieve financial results in relation to the annual plan. Tools that the portfolio managers used are financial system and enterprise project management software to track the schedule, budget and resources of projects, program or product development.

The portfolio managers in manufacturing also work closely with the sales and marketing team to monitor the competitor strategies on product development.

The coding method described in the data analysis method section and developed the codes on roles, responsibilities and practices from the raw data. During the interview, interviewees were asked to give some keywords about their roles, responsibilities and practices. The most frequently used keywords were: Business planning & strategic alignment, portfolio prioritization and selection, stakeholder management, risk management, regulatory, value assessment and benefit realisation. The code is analysed based on (Blomquist & Muller 2006; Killen et al. 2008; Jonas 2010) roles and practices of portfolio manager. n this study, these keywords/codes are grouped into six categories:

- Business planning & strategic alignment
- Portfolio prioritization and selection
- Stakeholder management
- Risk management
- Resource planning
- Value assessment and benefits realization

The categories, codes and the number of times these codes (within each category were mentioned by interviewees is summarised in Table 1.

Category	Code	Time mentioned by interviewees
1. ROLES		
Types of Portfolio		
Business planning	Involve in stakeholder business	20
& strategic	planning and align investment with	
alignment	strategic goals	

Category	Code	Time
		mentioned by
		interviewees
Portfolio	Technique to prioritize and select	16
prioritization &	projects to maximize investment	
selection		
Stakeholder	A process to support an organization	19
management	in achieving its strategic objectives	
	by interpreting and influencing both	
	the external and internal	
	environments and by creating	
	positive relationships with	
	stakeholders through the appropriate	
	management of their expectations	
	and agreed objectives.	
Risk Management	The identification, assessment, and	22
	prioritization of project risks or the	
	effect of uncertainty on objectives,	
	whether positive or negative	
	followed by coordinated and	
	economical application of resources	
	to minimize, monitor, and control	
	the probability and/or impact of	
	unfortunate events or to maximize	
	the realization of opportunities	
Resource Planning	Resources allocation to achieve	17
	maximum output	
Steering Committee	Participation in steering groups	
Review	Initiate review of projects or product	21
	developments	
Communication	Provide effective communication via	17
	meetings or reports with	
	stakeholders	
Staff reporting	Number of staff report to portfolio	
	managers	
Regulatory	Compliance procedures, policy and	14

Category	Code	Time
		mentioned by
		interviewees
	quality	
Value and Benefit	Development and implement	22
Assessment	Investment Framework:	
	Financial target	
	Value Assessment	
	model/Benefit Realization	
	model	
Established/years		
Decision Making	Group decision making by	16
	Investment or Portfolio Board	
Tools	Tools used to manage the portfolio	
	management techniques and	
	processes	

Table 1: Roles, Responsibilities and Practices of Portfolio Managers

The Portfolio manager's roles for both service and manufacturing organizations involve before and after a single project/program/product. From the interview, it indicates that portfolio manager has similar roles and is stated as below:

- a) Involves in strategic business planning with stakeholder during prestage of project or product development
- b) Ensure projects/programs/products delivered on time, budget and scope during the project or product development
- c) Managing portfolio risks
- d) Project reviews, coaching, issue handling and improvement of corporate processes after the project or product development
- e) Implement best practices and tools for portfolio management

Though the portfolio manager's roles are similar, they differ slightly in the extent due to their different portfolio management context. For example, in services organizations, the business planning processes are relatively shorter

term (1-3 years) compare to manufacturing. The process on ensuring the projects/program deliver benefits/value and alignment with organizations strategy are essential. Those business case that do not have strong benefit/value to organization strategy or business change will not be in top priority on delivery or even approved by their Portfolio Review Board. Their responsibilities include compliance with corporate policies, development, implement and maintain Investment Framework and the investment model such as Value Assessment model/Benefit Realization model and achiving financial target.

As for manufacturing organizations, portfolio managers will need to work on portfolio strategy and work on longer term product roadmaps (1-10 years) due to research and development activities required for their industries. The roadmap outlines how management wants to achieve their desired objectives (product and technology) and allows for identification of needed capabilities, which then be planned for in terms of time and budget (Cooper et al. 2004). The portfolio managers work closely with their sales and marketing team to monitor competitor product information and trend. They are also working closely with their R&D and quality team to monitor the quality of products before delivery as defects product will incur heavy losses (profit and goodwill) to the organizations. The portfolio manager in manufacturing are involved in several stages such as new product development, new product management and new categories opportunity and their responsibilities include integration of business drivers, team leadership and achiving financial target.

#### Conclusion

In qualitative study, six portfolio managers from three manufacturing organizations and three service organizations in Australia were interviewed. The objective was to explore the relationship between portfolio context (using TCE dimensions) and the roles, responsibilities and practices of portfolio managers in Australia. The inductive approach is applied to analyze the interview data and the research questions is answered as follows:

- The research model is partly validated and there are indications for a positive relationship between the portfolio context (TCE dimensions) and the roles, responsibilities and practices of portfolio managers in service and manufacturing organizations in Australia
- Constructs for the portfolio context and roles, responsibilities and practices in the research model are built
- There are differences of roles, responsibilities and practices of portfolio managers in manufacturing and service organization in Australia
- There's a shift of portfolio manager's role in service organizations from tactical to strategic
- The stakeholder management skills are essential for portfolio managers in both industries
- Portfolio Managers from both industries are involved in portfolio risk management (i.e. invest in the portfolio that has higher returns of investment).

#### **Practical Implication**

The practical implications of the results are:

- Portfolio managers are focusing on business results, stakeholder satisfaction and long term strategy and results of their portfolio
- Portfolio managers from service industry require not only project management skills but also financial analysis skills for reporting and communications
- Top management in both service and manufacturing industries are involved in portfolio management to achieve business results, strategy alignment of the projects and accountable for the value of projects requested
- Best practices and tools for portfolio management is essential

#### **Theoretical Implications**

The TCE's underlying assumption that different project types need different governance structures (Williamson 1985) is supported by this preliminary results. Organizations from both industries; service and manufacturing show flexibility in adapting their governance to the requirements of their environment. However, in service industries organization are new to portfolio management and are looking for the best practices for their project, program and portfolio management. The organizations use specific processes and tools to counteract the problem of bounded rationality in decision making, issues handling and business planning.

The role of portfolio manager is to put together the network of resources to deliver projects/product development. They ensure the availability of the right resource at the right place and time and interaction with other projects and the resources needs. Their role becomes pivotal as one of organizational integrator to co-ordinate resources, advisor to management teams and escalator of issues across organizational boundaries.

#### **Next Stage**

The research model will be executed through the combination of qualitative and quantitative studies. This paper represent the qualitative study (stage 1) which has identified their roles, responsibilities and practices of portfolio manager. The stage 2 which is quantitative study will confirm the results and investigate the impact of project types and environmental uncertainty on portfolio management roles, responsibilities and practices. The quantitative study will involved the following steps:

- Validate the result from qualitative study
- Assessment of correlation between independent and dependent variables
- Modeling of relationship of roles, responsibilities and practices with project types and environmental uncertainty.

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