AN INVESTIGATION OF ALIGNING PROJECT MANAGEMENT TO BUSINESS STRATEGY: A REVIEW AND CONCEPTUAL FRAMEWORK

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Abstract:

This paper discusses in depth the factors that lead to misalignment between the project management and the business strategy by investigating four case studies in the telecomunications industry in Saudi Arabia. Project management has been an important issue for many years and for many companies worldwide. Many implementations of project management (PM) have been successful, while others have failed to deliver the outcome of the project. The literature indicates that misalignment between large projects and the business strategy leads to 30% of all projects failing. Indeed, the literature highlights few internal factors (e.g. effective communication, executive support, involving the project manager in the business strategy development, and the project manager leadership competence) that may tie the project management to the company's business strategy. However, this study indicates very important external factors that affect the implementation of the company's business strategy. A framework will be developed to provide a clear guide to the project management efforts towards a competitive business strategy.

Keywords: Project management, business strategy, alignment.

1   INTRODUCTION

Projects have been a central activity in most companies and in particular in the telecomunications industry due to the dynamic market and the high competition. Many previous studies have demonstrated that most projects do not finish on time and on budget. Some failed to satisfy either the customer's or company's expectations (Miller, 2002; Mankins and Steele, 2005). Yet, the project's success means more than just meeting time and budget goals. This study looks at additional success dimensions such as the business outcome (Shenhar et al., 2007). A common factor in many organisations is that many large projects have been executed with no strong link to and consideration for the business strategy or organisational goals (Miller, 2002). Research and experience indicate that some internal factors such as communication, the competence and leadership of the project manager, involving the project manager in the initial phase of the strategy development and the executive's commitment can play an important role in aligning large project management to business strategy. This study indicates important external factors that affect the implementation of the company's business strategy in the project and also affect the project management efforts such as the government agencies, vendors, the dynamic market, and contractors. However, empirical literature offers limited direction on how to achieve such alignment. We believe that this paper contributes to the project management literature in two ways: first, the research investigates in depth the impact of these factors

on the alignment and on the implementation of the business strategy in large projects and secondly, develop a framework to align the project management process to business strategy. This will help the telecomunications industry in general, and in Saudi Arabia in particular, to measure the level of their alignment.

2   RELEVANT LITERATURE

Hunger and Wheelen (2003) define the strategy of a corporation as a comprehensive plan stating how the corporation will achieve its mission and objectives. They state that business strategy maximizes competitive advantage and minimizes competitive disadvantage. The typical business company usually considers three types of strategy: corporate, business, and functional. Corporate strategy describes a company's overall direction in term of its general attitude toward growth and the management of its various businesses and product line, while business strategy occurs at the business unit or product level and it emphasizes improvement of the competitive position of a corporation's products or services. Functional strategy is the approach taken by a functional area for example, project management, R&D, marketing, production etc, to achieve corporate and business unit objectives (Hunger and Wheelen, 2003).

Project management can generate significant value for organizations (Thomas & Mullaly, 2007). According to Zhai et al (2009) the quality of project management in mega-projects creates great value for different stakeholders. The value includes increasing revenue, saving cost, time, and improving quality. It also addresses improving corporate competencies, cultivating personnel, improving the satisfaction of customers/ suppliers/subcontractors/ employees, and protecting the environment. The implementation of professional project management in mega-projects can greatly enhance the management capabilities of the organization, and thus deliver the remarkable value of project management to more stakeholders.

Project success can be measured by four criteria. The first three criteria (time, cost, and project performances/scope) are called, in the literature, the "golden/ iron triangle" or "project management success" measures because they are concerned only with the efficiency of the project management process (Jha and Iyer, 2007). However, because it is also important to analyze the organizational benefits of a project (Jugdev and Müller, 2005; Kerzner, 2006), the last project success measurment (customer satisfaction) estimates the benefits to the organisation, based on the impact on the customer, the business impact on the organization, the opening of new opportunities for the future, and other stakeholders' satisfaction (Kerzner, 2006). In other words, "project management success" is only a dimension of project success (Zwikael, 2009).

After defining project success criteria, the next step is to review the project management (PM) actions that affect the project success. The US-based Project Management Institute (PMI) has its guide to the PM body of knowledge (PMI, 2008). This study adopted the PMI's nine PM knowledge areas and correspondingly identified PM actions following PMBOK (PMI, 2008). The PM functions or knowledge areas are project scope, time, cost, risk, quality, human resources, communications and procurement management. In this research, the nine project management knowledge areas that the project managers should take into account while planning the project are adopted but the focus of this research is only on in the planning phase.

According to Fonvielle and Lawrence (2001) alignment in general is an essential effort for organizational success. By "alignment" they mean having a common agreement between all three levels of strategy (corporate, business, and functional level) concerning goals and means. In general, alignment is the effort of making everyone in the organisation agree on the main goal. This action will direct all parts and functions of an organization so that it works toward the same goal and objectives. Business strategy must be clearly understood at all levels of the organization. When the alignment is strong, the planning and the execution team obtain encouragement and energy runs high. Both individual and team effectiveness increases, but when the alignment is weak, people can not focus on

the main goal and objectives. Actions therefore become less effective. The principle of the alignment is that every aspect of an organization's activities should be integrated and move in the same direction to achieve the corporate goals. In an ideal world, the organization's mission or goals should be translated into its business and strategic plan (Holbeche, 2009).

When looking at an organization, important elements appear; workers, departments, strategies, business processes, etc. It has been argued that successful organisations are those organisations that achieve a proper alignment between these elements. Alignment is a common term in business literature, and is often referred to as strategic alignment. This concept stresses the coordination of the goals and implementation plans of project management with the goals and organizational structure of the business. Today's project managers and executives must concern themselves not just with technology and day-to-day work, but must also understand the strategic goals of the business in a dynamic and uncertain environment.

The concept of alignment has been mentioned in the literature. Scholars have attempted to align the three levels of organisation namely corporate, business, and functional levels. Aligning business strategy with functional strategies demands the majority of the alignment efforts. Functional strategies such as IT, IS, marketing, manufacturing, and human resource strategies dominate the interest of researchers to align these strategies with business strategy. (e.g., Preston and Karahanna, 2009; Gutierrez et al., 2009; Yayla and Hu 2009). Because project management is similar to these functional strategies, project management should be aligned with the business strategy (Srivannaboon, 2009). Only recently have researchers started to explore the alignment of project management more thoroughly (e.g., Srivannaboon, 2006). Srivannaboon suggests "a need for more research in this area; none, however, explicitly talks about the framework for aligning project management and business strategy comprehensively".   According to Gutierrez et al (2008) analyzing alignment across different organizational levels (strategic, tactic and operational) provides a more complete picture of the organization's alignment maturity that could facilitate the design of specific actions to improve the project alignment with business objectives. Strategic alignment research suggests that alignment has a positive effect on organizational performance (Chan, et al. 2006).

Srivannaboon (2009) states that a competitive advantage can be achieved through the use of project management. However, Gray and Larson (2003) argue that in some organisations, the process of project management often fails to support the strategic plan. It is worthwhile stating that, aligning project management to business strategy could help the project management team to implement the company's business strategy in the projects in a proper way. Srivannaboon (2009) suggests the alignment of project management to business strategy should be investigated. Milasovic (2006) states that the board of business directors is responsible for the three processes: first, business planning; second, portfolio management; and third, prioritizing projects. The project managers are responsible for the process of planning and executing the large projects. Milasovic also argues that when the above processes are aligned, the strategic elements (e.g. Goal-Objective-Vision-Mission-Values) feed the portfolio element. In turn, the portfolio element feeds the project management element (e.g. Strategy-Organization- Process- Metric- Culture), and the project management element feeds into the projects' and the team's execution. However, , it has been shown that in many cases, these processes are not aligned (Milasovic, 2006). As a result, organizations may fail to align their projects either to their business strategy or to their portfolio. This might cause the termination of the project or the continuation of executing projects that do not achieve the anticipated outcomes and goals. Thus it is a waste of important organizational resources.

In recent study, Shenhar et al., (2007) shows "a missing link" that exist between the business strategy and the project plan. They label this missing link the *project strategy* (see figure 1).
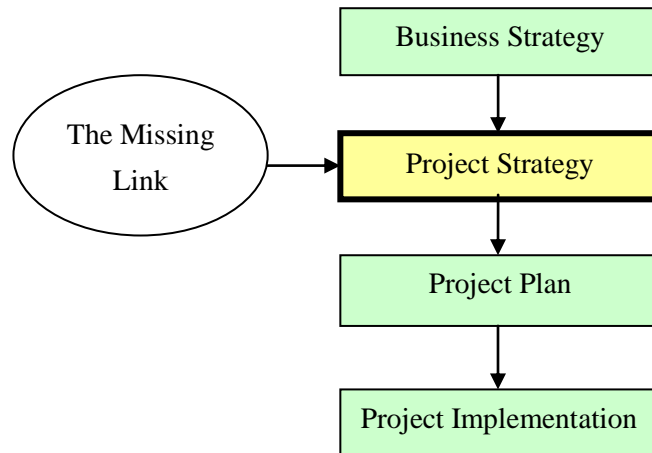
Figure 1.   The missing link between business strategy and the project plan, Source: Shenhar, et al., (2007).

According to Aubry et al., (2007) the current literature provides models for the alignment between corporate strategies and projects. However, the published literature relating to business and project management lacks empirical studies to describe in depth the detail of the processes of implementing the corporate strategy down to the project management level during the planning execution of the project.

At this stage of the research, factors such as communication between business strategy and project management, the competence and leadership of project manager, involving the project manager in the strategy development, and the executive's commitment have been covered.
Communication has been mentioned by researchers as a major factor which reinforces the alignment. Claude and Hanley (2007) claim that implementing strategy receives less attention than formulating strategy and translating strategy into action, faces a communication problem. Supporting the above argument, Guffey and Nienhaus (2002) find that only 56% of employees are able to identify the strategy even after management's efforts to communicate it. Effective methods of communication such as continuous meetings, reports, and two-way communication would increase the concentration of employees toward the strategy in all levels (Luftman, 2000).
In addition, the executive's commitment would play a major role in the alignment. For example, Luftman (2000) argues that achieving alignment is an evolutionary process which requires strong support from senior management. Claude and Hanley (2007) argue that strategy implementation efforts suffer as a result of a lack of commitment from executives, a lack of committed resources or ineffective project management.

Involving the project manager in the initial stage of the strategy development is another factor that may link the project management to the strategy. Supporting this argument, Artto and Dietrich (2004) believe that encouraging project managers to play a role in forming strategies is one of the important managerial challenges of the project management and business strategy alignment. However, Crawford (2005) finds that senior managers believe that project managers should not be involved in strategy formulation. The reaserch emphasises that the project manager competence cannot be ignored in literature. Personnel Competence of the project managee has been recognised as an important criteria for project performance. When a skillful project manager and the project team are aware of the process and the stage of the project, this will reflect and enhance the business performance (Song and Gale, 2008; Luftman, 2000). Morris and Jamieson (2005) state that corporate strategy is not translated into project strategy by process alone. Moving strategy through such processes and practices requires a wide range of personal skills and a clear definition of roles and responsibilities. However, the skills required to manage day-to-day activities are not always the same skills required to manage an effective strategic implementation effort (Claude and Hanley, 2007).

3   PROBLEM OVERVIEW

Hauc and Kovač (2000) highligh a critical problem which prevents the implementation of business strategy in large projects. This problem occurs at a weak point (the point of transition from strategy to project). According to their research, "this point has always been exposed". Strategic objectives, regardless of whether they involve global strategy, business strategy, or strategy of a strategic business unit, are translated into project objectives and furthermore, into an overall project start-up process (see figure 2).
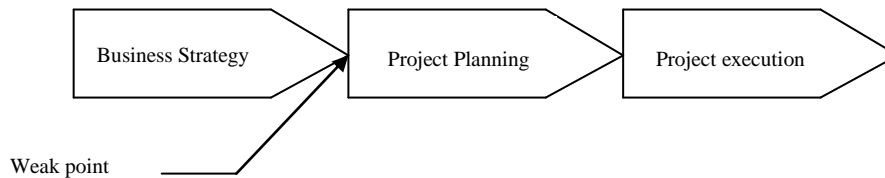

Figure2.   The weak point between business strategy and the project management.

According to Shenhar et al., (2007) there is a gap between business strategy and the project plan. This gap creates unclear business strategy which causes the project manager to plan the project without an apparent link to business strategy. Also, Shehar et al state that "there is a missing link between the business strategy and the project plan". Later, they call this link the *project strategy* (please see figure 1).

Recently, more attention has been paid to the process of aligning project management to business strategy (Shenhar et al., 2007; Milosevic, 2006). However, the literature related to business and project management lacks empirical studies to describe in more detail the processes of achieving this alignment (Aubry et al., 2007). Companies should focus on aligning their business strategy with the project management in order to have a successful overall direction of both strategy and projects. Such alignment is challenging due to the objectives of business strategy not being clear or well-communicated between the business strategy and the project management or consistent with the project management actions. Misalignment may cause an organisation to miss achieving tangible goals and objectives. Understanding the alignment may be one of the major challenges to an effective project management process. The research literature has highlighted that there are many large projects which have been executed without implementing the strategies as formulated by the executives at the corporation's level without the involvement of the project manager.

The case studies show that the telecommunications companies have no clear method or mechanism for aligning their business strategy to their project management action and they do not have any mechanism to track and measure their alignment level.

4   AIM AND RESEARCH OBJECTIVES

The aim of this paper is to investigate whether the alignment between project management and business strategy affects and contributes to the improvement of corporate performances for delivering the required business outcome (e.g. time-to-market, high quality, innovative technology, special feature, superior service, and low-cost products). The objectives of this paper will attempt to do the following:

- To explore the alignment process of PM and business strategy.
- To identify the role of communication between the three levels of the organisation (e.g. Strategy Management Level, Middle Management Level, and Operational Level).

- To investigate the effect of the internal and external factors of the alignment such as project manager leadership competence, the involvement of the project management team in the strategy development, vendors, contractors, dynamic market and the executives' commitment in PM.
- To develop a framework to assist business organisations to put their strategy into action.

5   RESEARCH QUESTIONS

To satisfy the above objectives, this paper will address the research questions:
Q1. How does the business strategy and project management alignment influence the project success and the business performance?
Q2. How can the process of strategic alignment be achieved?

6   GAP IN THE LITERATURE

After reviewing the existing literature in the area of the alignment between big project management and business strategy, two issues have been identified. Firstly, the alignment of big project management to business strategy has not been extensively researched (Shenhar, et al., (2007). Secondly, the process of achieving this alignment has not been empirically researched in depth. Therefore, there is a need to conduct a further study to investigate the alignment of business strategy and project management. This will lead to the development of a framework for alignment.

7   POSSIBLE RESEARCH CONTRIBUTION

This paper offers two contributions. Firstly, the research contributes to the existing literature of project management by clarifying the concept of the alignment and the factors that reinforce such alignment, as follows:
- To enhance the alignment between project management and business strategy.
- To address the effect of the alignment on the company' performance and the impact of the alignment on the out come of the project (e.g. product lifecycle, product quality, innovative technology, superior service, low cost, and product's special features).
- To create framework to achieve this alignment.

Secondly, this study will benefit project managers by enabling them to execute their projects in a strategic way.

8   METHODOLOGICAL CONSIDERATION

Due to the limited research on the subject of the alignment of project management and business strategy (Srivannaboon, 2009; Shenhar, et al., 2007), the methodology used in this paper is a case study. However, it provides a deeper understanding of the problem of the alignment. The study employs a qualitative approach in order to assure validity and reliability. Multiple sources of data collection are used (e.g. interviews, followed by annual reports and documents). The research makes use of four case studies covering four big projects in four large commucations companies in Saudi Arabia. Senior managers from these companies were interviewed in addition to executives, project managers, team members and CEO's. To select cases, multiple criteria were defined and cases that matched those were selected. Invitations were sent to the four telecommunications companies and interview sessions were conducted. Immediately after each swssion, the interview was transcribed and

coded. Case studies, 3-5 pages per case, were written recording the most essential findings. These reports will be used for further analysis (e.g., within-case and cross-case analysis).

9   CONCEPTUAL FRAMEWORK

According to Dubin (1978) the characteristics of a theoretical framework should consist of variables or units of analysis, the laws of interaction among units of the framework, boundaries within which the theory is expected to hold, and propositions of the framework. These characteristics match the theoretical framework of the study and are explained. Firstly, variables or units of analysis whose interactions comprise the focus of the study are (generic) business strategy and project management. Secondly, the framework indicates the manner in which these variables/units interact with each other. This is a two-way influence of business strategy and project management through a strategic alignment process. Thirdly, the boundaries within which the framework is expected to hold, need to be determined. In particular, the anticipated application of the framework is with respect to various projects within an organizational business unit.

Srivannaboon and Milosevic (2006) conducted research using a case-study methodology that extensively examined eight case studies covering nine projects in seven organizations. As a result of their work, an empirically-based theoretical framework was developed to address the configuration of project management as influenced by the business strategy (and vice versa). They found that business strategy realizes its influence on project management via the competitive attributes of the business strategy (time-to-market, quality, cost).
From their finding, this research has constructed the relationship between the two variables - business strategy and project management - in the conceptual framework as being on top of each other and showed the relationship between them as a direct relationship with two-way influence

Recent literature has in general found that the most important enabler factors of strategic alignment are the shared domain knowledge of business and functional managers. This research proposes factors such as involving the project manager in business strategy development, improving executives support, and developing project manager leadership competence to maintain the shared knowledge between business and functional managers.
In theory, strategic priorities at the functional level align with and support business level strategies. Alignment of priorities is supposed to contribute to enhanced organizational performance as well as the project's success, just as misalignment is expected to weaken performance and the project success. The literature on the strategic alignment of functional strategy and business strategy suggests that strategic alignment has a direct positive effect on performance.

A framework has been developed to address the research gap and the factors under investigation i.e. external and internal factors that contribute to the alignment effort icluding communication, developing project manager leadership competence, involving the PM team in the strategy development, and enhancing the commitment of executives, government agencies, vendors and contractors. Figure 3 below illustrates the conceptual research framework which shows the way to conduct and to investigate the effect of strategy and project management alignment to provide competitive advantages.
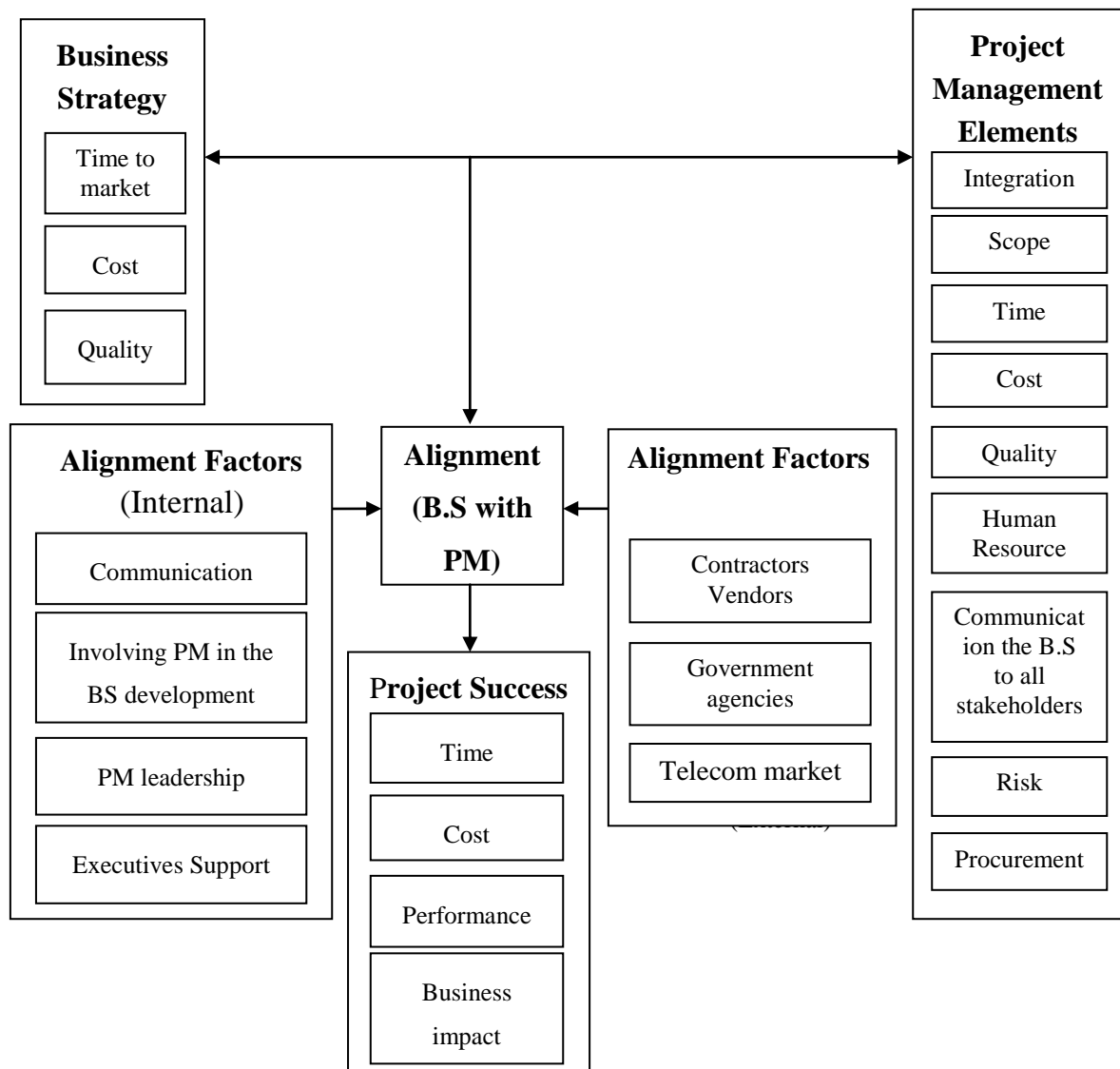
Figure3.   Conceptual framework.

The variables of the framework are divided into three main constructs. The first and the second constructs are considered the antecedent of the alignment including business strategy and project management elements. Assessing the main priorities (goals and objectives) for both the business strategy and the project management will lead the measurement of the alignment in the companies. The second construct is the process of the strategic alignment which this paper aims to propose and also to answer the research question (namely how the process of the strategic alignment will be achieved). The third construct is the consequence of this framework which includes the project's success and the company's performance. Including the project sucess in this framework allows the impact of this alignmnt of the project to be investigated. This will answer the first question of this research (namely to what extent the strategic alignment between business strategy and project plan influences the project outcome and the business performance**.**

To explore the correlation between the constructs, three main steps will be taken. The first step is to assess the alignment between business strategy and project management planning phase for each of the four case studies for the four companies by measuring the alignment. The second step is to explore the

role of each of the alignment factors on the strategic alignment. The third step is to explore the role of the strategic alignment on the project's success and on the company's performance.

10   CONCLUSION

This paper has demonstrated that a gap exists between business strategy and project management (as shown in figure 1) which requires further investigation. It is worth mentioning that the main concern of this study is the existance of a misalignment between project management and business strategy. This issue is due to internal and external factors. Internal factors include communication between the project manager and the project sponcor (executive), project manager leadership competence, involving the project manager in the strategy development, and the executive's commitment. The external factors are vendors, contractors, government agencies, and a dynamic market. If the telecommunications companies take these factors into consideration during the planning and the execution phase, they will be able to implement their business strategies in their porjects in a proper way. The conceptual framework presented in this paper shows that the above factors could be developed further in order to provide a clear guide to the project management efforts. This will result in a competitive business strategy that delivers the anticipated outcomes. Also, this research investigates the impact of this alignment on the outcome of the project as well as the organisation's performance. The area of the 'missing link' needs to be explored further to enhance the process of aligning project management to business strategy in order to achieve successful projects.

Refernces

Artto, K. and Dietrich, P., 2004. Strategic Business Management through Multiple Projects In:
Morris, P. and Pinto, J., (eds.). The Wiley Guide to Managing Projects, Hoboken, NJ: John Wiley &
        Sons.
Aubry, M., Hobbs, B. and Thuillier, D., 2007. A new Framework for Understanding Organisational
        Project Management through the PMO' *International Journal of Project Management* , 25,
        328-336.
Chan,Y., Sabherwal, R., and Thatcher, J., 2006. Antecedents and outcomes of strategic IS alignment:
        An empirical investigation, IEEE Transactions on Engineering Management, (53),1, pp. 27-
        47.
Claude, A., and Hanley, Jr. C., 2007. The Execution Challenge: Translating Strategy into Action,
        Bank Accounting & Finance.
Crawford, L., 2005. 'Senior Management Perceptions of Project Management Competence'
        International Journal of Project Management, 23, pp. 7-16.
Dubin, R., 1978. Theory Building, New York, NY: The Free Press. 304.
Fonvielle, W., and Lawrence, P., 2001. Gaining Strategic Alignment: Making Scorecards Work.
        Management Accounting Quarterly, 3, 1, pp. 4-14
Gray, C., and Larson, E., 2003. Project Management: the Managerial Process, 3ed.New York,
        McGraw Hill.
Guffey, W., and Nienhaus, B., 2002. Determinates of Employee Support for the sStrategic Plan of a
        Business unit, *SAM Advanced Management Journa*l, 67(2) pp. 22-30.
Gutierrez, A., Orozco, J. and Serrano, A. 2009. Factors affecting IT and business alignment: a
        comparative study in SMEs and large organisations, *Journal of Enterprise Information
        Management*, 22, 1/2, pp. 197-211
Hauc, A. and Kovač, J. 2000. Project Management in Strategy Implementation-Experiences in
        Slovenia' *International Journal of Project Management*, 18, 61-67
Holbeche, L., 2009. Aligning Human Resources and Business Strategy, 2nd ed. Great Britain,
        Butterworth Heinemann.
Hunger, J., and Wheelen, T. 2003. Essentials of Strategic Management, 3rd ed.USA, Prentice-Hall.

Jha, K. N., and Iyer, K. C., 2007 Commitment, coordination, competence and the iron triangle.
International Journal of Project Management, 25, pp. 527–540.
Jugdev, K., and Müller, R., 2005. A retrospective look at our evolving understanding of project
        success. *Project Management Journal*, 36, 4, pp. 19–31.
Kerzner, H., 2006 Project management: A systems approach to planning, scheduling and controlling
        (9th ed.). New York: Wiley.
Luftman J., 2000. Assessing Business-IT Alignment Maturity'. Communications of the association for
        Information Systems, 4, 14, pp. 1-51.
Mankins, M. and Steele, R., 2005. Turning Great Strategy into Great Performance, Harvard Business
        review, 83(7/8) pp. 64-72.
Miller, D., 2002. Successful Change Leader: What makes them? What do they do that is different?
        Journal of Change Management, 2, 4, pp. 359-368.
Milosevic, D., 2006 . A theoretical Framework for Aligning Project with Business Strategy'. *Project
        Management Journal*, 37,3, pp. 98-110.
Morris, P. and Jamieson, A., 2005. Moving from Corporate Strategy to Project Strategy'. Project
        Management Institute, 36,5, pp. 5-18.
PMBOK® Guide, 2008, (4th ed.). A Guide to the Project Management Body of Knowledge, Newtown
        Square, PA: Project Management Institute.
Preston, D. and Karahanna, E., 2009. Antecedents of IS Strategic Alignment: A Nomological
        Network, *Information Systems Research*, 20, 2, pp. 159-179.

Shenhar, A, Milosevic, D., Dvir, D,. and Thamhain, H., 2007. Linking Project Management to Business Strategy, USA, Project Management Institute, Inc.

Song, S., and Gale, A. 2008. Investigating Project Managers Work Values by Repertory Grids Interviews   '. *Journal of Management Development*, 27,6, pp. 541-553.

Srivannaboon, S., and Milosevic, D., 2006. A two-way influence between business strategy and project management. *International Journal of Project Management*, 24,6, pp. 493-505.

Srivannaboon, S., 2009. Achieving Competitive Advantage Through the use of Project Management Under the plan-do-check-act concept'. *Journal of General Management*, 34,3, pp. 1-19

Thomas, J. and Mullaly, M., 2007. Understanding the value of project management: First steps on an international investigation in search of value. *Project Management Journal*, 38, 3, pp. 74–89.

Yayla, A. and Hu, Qing, 2009. Antecedents and drivers of IT-business strategic alignment: Empirical validation of a theoretical model, European Conference on Information System (ECIS) proceedings. Paper 57.

Zhai, L., Xin, Y. and Cheng, C. 2009. Understanding the Value of Project Management From a Stakeholder's Perspective: Case Study of Mega- Project Management, Project Management Journal, 40,1, pp. 99-109.

Zwikael, O., 2009. The Relative Importance of the PMBOK® Guide's Nine Knowledge Areas During Project Planning, *Project Management Journal*,40,4,pp. 94-103.