Alignment of large project management process to business strategy

A review and conceptual framework

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Abstract

Purpose – The purpose of this paper is to discuss in depth the factors that lead to misalignment between the project management (PM) and the business strategy by investigating four case studies in the telecommunications industry in Saudi Arabia.

Design/methodology/approach – Due to the limited research on the subject of the alignment of PM and business strategy, the methodology used in this research was a case study in depth interview.

Findings – The paper highlights the important factors that affect the process of aligning the PM to the business strategy. The companies that have strong alignment between the business strategy and the PM show successful projects outcome while the companies that have mismatch alignment show less successful projects outcome.

Research limitations/implications – The paper has investigated four telecommunications companies only. However, more companies will be better to compare the finding. Due to time constrains, the research has studied one project in each company. Each project was supporting one of the company's business strategies. More projects and business strategies will lead to clear picture of the alignment. Access to executives' managers and CIO's was difficult. Several meetings were cancelled without short notice.

Practical implications – This paper helps the companies to implement their business strategies with embedding their projects in the overall strategy. Also, helps the PM team to execute the projects in a strategic way.

Originality/value – This paper contributes to the literature with a clear explanation of the concept of the alignment and provides a framework to ensure the alignment between the large PM process and the business strategy is achieved.

Keywords Project management, Business strategy, Alignment

Paper type Research paper

1. Introduction

Projects have been a central activity in most companies and in particular in the telecommunications 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 highlights additional success dimensions such as the business outcomes (Shenhar *et al.*, 2007) which can be achieved through a proper

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alignment between the large project management (PM) process and the business strategy. A common factor in many organisations is that many large projects have been executed with no strong link to the business strategy or organisational goals (Miller, 2002; Eriksson, 2013).

Many implementations of PM have been successful, while others have failed to deliver the outcome of the project. The existing literature indicates that misalignment between large projects and the business strategy leads to 30 per cent of all projects failing (Miller, 2002). 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 PM 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 has been developed to provide a clear guide to the PM efforts to align large PM process to business strategy.

Hauc and Kovač (2000) highlight 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 1).

In recent study, Shenhar et al. (2007) and Patanakul and Shenhar (2011) shows "a missing link" that exist between the business strategy and the project plan. They label this missing link the project strategy (see Figure 2).

Shenhar et al. (2007) indicate that 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, Shenhar 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 2).

Recently, more attention has been paid to the process of aligning PM to business strategy (Shenhar et al., 2007; Milosevic, 2006). However, the current literature related to business and PM lacks empirical studies to describe in more detail the processes of achieving this alignment (Aubry et al., 2007). Companies should focus on aligning the PM with their business strategy 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 PM or consistent with the PM 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 PM process. The exiting literature has

Source: Hauc and Kovač (2000)
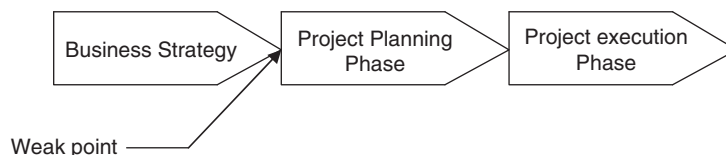
Weak point

Figure 1.
The weak point between business strategy and the project management
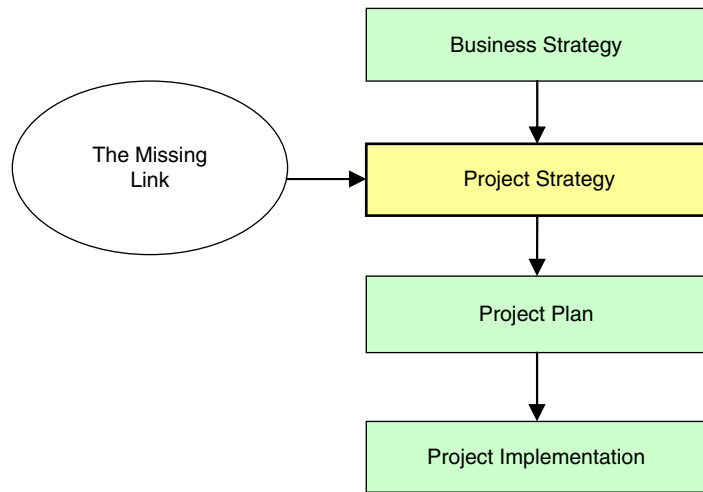
Source: Shenhar *et al.* (2007)

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.

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 PM to business strategy (Eriksson, 2013). This study emphasises on important external factors that affect the implementation of the company's business strategy in the project and also affect the PM efforts such as the government agencies, vendors, the dynamic market, and contractors. However, empirical literature offers limited direction on how to achieve such alignment.

The aim of this paper was to investigate whether the alignment between PM 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 research are as follows:

- to explore the alignment process of the PM and the business strategy;

- to investigate the effect of the internal and external factors (project stakeholders) on the alignment such as effective communication, project manager leadership competence, the involvement of the PM team in the strategy development, vendors, contractors, dynamic market, government agencies, and the executives' commitment in PM;

- to investigate the role of the alignment on the project success and the company performance; and

- to develop a framework to assist business organisations to put their strategy into action.

To satisfy the above objectives, this research addresses the following two questions:

Q1. How does the business strategy and PM alignment influence the project success and the business performance?

Q2. How can the process of strategic alignment be achieved?

2. Relevant literature
2.1 The concept of strategy
Hunger and Wheelen (2010) 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 maximises competitive advantage and minimises 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 towards growth and the management of its various businesses and product line, while business strategy occurs at the business unit or product level and it emphasises improvement of the competitive position of a corporation's products or services. Functional strategy is the approach taken by a functional area, for example, PM, R&D, marketing, production, etc. to achieve corporate and business unit objectives (Hunger and Wheelen, 2010).

2.2 The concept of PM
PM can generate significant value for organisations (Thomas and Mullaly, 2007) and the quality of PM in mega-projects creates great value for different stakeholders (Zhai *et al.*, 2009). 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. According to Shi (2011) the right implementation of the PM can add great value to an organisation. Nevertheless, some organisations have gained little value from the PM due to the fact that they have not applied the PM in a proper way. It has been argued that PM could add value to the organisations if it was developed in a right way both strategically and tactically (Winter and Szczepanek, 2008; Shi, 2011).

2.3 Project success
Project success can be measured by four criteria. According to Jha and Iyer (2007) the first three criteria (time, cost, and quality) are called the "golden/iron triangle" or "project management success" measures because they are concerned only with the efficiency of the PM process. However, because it is also important to analyse the organisational benefits of a project (Jugdev and Müller, 2005; Kerzner, 2009), the last project success measurement (business impact) estimates the benefits to the organisation, based on the impact on the customer, the business impact on the organisation, the opening of new opportunities for the future, and other stakeholders' satisfaction (Kerzner, 2009). In other words, "project management success" is only a dimension of project success (Zwikael, 2009). Hence, project success is a strategic management concept where project efforts must be aligned with both short and long-term goals of the company (Al-Karaghouli, 2005; Al-Tmeemy *et al.*, 2011; Han and Hovav, 2013).

2.4 The concept of the alignment

According to Fonvielle and Lawrence (2001) alignment is an essential effort for organisational success. By "alignment" they mean having a common agreement between all three levels of strategy (corporate, business, and functional) which concerns with 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 organisation so that it works towards the same goal and objectives.

Business strategy must be clearly understood at all levels of the organisation. When the alignment is strong, the planning and the execution team gain encouragement and the energy runs high across the different level. Both individual and team effectiveness increases, but when the alignment is mismatch (weak), people cannot focus on the main goal and objectives. Actions therefore become less effective. The principle of the alignment is that every aspect of an organisation's activities should be integrated and move in the same direction to achieve the corporate goals. In an ideal world, the organisation's mission and goals should be translated into its business and strategic plan (Holbeche, 2009).

When looking at an organisation, important elements appear such as 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 PM with the goals and organisational 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 (Kwak and Anbari, 2009).

It is worth mentioning that 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 both scholars and practitioners to align these strategies with business strategy (e.g. Preston and Karahanna, 2009; Gutierrez *et al.*, 2009; Yayla and Hu, 2009). Because PM is similar to these functional strategies, PM should be aligned with the business strategy (Srivannaboon, 2009).

Srivannaboon (2009) states that a competitive advantage can be achieved through the use of PM. However, Larson and Gray (2011) argue that in some organisations, the process of PM often fails to support the strategic plan. It is worthwhile stating that, aligning PM to business strategy could help the PM team to implement the company's business strategy in the projects in a proper way. Srivannaboon (2009) suggests the alignment of PM to business strategy should be investigated. Milosevic (2006) states that the board of business directors is responsible for the three processes: first, business planning; second, portfolio management; and third, prioritising projects. The project managers are responsible for the process of planning and executing the large projects. Milosevic 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 PM element (e.g. strategy-organisation-process-metric-culture), and the PM element feeds into the projects' and the team's execution. However, it has been shown that in many cases, these processes are not aligned (Milosevic, 2006). As a result, organisations 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 organisational financial and human resources.

Only recently scholars have started to explore the alignment of PM more thoroughly (e.g. Srivannaboon, 2009) with business strategy. 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.* (2009) analysing alignment across different organisational levels (strategic, tactic, and operational) provides a more complete picture of the organisation's alignment maturity that could facilitate the design of specific actions to improve the project alignment with business objectives. According to Chan *et al.* (2006) strategic alignment research suggests that alignment has a positive effect on organisational performance.

It has been recognised that most studies link the business strategy with PM in three ways. First, the alignment can be attained through project selection (seeing the selection or prioritising the projects that contribute to the business strategy is an alignment; Artto and Dietrich, 2004). Second, the alignment of PM can be ensured by project portfolio management (PPM) (Rajegopal *et al.*, 2007; Gareis, 2004; Jamieson and Morris, 2004; Pennypacker, 2005; Turner and Simister, 2008). Third, the alignment can be achieved through the project management office (PMO) (Hill, 2004; Aubry *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 PM lacks empirical studies to describe in depth the detail of the different processes of implementing the corporate strategy down to the PM level during the planning execution of the project.

Although Jamieson and Morris (2004) identified strategic planning, portfolio management, and emergent approach as important steps in the alignment process, with information that supports this research. They did not provide a framework and did not position their research as a set of case studies or as a theoretical foundation for alignment. Furthermore, Turner and Simister (2008) argued, conceptually and without an empirical validation, that portfolio management is an important step in aligning projects with the business strategy. However, Srivannaboon (2009) provided a framework based on an empirical study for aligning PM with business strategy. Although Srivannaboon incorporated variables in his framework such as business strategy and PM, he did not investigate the factors (internal and external project stakeholder) that affect the process of the alignment. Also, he did not show the impact of the alignment on the company performance or on the project success, which both of the above our study addresses.

2.5 Alignment enabler factors
These includes factors such as effective communication between business strategy and PM, the competence and leadership of project manager, the involvement of the project manager in the strategy development, and the executive's commitment have been mentioned in the literature as important factors for such alignment. For example, Claude and Hanley (2007) claim that implementing strategy receives less attention than formulating strategy, therefore translating strategy into action faces a communication problem. Supporting the above argument, Guffey and Nienhaus (2002) find that only 56

per cent 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 towards 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) reported that strategy implementation efforts suffer as a result of a lack of commitment from executives, a lack of committed resources or ineffective PM.

Involving the project manager in the initial stage of the strategy development is another factor that may link the PM 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 PM and business strategy alignment. However, Crawford (2005) finds that senior managers believe that project managers should not be involved in strategy formulation.

This research emphasises that the project manager competence cannot be ignored in literature. Personnel competence of the project manager 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; Furlong and Al-Karaghouli, 2010).

3. Methodological consideration

Creswell (2012) suggests a number of practical criteria for selecting one of the deductive and inductive research methodology approaches. Perhaps the most important of these criteria depends on the nature of the research topic. For example, if the topic is new or under a thrilling debate, or there is little existing literature, it may be more appropriate to work inductively by generating data and analysing and reflecting upon what theoretical themes the data are suggesting. This is the case of this study, where the alignment between PM and business strategy as phenomena has not been research thoroughly and little has been researched. Also, the process of the alignment as well as the contribution of such alignment to the project success and the company performance is still need to be further investigated.

Due to the limited research on the subject of the alignment of PM and business strategy (Srivannaboon, 2009; Shenhar *et al.*, 2007), the methodology used in this research was a case study. Case study is a good approach to explore the alignment deeply and to investigate the affect of such alignment on the project success as well as the organisation performance, the researcher preferred to go to the floor of the proposed telecommunication companies and make the interview. In total, 35 participants (this sample helped the researcher to reach saturation; Yin, 2009) from the three levels of the organisation including corporate, business, and functional levels (business executives, CIO's, project managers, the PM team) were contributed to this research. The study employs a qualitative approach in order to assure validity and reliability. Multiple sources of data were used (e.g. interviews, followed by annual reports and

documents). Using the combination of these sources to ensure validity is known as one form of triangulation. Triangulation refers to the use of more than one method in data collection, research design, and data analysis to increase the level of confidence in the ensuing findings (Yin, 2009).

The research makes use of four case studies covering four big projects in four large communications companies in Saudi Arabia. According to Yin (2009) the motivation behind using multiple cases is the desire to establish whether the findings of the first case occur in other cases (comparing the results for all cases) and, as a consequence, the need to generalise from these findings. 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 session, the interview was transcribed and coded.

Prior to data collection, the researcher developed a data collection protocol containing an overview of the research, field procedure, case study questions, and a guide for the case study report to enhance reliability of the research by demonstrating the methods and tools used and maintain a sequence of evidence by indicating the link between the content of the protocol and the initial research questions (Yin, 2009). This study includes major elements of data collection protocol, consisting of an overview of the research (research objective, research questions, propositions, etc.), field procedures (case selection criteria, interview guides, coding system, etc.), and a guide for the case study report.

Formulating appropriate questions to explore the alignment and answer the research questions was critical to achieving success in this type of interviewing. These questions contain open, specific, and closed questions also the interview guide is flexible for probing questions (Saunders *et al.*, 2012).

To answer the research questions, the interview guide was structured in a way that guide the creation of the interview questions to focus the interview in the research goals and objectives as well as to meet validity and reliability. For example, the creation of the interview questions follows three ways.

First, questions are seeking respondents from the three levels of the organisation including corporate level, business level, and functional level in order to get a quality view from deferent management perceptions. Second, the interview questions are designed to generate valid and reliable answers by using three types of interview questions including open questions, probing questions, and specific and closed questions. Third, the interview questions should explore the impact and the correlation between the strategic alignment and the project success as well as to the company performance. Moreover, these questions should explore the role of factors such as involving the PM in the strategy development, executives support, superior-subordinate communication, and the project manager leadership competence on the alignment. Finally, in order to measuring the alignment between business executives and project managers for each case study of the four companies, the interview guide has questions for both the executives and the project mangers regarding their priorities.

Semi-structured interviews was employed in this study because the semi-structured and in-depth interviews provide the researcher with the opportunity to get answers and explanations from the interviewees or build on their responses (Easterby-Smith *et al.*, 2008; Robson, 2002). The conversation with the interviewees were recorded by audio-recording. Each interview was recorded and later transcribed. Each interview took approximately 60-90 minutes and notes were taking to ensure the validity

and reliability. Each hour of recording took 9-12 hours for transcribing. In addition, interviews were conducted on a one-to-one basis, between the researcher and a single participant including executives, project managers, and the project team.

After transcribing the scripts, different categories have identified for each construct of the framework (e.g. business strategy, PM, internal factors, external factors, and the project success) and gave explanation for each category and coded each case as well as each participant. After that such categories and themes were constructed in NVivo. Following that, each sentence and word were extracted from the transcripts and related to each theme which was constructed within the software package (NVivo). The final stage was to anaylsis the data using NVivo.

This research also conducted in-depth interview on a group basis (focus group) where the researcher met with a small number of participants (executives and project managers) to explore an aspect of the research through a group discussion (Saunders et al., 2012).

Different groups of participants – executives, PM officers, project managers, assistant project managers, and team members – were interviewed from multiple levels of the organisational hierarchy in the telecommunication companies to obtain information from different perspectives. Interview guide was used and provided to the participant ahead of time to allow the emergence of dimensions and constructs within the natural environment while maintaining a sense of focus on the issue.

3.1 Description of the research design
This research pursued the following steps:

- reviewing the existing literature which lead to the identification of the relevant gaps;
- designing the research with the goal of filling these gaps by defining the research objectives, the research questions, and the research methodology (case study research);
- in order to evaluate the proposed framework, this research identified common characteristics of theoretical frameworks in general and later revisited to link with the proposed framework at the end of the study;
- conducting a field study including data collection and data analysis;
- producing a final case study report summarising essential findings, validated by a panel of experts, and checked with the existing literature; and
- creating a theoretical framework (Figure 4) for aligning projects with the business strategy (Figure 3).

4. Data analysis and results
After collecting the data, the next step was the analysis and make sense of the data collected. This helps to understand the relationship between the alignment and the project success as well as the company performance and the process of a successful alignment. Furthermore, the interview was a good chance for creation variables that have not been proposed in the conceptual framework. The research employed content analysis as a widely used in qualitative research technique. NVivo 2009 was used as a preparation method for data analysis. This programme helps to ensure the validity and the reliability of data analysis and the researcher use this tool as contributing to the research methodology.
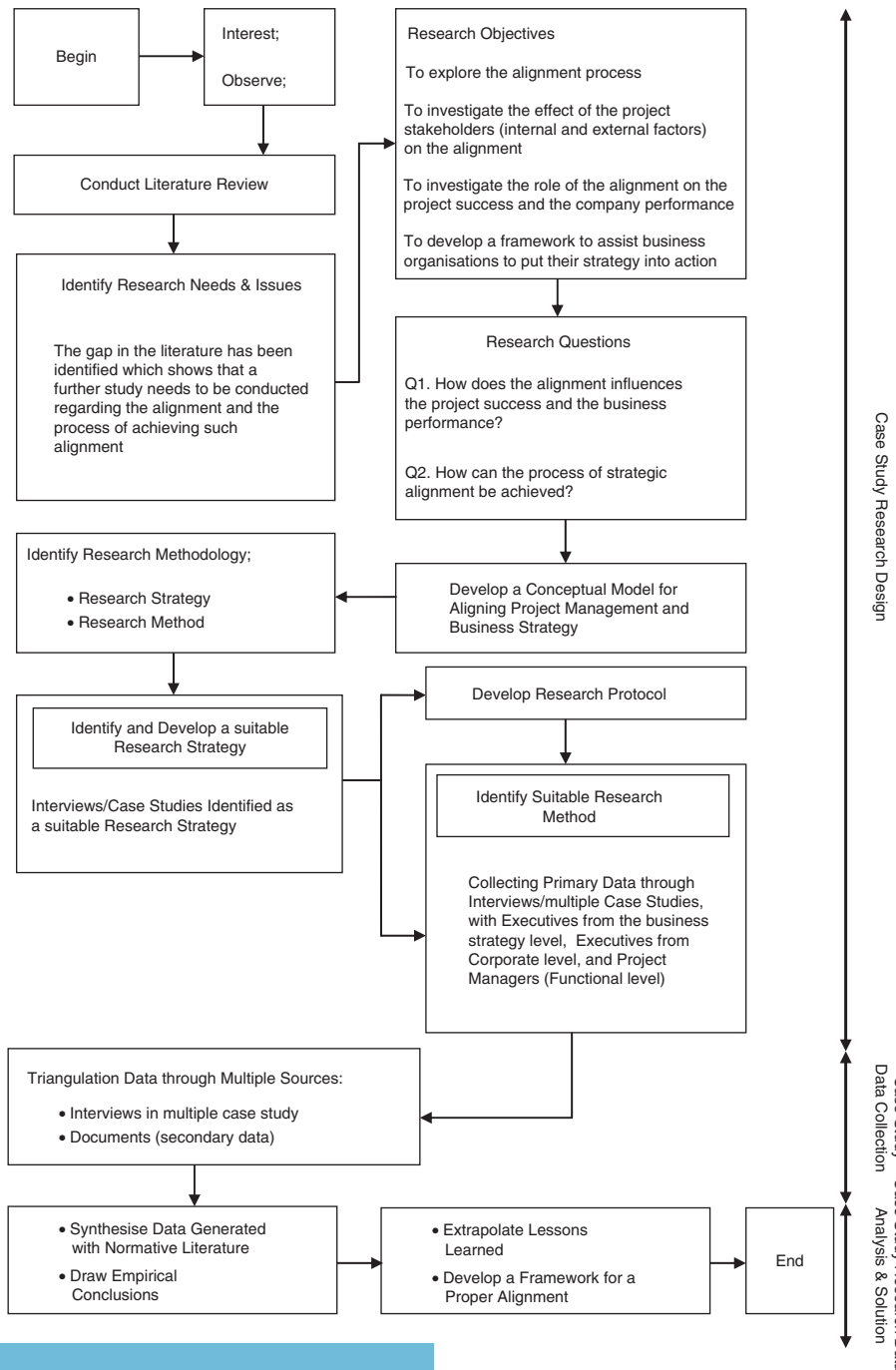
Figure 3.
Research methodology
roadmap

4.1 Data analysis

The proposed strategic alignment framework includes internal and external factors that affect the alignment (including the internal and the external project stakeholders). The internal factors include communication, executive's support, involving the project manager in the strategy development, project manager leadership competence, project team, project resources, and PM tools. External factors include dynamic market, vendors and contractors, government agencies, and site acquisition. This framework suggests all the factors impact the alignment differently (Figure 4). Some of these factors were highlighted in the literature but some of them were appeared through the investigation.

4.1.1 Effective communication. This attribute has a visible impact on the strategy implementation in the sense that it was identified as a constant by most of the participants. They agreed that the lack of communication between the project managers and the executives influences the projects and the implementation of the
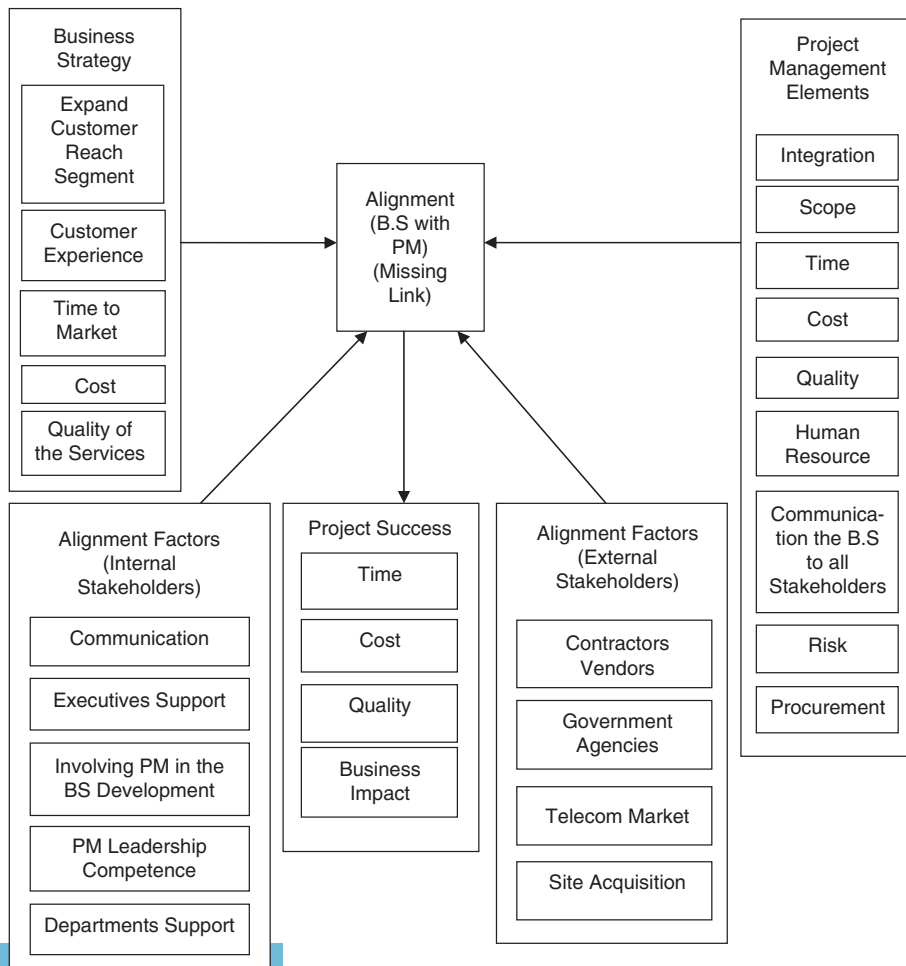

Figure 4.
Conceptual framework

business strategies. This attribute is crucial at the business strategy and the PM as it impacts the project outcome. The participants from the three levels of the organisation includes corporate, business, and function level (PM) address the significance of a proper communication between the project manager and the project stakeholders on the alignment. The significance of the communication can be seen throughout the information that the interviewees provided during the interview. They provided information about the role of communication in the strategy implementation, the problems that were generated from the lack of communication, and the role of the effective communication to overcome several problems.

4.1.2 Executive support. This attribute was rated highly by both executives in the business level and the project managers in the functional level. Executives affect the implementation of the company's business strategy because since they are the sponsors of the projects and have the power to enhance the PM efforts. Since they are close to the corporate strategy people, they have an advantage to study and prepare for the telecommunication market trend and its technologies. This advantage can be used to enhance the project plan.

Various project managers compliment the executives on having a great understanding and support for the PM team. All the participants, especially the project managers invariably reacted strongly when they were asked about this attribute, since they have already recognised the power that the executives have for solving many barriers that affect the implementation of the company's business strategies that are out of the PM control.

Most of the problems have been solved by the executives and most of the project managers compliment the executives' support since they contribute openly for executing the project in a strategic way. Although, the project managers appreciated the executives' support during the execution phase, they perceive their contribution in the PM is limited during the project planning phase.

4.1.3 Involving the PM in the strategy development. The importance of this attribute was obvious since the project managers and the executives expressed the advantages of having the project managers in the development process of the company's business strategies. There are three reasons for involving the project managers to participate in the strategy development. First, by understanding the business strategy the project manager influences the implementation of the business strategy positively (Up down influence). Second, by adding practical inputs and feedback to the strategy, the project manager influences the implementation of the business strategy brightly (down up influence). Lastly, by involving the project manager in the strategy development helps to build an effective work environment.

4.1.4 Departments supports. The telecommunications companies have several departments such as business, marketing and sales, IT, finance, human resource, PM, networking department, operation, and planning. The project manager has to manage several internal and external stakeholders beside his project in order to execute the project in a strategic way. According to several participants, some of the company's departments affect the project but not as much as the external stakeholders. Several project managers highlight the important to consider the cooperation of some departments as a risk which needs to be mitigated.

4.1.5 Leadership competency. The significance of having the project managers, the leadership competency, and the impact of such skill on the alignment are recognised from the telecommunications companies, so they provide a leadership programme for the project managers. Some of the project managers link such programme and the

workshops to the achieving the goal and objectives of the company. Moreover, one of the criteria that the company uses to evaluate the project manager is on his leadership competency. Several participants indicated the importance of having the project manager such skill and how this skill contributes to the alignment. The importance of such skills in the alignment can be recognised from the project manager's leadership decisions which therefore help to link the project with the company's business strategies or its competitive advantages.

4.1.6 Government agencies and the services providers. Government agencies and the main services providers such as municipalities, the communications and information technology commission (CITC), customs, and the electric company (SCECO) play a major role in the success of the telecommunications companies and in meeting their goals and objectives. In addition to that several project managers speak excruciatingly about their experience when they conduct the processes of issuing these permits. According to them, some of their projects are affected unconstructively by such processes. Regulation has stopped some of their innovative projects even before they started and some of them are terminated in the early stages. Several participants pointed the importance of considering this attribute during the project planning phase in order to strengthen the alignment. Each participant explained his experience towards this attribute.

4.1.7 Vendors and contractors. Vendors and contractors are the second highly rated attribute in the external factors and mentioned important from most of the participants. According to several project managers and executives this attribute is hard to manage. If the PM team is not managing the vendors and contractors properly, they will damage the company's reputation since they provide the telecommunication equipment, construct the infrastructure, and do most of the telecommunication work. They affect the quality, the projects time to market and they contribute to the company development. They are one of the main sources of the project failure. Vendors and contractors affect the alignment as well as the implementation of the company business strategy. For example, if vendors have a good PM team, tools, and resources, they will support the company to meet its goals and objectives. On the other hand, if the vendors are unprofessional in terms of PM and expertise will not contribute the company's business strategies positively. The impact of the vendors and the contractors on the alignment is noticeable since they contribute to the project heavily. Managing them in a proper way leads the PM team to execute the project in a strategic way. The differences in interest between the PM and the vendors are one of the sources that affect the business strategy implementation. Vendors and contractors focus heavily on their payments especially when they finish 50 per cent of the project. In addition to that if the vendor is not financially strong, he will not be able to survive during the course of the project. Moreover, the vendor qualification affects the quality of the work.

4.1.8 Site acquisition. Site acquisition is another external factor that was mentioned by the participants which affected the alignment. The telecommunication companies face difficulties from acquisition the sites for constructing their telecommunication equipment such as mast and towers. The difficulties come from finding and owning these sites. Some sites belong to the government properties and some sites belong to individuals. According to the participants, the difficulties of owning these sites affect their projects as well as the alignment effort since they delay the project life cycle and some time they affect the quality of the services. Site acquisition needs a negotiator who reduces the prices of owning these sites. Such a person should be a convincer who

convinces the individual that the telecommunication equipment are safe for the environment and do not have any affect on the people health and needs a person who knows the law and the government rules. If the PM team or the department of the site acquisition succeeded in acquiring the sites, the company will sign a lease agreement which therefore allows the company to construct their equipment and towers in their properties.

4.1.9 Dynamic market. The last attribute that was mentioned by the participants is the market volatility and the acceleration of the telecommunications technology. Several participants mentioned the affect of the market trend and the high acceleration of the telecommunications technology development on their projects and on the alignment as well. According to them, sometime during the course of the projects, their projects or the infrastructure of the projects have to be modified in order to be compatible with the new technology. When the new technology in the telecommunication market hit the market, some of their projects have to be terminated since they become absolute. Executives in this company play a major role for keeping the projects up-to-date. Executives update the PM team during the course of the project about the market trend and telecommunication technologies in order to help the PM team to survive during this hit. Any change in the project if it is not considered in the planning phase, will affect the company business strategies since they will not fully implemented in the projects. Moving from technology to another rapidly confuses the work of the PM team which affects the project outcomes (project triangle – time, cost, quality) and the implementation of the strategies in the projects. The rapid movement can be recognised in the previous example (changing from 3G to 4G). Several participants point out to the 3G project as an example of the dynamic market which is one of the factors that affect the alignment.

4.2 Results

The research highlights the important factors that affect the process of aligning the PM to the business strategy. Some of these factors should be considered by the company high management such as the executives support, involving the project manager during the strategy development, telecommunications market, units and department support, and the leadership competancy. The other factors such as communication between the project manager and the project stakeholders, government agencies, site aquisition should be considered as a vital risk during the planning phase (please see Table I).

The above factors have direct and indirect impacts on the major product of the planning processes of the nine knowledge areas (see Figure 4 – PM elements) during the execution phase (PMBOK® Guide, 2008).

Internal an external factors that affect the alignment
Effective communication
Executive (sponsor) support
Government agencies
Vendors and contractors
Involving the project manager in the strategy development
Units and departments support
Project manager leadership competency
Telecommunications market
Site acquisition

Table I.
Internal and external
factors

The companies that have strong alignment between the business strategy and the PM show successful projects outcome while the companies that have mismatch (or weak) alignment show less successful projects outcome.

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

5. 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. First, variables or units of analysis whose interactions comprise the focus of the study are (generic) business strategy and PM. Second, the framework indicates the manner in which these variables/units interact with each other. This is a two-way influence of business strategy and PM through a strategic alignment process. Third, 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 organisational business unit.

Srivannaboon and Milosevic (2006) conducted research using a case study methodology that extensively examined eight case studies covering nine projects in seven organisations. As a result of their work, an empirically based theoretical framework was developed to address the configuration of PM as influenced by the business strategy (and vice versa). They found that business strategy realises its influence on PM 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 PM – 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 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 organisational 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 including 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 4 below illustrates the conceptual research framework and the way to conduct and to investigate the effect of strategy and PM alignment to achieve competitive advantages.

The US-based Project Management Institute (PMI) has its guide to the PM body of knowledge (PMBOK® Guide, 2008). This study adopted the PMI's nine PM knowledge areas and correspondingly identified PM actions following PMBOK® Guide (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 PM 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.

The framework has three main constructs includes business strategy, PM, and the alignment. Business strategy and PM are the variables that need to be aligned with each other to ensure a successful project outcome. Alignment process is the aim of this research to ensure a proper business strategy implementation in the projects (to answer the research question on how the process of the strategic alignment will be achieved).

Project success is considered the consequence of this alignment. Including the project success in this framework leads to investigate the impact of such alignment on the project outcome. 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). Assessing the main priorities (goals and objectives) for the business strategy people and the project managers helps to measure the alignment in order to compare the score of the alignment with the project outcome.

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 PM 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.

6. Discussion and conclusion

6.1 Implication for theory
While research on various project stakeholders has received attention, there is a lack of research that actually examines the process of PM through the theoretical lens of stakeholder theory (Bourne and Walker, 2006; Marjolein and Janita, 2008) as well a lack of research that has applied both stakeholder theory and the strategic management process to the PM process (Ives, 2005; Jugdev and Muller, 2005; Norrie and Walker, 2004; Sutterfield et al., 2006). Therefore, this research fills the gap in literature by using stakeholder theory and the strategic management process as the theoretical lenses through which to analyse three case studies of telecommunication projects, and to offer a theoretical strategic framework to align PM in the planning phase with business strategy. The results of this study contribute to the concept of the stakeholder theory (PMBOK® Guide, 2008) and (Freeman, 2010). Project stakeholders include executives, project managers, project team, vendors and contractors, and the government agencies show direct affect on the projects outcome as well as the PM process.

The study supports on conclusions made by other scholars on the importance and the benefits of such alignment. The results show that the above factors can lead to a proper alignment and the latter will lead to successful project outcome to enable the telecommunications companies in responding to opportunities in high-dynamic market (Srivannaboon, 2009).

6.2 Implication for the PM literature and contributions
This paper contributes to the PM 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 second, developed a framework to align the PM process to business strategy. This will help the telecommunications industry in general, and in Saudi Arabia in particular, to measure the level of their alignment. The study contributes to the PM by providing clear understanding of the alignment and the process of achieving such alignment.

6.3 Implication for practice and contributions
The finding suggests that the telecommunication companies should align their business strategies and PM and measure their alignment continuously.

The alignment between PM and business strategy can be achieved when the priorities of the business strategy people are compatible with the priorities of the PM team. The compatibility of the priorities can be achieved through the following steps:

- the telecommunications companies should encourage their executives as well as their units and departments to participate continuously and from the initial planning phase of the project and support the PM team during the execution phase;

- the telecommunication company should encourage the business strategy people to involve the project managers during the development of their strategies;

- leadership competency should be a critical criteria when forming the PM team;

- the telecommunications companies should update the PM team for any change in the telecommunications market; and

- the PM team should consider these factors (internal and external factors) during the planning phase as important risks that need to be mitigated.

This study will benefit the project managers by enabling them to execute their projects in a strategic way.

6.4 Research limitations

- This research has investigated four telecommunications companies only. More companies will be better for comparing the findings.

- Due to time constrain, the research has dealt with one project in each company. Each project was supporting one of the company's business strategies. More projects and business strategies will lead to clear picture of the alignment.

- Access to executives' managers and CIO's was difficult. Several meetings were cancelled without short notice.

6.5 Areas of future research
This research suggests that research on alignment could be conducted in other industry in order to compare the results and conclusion.

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