



Aligning Project Management with Business Strategy

Student Name: Amena Yousef Al Sabaa
ID: 60116

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Supervisor: Dr. Paul D. Gardiner

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1.0 Executive Summary

Business strategy is becoming a subject of very high importance in business environments. Business strategy defines organization objects and goals in long term plan. In order to compete in business markets, business strategy should be executed successfully.

Project management is a critical tool. It has direct effect on business strategy. If used in mature way, business strategy will be achieved with significant outcomes. But if it goes in different direction than the business strategy, lot of negative consequences will result. It is not enough to complete the project successfully; it has to achieve benefits and be part of the business strategy.

Lot of methodologies and frameworks has been introduced with different elements to ensure project management alignment with business strategy such as Portfolio Management. The long term goals must be achieved by selecting the right projects and managing them consistently.

This paper defines the newly emerged concept of aligning project management with business strategy. The topics presented include: business strategy effectiveness, project management practices, project managers capabilities, alignment framework. Case studies are also included. These cases are analyzed to investigate the effect of project management alignment with business strategy in the business environment.

The research is also including recommendation on applying successful alignment model. Finally, conclusions are drawn based on discussed topics.

Key words: project management, business strategy, portfolio management, organization performance, strategic alignment.

2.0 Introduction

The essential role of planning business strategy and making it effective is well known nowadays in business environment.

The number of organizations using project management as a tool of maximizing value to their foundation operations is growing. That makes organizations look into projects as a “building blocks” in the design and execution of strategy of corporations and governmental sectors (Paul, 2005 citing PMI (2000)).

By analyzing the activities involved in strategy planning, strategy execution and the source for project startup, this shows a strong relationship between strategic objectives and project management (Paul, 2005).

“Project Management”, “Portfolio Management”, “Business Strategy”, those are the terms/factors organizations are manipulating to achieve their objectives. When these methodologies are aligned, the strategic factor inputs the portfolio factor; the portfolio factor inputs the project management factor, and the project management factor inputs the project execution.

But in many cases, those factors are not aligned; each factor is just moving in totally different tract than other factors. As a result, organizations may fail to link their projects either to their business strategy or to their portfolio causing them either to terminate the project or continue on a project of no link to the organization objectives, thus wasting organization resources.

Lot of managers in several organizations has expressed their concern that they are facing the misalignment between their organization’s strategic objectives and the planned projects to deliver the targeted business objectives.

As defined by Conrad and Derek (2003) citing Cleland (1999), projects are isolated entities with a defined start and end point that result in something new supporting organizations to meet their operational or strategically objectives. However, real business environment shows many cases where projects have independent stream of activities that is not reflecting the business strategy.

In many cases, organizations treat all projects in the same way regardless the business strategy adapted by the organization.

Many organizations are spending years in planning the strategic activities that mainly focus on identifying long term business objectives, as well as high level plans on how to achieve those objectives. Effective strategic management activities identify the strategic objectives (what an organization wants to achieve) and the strategies (how the strategic objectives will be achieved) over a strategic time frame, typically three to five years. Strategic objectives may cover financial revenue or investment, market shares increase, technology development. For services provider companies, strategy consists mainly of a collection of service ideas that when implemented will contribute to the achievement of the desired business objectives.

Organizations that are not aligning the business strategy with the project management will be finding it very difficult to achieve the desired objectives. The misalignment is sometimes costly as organization resources can be wasted without any significant benefits.

There are many reasons for the misalignment. A critical component contributing to that misalignment is the lack of the awareness and professional skills that is able to translate the strategy into actionable plans across organizational functions, and then drive the executed plans to deliver the desired business results.

Organizations that are translating their business strategy into project-level goals are able to deliver their uniqueness such as speed to market, high product quality in a smooth and professional way.

It is becoming essential for organizations to understand the challenges involved in aligning the business strategy and project management so that they can manage their projects effectively in today's competitive markets.

The concept of aligning business strategy with project management is costly in term that it requires high capabilities and professional managers but it generates high revenue.

To have a successful alignment, both of business strategy and project management should be carefully analyzed, planned and executed. And then an effective technique should be selected to fill up the gap.

This research took place in an international roaming services provider using the case study methodology.

Several techniques have been discussed by researchers in order to align the business strategy with project management. Some general techniques for the alignment model are the balanced scorecard (Simon and Ken, 2005 citing Kaplan and Norton, 1993, 1996), planning structure trees (Simon and Ken, 2005 citing Labovitz and Rosansky, 1997), and the logical techniques (Simon and Ken, 2005 citing Baccarini (1999) and Pendlebury et al. (1998)).

The effectiveness of the techniques covered by researchers differs according to many factors such as: business nature, organization structure and current situation.

By analyzing current situation of this research case, Portfolio Management was found to be the most suitable one to be applied.

The cycle of achieving the desired objectives in an organization starts with the strategic aspects; strategic objectives should be the basis of creating, selecting and developing new services. Portfolio management is an effective process to identify and prioritize project ideas that best support the achievement of the strategic objectives. Then the other layer is project management which involves the development and execution of the project plan just before the team execution.

Due to its effectiveness and importance, the implementation of portfolio management is growing. In many cases, portfolio management was successful to fill up the missing point between business strategy and project management.

Portfolio management is mainly concerned with project planning and selection in a way to be linked to business strategy.

As organizations are facing lot of constraints such as lack of finance and organizational resources, it is important to make careful prioritization choices when developing a project portfolio that is defined as a group of projects to be accomplished under central sponsorship (Sungjoo et al, 2008 citing Ghasemzadeh (1999)).

If applied successfully, portfolio management transforms organizations toward project management maturity and effective business strategy with proper resources allocation.

In order to establish the portfolio management, a framework should be set based on the current situation of the organization. The culture of the organization should support organizational

change when applying portfolio management. Portfolio management guidance formulates flexible principles to maximize strategic projects alignment outputs. For this research, the OGC model has been adapted.

This research provides a literature review defining the business strategy along with its various types and its effectiveness on organizations success and achievements. The second part that will be illustrated is project management effectiveness. The skills and capabilities required by the project manger will be covered as well.

After showing a clear explanation for business strategy and project management, a case is represented to show how business strategy and project management are running in an international roaming services provider and what is the culture created over there. The analysis of the current situation in the international roaming service provider in terms of business strategy and project management will lead to the consequences of current situation drawbacks and the reasons beyond those consequences.

The report will be ended with drawing a framework of aligning the business strategy with project management that is suitable to be applied in the project case which took place in the international roaming services provider.

The aims of this research are to examine the strong relationship between business strategy and project management, to examine how efficient the alignment framework is, and how to apply it in the researched sector.

In order to achieve the research aim, the report has the following objectives:

- To provide a review on the types of business strategy and its effectiveness, project management maturity, misalignment drawbacks, and alignment framework.
- To show how the alignment issues are affecting organization performance.
- To investigate the alignment issues and consequences in the researched organization.
- Based on the literature review and the research, to make recommendations on how to align business strategy with project management in the researched organization.

3.0 Literature Review

3.1 General Overview

One of the most critical complaints project managers are complaining is that projects exist randomly. The projects are not linked to strategy, and employees are not aware about entire organization projects and their scopes. Consequently, employees feel they are working from mixture of projects environment with too many unwanted projects (Randall and Robert, 1999).

Most organizations normally focus on short-term outcomes such as fast financial revenue. But still projects are expected to achieve results that go in line with organization strategy. That is why it is becoming very essential for organizations to think what it means to align project management with business strategy.

If a developed project does not fit the business strategy, then many projects should be omitted from the strategic priorities of the business (Paulo, 2008) as the misalignment will lead to negative consequences. For instance, Sabin (2006) found that many organizations suffer from failures and losses due to misaligned projects and lack of systematic procedures to align project management with business strategy.

Another example has been viewed by Anthony (2007) where some large organizations have invested significant amount of money in developing project management systems but they didn't get a significant improvement comparing to the spent amount. That is because project management is not fully aligned with project management.

Although projects are considered as an essential element in organizations strategies, sometimes there is no awareness that project management should be looked into as a functional strategy and business process. Consequently, aligning project management with business strategy will become more difficult.

Li (2009) argues that perceived strategic uncertainty has direct effect on lot of project elements like project sponsorship and project outcomes as well as moderating effect on same elements (project sponsorship and project outcomes).

In order to understand the relationship between project management and business strategy, it is necessary to highlight some related concepts such as: business strategy importance, project management maturity, project manager skills and portfolio management.

3.2 Importance of having well-planned business strategy

Business Strategy refers to a long-term procedures and approaches to implement organization's business plans to achieve its business objectives.

A part of the definition stated above, other researchers have defined business strategy in other ways. Abdulrahman (2006) defined Business strategy as the way of achieving the value and expectations of stakeholders or the objectives of the organization. From another point of view, Gail (1999) concludes that the organizational strategy is the direction of business in order to achieve the long-term objectives which are directed by market needs where the business will compete and targets.

Successful business strategy requires good understanding of the external and environmental factors that affect business ability to compete. Moreover, it requires resources such as human skills, assets and finance to achieve its objectives.

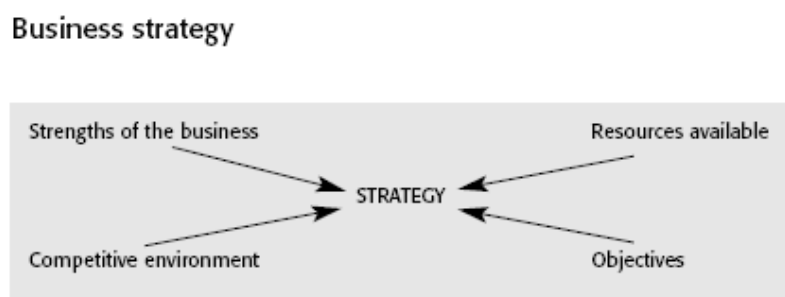


Figure 1: Influences on strategy formation (David and Peter, 2003)

Most of researchers when defining business strategy focus on how to better deal with competition by different ways of creating competitive advantages, advantages that provide organizations with the benefits that will maintain them when attracting customers and defending themselves against competitive forces (Sabin, 2006).

In brief, strategy is about:

- Direction: where the entire business is shaping the long term objectives.
- Scope: deciding which market and what activities the entire business should address.
- Advantage: How can the business have better competition in the market?
- Resources: define required resources in term of skills, assets, finance, relationships, technical competence and facilities.
- Environment: define external and internal factors that affect competition.

The critical part in business strategy is ensuring proper planning. The planning of business strategy points to important changes in an organization, affecting its long-term direction and the scope of its activities (Max et al., 2008). Within the planning phase, organizations should select the most appropriate business strategy that is most suitable to their objectives. Sabin (2006) stated that in order for organizations to achieve important competitive advantages, they must focus on and support the selected strategies.

Depending on the business scope, organizations should follow one of the three generic strategies defined by Sabin (2006) citing Porter (1980): cost leadership, differentiation and focus.

Organizations focusing on one of those generic strategies achieve long term success and better performance. On the other hand, applying more than one generic strategy will result in negative outputs. Organizations of such selection normally perform below their capability.

But still some selective combinations can lead to significant results. For instance, Sabin (2006) found that many researchers and practitioners (e.g., Hill, 1988; Miller & Friesen, 1986; Phillips, Chang, & Buzzell, 1983; White, 1986) have positive view about this combination as the best-cost strategy.

Below are detailed definitions for the three business strategies that have been mentioned above as stated by Sabin (2006) citing Porter (1980):

- Cost leadership: Organizations following a cost leadership strategy aim at increasing competitive advantage and improving market share by being the lowest cost producers in the industry.

- Differentiation: Organizations following a differentiation strategy aims as having distinct identity in the market place that satisfies the desires of their customers (e.g., fast delivery, high service quality innovative features). This differentiation allows the organization to charge a premium price.
- Best-cost: Sabin (2006) found that lot of researchers argue that the combination of strategies under certain conditions can result in the best way of achieving competitive advantages (e.g., Hill, 1988; Miller & Friesen, 1986; Phillips, Chang, & Buzzell, 1983; White, 1986). In general, organizations can combine both cost leadership and differentiation in order to have better competitive advantage. Consequently, low cost products with high customer values will be provided.

3.3 Importance of professional project management (project management maturity)

Due to economic forces in business environment, business environments are changing rapidly. Those forces result in re-designing the organizations in order to decrease cost, speed up product development and high attention on customer satisfaction. Those conditions make organizations focus more on project management as powerful tool to achieve strategic objectives through projects. By developing a “big picture” approach to investigate how system elements interact, better decisions can be done which can be described as the “best interest” of the overall project (William and Carol, 2004).

As organizations are growing in terms of size and scope, they are operating complicated projects. However, they might have not enhanced their project management methodologies. Lot of researches proves the increase in projects failure rates, and those rates are related to the size of projects.

Due to the above result, the awareness of the strategic importance of Project management is rapidly increasing in corporate. Senior managers and decision makers believe strongly that if project management is aligned with business strategy, then that will enhance achieving organizational objectives, strategies and performance (Sabin, 2006).

Project management can be defined as a methodology to manage work within a triangle consists of time, cost and performance requirement. Different researchers define project management in different ways. Sabin (2006) defined project management as a specialized method of management just similar to any other functional strategies that is used to achieve continues business goals, objectives and tasks within a planned schedule and budget.

The fundamental nature of project management is to support the execution of an organization's competitive strategy to deliver a desired objective. Most of world's best organizations are moving toward project management environment as a "way of working" rather than a procedure or unified tool (Richard et al., 2007).

In contrast to the traditional stereotype, the latest researches describe project management as a key business process (Sabin, 2006 citing Jamieson & Morris, 2004). This view means that the organization is looked into as the process rather than the traditional functional or matrix form while project management is looked into as one of the key business process that enables organizations to deliver valuable outcomes. For that reason, when organizations link their projects to their business strategy, they are more able to achieve their organizational goals.

Managers should be aware about the importance and advantages for project management applications and should clearly recognize that. That is because achieving effective project management's models will affect the organizational objectives. Organizations that start project management practices rarely stop it because it works.

The core nature of project management is to support organizations in execution of its competitive strategy to achieve its targets (Sabin, 2006 citing Milosevic, 2003)

Organizations that are ensuring greater maturity should expect to get tangible benefits that include better performance for project portfolio, efficiencies that is resulted with better resource allocation, and have better stability for the entire processes. As a result of that, organizational maturity then can provide strategic achievements and potential competitive advantages.

So, if project management is successful, organizations will succeed in achieving its objectives. And vice versa is applicable as well. If project management fails, organizations will fail on achieving its objectives.

Project management effectiveness also generates objectives that add value to business and defines the objectives in a way that make possible to illustrate the extent which they are achieved. Part of the project management effectiveness is clarifying the goals in a way that enables to maximize the potential towards achieving objectives (Jeff, 1997).

Jeff (1997) stated that the effective project management can achieve business change within a controlled organizational context covering the whole organization life cycle starting from the establishment of strategy to achieve objectives.

Project management if applied in effective ways using maturity models, organizations can assess their current capabilities and implement change and improvement in a structured ways with measurable outcomes based on market best practices. Maturity models contain hierarchical collection of elements that describe the characteristics of effective processes, and their functions enable organizations to obtain the benefits resulted by enhanced capability at all levels.

The most popular maturity models that have become as standard consist of Portfolio, Program and Project Maturity Model (P3M3) ([A] OGC, 2008).

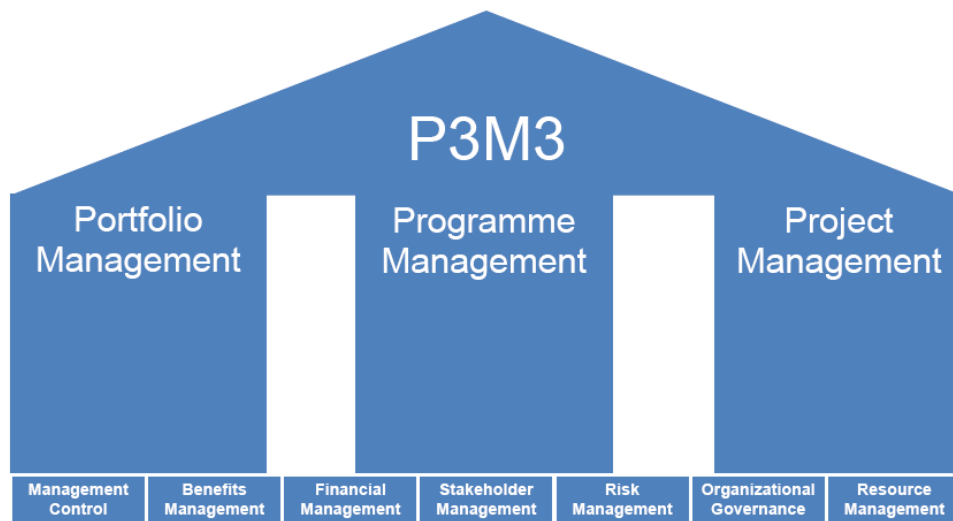


Figure 2: P3M3 Structure ([A] OGC, 2008)

Mike (2002) found that back in 1998, number of European projects failed which affected global results causing a profit warning on Wall Street. The main issues to generate this warning were:

- Project management was not following clear standards and disciplines.
- Business objectives missed the clarity.

3.4 Appropriate project manager skills for successful project management

Project managers play a vital role in driving the projects toward success under the umbrella of corporate strategy. That will definitely depends of the skills of project managers.

To response to business changes and environmental conditions, project managers should be capable to play a critical role to lead strategic initiatives and projects.

Low and Ben (1997) have discussed this point by proofing that project management is very much similar to military strategy, management in both army and organizations projects has an importance impact in shaping the success.

Li (2009) citing Ross and Weill (2002) found it very importance to have proper guidance and oversight from senior management on project phases to ensure the project is on track to follow cooperate strategic goals.

Project manager should have high capabilities to develop a project plan that integrates all project related activities to view the project from systems thinker level. The systems thinker level covers, organization events, structure and organization vision. The combination of such understanding of project activities and the development of team member relationships will have better decisions and results (William and Carol, 2004).

Managers that are adapting high standard capabilities can shape organization's outcomes in the desired way and ease projects implementation (Kedsuda and Stephen, 2008).

One of the required techniques for project managers also is to balance the need of giving individual project mangers the freedom to manage the project under the business strategy umbrella with having condition to have high level management controls that integrate project management with organization strategy (David, 2003).

In brief, in current markets where they are facing rapid changes, project managers should think and act strategically. Those are sort of questions that the project managers need to address: How

does an organization formulate a strategy to achieve competitive success? How do projects contribute to the implementation of the organization's strategy? How should a project manager develop a project strategy that supports organizational strategic and business goals?

The project manager should be able to use sort of ranking mechanism to be used to prioritize strategic projects and to help the manager analyze how project fits to the organization strategic objectives.

3.5 Aligning project management with business strategy

Project management should be linked to business strategy as it is the driver for strategy implementation.

Due to its criticality, the topic of project management alignment with business strategy was the scope for lot of researchers. Jeff and Donald (2008) defined the strategic alignment as “The degree to which the information technology mission, objectives, and plans support and are supported by the business mission, objectives, and plans.”

So, the alignment is all about creating a strategic fit between the business strategy, IT strategy, organizational infrastructure and processes.

When projects are aligned with business strategy in efficient way, organizations will be able to finish projects faster and even at a cheaper cost. In addition to that, such process can guarantee higher satisfaction on the part of the client. There is also lower group or team stress but can produce greater revenue. The alignment will also enable organizations to have better creativity and quality so that they can reduce mistakes in projects.

Other advantages for the alignment models is that it provides a deep analysis of the process starting from forming business strategy to portfolio development to the project role. It also helps to improve employees bad feeling resulted in having mixture projects with unknown purposes (Randall and Robert, 1999).

Relationship between strategy and business plan is essential to ensure that right project are selected and decisions are aligned to the strategy (Simon and Ken, 2005 citing Buttrick, 2000).

Lot of researchers supported this relation as they have studied Strategy implementation from a single management perspective such as project management, or as a component of performance management or strategic control. Max et al. (2008) described projects as the vehicle used to implement the components of business strategy. Base on to this finding, the success of projects implementations is considered as a key factor to determine business strategy.

Jeff (1997) supported above finding as he stated that a key factor to measure project effectiveness is to show how it has been delivered and will it continue to produce the expected business values represented by organizational strategy.

Among various researches, literature has analyzed the idea of alignment in different management fields and between different factors. For instance, lot of studies has examined the alignment between the main components in an organization: tasks, policies and practices; others have discussed the relationship between alignment and performance with reference to another critical component which is the elements inside organizational hierarchy: corporate, business and function (Sabin, 2006)

The literatures often mention research and development (R&D), production, human resources, and information technology among others as functional strategies and use these as the variables to examine alignment in relation to the business strategy. Because project management is similar to these functional strategies, it also should be aligned with the business strategy. On the other hand, the traditional literature on aligning project management with the business strategy is not that much clear. Most researches link the business strategy with project management through project selection and viewing it as part of the alignment process (Sabin, 2006). In addition to that, project portfolio management is another concept suggested in the literature to ensure the strategic alignment of project management and business strategy.

Only recent researchers studies have started to explore the alignment of project management more thoroughly. For example Sabin (2006) citing Amieson and Morris (2004) suggested that most of the components contained in the strategic planning process: internal analysis, organizational structures and control systems have strong links to project management processes and its activities. As a result, these components strongly influence an organization's planned business strategies. At the same time Sabin (2006) citing Artto and Dietrich (2004) suggested that one of the most critical managerial challenges involved in aligning project management and

business strategy is encouraging employees to participate in using emerging strategies to create new ideas and renew existing strategies. These studies suggest a need for more research in this area. On the other hand very rare studies explicitly discuss the framework for aligning project management and business strategy comprehensively.

In order to integrate project management with business strategy, set of procedures need to be followed formulating effective framework.

Portfolio management is one of the practical methods to set the alignment. Sabin (2006) citing Cooper, Iklgett, and Kleinschmidt (1998b) defined the Project Portfolio Management as “a dynamic decision-making process through which an organization can update and revise its list of active projects”. The organization's selection of business strategy is what drives its project portfolio management process, the major purposes of that are to select and prioritize projects balance projects align projects with the business strategy manage available resource capacity-

Paul (2005) sets other strategy to set the alignment. This represented by a strategic governance cycle of four stages in order to achieve and maintain strategic alignment of the project portfolio.

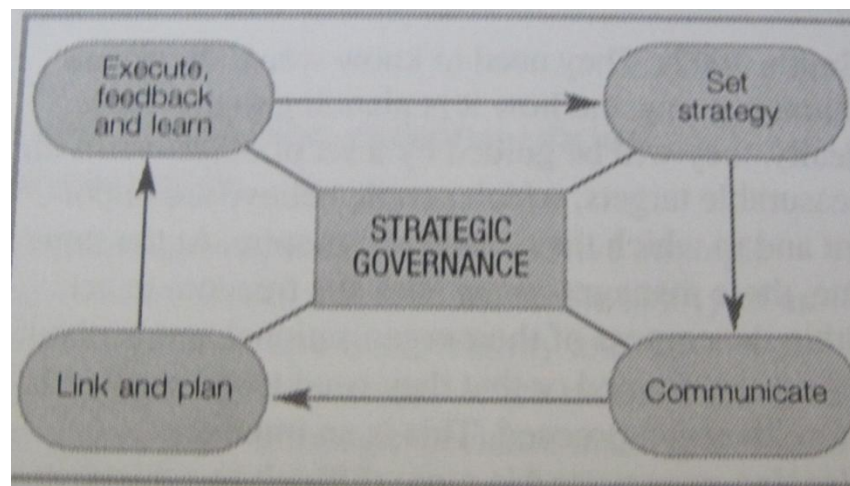


Figure 3: Strategic governance cycle (Paul, 2005 citing Smith, 2002)

Those four stages are:

- Set a clear strategy that focuses on achieving organization’s long term objectives.
- Communicate the strategy in order to share the critical information among employees.

- Link and plan in a way that ensures that the strategy is related to the plans, budgets and project portfolio.
- Execute, feedback and learn in a way to ensure that plans are executed supporting the business objectives.

Here is another example of a framework that is applied by HP. HP has experienced the success of the alignment model by ensuring the balance between four important factors represented below (Randall and Robert, 1999):

<p>Customer Satisfaction (28%)</p> <ul style="list-style-type: none"> • Improves service levels • Results in more consistent and accurate information/transactions • Helps ensure services are delivered as promised & expected 	<p>Employee Satisfaction (7%)</p> <ul style="list-style-type: none"> • Improves employee knowledge • Increases employee efficiency or effectiveness • Improves work/life balance • Positive impact to employee survey • Helps balance workload
<p>Business Value (46%)</p> <ul style="list-style-type: none"> • Achieves results that are critical for a specific window of opportunity • Minimizes risk for implementation and ongoing sustainability • Improves integration and relationships with partners • Provides a positive ROI in < 2 yrs • Aligns with business goals 	<p>Process Effectiveness (19%)</p> <ul style="list-style-type: none"> • Enables employees to do things right the first time • Increases the use of technology for service delivery • Reduces manual work and non-value added activities • Increases employee self sufficiency

Figure 4: Sample criteria and weighting, plus sub criteria developed by HP (Randall and Robert, 1999)

Strategic project leadership (SPL) framework is another framework that identifies the elements to be used by organizations when aligning project management with business strategy. Elements are: project strategy, spirit, organization, process, and tools (Sabin, 2006 citing Shenhar's (1999)).

In general managing the strategy through projects ease the achievement of maximum value by optimal utilization of available resources which include time, money and people (Svetlana, 1997).

3.5.1 Portfolio Management

If business strategy and corporate bottom line are understood clearly, then it will become easy to formulate a direct relation between the selected projects and organization objectives.

In order for projects to be linked to business strategy, researchers discuss lot of guidelines to achieve this purpose.

One way to make sure that project management is aligned with business strategy is to have deep understanding by project managers why the project is needed and what is the purpose of that project at the start of the definition phase (Gordan, 1999). Though such instruction seems to be obvious and well known, but still project managers can miss it as Gordan (1999) describes as they are most often not having the authority to understand what they are asked for “managers are often in the position of not fully understanding what they are being asked to do. Or the original request may have passed through a number of hands and the real need has become distorted along the way. A good instruction could have been given but the recipient failed to record it correctly. The unsure project manager may be hoping that understanding will come later as the plan gets built.” Gordan (1999) commented. In most organizations projects are just thrown from top management to middle management as instruction to start the project. Sometimes also top management when initiating a project is giving unclear information resulting in unclear project objectives.

For all those reasons and consequences, business strategy should be taken into consideration when defining the project. Project manager should understand why the project is needed and where it fits in organization strategy. Project manager should also ensure that project outcomes and benefits contribute to organization when linked to business strategy (Gordan, 1999).

The characteristics and approve followed by project manager is also an important factor to address business strategy when managing project.

Portfolio Management has been viewed by researchers to be an effective tool to keep projects and programs into one portfolio to ensure their alignment with business strategy.

Portfolio Management has been defined in several ways. Paulo (2008) defined it as selection of project. Other researchers defined portfolio management as a way of prioritizing product

development (Paulo, 2008 citing (Tatikonda, 1999; Cooper et al., 2000)). Another group of researchers view portfolio management as multiple project management (Paulo, 2008 citing (Dooley et al., 2005)).

[A] OGC (2008) stated portfolio management as:

“A coordinated collection of strategic processes and decisions that together enable the most effective balance of organizational Change and Business as Usual.”

In short, portfolio management is a mechanism to select a portfolio for projects development to achieve the following objectives:

- Maximize the value of the portfolio.
- Maintain balance.
- Support organization's strategy.

The implementation of portfolio management enables organizations to identify and invest in only those projects that have high success targets based upon organization strategy, objectives and core competences.

If portfolio management is implemented properly and performed on regular bases, high impact and value activity will be added to the organization. Portfolio management helps in maximizing the return on the product innovation investments. It also maintains competitive position in market. In addition to that, portfolio management helps in achieving focus and balance via enabling objective project selection. One more point is that portfolio management enables effective and efficient allocation of resources. All of those advantages lead to strength the link between project selection and business strategy.

Portfolio Management ensures that decisions are made collaboratively, in terms of the whole Organization, and by using the appropriate resources at the appropriate level.

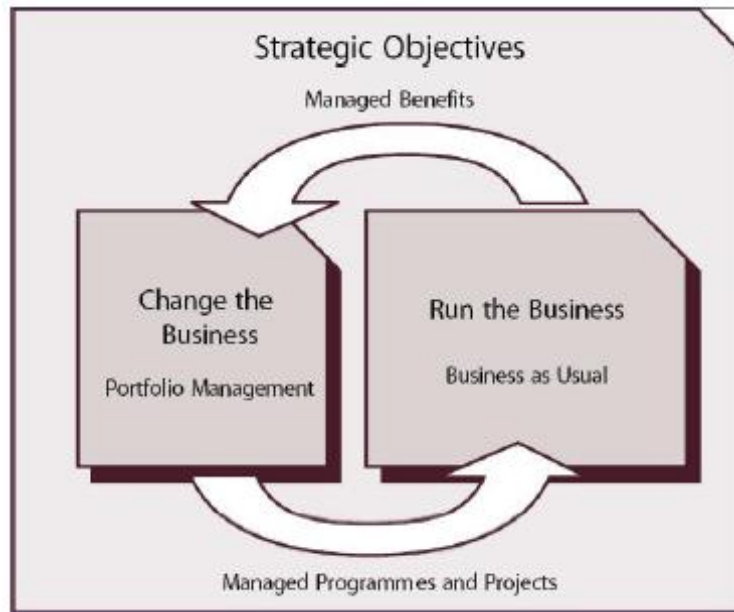


Figure 5: Strategic objectives “Run the business, change the business” ([A] OGC (2008))

Portfolio management provides insight into project development from the planning and strategic level. It ensures transparency in projects selection decisions, manages the risks of those projects, and maximizes return on projects.

Portfolio Management is an effective business practice that can enable organizations to get outstanding outputs from developed projects in cheaper costs. Successful organizations are recognizing that portfolio management enables them to make better decision.

[B] OGC (2008) summarizes the benefits that organizations will realize if applying portfolio management as following:

- Selecting the ‘right’ programs and projects.
- Removing the redundant and duplicate projects.
- Implementing programs and projects in effective way.
- Realizing greater benefits.
- Utilizing resources in more efficient way.
- Improving transparency, accountability and organizational governance.
- Improving the communication channels between senior management.

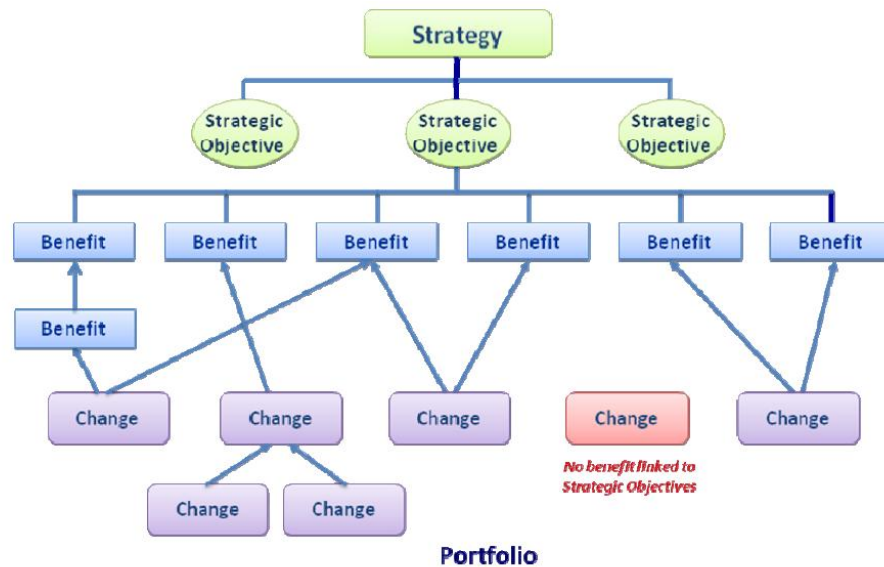


Figure 6: Alignment of benefits to strategic objectives ([B] OGC (2008))

Portfolio management is improving products and projects success along with aligning the portfolio of innovation projects with business strategy (Catherine et al., 2008).

The emerging of portfolio management in an organization requires high techniques as if any element is missed, problems can arise. For example, there might be shortage in available resources where on the other hand there are too many projects for development (Low and Ben (1997).

Just like any system, the implementation of portfolio management is often not straight forward. For many organizations, successfully implementing portfolio management is a bit difficult and time-consuming. That means applying portfolio management requires a well-planned strategy and smooth implementation.

Portfolio management guidelines topic is occupying a wide area in researches areas. Several guidelines have been suggested in order to get value from applying portfolio management. Despite the general applicability of the guidelines, there is no universal approach to apply portfolio management. Appropriateness of the implementation approach depends on the organization scope mainly. Different approaches reflect different assumptions, methodologies,

models, structures and business needs. The main challenge is selecting and designing an approach that will fit with organization needs.

Bruce (2002) has clarified the starting point in order to achieve successful portfolio management. Organizations should start with reviewing the strategic objectives of the organization by reviewing existing information like the strategic plan. In addition to the strategic objectives review, the key drivers within the organization should be reviewed as well.

Organizations should ensure that right projects are selected. The portfolio should be balanced and support the business strategy (Paulo, 2008).

Some manufacturing companies worldwide have started portfolio management as organizational change in order to align the organizational structure from project management with business strategy (Paulo, 2008).

Paulo (2008) found that effective portfolio management requires that three elements be in place and that they work in synchronization with one another: the business strategy, the development process for new projects and the portfolio review with its various models and tools.

Paulo (2008) pointed to other steps for portfolio management as:

- Having a database for all project related data and information categorized by business and types.
- Consider the business strategy as a main source for the new project strategy.
- Enhance the product development and project management process by defining criteria for the phases and defining the frequency of meetings to review the portfolio.

Organizations will have the chance to review project in all phases with relation to specific strategies, support specific project proposals in specific strategic areas where organizations need to develop and re-organize projects priorities in term of market and technology requirements (Paulo, 2008).

[B] OGC, 2008 has set a framework to provide flexible principles. This framework consists of senior management commitment, alignment of the organizational governance and organizational

strategy along with establishing portfolio office model that is functioning in a culture that supports the change. Referring to OGC framework, portfolio management activities are grouped within two cycles: the portfolio definition cycle and the portfolio delivery cycle. When the practices are integrated within organizational structure, they will facilitate portfolio management activities such as prioritization, balancing, planning and projects delivery.

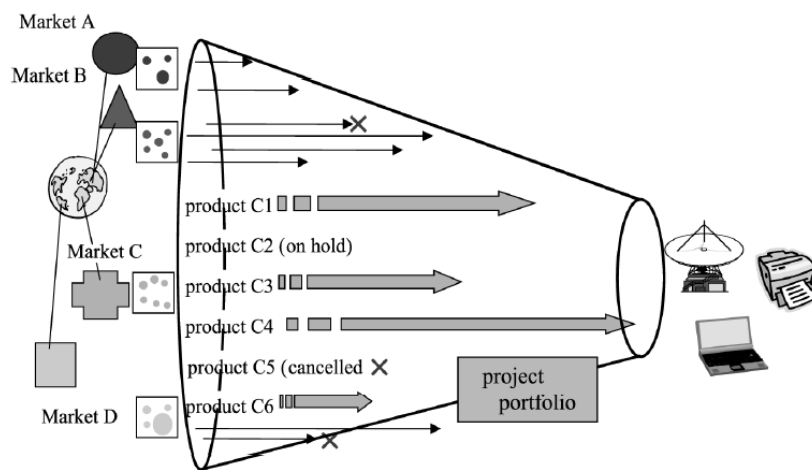


Figure 7: Project Portfolio (Paulo, 2008 citing Rozenfeld et al. (2006))

An important factor towards achieving successful Portfolio Management is the collaborative working. There are specific teams in an organization where portfolio team should communicate with strongly sharing information, tools, methodologies and processes. [A] OGC (2008) has defined the key teams that are required for integration in the below table which is extracted from OGC guide.

Management Board	<p>The Portfolio Office needed to engage with the members of the Management Board, both individually and as a team. The Management Board's involvement was critical as it ensured that the new ways of working were supported from the very top of the organisation, which led to departments understanding that PFM was a serious change.</p> <p>It was important to ensure that the Management Board understood how they were going to be involved with PFM before it was implemented. Once they were satisfied that the Portfolio Office ensured they were presented with the correct information, they were involved in the Portfolio definition and were happy to be key decision makers throughout. They were also critically involved and supportive of the communications that were published to the organisation.</p>
Finance	<p>When PFM was first being implemented, the Portfolio Office did not have expert financial skills, so collaborative working with the Finance Department was critical. This was particularly relevant with detailed financial planning aspects of Business Cases and defining and realising financial benefits from the Changes. Finally, the finance team were key players in helping with the overall Portfolio reporting and ongoing links to the organisational financial decision making.</p>
IT	<p>A key challenge for the Portfolio is to ensure that technology-enabled Changes are resourced appropriately. This was only achieved because we worked closely with the IT Programme Office to ensure that resources were being prioritised in line with the Organisational Portfolio priorities and that the mechanism to initiate technology Changes within the organisation was aligned to the Portfolio Office's Business Change Lifecycle. As well as the development aspects of IT implementation, the IT Programme Office also helped to ensure that all service management elements were in place.</p>
Procurement/ Commercial	<p>A significant proportion of Changes in the organisation require procurement and commercial advice in order to follow defined procurement processes. An Investment Board existed and was aligned with the PFM Governance. This ensured that key personnel, such as the Commercial Director, had early sight of proposed new Changes in addition to increased exposure to Business Cases and planning, which proved critical to ensure that plans realistically incorporated procurement and commercial timescales.</p>
Strategic Planning	<p>Portfolio Office has the most up-to-date information on all Changes and understands how those Changes are contributing to the Strategic Objectives.</p> <p>The Strategic Planning Team produced the Annual Plan, which contains a snapshot of information on the Portfolio and, as such, it was critical that the two teams were aligned, particularly during reviews and creation of the Annual Plan and the Organisational Strategy.</p>
Performance	<p>Without the expertise of the Performance Management Team the Portfolio Office would have struggled to identify how each of the Changes adds value to the overall organisational performance measures. The Performance Team also benefited from working with the Portfolio Office because they were able to integrate the information from the Portfolio into the organisational Balanced Scorecard mechanism; they were involved at the start of Changes and could begin planning the overall organisational performance.</p> <p>The Performance Team also provides performance-related support to Changes via the Portfolio Office. Historically, people did not think about the impact on the performance before starting a Programme or Project, but the introduction of PFM ensured that performance was included during the planning stages of every Change.</p>
PPM Delivery Team	<p>Working closely with the Programme and Project Management community is key. The Portfolio Office provided the standards for delivering Programmes and Projects, provided assistance with planning and helped managers' work through the steps to start up. Building a strong relationship with the Programme and Project Managers was critical, particularly when the monthly progress reporting mechanism was introduced. The relationship was the key reason why the reporting mechanism was successfully implemented, because the Programme and Projects knew that the Portfolio Office would get feedback and support on big issues directly from the Management Board, whereas historically there was nowhere to escalate to and everything was a battle.</p>
HR	<p>Changes will almost always impact the structures and working practices of people. The Portfolio Office engages early on with the HR team so they have an early view of Changes coming over the horizon, and have input into them. Importantly, training is something that used to be overlooked and the lack of training skills has caused a few Projects to be delayed in the past. However, since the Portfolio Office made sure that HR were involved during the planning and prioritisation, the training department knew how to align resources to priorities which pleased everyone.</p>

Figure 8: Portfolio Management teams involvement ([B] OGC, 2008)

The implementation of portfolio management is surrounded by some challenges. Those challenges includes getting senior management support and commitment, achieving a portfolio vision across the projects, managing to get accurate and appropriate data for portfolio repository, and finding enough time to implement the portfolio management (Catherine et al, 2008).

3.6 Misalignment consequences

The misalignment causes lot of problems such as: confusion; waste of resources; reduce productivity, low motivation of individuals and teams; internal conflict and project failure (Simon and Ken, 2005).

[A] OGC, 2008 discussed lot of consequences result from the misalignment. There won't be a base of which project need to be delivered as projects are not prioritized. New projects appear just on the fly and nobody is really sure what they are achieving.

Projects that are not supporting the business strategy or even affect the strategy negatively continue to be delivered. Even if employees are realizing the 'no use' of the projects, there is no proving to make a decision to stop the project.

Organizational team work will reduce as well specially at senior management levels due to the lack of understanding of the projects and links to business strategy. Employees will lose the energy to work collaboratively. They will lose also their committed to the organization and many employees might be searching for other jobs.

Moreover, senior management will not have a cooperative view of the future and as a result cannot lead or even add new to the organization.

In addition to that, decision making at the top level is not communicated to other employees, which causes more confusion within the organization when understanding the requirements.

A normal result for all above is having de-motivated employees. Employees will not have the interest to invest time in analyzing, planning or implementing projects using maturity models as they do not have to. So, employees with high capabilities will leave the organization in order not to waste their skills.

4.0 Methodologies

4.1 Overview

As stated earlier, the purpose of this research is to analyze the business strategy and project management as separate entities in a selected organization and then analyze to what extent they are aligned together and how is the selected organization is functioning accordingly. In order to achieve the research purpose, a variety of research methodologies have been used in this study including both qualitative and quantitative methods.

This study was based on two research integrated parallel phases: data gathering and data analysis. During data gathering phase, a literature review was conducted based on other researchers' studies in order to get good understanding on aligning project management and business strategy.

4.2 Research procedure

Several methods that are classified as qualitative approach is used to address the following objectives of the research:

- Analyze business strategy and its effectiveness, project management maturity, misalignment drawbacks, and alignment framework.
- Describe how the alignment issues are affecting organization performance.
- Describe the alignment issues and consequences in the researched organization.

The research procedure aims also to answer the following research questions:

- How the business strategy is identified and what are its main considerations?
- To what extent effective project management is applied in the case study organization?
- How are business strategies and project management linked to each other?
- What are the consequences of misalignment between business strategy and project management?

The qualitative approach includes data collection from semi-structured interviews, organization secondary data, observation and case study. This approach helps to gather a descriptive data of alignment issues.

The first step of the data gathering process was to meet Business Excellence manager to introduce the objective, research process and to get the organization commitment in contributing in the study. The same introduction was repeated when interviewing the selected staff.

Task Description	Concerned staff/ section	Duration	Requirements
Interviews	General Manager IT Director Head of departments Randomly selected staff (10)	15 – 30 minutes	Introductory interview
Collecting documentation	Business Excellence section	1 hour	List of documents Introductory interview with section head

Table 1: Data gathering plan

4.3 Research variables

Based on the selected organization nature of business, some research variables have been set which are: project efficiency, impact on the customer, direct organizational success, delivery time and quality. Those variables were the base of all the research methods.

Those variables were set in order to view current projects suitable from all angles.

4.4 Semi-structured interviews

Semi-structured interviews were used in this research where the questions are closed, but interviewees are given space to elaborate on the answer.

Using structured questions helps getting factual information and goes deeper into interviewees' experiences.

In order to get an overall understanding of the organization, key people who manage the different departments have to be interviewed. Those key people can be identified as the heads of departments and the general manager.

In order to ensure effective time management (Gail, 1999 citing Easterby-Smith et al., 1993), structured questions were prepared. This enabled gathering information in a timely and efficient manner (Gail, 1999 citing May, 1993). A total of five heads of department were interviewed, one head. The director of Information Technology and the General Manager were also interviewed. Randomly selected employees from middle layer were also interviewed. So, total of fifteen employees were interviewed. Each interview last from 15 to 30 minutes depending on the role of the interviewee in order to get answers for the research objectives and questions.

Introductory questions were presented at the start of the interview to warm up. Interview questions were developed after reviewing current projects process.

Each interview was conducted in a separate day to allow time to make a clear understanding (Appendix – E).

After each interview (phase 2: data analysis), the conversation was written out and translated to business terms. Case studies were then written.

4.5 Reviewing secondary data

Reviewing secondary data helps to understand the entire business and environment of the researched organization. It also enables to understand the problem statement and support the findings.

The secondary data reviewed included business strategy, organizational SWOT analysis document, relevant minutes of meetings, project related emails, organizational structure, some project documentation (scope of work, planning and analysis, testing scenarios) and projects plans.

4.6 Case Study

In parallel with the literature review, case study over several months was researched.

The case study method has been considered as an important and effective tool of research in the social science and management (Anthony, 2007 citing Chetty, 1996), especially in studies of internationalization through networks (Anthony, 2007 citing Mo'ller and Wilson, 2001). By comparing previously developed theories with new empirically resulting approaches, the case study approach is especially appropriate for developing new theoretical insights (Anthony, 2007 citing Yin, 1994). The case study approach is very powerful to exceed the local boundaries of the investigated cases, capture new views of reality, and develop procedures, testable, and valid theoretical and practical insights (Anthony, 2007 citing Eisenhardt, 1989; Tsoukas, 1989; Voss et al., 2002).

Although it has been argued that case study tool is more suitable for the development of theory than for the testing of theory, it can actually be used for (Anthony, 2007 citing Woodside and Wilson, 2003). It enables a researcher to expand and view the full picture of the business process and helps to develop better understanding. (Anthony, 2007 citing Miles and Huberman, 1994; Skaates and Tikkanen, 2003).

Case studies were used to study how projects are management in reference to business strategy through semi structured interviews (ranging from 30 – 45 minutes per interview) with employees having key positions in the organization, employees such as senior managers, project managers and team members in order to get information in different angles.

In order to select the reviewed cases (projects and participants) set of criteria were defined and cases that are most related to the criteria such as theoretical sampling and project frame that are related were identified (projects completed in at least six month or under), as well as number of years of experience for selected project management (at least 2 years).

These projects were then categorized into different categories, including strategic projects (creating strategic positions in markets and businesses), extension projects (improving or upgrading an existing product), utility projects (acquiring and installing new equipment or software, implementing new methods or new processes, reorganization, re-engineering), and

R&D projects (exploring future ideas, no specific product in mind) (Sabin, 2006 citing Shenhar, 2001). These projects were also classified in regards to external customers (external contract or consumers), internal customers (internal users or another department), or both. Each project was also evaluated in relation to such success dimensions as project efficiency, impact on the customer and direct organizational success (Sabin, 2006 citing Shenhar, Levy, Dvir, & Maltz, 2001).

Analysis was carried from different dimensions, within case, cross case and content analyses were performed. Total of 4 project cases from different categories in one organization were involved in the research.

For each case study, a self-typing method was employed (Sabin, 2006 citing Conant, Mokwa, & Varadarajan, 1990) to categorize the business strategy, using Porter's generic strategies (Sabin, 2006 citing Porter, 1980), to analyze the effect of the business strategy types on the maturity of project management elements. The research selected Porter's generic strategies typology to categorize business strategies types due to the following:

- Porter's generic strategies are proved and accepted as operational strategies by different researchers in their literature (Sabin, 2006 citing e.g., Harrison & St. John, 1998; Kim & Lim, 1988; Miller & Dess, 1993; Reitsperger, 1993; Veliyath, 2000).
- Porter's generic strategies mainly concentrate on the strategic positioning dimension of the business strategy (Sabin, 2006 citing KaId, Nilsson, & Rapp, 2000), where it shows the fundamental way in which an organization relates to its products. Those dimensions which contain differentiation (i.e., quality, delivery time), cost, and a combination of both are normally addressed by organizations as a project's critical objectives, constraints, and requirements.

4.7 Observation

Observation of current functions and process was also used. Observation is a valuable tool that adds a richness of detail. Normally the researcher is able to see for own purpose how is the behavior in the nature contexts. The benefits of using observation as a research methodology are that it fulfills the criteria of validity and offers flexibility. Moreover, it provides basis for inductively producing new theoretical clarifications.

5.0 Discussion

5.1 General analysis and results

The first portion of this research relates business strategy elements in the researched organization. Then it moved to the methodologies of project management as influenced by different types of business strategy. Results and causes were then illustrated along with a framework to improve the business environment.

Some of the studied cases were illustrating the situation where project management elements support and impact business strategy. Such relation exists when organizations refer to project information in order to get the way of adapting their business strategy. This process has been described by Mintzberg (1994) as an emergent strategy approach.

In this research and based on the literature review, it was shown that business strategy realizes its effects on project management through the competitive elements of the business strategy (example: delivery time and quality).

Those competitive elements are used in proper way to determine the methodology and effect resulted on different project management elements (strategy, organization, process, tools and culture).

For instance, if delivery time is selected as a competitive element, then project strategy's configurations should be designed to support the delivery time element by focusing on the time and ignoring any other related factor such as the cost and product features. In the same stream, the project process should also be designed to achieve the delivery time element by adjusting or combining process phases, milestones and activities.

In business environments, there are various combinations of competitive attributes of business strategy and project management that organizations can use as sources of advantage to compete with their competitors. At the same time, there are many alternatives to shape project management elements to support the competitive attributes of business strategy. Clearly, all three strategic types influence project management elements through the competitive attributes. Therefore, four propositions are discussed in this report, one for each project management element:

- Proposition '1': the project strategy is directly aligned with business strategy and supports it positively.
- Proposition '2': the project strategy is directly aligned with business strategy but failed to support it.
- Proposition '3': the project strategy is not linked to business strategy.
- Proposition '4': the project strategy is indirectly linked to business strategy.

Those four propositions were based on the previously mentioned variables:

- Project efficiently.
- Impact on customer.
- Direct organizational success.
- Delivery time.
- Quality.

For this research, OGC Portfolio Management guidance was adopted with the exclusion of some principles from applying fully. Organizational governance alignment and culture change were not applied as part of the proposed framework. Based on the case study, employee awareness was added part of the proposed framework.

5.3 Company brief

The research was done in an international roaming services provider (data clearing house - DCH) that has been established back in 1994 in UAE. This service provider is considered one of the leading clearing houses out of 5 available in the world only. It provides a full solution to GSM operators for roaming facilities be provided to their clients. It is the first international roaming services provider in the Middle East and is serving many leading telecommunication operators groups.

It provides a comprehensive Financial Clearing and Settlement service for handling reconciliation of GSM Roaming Records and net settlement of financial accounts between its clients and their roaming partners. Financial Clearing includes receiving/sending invoices, reconciliation, and bank account management, follow-up of payment, settlement of accounts, book keeping, sending/receiving credit/debit notes and many other customized services.

Mission:

To be a single source to our clients and to provide one solution to all their roaming needs in a reliable, responsible and efficient manner that will meet and exceed their expectations.

Vision:

To be the provider of choice for supporting GSM operators roaming services.

This service provider is a business unit of a leading telecommunication operator in UAE. It consists of 4 main departments having total of 56 employees.

5.3 Business Strategy

The researched service provider realizes the importance of having well-planned business strategy in order to achieve its objectives. The main objective of that provider is to have a well-known position and to compete in the international market. This main objective is very much related to the research variables “project efficiency, impact on customer, direct organizational success”

The competition is very strong as there are only few clearing houses and the other clearing houses have started very long ago comparing with that provider. International roaming now is activated in almost all worldwide countries by telecommunication operators. And those operators are having a very careful selection for their clearing house; they will only select the clearing house with professional and high quality services.

The researched service provider has consulted an external consultant to draw its business strategy. In order for the consultant to do so, the researched service provider has provided a full analysis of the current market, competitor information, services profile and organization structure. SWOT analysis was also provided as an input for business strategy definition. So, the final output from the consultant was produced based on deep analysis for the environmental factors that are affecting the business.

Business strategy was then discussed with the general manager and the head of departments. The business plan for strategy implementation is then developed again by the head of departments.

In the researched service provider, resulting from the entire corporate strategy, the research will highlight two main business strategies and how is the plan to achieve them.

The first business strategy is increasing the profit margin up to 30% till the end of 2009. This strategy was planned to take over one year duration (the entire year of 2009). The plan to achieve above strategy is to have two new clients during this year and start new services. This selected strategy is linked to one of the research variables “direct organizational success”.

The second business strategy to be highlighted for this research is a bit long term strategy. It is having European clients. This strategy was planned over 6 years duration and it was altered later

to reach the European market after reaching East Asia then Russia and from there only move to the European markets. This selected strategy is linked to following research variables:

- Impact on customer.
- Direct organizational success.

By going back to the strategy types defined in the literature review, the researched service provider strategy is classified as “Cost leadership”. In order to attract the telecommunication operators as new clients and expand in different geographical locations, the researched service provider is offering the cheapest prices for its services comparing with other clearing houses. As the researched service provider is considered as new in the international market and as the other clearing houses are having more experience with well-known international operators, at this stage the researched service provider is considering the prices the most attractive factor for telecommunication operators to make a decision in selecting it for the roaming data clearing.

“We know the competition is very strong especially with our limited resources, for that we are providing the least prices for ever”, General Manager commented.

One more reason behind adapting cost leadership strategy is the existence of “price sensitive customers” who can’t afford to buy better quality services (Gerry et al., 2006). This case is applied to the newly established operators who want to provide its subscribers with roaming facilities but can’t afford to have a contract with high cost service provider.

As the main data clearing houses are competing on non-price basis, the low price segment is considered as an opportunity for the researched service provider to avoid the major competitors.

As discussed by Gerry et al. (2006), in the long term, the cost leadership strategy cannot be followed without a low cost base. In the researched service provider the services cost is already low as the software and systems required to run all services are developed in house and the same number of employees will work in different types of services.

But still for somehow, the researched service provider strategy might be also move toward “Differentiation”. It is trying to have some distinct services. This attempt facing lot of difficulties since the competitive prices is the main aim and existing resources are not enough to be distinct.

5.4 Project cases

In the researched international roaming services provider, projects are running as standalone entities. Each department is getting the requirements and specifications from the related end user and just the development after scheduling according to their priorities. Projects are developed according to end user requests regardless any business strategy giving more focus on customer impact and ignoring the quality and project efficiency. Since the organizational structure in the researched services provide is having two software development departments, there is some times duplications between developed systems but with few more functionalities.

By referring to the organizational structure (Appendix – A), it is clear that there is no room for project management to help achieving project efficiency. There is no centralized section to select, assign, prioritize and monitor developed projects in the entire organization.

Projects that will be discussed in this research were categorized in term of project's main objective. Projects will be viewed in respective of the defined research variables:

- Project efficiently.
- Impact on customer.
- Direct organizational success.
- Delivery time.
- Quality.

5.4.1 Strategic Project – India Office

This type of projects aims at creating strategic positions in market and business.

As a strategic project, the researched provider is working on project which is opening new office in India.

The purpose of this project is to obtain group of telecommunication operators in new geographical location, India. As India is having more than 9 operators, the number of their subscribers is high and the traffic is high as well. The roaming activities are also very active and India operators are having high standard services for its roamers.

The researched provider targets all Indian telecommunication operators for the roaming data clearing. In order to have all Indian operators as clients, the researched provider should be responsible for data clearing between those operators inside and outside India. But Indian politics are banning national data exchange to be outside India geographical location. For that researched provider office should be there and the service can't start from UAE as with other clients.

The whole project idea starting from targeting the Indian telecommunication operators till opening offices there was initiated and directed by the General Manager.

Project timeline was very tough as it was specified by the client itself (India). The client gave duration of 1 month to install equipment and software in India office as a condition to sign the contract.

For this project, standard methodologies for project management were not applied at all. Due to its emergency, IT director has instructed each related section to go ahead with the related tasks. Communication was done either by quick meetings and mostly emails (Appendix-B). For Software development the scope was customizing current applications and testing them accordingly. For equipment procurement and office rental costs, an exceptional approval was obtained from top management.

Human resources were allocated by forcing employees to free up all their tasks and to be dedicated for this project only. Each department head was given instructions to free all resources

and to be dedicated for this project only. So, this caused the delay of current tasks and consequently, lot of complains start to be received from other clients.

Project teams worked under pressure to complete on time. But they were successful to achieve the deliverables on time and systems were running smoothly in the new office in India.

This successful achievement affected negatively some current tasks as they were delayed. This can be considered as a drawback for this project in term of project management methodology.

On the other hand, the project was aligned with the business strategy mentioned above. One of the researched provider business strategies is to reach the European market after reaching the south Asia then Russia and from there only moves to the European markets. At the same time, having big telecommunication operators such as the Indian operators will definitely increase the profit and that will be aligned with the first mentioned business strategy.

To sum up, this project was successfully aligned with business strategy though no mature methodology was applied. This project is categorized under the first proposition that was defined in the above section where the project strategy is directly aligned with business strategy and supports it positively.

To view the project in summarized clear angle, below check list which has been listed by [A] OCG (2008). This check list is mainly based on the research variables.

Project Characteristics	Applicability		
	Fully developed	Partially developed	Not developed
A finite and lifespan	✓		
Defined and measureable business deliverables that contribute towards the achievement of business objectives		✓	
A defined amount of resources			✓
Delivery of capabilities from which business benefits and performance improvements can be leveraged		✓	
An organizational structure, with defined roles and responsibilities			✓
Focus on management and coordination			✓
Delivery of outputs with time and cost constraints	✓		
Quality management, focusing on fit-for-purpose outputs based on requirements			✓
Business cases containing an accurate budget for output delivery			✓
Risk management focused on costs, quality and timescale for delivery			✓
Issue management is proactive and focused on ensuring successful delivery			✓
Project plan that are both product and activity oriented			✓
Effective engagement with the stakeholder environment, focusing on achieving stakeholder requirements		✓	

Table 2: project check list (case 1)

Project performance can be summarized as below:

- Project is directly linked to business strategy.
- No project management maturity models.
- Employees are not satisfied.
- Time control was met.
- Quality & project efficiency can be ranked as medium as lot of shortage was found after implementation.

Below table summarizes project activities in term of the research variables:

Research variable	Rank
Impact on customer	High. The implementation of the project impacted a target client to avail organization services.
Direct organization success	High. The implementation of the project is new revenue source.
Delivery time	High. Due to its criticality, project was delivered on time.
Quality	Medium. If the project is looked into as standalone entity, the desired output was delivered. But due to shortage of time and stress, when integrating with other systems, some technical bugs were found.
Project efficiency	Low in as no project management maturity model was applied. Project run just on the fly.

Table 3: project ranking (case 1)

5.4.3 Extension Project – Systems Integration

This type of projects aims at improving or upgrading an existing product.

This category will be represented by System Integration project. In the researched service provider there is lot of applications supporting services provided to clients. Since each application is developed as a project by different development team, each service is running in different servers, using different database and different platform.

This having lot of drawbacks. The maintenance is a time consuming as several servers have to be maintained. Occupied space in data center (where all servers are stored) is about to be full. In addition to that any changes requested by client, if master data involved, then all related systems have to be changed since every system is using its own database.

For all of above reasons in addition to having better performance, IT director propose the idea of integrating all systems in one platform.

The project started with defining related teams and scope. Required equipments and their specifications (storage size, platform) have been specified as well.

As of now, the project is just in planning phase, prepare the scope of work, identify all milestones, planning schedule and allocating resources.

So far, the project is trying to go in the correct track of applying project management methodologies.

The purpose of the project is to have a centralized system ensuring better performance. It is an internal project which has nothing to do with client request. Due to efforts required for this project, some of client requests are held up till implementing this project in order not to develop the request in existing system and then repeat the same in the new system.

So, it is not related directly to organization business strategy. At the same time it can be considered as an obstacle for achieving the business strategy. Business strategy is not taken into consideration.

Though the project is not aligned with business strategy in direct way, it is following the correct track in terms of project management maturity.

This project is categorized under the third proposition that was defined in the above section where the project strategy is not directly aligned with business strategy and supports it positively.

To view the project in summarized clear angle, below check list which has been listed by [A] OGC (2008).

Project Characteristics	Applicability		
	Fully developed	Partially developed	Not developed
A finite and lifespan	✓		
Defined and measureable business deliverables that contribute towards the achievement of business objectives			✓
A defined amount of resources	✓		
Delivery of capabilities from which business benefits and performance improvements can be leveraged		✓	
An organizational structure, with defined roles and responsibilities	✓		
Focus on management and coordination	✓		
Delivery of outputs with time and cost constraints	✓		
Quality management, focusing on fit-for-purpose outputs based on requirements	✓		
Business cases containing an accurate budget for output delivery	✓		
Risk management focused on costs, quality and timescale for delivery			✓
Issue management is proactive and focused on ensuring successful delivery	✓		
Project plan that are both product and activity oriented	✓		
Effective engagement with the stakeholder environment, focusing on achieving stakeholder requirements	✓		

Table 4: project check list (case 2)

Project performance can be summarized as below:

- Project has not direct link to business strategy.
- Started with applying project management maturity.
- Some clients' requests are delayed.
- Project efficiency and quality can be ranked high.

Below table summarizes project activities in term of the research variables:

Research variable	Rank
Project efficiency	High. Project is using project management methodologies.
Quality	High. Since project phases were carried in efficient way.
Impact on customer	Medium. The integration of services will enhance services level which will indirectly have good impact on customer.
Direct organization success	Medium. Again the project is enhancing the service quality which will indirectly link to organization success.
Delivery time	Medium. Project was not implemented on time, but not that much far from planned.

Table 5: project ranking (case 2)

5.4.3 Utility Project – Roaming Replicator System

This type of projects aims at acquiring and installing new hardware or software. It can be also implementing new methods or new process. Process re-engineering can also be categorized here. Discussed example for this project is Roaming Replicator System.

Roaming Replicator project is a service provided by the researched service provider for its clients who are opening new operators in other geographical places, for instance, Etisalat-UAE has opened new subsidiary Etisalat-Afghanistan. The purpose of this service is to enable the newly established operators to provide international roaming for its subscribers using the agreements signed between the mother company and other roaming partners. By using Roaming Replicator service, subscribers of the newly established operator can roam using the mother company roaming agreement and the service provider will separate the calls and take care of forwarding and receiving calls to the appropriate destination.

So, the new service is highly linked to the business strategy as it is expected to add new revenue as well as new service to attract new clients which support the position for the researched service provider in the international markets.

The project life cycle for the Roaming Replicator service was as following (Appendix-C):

- A client management (telecommunication operator) has proposed the idea and asked the researched service provider to implement it with a period of 3 weeks.
- The researched service provider management agreed to implement the project after having meeting with the requestor management. The project was then assigned to the head of services development department (S.D.).
- Head of S.D. drafted the meeting contents in an email and sent it to his team asking them to study and start the service development giving the specified deadline (Appendix-C).
- Few days later, no response was received from the development team. Then the head of S.D. called for a meeting asking about functionalities of the service and he formed the team accordingly.
- Project team structure was as following:
 - 1 team leader/ Developer.
 - 3 developers.

- The assigned team developed the database design and required programs list.
- Team was forced to start the development before even signing the contract with the requestor.
- Service was developed based on the pre defined requirements and after one week time, the requestor has changed some critical paths in the procedure.
- Continues changes were received in the service login. Software development phase was not stable, whenever a piece of development is over, the idea is changed.
- Changes were communicated between requester and S.D. head either verbally or by phone.
- During the development cycle, the team has been reduced to only two members (one team leader and one developer). The team has been decreased as other projects came in between and need development.
- Project delivery was delayed for two months due to:
 - Continues changes in requirements.
 - The developer was having other tasks on hand; he was not dedicated for that project only.
 - No clear requirements from clients. Requestor is setting a launch date, when the service is ready; requestor is just quite for some internal arrangements.
- Few weeks after development started, head of S.D. has requested MS project plan for the project (Appendix – C).

Externally, there was one project manager coordinating with end user. Internally, another team leader was managing the project.

This project was very critical and aligned to organization business strategy, but it was not managed in proper systematic methodologies causing some issues. Project delivery was delayed which caused client's dissatisfaction. So, again the lack of centralized project management entity is causing this weakness.

This project is categorized under the second proposition that was defined in the above section where the project strategy is directly aligned with business strategy and but failed to support it.

To view the project in summarized clear angle, below check list which has been listed by [A] OGC (2008).

Project Characteristics	Applicability		
	Fully developed	Partially developed	Not developed
A finite and lifespan			✓
Defined and measureable business deliverables that contribute towards the achievement of business objectives		✓	
A defined amount of resources			✓
Delivery of capabilities from which business benefits and performance improvements can be leveraged			✓
An organizational structure, with defined roles and responsibilities			✓
Focus on management and coordination			✓
Delivery of outputs with time and cost constraints			✓
Quality management, focusing on fit-for-purpose outputs based on requirements			✓
Business cases containing an accurate budget for output delivery			✓
Risk management focused on costs, quality and timescale for delivery			✓
Issue management is proactive and focused on ensuring successful delivery			✓
Project plan that are both product and activity oriented			✓
Effective engagement with the stakeholder environment, focusing on achieving stakeholder requirements		✓	

Table 6: project check list (case 3)

Project performance can be summarized as below:

- Project is directly linked to business strategy.
- No proper allocation for resources.
- No project management maturity models.
- Employees are not satisfied as they were under pressure.
- Time control was not met.
- Client (requestor) was warning to terminate the entire roaming services.

Below table summarizes project activities in term of the research variables:

Research variable	Rank
Impact on customer	High. The implementation of the project impacted a target client to avail organization services, but due to the low quality of the service, lot of complaints and clients dissatisfaction was there.
Direct organization success	High. The implementation of the project supposes to be new revenue source. But due to low quality, the project was thread of loosing clients.
Delivery time	Low. Delivery time was behind schedule.
Quality	Low. Due to continue changes and missing of project management methodology, system was full of bugs and issues. At the same time, system was not fully aligned with requirements.
Project efficiency	Low in as no project management maturity model was applied. Project run just on the fly.

Table 7: project ranking (case 3)

5.4.4 Research and development project - Forecasting

This type of projects aims at exploring future ideas.

An example of this project in EDCH is developing forecasting system where clients can perform several analyses like 'what if analysis' on their roaming data for forecasting purposes.

The project's idea was initiated by marketing department based on their researches on services provided by other clearing houses in the same market.

The scope of this project is to include current data as well historical data. For example, for 2008, with 38,000 KSA subscribers in UAE and a charging rate of 1.5 for the minute, the revenue increased 15%. What will be the revenue if the minute charging rate decreased to 1.2?

Such type of analysis is required by telecommunication operators for their analysis. And telecommunication operators that are clients with other clearing houses that are using this system will find it difficult to think of changing to other clearing house that is not having this service.

Project life cycle starts with studying the requirements in order to have software with full capabilities and functionalities. Those requirements were then passed to the IT department. The IT department is now responsible of having the suitable vendor to outsource this project. As of now, following have been developed:

- Scope of work.
- Project manager was selected.
- Project team.
- Project plan (Appendix - D).
- Required hardware and software specifications.

So the main objective of this project is to provide value added service for existing clients and to attract new clients.

This project is categorized under the fourth proposition that was defined in the above section where the project strategy is indirectly aligned with business strategy.

But the project did not start on the planned time and was postponed for 1 year as lots of unplanned project were having high priority.

To view the project in summarized clear angle, below check list which has been listed by [A] OGC (2008).

Project Characteristics	Applicability		
	Fully developed	Partially developed	Not developed
A finite and lifespan	✓		
Defined and measureable business deliverables that contribute towards the achievement of business objectives	✓		
A defined amount of resources	✓		
Delivery of capabilities from which business benefits and performance improvements can be leveraged	✓		
An organizational structure, with defined roles and responsibilities	✓		
Focus on management and coordination	✓		
Delivery of outputs with time and cost constraints			✓
Quality management, focusing on fit-for-purpose outputs based on requirements	✓		
Business cases containing an accurate budget for output delivery	✓		
Risk management focused on costs, quality and timescale for delivery			✓
Issue management is proactive and focused on ensuring successful delivery	✓		
Project plan that are both product and activity oriented	✓		
Effective engagement with the stakeholder environment, focusing on achieving stakeholder requirements	✓		

Table 8: project check list (case 4)

Project performance can be summarized as below:

- Project is directly linked to business strategy.
- Started with applying project management maturity.
- Time control was not met.

Below table summarizes project activities in term of the research variables:

Research variable	Rank
Project efficiency	High. Project is using project management methodologies.
Impact on customer	High. New revenue source
Quality	High. Since project phases were carried in efficient way.
Direct organization success	Medium. Again the project is enhancing the service quality which will indirectly link to organization success.
Delivery time	Low. Project was not implemented on time.

Table 9: project ranking (case 4)

To sum up, below table summarizes all projects performance in term of research variables.

Project Name	Research variables				
	Project efficiently	Impact on customer	Direct organizational success	Delivery time	Quality
India Project	Low	High	High	High	Medium
System Integration	High	Medium	Medium	Medium	High
Roaming Replicator	Low	High	High	Low	Low
Forecasting	High	High	Medium	Low	High

Table 10: projects ranking

5.5 General reasons beyond alignment issues

By summarizing up points discussed earlier in the research, it is obvious that there is a missing link in the organizations between project management and business alignment. When selecting the projects for development in the organization, business strategy is out of the scope.

Normally projects pass lot of check points for authorization before they are implemented and those check points are managed according to project size (Paul, 2005). This step which is part of having successful project is again missing in the researched service provider.

Staff awareness is considered as an important factor to achieve successful business strategy. In the researched service provider the business strategy have never been communicated to the team members.

A simple question was asked to randomly selected employees from several departments: “how do you define the business strategy for this organization?”

Below are samples of the received answers:

- *“I have no idea and I have not heard about business strategy”*. Programmer commented.
- *“For each organization there should be a strategy, but what is our strategy I don’t know”*. System analyst commented.
- *“I have not seen it, but it will definitely be increasing the profit and the clients”*. Senior specialist comments.

By referring to the researched service provider organizational structure, there is no centralized point to fill up the gap between business strategy and project management. At the same time there is no dedicated team for project management like ‘PMO’ where it is main responsibility is to define and maintain process related to project management in the entire organization.

From above project cases, the way of selecting and initiating the projects in the organization is by itself a mass. The projects that are assigned from top management (General Manager Office) will come on sudden and urgent basis. Those projects might have some relations with the

business strategy or might be away from the business strategy. There were some projects in the researched service provider requested by management (General Manager Office) again on urgent basis just because the client request and the researched service provider cannot refuse any client request. For instance, one of the biggest telecommunication operators in the Middle East has requested a service where it's related to its internal business and should be developed by its internal IT department but due to some internal problems inside that operator the researched service provider was requested and the General Manager agrees to give them the service for free of charge. This is the situation where the initiation comes from top management.

For other projects, requests are coming internally where some are not aligned with business strategy. Every department in the researched service provider is working as stand alone.

A critical component contributing to the misalignment between strategy and project management is the lack of core capabilities and skills to translate strategies into action plans through projects and then deliver the desired business objectives.

Managers in the researched service provider are not having the required skills. Managers are not PMP experts. Most of them were technical employees (programmers, client support administrators...). They have been promoted to managers without any prior perpetrations. And due to work load, most of them have not attended any management training since ages. Software Development manager commented:

“I believe, I got to the position of Manager without any advance preparation to this position (including proper training in leadership, decision making and Project management for example)”.

The importance of project management alignment with business strategy is out of management scope. The main concern to get profit regardless the way followed. Management is not having any awareness or even commitment to support the alignment. Due to the lack of knowledge about how strategic plans should be implemented, It is difficult to imagine how successful strategic plans can be developed (Paul, 2005).

The researched service provider management is not convinced to spend extra effort to re-structure the organization in a way to support the alignment.

“Clients is the main concern, all services are running and instead of looking toward book style methodologies, it is much more worth able to spend the time in bringing new clients” General Manager commented.

As the management is not giving any concern to this area, business strategy is just designed as it is part of formality and it is just stored in the shelves.

In addition to all above points, employees in the researched service provider are also not having any knowledge about project management methodologies or even business strategy. As stated earlier, the business strategy of the organization itself is not known for the employees. This is an expected result, business strategy is just on shelves, and nothing is communicating to employees, management awareness or commitment is missing; employees will definitely miss the capabilities.

To sum up, the organization is not realizing the benefits of using project management as a tool to achieve its long term objectives.

5.6 Misalignment consequences

When projects are not aligned with business strategy, lot of consequences will result affecting organization negatively. One of the results that can be seen easily in the researched service provider is that it is difficult for organization to achieve the business objectives. As projects are just selected randomly, when it comes to implement a project that is related to business strategy, it can be delayed and won't be implemented on time. This will be costly as it might lead to clients lose causing impact on customers projects efficiently to be low.

By systemic way or not, some projects in the researched service provider were on time. But if this situation continues, the success will be for short term only. Long term objectives can't be satisfied. That will affect organization success negatively.

One more point is that the misalignment in the researched service provider is affecting the international competition. It is very difficult to compete with well established clearing houses in the world.

The way how the work is running is very tie and has no flexibility to accept urgent projects as there is no initial proper planning and resources are limited.

Projects in the researched service provider are suffering as resources are wasted as they are not aligned to priorities. As a result, schedules are always slipping and run over budget as resource are not allocated properly to support the most important requests. It was noticed from the projects discussed earlier that the implementation of some projects caused operational disruption, causing further resources issues for recovery.

As employees are not involved in business strategy issues, they are losing the desire to work collaboratively. Employees are not committed to the organizations and lots are looking for other job.

Another consequence is the confusion that normally exists in almost all the projects as the critical and related decisions are always done at the top level management only. Well, employees are not even motivated to spend time on best practices for project implementation as no one is caring.

To sum up, below points summarize main consequences of misalignment that the researched service provider is facing:

- No consistent criteria to take Go/ Kill decisions.
- Projects are added to tasks list without clear directional focus.
- Resources are not allocated in proper way causing long time to deliver to client, poor quality and more failure chances.
- Selection decision is not based on facts and objective criteria, but on politics and opinions.
- Many of bad selected projects fail to bring success to organizations.
- No strategic direction for projects selection.
- Projects mostly are poor to fit to business strategy and therefore, do not reflect strategic objectives of the business.

6.0 Conclusion

Organizations often concentrate on short term results such as immediate financial revenue. However, projects should achieve results that align to organization over all business strategy. Business strategy is very critical aspect in all organizations. It covers the path of action, the use of resources, the schedule and the structure that guide to success in competitive markets.

Project achievement is a multidimensional model. The strategic success of a project should not be evaluated by the outcomes as standalone object. Thus, project will be considered a successful one only if it achieves and satisfies the business strategy. So, the more the project management is aligned to the business strategy, the more positive consequences will be created. A clear business strategy should be the input for a successful project management.

On the other hand, if business strategy and project management each is running in different track, negative consequences will be resulted.

Moving to the researched sector, the misalignment between business strategy and project management is obvious. The four propositions viewed the projects over there in clear way:

- Proposition '1': the project strategy is directly aligned with business strategy and supports it positively.
- Proposition '2': the project strategy is directly aligned with business strategy but failed to support it.
- Proposition '3': the project strategy is not linked to business strategy.
- Proposition '4': the project strategy is indirectly linked to business strategy.

Each of the business strategy and project management is operating in different track affecting organizational success and project efficiently in negative way.

The negative consequences defiantly are affecting clients, projects quality and delivery time.

In order to have project management aligned with business strategy, the business environment should be enriched with high level capabilities and experiences, and shaped in an efficient way to support Portfolio Management.

The need of applying Portfolio Management is becoming essential especially that most organizations are running thousands of projects that require critical prioritization. Portfolio Management if applied successfully helps in selecting the right project at the right time. This will obviously enhance the alignment between business strategy and project management.

Among several alignment frameworks, OGC framework is proposed to be implemented in the researched sector as it found most suitable.

To conclude, organizations should be committed to ensure that no gap exist between their business strategy and project management. The gap should always be filled by an efficient framework which is represented by Portfolio Management in this research.

7.0 Recommendations

In order to use project management as a driver for achieving business objectives through business strategy, there are lot of challenges that have been covered by lot of researchers need to be addressed.

As stated earlier, OGC guidelines were used as framework for the alignment model adding employees' awareness and readiness. But this research will focus on below challenges as they are the most needed for the researched service provider case.

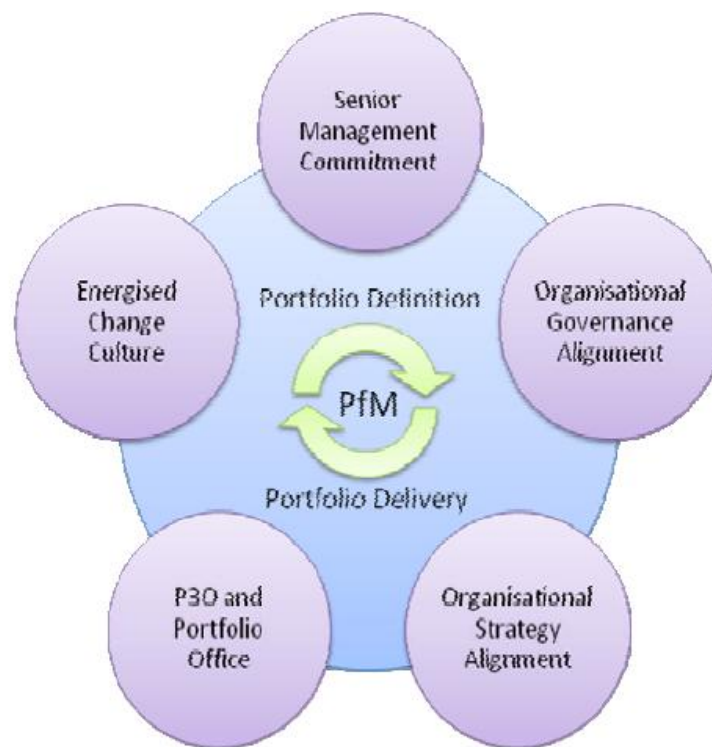


Figure 9: Portfolio management model ([B] OGC, 2008)

7.1 Management Commitment

The first required challenge to be achieved is to get management commitment and awareness. Top management represented by the General Manager should realize current situation and bad impacts on business. At the same time General Manager should have a strong believe on the importance to re-shape the project management process in the organization.

Kedsuda and Stephen (2008) stated that in order to achieve the best strategic performance in organizations, project managers should realize and apply appropriate leadership styles. They should also recognize their organization internal and external objectives.

The importance of getting management commitment has been highlighted by lot organizations as key factor for alignment success. [B] OGC (2008) showed the view of some companies with regard this issue:

“The commitment from our Management Board was critical in the adoption of Portfolio Management within the organization. Once the Management Board received the report that defined the current position of all of the Changes and highlighted the fact that lots of Changes could not be aligned to our strategy, they understood that Portfolio Management was needed to ensure that Changes were not only delivered successfully but that the right Changes were implemented. The Management Board recognized there was a strong need for enhanced collaborative working and a standard way to manage change if they were to make informed decisions”.

There should be continues workshops and presentations showing guidelines for aligning project management with business strategy and the positive outcomes of such concept.

It will be also useful to present examples of successful companies in the world where they their project management leads to achieving business objectives.

Training and attending international seminars with regard this topic is also required.

At the same time, department heads and team leaders should be trained to have the required capabilities.

Managers should have clear understanding of what it their business strategy, their organization location in the market and how to action their business strategy. Managers should get high level training on strategic thinking. They should be able to translate their understanding of organization’s vision into to action plan (Paul, 2005).

Paul (2005) citing Hartman (2000) suggests enhancing the strategy through project managers’ skill improvements. The effective project manager should know how their projects support

corporate strategy and work on using this knowledge to help those obtaining required resources to successes.

Managers should be trained on the way of selecting projects. Projects should not be selected just because it is good idea, project manager should have a good thought on how the selected project will contribute to organization value otherwise it will be just waste of resources (Paul, 2005 citing Roberts and Gardiner, 1998).

([B] OGC, 2008 has set keys to success in term of senior management commitment:

- Ownership of portfolio management: the implementation of the portfolio management should be owned by the management board.
- Understanding current situation: at the starting point, a report should be produced defining the current status.
- Defined roles: the roles of management board and portfolio team should be understood and agreed.
- Avail resources of the portfolio office.
- Management board should make decisions regarding the categories and priorities within the portfolio.
- Establish efficient reporting tool where management board receives regular portfolio dashboards having strategic information on portfolio progress, risks, issues, dependencies and decisions required.
- Ensure collaborative working within departments.

7.2 Employees Awareness and readiness

Along with ensuring management commitment and awareness, business strategy should be communicated to employees as they part of the organization tools toward achieving its targets.

By this way, employees will feel that they are an effective part of the organization and the awareness will grow on the employees.

As Portfolio Management is not easy to develop, its implementation will result in lot of changes in Management Board decision and organizational governance processes. Hence, it is very

important that employees leading the implementation of Portfolio Management have the required skills and capabilities. If any involved employee that is not having a combined experience of portfolio, program and project management along with strategic management experience, changes for failure will increase ([B] OGC, 2008).

7.3 Re- structure and introduce Portfolio Management through portfolio office:

The researched service provider structure should be altered to have a separate department with strategic knowledge and project management focus. This department should be ‘Portfolio Management’. Portfolio Management is mainly doing the right projects.

Portfolio Management is highly required in the researched service provider because it that the right programs and projects are selected and the wrong ones are not or are stopped if already started. The right programs and projects are those that contribute effectively to organization’s strategic objectives ([B] OGC, 2008).

Portfolio Management concentrates on delivering the right projects in order to match the strategic objectives. If there are no targets or measures of the strategic objectives, then it will be difficult to know which project contribute most and which one should not be selected.

Portfolio management is sort of control. Its functionality requires the definition, communication, and use of agreed policies, principles, and practices shared by all key resources in the organization. Considering all above, the combination of these policies, principles, and practices establish the basis of an organizational process.

Portfolio management, as a control, must be functioned by set of integrated and interacting work processes. These processes should be defined, reviewed, validated and adjusted on regular basis. The development and introduction of that process should be grouped with lot of skills: communication, risk management, responsibilities assignment. This is to ensure that those processes are effectively integrated and fit into the normal existing work flow in the organization.

It is suggested to plan a portfolio management cycle to be implemented in the researched service provider. As described by [B] OGC (2008) at the top level, all portfolio management exercises should be grouped into two cycles: Portfolio Definition and Portfolio Delivery. Both of these cycles should be maintained stable to support the changing environment where organizations operate. Below diagram shows activities involved in both cycles of Portfolio Definition and Portfolio Delivery.



Figure 10: Portfolio Management phases ([B] OGC, 2008)

In order to have a successful and effective portfolio, the following critical fundamentals should be satisfied:

- A strategy must exist, having well-defined and agreed strategic objectives with related targets and measures.
- Every change/ project must have a reasonable Business Case clearly illustrating the benefits in adequate detail. In this case, there will be proper alignment to related strategic objectives.

The main responsibility of Portfolio Management is resources allocation to achieve corporate desired objectives.

Successful frame work for an effective Portfolio Management should focus on below main points:

1. Maximizing value by selection proper method for resources allocation.
2. Maintaining balance by achieving a desired balance of projects through some specific parameters such as: risk versus return, short term versus long term, business area and technologies.
3. Aligning with Business Strategy by ensuring that portfolio of projects reflects the business strategy and the cost of the projects aligns with the strategic priorities of the organization.

One of the useful exercises to start with towards having successful Portfolio Management practices is to study the current existing capabilities and to evaluate their maturity across the organization. The output of the study should be analyzed, and this analysis will show which existing element provide a strong foundation and where is the improvement effort required. For those areas that need improvement, a plan should be prepared on improving various capabilities, and achieving a maturity model that will contribute at enabling different aspects of Portfolio management and its practices.

One important task that should be carried by management is identifying a starting point to provide the required input for the development of Portfolio Management implementation strategy.

The set of Portfolio Management practices should be introduced in phases. However, management should understand and agree on the most critical needs and most potential value, and then implement phases that are most directly relates to them.

Implementing Portfolio Management in phases needs identifying and providing list of priorities according to importance or value. Along with that, management should identify the needs which clarify the organization desire in implementing Portfolio Management practices.

Obviously, implementing Portfolio Management within an organization is a critical and significant responsibility. It must be driven by significant requirements that are well defined. Those requirements should have consensus and obtain organization commitment.

In brief, Portfolio Management implementation may be phased with phases listed below. And, each implementation phase is valuable by itself:

- Definition of the plan for portfolio management implementation, including components of the plan, boundaries, exceptions, target business segments, supporting business units, and definition of achievements.
- Justification for the implementation of Portfolio Management practices, including identifying the expected benefits and outcomes, and the expected cost (development cost and ongoing cost).
- Commitment to the implementation and for continuous operations in the portfolio management workspace made (and documented) by the executive management of the organization.
- Identification from at a high-level point of view the approach to be used for Portfolio Management implementation exercise. Approach identification should include: definition of potential work paths, major milestone and timeline, definition of major work products and outcomes, and roles and responsibilities of the implementation team.
- Getting deep understanding of the type of effort required for the introduction and implementation of Portfolio Management. This required in order to identify an effective approach and to identify the required capabilities and experiences.
- Evaluate current capabilities in the organization that will be required to support the activities required for Portfolio Management and determine if a sort of readiness exists to go ahead with the introduction and implementation.
- Use the experience from other critical and significant changes took place in the organization as Portfolio Management is again a critical and significant project.

[B] OGC, 2008 has set keys to success in term of introducing portfolio office:

- Ensure establishing portfolio office as portfolio management can't be implemented without it.
- Direct link should be established between management board and portfolio office to ensure ownership of the portfolio at the highest level.

- Management board should agree on the portfolio office vision that will support the implementation via the organization.
- Portfolio team should be having both project management and strategic management skills.
- Portfolio management team should focus on collaborative working with other departments at all levels of the organization.
- High level of communication skills are required to ensure a common understanding of the portfolio.
- Design and implement management dashboards that contain timely and accurate information to enable the management to make proper decisions.

7.4 Organizational Strategy Alignment:

The last recommended element of OGC frame work is the organizational strategy alignment.

This element is applied through:

- Organizational strategy should exist containing well-defined and agreed strategic objectives with related targets and criteria.
- Ensure that portfolio office work closely with business excellence department.
- Use performance expertise to work with portfolio office and assist particularly during the planning and reporting phases.
- Portfolio office should lead on the portfolio related activities, ensuring alignment with the strategic planning activities.
- Conduct regular review of the portfolio on regular basis.
- Involve key departments in early business case impact evaluation. That will enhance team work and the quality of the portfolio.

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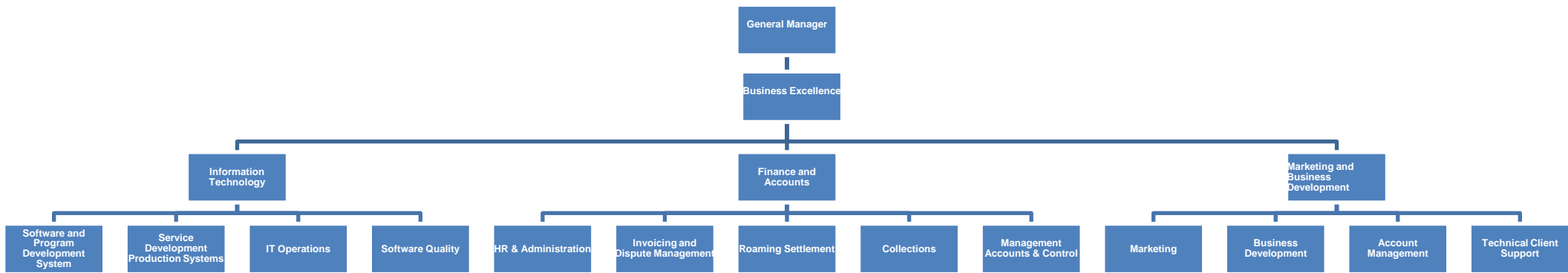
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Appendix – A

Organization Structure



Appendix B

Strategic Project – India Office, project initiations

- Client Request

From: Marketing Manager
Sent: Thursday, September 10, 2009 8:34 AM
To: IT Director
Cc:
Subject: India Project

Dear,

As per our yesterday's meeting with XXXX India; kindly note that they would like to start testing the national roaming TAP files with some Indian operators by 10th Oct 2009.

The deadline is very close and we don't have the time for purchasing new servers. As per our telephone conversation and the conversation between XXXXXX; kindly arrange to prepare the available free servers with in our company and install the required programs for running the national roaming service in order to be ready for shipment to India by **23rd of Sep 2009**.

As per my discussion with XXXX India roaming team, the below services are not required for the initial stage, but they said "we might use it later".

- Olap
- NRTRDE
- Re-rating

If you need any more clarification, kindly do not hesitate to contact me.

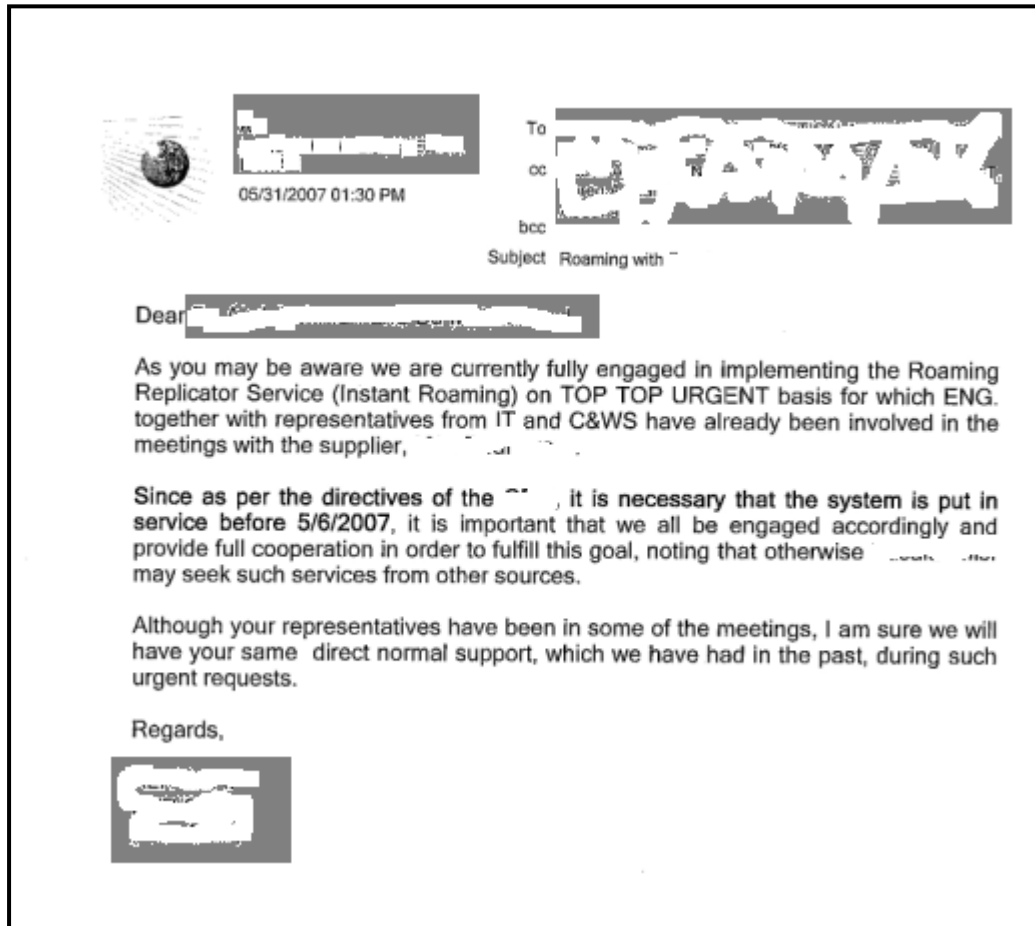
Thanks

Best regards,

Appendix C

Utility Project – Roaming Replicator System

Client's Request:



Assigning the project to concerned team:

From:
Sent: Wednesday, June 06, 2007 9:45 AM
To: development team
Subject: FW: Roamware service provision for
Importance: High

Al-Salam Alaikum,

Please note following steps need to be considered for below service between ...

1. TAP file will be received from Files will be sent by e-mail(e.g. CDXXXXXZZZZZ99999-TAP3.10)
2. TAP file will be sent by Files will be sent by direct link (e.g. CDXXXXXZZZZZ99999-TAP3.09)
3. Convert TAP file and combine records from booth files into one file (CDXXXXXZZZZZ99999) with necessary changes in some fields to make the file as it is generated from ETISALAT-UAE billing system
4. Combined file will need to be processed in production system
5. Original files need to be processed and stored in different tables to refer if required for finance issues
6. Invoice will be printed and sent as combined file

The development time for this task need to be completed within 3 week.

Thanks and regards,

Head – Service Development

From:
Sent: Thursday, May 31, 2007 2:08 PM
To:
Cc:
Subject: FW:Roamware service provision for

Dear All,

A. As discussed, Development Team, Please prepare for this service only for iNbound roamers on network , as follows:

- 1) Roamware Generated files from to be merged with files (same sequence).
- 2) Same tariffs as (IOT) to apply.
- 3) MSCID's to be mapped : MSCID to replace MSCID's were applicable .
- 4) Files will be sent by ITSD –Etisalat

Pls schedule meeting between all sections IT/ Marketing/ Finance on Sunday 3rd June 10am.

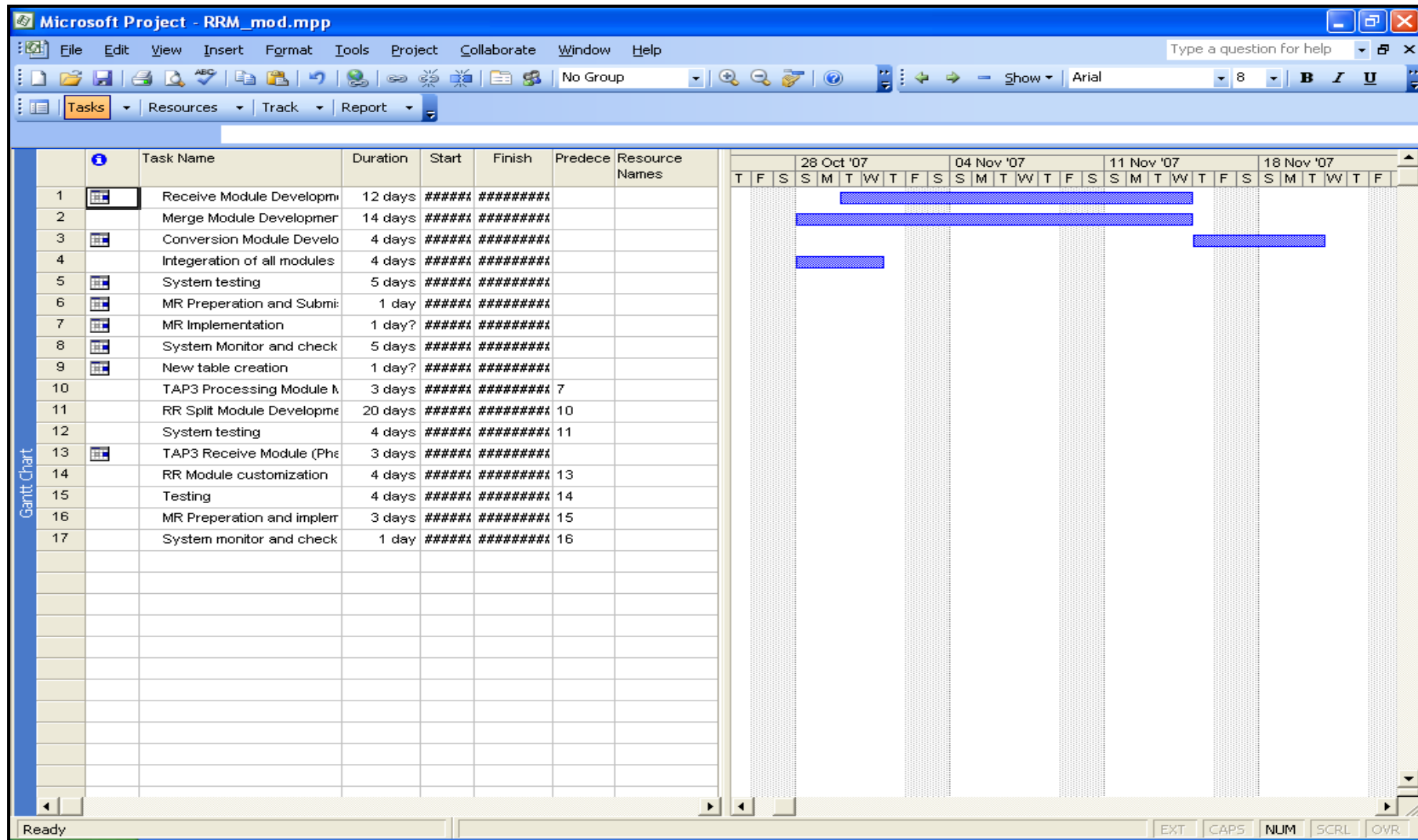
B. Marketing : to raise charging policy.

C. Finance: to discuss month end settlement procedures.

Regards

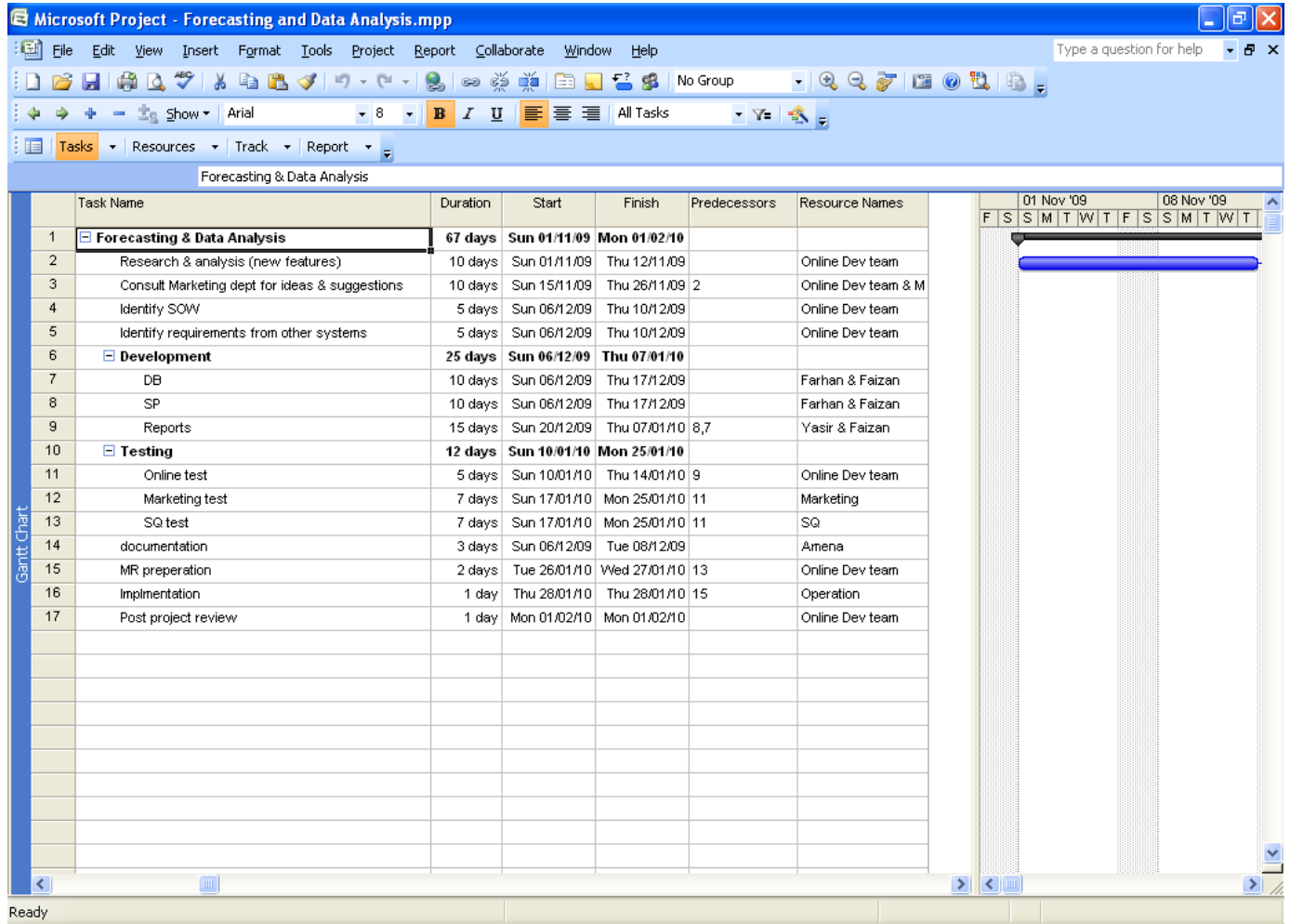
.....

MS Project



Appendix D:

Research and development project - Forecasting:



Appendix E

Interviews questions:

- How was the project assigned/ selected?
- Was the project analyzed, evaluated and planned?
- Were the resources efficient?
- Did you follow project development life cycle?
- Was the project documented?
- Was the output evaluated in term of matching requirements?
- How did you gather the requirements?
- Was it implemented on time?
- To what extend the project was affecting business success?
- Are you aware about business strategy?
- How was the project aligned with business strategy?
- How was the project prioritized among other projects?