

الجامعة
البريطانية في
دبي



The
British University
in Dubai

Perceived Project Climate and Project commitment

إدراك بيئة المشروع وتأثير ذلك على الولاء للمشروع

By

Mohammed Abdulrahman Al Marzouqi

Dissertation submitted in partial fulfillment of
MSc Project Management

Faculty of Business

Dissertation Supervisor

Dr. Abubaker Suliman

June 2011

ST/07/V01



DISSERTATION RELEASE FORM

Student Name:	Student ID:	Programme:	Date:
Mohamed Al Marzouqi	70114	MSc Project Management	05 June 2011

Title:

"Perceived Project Climate and Project commitment"

I warrant that the content of this dissertation is the direct result of my own work and that any use made in it of published or unpublished copyright material falls within the limits permitted by international copyright conventions.

I understand that one copy of my dissertation will be deposited in the University Library for permanent retention.

I hereby agree that the material mentioned above for which I am author and copyright holder may be copied and distributed by The British University in Dubai for the purposes of research, private study or education and that The British University in Dubai may recover from purchasers the costs incurred in such copying and distribution, where appropriate.

I understand that The British University in Dubai may make that copy available in digital format if appropriate.

I understand that I may apply to the University to retain the right to withhold or to restrict access to my dissertation for a period which shall not normally exceed four calendar years from the congregation at which the degree is conferred, the length of the period to be specified in the application, together with the precise reasons for making that application.

Signature:

Abstract

This research paper explores the relationship between project climate and project commitment in the context of UAE government sector. The purpose of this study is to identify the main factors that influence the commitment of individuals' towards their project and test in the correlation between those factors and project commitment.

Through extensive review of literatures five factors of project climate were identified; strategic alignment, project procurement, organisational structure, leadership and project teamwork. In order to carry on this study a questionnaire was developed and distributed to more than 40 government organisations in the Emirate of Abu Dhabi. Based on 659 responses the data was analysed using statistics program (SPSS).

The results revealed that project climate is significantly related to project commitment. In addition, based on the statistical evidence all identified factors were found to be significantly related to project commitment, except the organisational structure factor which was unexpectedly not related to the project commitment. The positive relationship did not take place for organisational structure factor probably due to low reliability figure accounted for the total items of this factor.

Finally, some actionable recommendations were proposed for the government organisations in UAE to enhance people commitment towards their project and achieve project success. An example of the recommendation is that, projects in the government organisations should have high strategic focus and the strategic direction must be clearly determined before selection of individual project in order to link the project objective with the organisation strategy.

ملخص البحث

هذه الدراسة البحثية تستعرض العلاقة بين مناخ المشروع والولاء للمشروع في القطاع الحكومي بدولة الإمارات العربية المتحدة. الهدف الأساسي من هذه الدراسة هو تحديد العوامل الرئيسية التي تؤثر على ولاء الأفراد نحو مشروعهم والتحقق من العلاقة بين تلك العوامل والالتزام بالمشروع. ومن خلال مراجعة دقيقة للبحوث الأخرى تم تحديد خمسة عوامل تدرج ضمن مناخ المشروع وهي: التوافق الاستراتيجي وإجراءات التعاقد في المشروع والهيكل التنظيمي والقيادة بالإضافة إلى العمل الجماعي في المشروع. ولتنفيذ هذه الدراسة تم إعداد استبيان يحتوي على أسئلة متعلقة بموضوع البحث وتم توزيعه على أكثر من 40 مؤسسة حكومية في إمارة أبو ظبي، حيث تم استرجاع عدد 659 استبيان مكتمل وتم تحليل البيانات باستخدام برنامج متخصص في مجال الإحصاء. وكما كان متوقفاً، أكدت نتائج الدراسة بوجود علاقة كبيرة بين مناخ المشروع والالتزام بالمشروع. بالإضافة إلى ذلك، واستناداً إلى البيانات الإحصائية تبين أن جميع العوامل المذكورة أعلاه لها علاقة كبيرة بمتغير "الولاء للمشروع"، باستثناء عامل "الهيكل التنظيمي" الذي تبين وبشكل غير متوقع لا توجد علاقة بينه وبين متغير "الولاء للمشروع". ومن خلال تحليل البيانات تبين أن العلاقة الإيجابية لم تتضح بالنسبة للهيكل التنظيمي ربما بسبب انخفاض معدل الاعتمادية للأسئلة المتعلقة بهذا بالهيكل التنظيمي. وأخيراً، تم اقتراح بعض التوصيات للمؤسسات الحكومية في دولة الإمارات العربية المتحدة وذلك لتعزيز إلتزام الأفراد تجاه مشاريعهم وبالتالي تحقيق النجاح في جميع مشاريع المؤسسة، على سبيل المثال تمت التوصية بأن مشاريع المؤسسات الحكومية ينبغي أن يكون التركيز الاستراتيجي فيها عالية كما يجب تحديد التوجه الاستراتيجي بوضوح قبل تنفيذ المشروع وذلك من أجل ربط أهداف المشروع مع استراتيجية المؤسسة.

Dedication

I dedicate this dissertation as an outstanding success of my master degree to all my family members, especially my dearly parents, my dearly wife (Amna) and my lovely daughter (Al Mahra).

Acknowledgement

After completion of my master degree in project management, I would like to gratefully acknowledge my dissertation supervisor (Dr. Abubaker Suliman) for his support and efforts of reviewing my progress, as well as providing valuable feedback for improving accomplished chapters. Also, I would like to thank my wife for her support during the period of studying the modules and the time spent to accomplish the dissertation.

Table of Contents

Table of Contents	1
Chapter 1: Introduction, Objectives and Problem	4
1.1 - Research Aim and Objectives.....	6
1.2 - Research Scope.....	7
1.3 - Problem Statement.....	8
1.4 - The Importance of the Study	11
Chapter 2: Literature Review	13
2.1 - Project Work Climate	15
2.1.1 - Strategic Alignments.....	17
2.1.2 - Project Procurement.....	21
2.1.3 - Organisational Structure	25
2.1.4 - Leadership	28
2.1.5 - Project Teamwork.....	30
2.2 - Project Commitment.....	32
2.2.1 - Affective and Continuance Commitment	34
2.3 - Project Climate and Project Commitment.....	36
Chapter 3: Research Methodology	40
3.1 - Research Design	40
3.2 - Questionnaire Instrument	42
3.3 - Measures.....	43
3.4 - Sample	44
3.5 - Data Analysis.....	44
Chapter 4: Data Analysis, Findings and Discussion	46
4.1 - Descriptive Statistics	46
4.2 - Reliability Statistics.....	48
4.3 - Correlation Statistics.....	49
4.4 - Regression Statistics	51
4.5 - Discussion of Main Findings.....	63
Chapter 5: Recommendations and Conclusion	68
5.1 - Recommendations	68

<i>5.1.1 - UAE Government organisations</i>	68
<i>5.1.2 - Abu Dhabi Government Departments</i>	69
<i>5.1.3 - Executive and Senior Manager</i>	70
<i>5.1.4 - Government Employees</i>	70
<i>5.1.5 - Community Stakeholders</i>	71
5.2 - Conclusion	72
5.3 - Future Research Studies	72

References: 74

Appendices 86

Appendix 1: Questionnaire	87
Appendix 2: Histogram for Demographic Factors.....	92

Chapter 1: Introduction, Objectives and Problem

Chapter 1: Introduction, Objectives and Problem

In today's active and dynamic environment, significant changes occur in both public and private sector which ultimately affect the business performance of the firms. Some changes robust the markets and create opportunities for more growth and revenue. While other might challenges the organisations' survival and force them to run the business normally or with minimum loses such as the economic downturn period. Therefore, organisations need to adjust their business and undertake new strategy in order to realign with new market conditions and achieve the desire goals. It is essential that organisations should not change only for the sake of change; however it should change to enhance organisational performance through flexible strategy, ability to rapidly learn and develop new organisational skills and capabilities (David et al, 1996)

More and more, the execution of important tasks and goals in organisations today is being achieved through utilizing of projects as highly supportive tool for accomplishing potential business and achieve strategic objectives. Projects have clearly become a modern way of delivering complex activities in order to simplify the execution process and achieve deliverables with optimum quality. The increasing trend of projects led to the need for management of multi projects in an organisation. Thus, project management concept has been introduced as powerful tool for managing projects and avoids project failure. Today's project management has become one of the main organisational activities to assess project outcome which is extremely important to all parties involved in the project including managers, customers and stakeholders. Nevertheless, this concept rapidly adopted in the project environment because there are many projects being conducted that are totally unrelated to the organisation strategy and its stated mission, failed to achieve both project and corporate objectives and completely run out of planned scope, schedule and budget (Aaron et al, 1997).

It is necessary to distinguish between the two terms, the project and project management. A project can be defined as a temporary endeavor to achieve a specific and unique objective through a series of activities and tasks that consume resources. It has to bring beneficial change or added value, and having a defined beginning and end which is usually constrained by date or deliverables. In contrast, project management can be considered as a set of principles, practices and techniques applied to manage, control and monitor project objectives

and risks through utilizing of organisational structure and resources to achieve better performance and outcomes (Andrew and Bassam, 1996).

As many organisations realised the precious benefits of projects, the number of project management adoption is considerably growing due to the accelerated pace in growth of simultaneously ongoing and interrelated projects within organisations. Thus, the issue naturally arises, how to undertake all projects successfully? Many scholars investigated on the factors of why projects fail. While others defined some criteria against which projects can be measured in order to achieve project success, such as the well known measurement and called as “the iron triangle”, which are cost, time and quality (Roger, 1999). Despite both factors and criteria for success are known and identified, projects however continue to be described as failing. An argument could be that projects are being affected by the entire surrounding environment, where the success of projects determined by many other factors not only the issues directly linked with project component, but also by the entire relation with the organisation atmosphere and by the interaction with the various portions of organisational climate. Therefore, project management is extremely associated with fundamental aspects of organisation such as organisation strategy, leadership, organisational structure and internal management processes (David, 1996).

In fact, increasingly diverse climate within organisations have a wide variety influences on project performance. Obviously, these influential issues could adversely reflect on project success. Moreover, projects are enormously linked with organisational strategy and are considered as tool for implementing the organisation strategic plan. The success of projects becomes crucial to the organisational success. At the strategic level projects must be selected based on pre-defined criteria that will ensure the alignment of project objective with the corporate objective (Fevzi, 2001). In addition, as the project contractor is essential factor for project success, it is equally important to have experienced contractor who will manage and execute the whole project. Therefore, at the operational level the contractor must be evaluated and selected carefully based on proper processes and appropriate agreed criteria in order to ensure that all the procurement processes are aligned with the organisational strategy and its business priorities. On the other hand, the selected project should have a high level of commitment of leadership at the organisation. Besides top management should demonstrate the trait of transformational leadership in order to inspire subordinates and increase the productivity of project's team members. Furthermore, the organisational structure can also

play primary role in the success or failure of projects. Hence, the dynamic type of structure should allow more flexibility for the smooth implementation of projects particularly in the government sector.

It is vital that a project in any organisation supports the corporate strategy and highly contributes to the achievement of organisational strategic objectives. That can be applied through converting strategic plans into daily actions since both project management and strategic planning concepts are congruent. Every project that is directly related to one or more of an organisation's priority can be called a strategic project. Such projects are justified and supported by an organisation strategic plan, analyzed from a strategic perspective and managed and monitored in a high hierarchal level by programme management office (Sergio and Cliff, 1994).

A critical part of strategic implementation at the government organisations is the decision making process during the selection of projects and management of simultaneously ongoing projects that will ultimately drive the organisation towards its successful implementation of its strategy. The challenges that almost all government organisations faces during execution of its strategic plan, practically the climate factors that affect the execution of strategic projects was the main encouragement of doing a research on this specific topic. The following chapters of this research show detailed illustration on the factors that affect the project success especially in the government sector.

1.1 - Research Aim and Objectives

The aim of this research is to understand and describe the relationship between project climate and project commitment by identifying the project climate factors that highly affect project commitment in the government sector.

The main objective of this research is to explore and identify the factors that influencing the project performance and find out to what extend the project climate is associated with project's commitment in government organisations. Other objectives are as following:

- To urge government organisations embed the leading practices of project management in their projects in particular and in their organisational culture in general in order to better perform with their strategy and effectively implement the projects.

- To better align project objective and corporate objective through using set of criteria or model in the process of strategic development, procurement and selection of projects.
- To identify cultural variables that increases effective commitment towards projects.
- To help government organisation execute its strategic plan effectively through identifying critical factor for project commitment and attributes of highly encouraging work environment.
- Identify the issues that could lead to project failure primarily caused by project climate factors.
- To review other researchers' point of view on the topic by conducting detailed literature review.
- To produce a set of recommendations for different part of the community of how a government organisations can provide sustainable healthy environment to achieve projects' goals.

1.2 - Research Scope

The research concentrates on the public sector practices in terms of the management's behavior and commitment against projects requirements. Also, it investigates on the challenges that counter the projects' team members that create obstacles on the team journey towards project goals. The research highlights the governmental approaches to encourage project commitment particularly in the context of Abu Dhabi Government Departments. However, in certain occasions the case of one of Abu Dhabi governmental body is used in this research paper for more investigation on the government practices due to the availability of relevant information. The main focus area of this research is the management's behavior towards projects from government point of view. The report will provide in-depth research on the factors affect the project's performance in order to implement an organisation strategic plan and achieve its objectives.

1.3 - Problem Statement

As the scope of the research focuses on the public sector and particularly Abu Dhabi government departments, it is highly noticed that almost all Abu Dhabi government departments striving to accomplish their initiatives and projects in order to achieve their corporate objectives and strategy. These tremendous efforts carried out by them to support the overall strategy of Abu Dhabi government to become among top five governments in the world. The government is represented by Executive Council (EC) which identifies and designs the 5 years strategic plan for the Emirates of Abu Dhabi and communicates it across all entity for deployment, each according to its core purpose. Government entities reports on their progress on strategic plan to the EC, the central point for consolidating and monitoring the government performance against the strategic plan.

At the strategic level top management lack the decision making in terms of critical factors for selecting projects. Usually, they think the more; the better as they accept almost all proposed projects without considering the stakeholder engagements which might affect the projects in the execution phase or later stages. Thus, the project scope might be changed several times in order to consider the stakeholders requirement, and this might also increase the project cost and affect the project schedule. In addition, organisations execute too many projects that are improperly linked to the strategic plan, while lack of resources overstretched the existing workforce. Managers at government organisations show typical management style and deal with project as managers not as leader. Whereas, projects need visionary's leadership who can maneuver, build trust and enhance the adaptability of project activities in the multifaceted environment. Many organisations lacked the sense of urgency and failed to establish priorities due to lack of effective leadership (Charles et al, 2008). Furthermore, in government department the organisational structure is usually build based on multi hierarchal layers which ultimately create typical mechanistic design. This particular stricture has long chain of command which does not provide full support for projects and hinders the creativity and innovation.

At the operational level, many internal processes are very complicated and the official procedures are not clear to the project managers and project team member. For example projects get stack or delayed more often in the procurement process due to complicated evaluation procedures and documentation required at this stage. In addition, lack of

standardize criteria for project procurement affect the project success, because in this phase the organisation require to assign competent consultant to carry out the works and prior to that they are required to allocate knowledgeable project manager who can ensure the project success through identifying the set of selection criteria for specific project. Unfortunately, at this stage project could loss its strategic allegiance, because strategic planning employees are not involved in this process in order to ensure that the selection criteria reflect the strategic objectives of the organisation which are ultimately highly supported by the objectives of the selected project.

On the other hand, at the project level project team members faces many obstacles to execute the project activities as they are not sufficiently authorized to take on spot decisions and to master their tasks. Lack of leadership's commitment and executive's involvement in the operational activities of each projects affect the project performance and might cause lot of delays. Whereas, team members are not satisfactorily motivated through empowerment, appreciation and rewards in which they would enhance their performance by increasing their individual productivity and having better quality of outcome. Consequently, the status of many projects shows behind the schedule, out of scope, and over budget. These issues would affect the overall performance of the organisation strategy.

As this research focuses on the government practices, an objective evidence of projects' performance observed in one of Abu Dhabi government departments. The data of project performance is presented below in figure 1 and it is generated from 2009 performance report document (an internal document created by Strategic Performance Division). It is noticed that the status of 27 projects out of 57 is below target, whereas 12 Key Performance Indicators (KPI) related to those projects out of 34 are not achieved. The ultimate progress of all projects affects the performance of the organisation against its strategy as well as creates a big gap at the strategic level in terms of aligning the projects with the implementation of strategic plan and core business objective of the organisation.

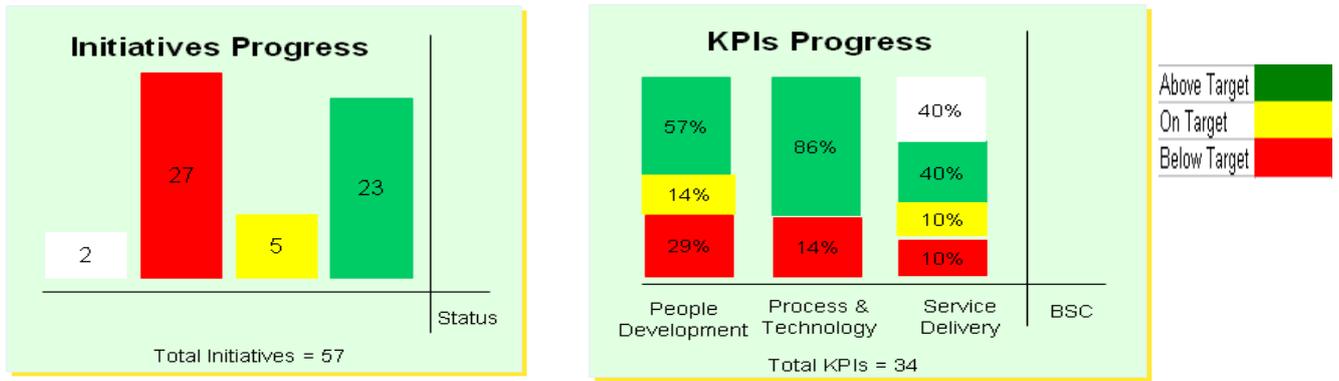


Figure 1.1: Initiatives and KPIs Progress in 2009

The organisation conducted further investigation on the causes for those huge delays in the project's progress and found that the most challenge impacting the projects is the top management approvals. The table below shows the result of the investigation with more factors for the delays:

Causes for delayed projects	Percentage (%)
Top management approval	26%
Dependent on other projects	22%
Late start	19%
Change of scope work	15%
Lack of resources	10%
Late of internal approval	4%
Dependent on external stakeholder	4%

Table 1.1: Causes for Delayed Projects and Initiatives. (source: 2009 performance analysis document)

It is highly important to capture these factors and causes for delayed project in this research as a real example for challenges in the governmental organisation to achieve project commitment. In addition, these issues will be highlighted in the following sections of this paper along with other relevant factors that affect project commitment.

1.4 - The Importance of the Study

In today's complex business environment, organisations seek new ways of doing the work. The tasks are combined together as activities that ultimately will deliver a project. The new way became very common as it increase productivity, reduce the cost, improve processes and increase customer focus to meet their expectations. Managing these various projects along with their recourses, people and communications is a high challenge and require a dedicated function to oversee the management of projects. Firms started to establish Project Management Office (PMO) as a creative solution for centralising the management of diverse projects within the organisations and seek better performance through identifying and managing all interactions between projects and organisational units. However, this concept is not yet widely spread in the public sector, where vast array of projects failed to achieve the desire objectives. However, the study of project climate effects on project commitment has received little detailed attention in project management literature, which would tremendously strengthen the importance of this study.

Besides, we can see from the problems mentioned in previous section that the commitment towards projects can be affected from different dimensions of project climate. Therefore this particular study is very important for organisations especially in public sector as it will highlight the fundamental factors of project climate and its consequences impact on the project performance. Knowing these factors and the great extend of its impact on project commitment would help organisations in prioritizing their business and would lead them to highly consider the critical success factors within their operations. This could also lead to obtain healthy environment for execution of strategic projects. Hence, having such climate within project base organisations would help the projects to extensively contribute towards achievement of organisational goals.

Additionally, as the research will draw attention to the strategic aspects that could improve organisational performance, the results of this study and the recommended actions can be addressed to the management at the strategic level in government sector in order to overcome the challenges and improve the process of strategic development and execution as well as better utilize their resources.

Chapter 2: Literature Review

Chapter 2: Literature Review

In today's active and dynamic environment, firms need to adjust themselves for the common objectives of sustainability. Top management should have a clear vision and full of understanding of their strategies in order to add value to their organisation and achieve the desire objectives. The most challenging part in the strategy that the top management faces is not developing a strategy itself, but how to effectively and efficiently implement it across their organisation. This challengeable commitment to the top management primary caused by the massive number of initiatives and projects attached to the organisation strategic plan.

Nevertheless, many organisations nowadays undertake project as a growing part of their operations and an essential instrument for implementing organisational strategies. In addition, projects have clearly become a central activity in organisations where the management invest high capital and allocate huge resources in order to improve their business performance and implement the organisational strategy (Brian et al, 2009). Moreover, projects are the new way of delivering work as now organisations will be required to change their mechanisms in handling complex activities in order to carry out works with speed and flexibility (Colin, 1995). Therefore, it is clear that effective implementation of strategy requires an appropriate set of projects to accomplish the strategic plan. The question arises here, how to obtain top management's and other stakeholder's commitment to enhance the project performance as well as ensuring the effective implementation of corporate strategy through attaining high level of project commitment? And what are the projects' surrounded factors that affect the commitment level of people towards projects' tasks, risks and other responsibilities?

Researches highlighted that many projects fail in delivering the desire objectives due to many reasons related to lack of proper project management, top management support, organisation culture, structure and internal processes (Liang et al, 2002). According to the study done by Martin and Martin (2003), the result indicated that high time pressure towards the projects end is one of the reasons for project amnesia. Whereas, Rodney and Ralf (2003) stated that project managers are evaluated against the performance of their projects particularly in terms of timeline, "delivering the desired outcomes within the desired timescales". As project is transient (temporary period, has start and end date) in which it creates high pressure on the project manager and team members to meet the deadline, accordingly the extensive focus on meeting the deadline would affect the quality of project outcomes and might lead the project

to the failure and loss of management commitment. Therefore, the concept of project management evolved as many organisations strive to resolve those challenges as well as to plan, manage and monitor complex activities of project. The growing need for knowledge about project management tools leads the organisations to embed the project management practices within their organisational structure through Project Management Office (PMO). Munns and Bjeirmi (1996) explained how project management disciplines contribute in project success. According to them, project is performing set of tasks to achieve a specific objective, while the process of controlling the achievement to reach that objective is a project management. However the overlap between the two exists in real practice as there are different factors affect the project and project management, an example is given in table 2.1 to differentiate between them in terms of scheduling.

Type	Success Factor	Failure Factor
Project	Having a detailed implementation process	insufficiently implemented the process of activities
Project Management	Satisfying the project schedule	Inadequately defined the tasks

Table 2.1: Scheduling Success and Failure in Project and Project Management

Many organisations seek for management commitment in projects through establishing a PMO function in the top hierarchical level of their organisational structure. Obviously, reporting to the top management directly will strengthen the role of this unit and will improve the power of individual project as the information about its progress and challenges will be access by the management immediately which will help in generate immediate decisions. Notably, ensuring the strategic alliances of each project is a critical aspect that should be mainly under the responsibility of PMO. Therefore, one of the most significant factors in project selection in the public sector is strategic fitness. Strangely, this particular measure is not broadly discussed by the researchers and found few articles that took into account this critical factor as a major influence in decision making process. For example, Archer and Ghasemzadeh (1999) stated that strategic direction must be clearly determined before selection of individual project in order to link the project objective with the organisation strategy. According to them, extensive preparation and planning of strategy should be carried out to ensure strategic focus in the selection process in either way top-down (strategic consideration) or bottom-up (individual project consideration). The outcome of strategic

project should focus on the competitive advantage and business result rather than getting the job done. Usually the formal link between business strategy and project is not considered in many organisations. Laura and Adrien (2002) and Chi-Cheng et al (2008), investigated on research and development (R&D) projects and revealed that the major themes of R&D project's selection are: 1) relating selection criteria to corporate strategies, 2) integrate the needs and desires of stakeholders and 3) consider the risks and qualitative benefits.

Terry (2002) analysed the performance of 136 European projects (23 organizations) in terms of two criteria time and cost. Researchers and many other people expect a strong correlation between the two, but the result of study showed a small amount of cost escalated during the schedule delays. It is also observed that the performance of budget had only 4% escalation which is much better than the performance of schedule with 16% delay. In addition, the study showed on-time performance of the project achieved by organisations that had a wide education on the concepts of risk management and dedicated a person who acts as an owner person for the specified risk. Archer and Ghasemzadeh (1999) suggested that it is important to analyse the project by using Work Breakdown Structure (WBS) to identify the risk and its consequences associated with each activity.

2.1 - Project Work Climate

Morgan and Sousa (2005) studied various literatures, books and academic journals of project management and noticed that throughout the last decade, the interest to the cultural perspectives on project management has extremely increased. The broad attention to the project climate in the recent years primarily arises because achieving project's goals is highly influenced and reliant on the project culture and the national culture of partners (Isaac et al, 2005). Morgan and Sousa (2005) suggested that project managers might also examine the studies and researches conducted outside the project management literatures in order to have information and understand project's climate form different organisational perspectives.

In the academic and business field, the term "climate" is also used as "culture" or "behavior" and it is known as "organisational climate" or "project climate". The concept of these terms is almost the same in meaning for both organisational or project level as it represents the same notion such as management behaviors and employee workplace attitudes. Edgar (1992) defines the term culture as "a pattern of shared basic assumptions that the group learned as it

solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way you perceive, think, and feel in relation to those problems". Therefore, the project climate is defined as a set of values, beliefs and behavioral norms that are perceived directly or indirectly by the managers, individuals and groups that are seen common in firm's projects in which it control the way they interact with their stakeholders or with other project's aspects such process, procedures, teams and structure (Bro, 1983).

As the social and cultural aspects became crucial to the project commitment and its overall success, there has been a shift in project management literature from the structural modes towards the cultural and social interaction due to the high number of failed and deviated projects in terms of project schedule and budget raised the attention to the cultural aspects of project management (Stewart et al, 2002). For example Kim and Robert (1999) developed "competing values framework" to identify organisational culture profiles. The framework compares the cultural attributes with quality outcomes. Firms with major concerns to the end product or service (results-orientated), its predominant culture is achieving high competitiveness in the market through hard drivers' leaders. The management style within this project climate is more concerned with short-term objectives and more focus is provided to the producer individuals to improve their ability, productivity and get the job done. Such culture do not encourages teamwork and cooperative efforts by employees, rather it lead to self-preservation and conflicts within the working environment. Conversely, firms with strong behavior associated with consensus and team cohesion should allow for mutual long-term benefits. For instance, increased employees' satisfaction will consequently increase customers' satisfaction which will ultimately positively influence the firm's performance. In this type of culture the management exhibit mentor and facilitator style (people-orientated). Therefore, a high project commitment is conducive in such climate as the projects are managed through proactive, open, moral, and teamworking approaches.

Rob et al (2002) used "competing values framework" which was developed by Kim and Robert (1999) to analyse project culture against quality outcomes by identifying the cultural orientation of thirteen Australian projects. They found that in "result-orientated" climate the projects were below expected performance due to lack of cooperation and teamworking as the major attention was targeted the hardworking individuals to direct their endeavors towards achieving high market shares and increasing market competitiveness of the firm.

Whereas, in people-orientated climate projects exceeded the expected delivering performance because leaders placed premium concentration on teams cohesion and increased team member participations.

Robert (2002) studied 34 Canadian firms and observed from project managers that project culture is not constant and its frequently changing, thus there is a high need for effectively managing the change. Paul (1994) said dysfunctional culture could cause for risks occurrence due to the growing isolation, losing innovation and lack of ability to adjust the project with increasingly changeable environment. Whereas, having high ability to adapt to the environmental changes would help the organisation to successfully encourage an effective culture (John and James, 1992). Culture is more dynamic than static as it the incessant changes take places in the project environment and management commitment (Mats, 1993). The social interaction between employees and organisation will form an active cultural system within the work environment that distinguishes an organisation from another. The system is built as a result of people constructing their own culture (Margaret, 1988).

2.1.1 - Strategic Alignments

Project selection is an essential approach of the strategic decision in any organisation. It is very important that each project should ultimately support the corporate strategic objectives in order to help the organisation to achieve a competitive position. Therefore, management at strategic level may standardise the selection process by developing set of criteria that most appropriate for prioritising the projects. The prioritisation process should highly consider the business priority and strategic goal of the organisation in order to ensure the strategic alliances of each project.

As projects are one of the practical tools for implementing the organisational strategic plan and achieving business priorities, the selection of strategic projects become critical process to the top management. This is because these projects are highly contributing to the achievement of ultimate organisational objectives and strategy (Surapon and Chotchai, 2007). Moreover, defining the initiatives is the most critical part of linking the strategy to short-term action (Kaplan and Norton, 2001). Chapman et al (2006) support the same rational as they believe that selection projects in the public sector present considerable difficulties due to large capital expenditures and uncertainty of potential benefit. Juuso et al (2006) said "Project

selection is a strategic decision problem which is often characterised by multiple, conflicting and incommensurate objectives".

Steven et al (2006) prioritized the projects based on strategic aspect (long-term strategic direction), technical aspect (technical requirements) and user aspect (operational requirements of project). They pointed out that these aspects should include the key elements of evaluating projects such as perceived value of the project if funded, managerial labour needed (project managers), project cost, project risk and social welfare particularly for public sector. Moreover, they applied the data of 84 United State governmental projects from different agencies in their model of selection project. The result indicates that their model which is based on the above mentioned aspects can be applied effectively in public sector project selection, due to the relevant outcomes comparing with the actual projects.

Throughout the research there are many articles examine different perspectives of factors influencing project selection. A research study by Mohanty (1992) on both public and private sectors attempt to develop a model for project selection process based on multiple-criteria decision. The model called "Multi-Criteria Decision-Making (MCDM)" and specifies the influences of project selection into two categories, as it illustrated in table 2.2:

Intrinsic Criteria	Extrinsic Criteria
<ul style="list-style-type: none"> ▪ Project-identification ability ▪ Resources requirements and availabilities ▪ The past experience of the organisation in managing the project ▪ Management attitudes ▪ The time horizon of the project 	<ul style="list-style-type: none"> ▪ The risk/return ratio ▪ The market environment ▪ Government polices and regulations ▪ The socioeconomic climate ▪ Legal and technological implication

Table 2.2: Selection Criteria of MCDM

According to him "whatever the selection methodology is, a project is suitable primarily if the benefits that it generates are greater than its cost, for example if it passes the basic test of productivity management". Organisation normally prefers to invest in projects that require low degree of competence, accomplished in short time, minimum capital and high return potential. However, these set of criteria may not deem as most appropriate techniques. Therefore, the researcher stated that the most acceptable project can be argued on the technical competence of the organisation, resource-mobilization capability, potential return and implementation time of the projects.

According to Andres et al (2008), public enterprises face a common problem, they aspire to initiate number of projects at the same time as the availability of the budget is ensured and the funding is afforded by the government. Another common problem is complexity of decision process due to technical limitations of planners in defining the relations between specific projects. The researchers argued that the public sectors must consider social equity, economic, and political criteria, unlike the private sector where net profit or returns to shareholder is frequently the sole criteria. In addition, the authors investigated in-depth on the public utilities projects and pointed out that selection and prioritisation of those projects are highly complex process. They proposed a multi-objective mixed integer linear program (MOMILP) model. The model components categorised and designed based on weighted set of widely accepted criteria that ultimately propose a bank of worthy investment projects (successful project portfolio). This model was built primarily for the planner particularly in public sector to help them in the process of selection projects. The model highlights the tangible and intangible attributes, as well as the financial and non-financial aspects. It focuses on considering and directing the decisions of selection project towards the economically efficient solution, social welfare functions, financial goals, precedence relations among projects, earliest and latest start dates simulates (the impact of political decisions), endogenous cash flow generation and exogenous budget. This particular model applied on case study of Water and Sewer Utility Company in Spain and showed computationally efficient for portfolios encompassing a large number of projects.

Other researchers investigated on other models and used different criteria for prioritising the projects. Barbarosoglu and Phinas (1995), used two models simultaneously, Analytical Hierarchy Process (AHP) "a structured technique for dealing with complex decisions" and Mixed Integer Programming (MIP) "a mathematical method for determining a way to achieve the best outcome" (wikipedia 2011). The researchers used those two models as project selection tools for the Istanbul Water and Sewerage Administration in order to consider the following factors: social, political, economic and project scheduling. While Son and Min (1998), used the same two models to solve the capital budgeting problem in the US electrical power industry by taking into account the financial and environmental factors.

Stelios et al (1995) analysed 306 articles from 93 journals and concluded that there are very few study deal with both evaluation and fund allocation as an integrated activity in project selection process within service and government sectors. However, they pointed out that the

method of selection project is usually influenced by political factors instead of technical issues in non-profit organisations. This replacement would eventually impact on the organisation performance and would reduce its effectiveness due to inefficient decision making during the project selection process.

Many researchers show interests in using Decision Support Systems (DSS), an interactive approach that support and improve the decision making of a non-structured management problem (Turban and Walls, 1995). For example, in order to increase the likelihood of user acceptability Ghasemzadeh and Archer (2000) have used the DSS as a base for their integrated framework for project portfolio selection called Project Analysis and Selection System (PASS). This framework is developed to support corporate decision making by taking the advantage of best attributes and selection criteria of the existing models. Basically, PASS took into account the most fundamental and widely used criteria as summarized in the table 2.3:

Perspective	Criteria
Issues	<ul style="list-style-type: none"> ▪ Organization’s objectives and priorities ▪ Financial benefits ▪ Intangible benefits ▪ Availability of resources ▪ Risks of the project portfolio
Difficulties	<ul style="list-style-type: none"> ▪ Multiple and conflicting objectives ▪ Uncertainty due to qualitative objectives ▪ uncertainty and risk ▪ Time for completion ▪ Interdependent between projects
Constraints	<ul style="list-style-type: none"> ▪ Finance ▪ Workforce ▪ Facilities and equipment ▪ Resource limitations
DSS Criteria	<ul style="list-style-type: none"> ▪ Committed senior executive sponsor ▪ Carefully defined system and information requirements ▪ The team approach to system development ▪ Computer hardware and software selection

Table 2.3: Fundamental project selection criteria for PASS framework

Although there are many literatures demonstrate interest in developing a models and frameworks to consider all critical factors of project selection process, some literatures criticized those approaches as they have largely failed to gain user acceptance (Mathieu and Gibson, 1993). They justified this failure as the model provides solution to project selection without allowing the decision makers to use their experience, knowledge, insight and judge during the selection process. According to them, in the committees meeting, if executives allowed members to debate and argue they would came up with creative ideas and solutions that could be more efficient than the recommendation of the model. Whereas, Liberatore and Titus (1983) contradict the modeling approaches as there are only few of those models are being utilized and helped to take the decisions. Moreover, Hess (1993) stated that "management science has failed altogether to implement project selection models; we have proposed more and more sophistication with less and less practical impact". As there are no most appropriate criteria for selection project portfolio, it seems that an organisation should formalize its own evaluation criteria that most fit the organisation strategy and is aligned with leaders' vision and meet stakeholders' expectation.

2.1.2 - Project Procurement

Supplier selection process has undergone major changes during the past years. Due to these enormous changes this topic has been studied extensively. Nowadays potential suppliers are being evaluated against multiple criteria rather than a single factor such as cost. Multiple criteria approach is used mainly for taking decision of the best supplier. The list of criteria and the scores should be developed and incorporated carefully with the specialised people who have technical experience on the same project. This will make the process of selecting the supplier more efficient and accurate decisions will take place at this stage.

More and more, enterprises in various industries have challenged tremendous changes during the past decade. They have increased the level of depending on their supply chain as a source of their competitive advantage within their market industry. Therefore, determining which service/product provider to include in supplier chain list and select the best for a particular project has become a key strategic consideration (Thomas and Janet, 1996). The selection process is a challenging task as senior employees have to take the decision under the condition of limited information. The pre developed list is a measurement tool that facilitates the client to evaluate potential supplier performance before handling a particular job. This

tool helps the client to select the most appropriate supplier as they would have adequate confidence that the selected one can achieve high performance and meet their expectation (Nabil et al, 2007).

Going through more than ten journals articles, it is noticed that certain criteria are constant in evaluation process at different industries such as quality, delivery time and cost (D. J. Watt et al, 2009a). The researches show that these are the most important factors of selecting a supplier. While there is other less important criteria like company profile, resources competencies and experiences in performing similar tasks (Rapcsak et al, 2000). As most of the clients examine the quality of the product or service during the evaluation process, they need the service or the product to be produced according to the best standards in the class, meet the client and stakeholders expectation. Different organisation has different priorities that depend on the type of their business and which market industry they are part of it (Gary, 1998).

The selection criteria most probably developed by the project working group and are necessary for decision making process. Prequalification is one of the common approaches most currently used by many countries around the world to assess the capabilities of the suppliers before being invited to a particular tender. Prequalified suppliers are placed on a standing proved list for invitation to bid on a regular basis. In the tender evaluation each criterion is given a rate according to the client priorities of a particular project (Weijun and Zhiming, 2007). Figure 2.1 shows the process of selecting a supplier.

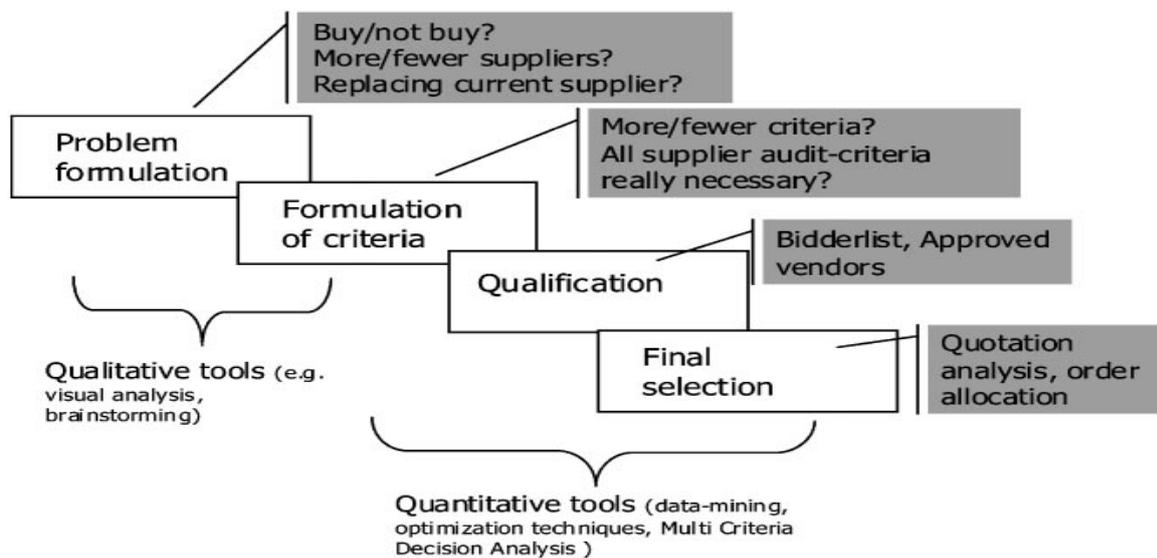


Figure 2.1: Process of Selecting Supplier (Luitzen et al, 2001)

Supplier selection decision is critical by the fact that various criteria and principles must be considered in the decision making process. Charles et al (1991) investigated on many aspects related to the vendor selection process in manufacturing sector. They referred to the study done by Dickson (1966) which based on 170 responses out of 273 surveys distributed to purchasing agents and managers selected from the membership list of the National Association of Purchasing Managers. From this study they concluded that the most important factor is the quality. Beside this they considered delivery, performance history and warranties as extreme importance factor in the tender evaluation criteria.

Similarly, William et al (2009) have done a study based on 78 journal articles collected. One of their main objectives of doing this research is to identify which evaluation criteria were paid more attention to. From the research they concluded that the most popular criterion is quality, based on 68 papers out of 78 (87.18%) considering quality in the supplier selecting process. This was followed by delivery time (64 papers or 82.05%), price/cost (63 papers or 80.77%), manufacturing capability, service, management, technology, research and developing met, finance, flexibility, reputation, relationship, risk and safety and environment. There are various quality attributes that are found in the papers such as quality management system (ISO) and continuous improvement program. Bill (1995), emphasized that product quality, price and service are essential dimensions in the selection decision. According to him "service can be seen as a dimension of quality, not only of the product but of the competence of a supplier as part of the commitment to total quality management". In other words, suppliers must deliver products or services in accordance with the quality policy of the client.

Interestingly, Hatush and Skitmore (1997) recommended "workload the contractor has on site" as an important element of contractor selection criteria. The authors have addressed this type of measurement because they think the existing workload of the contractor at the time he is awarded a new contract may affect badly on his performance and might cause failure to accomplish the deliverables on time. Che and Wang (2008) and Vijay and Ravi (2007), thought that firms should focus on price, quality and due date when the purchase method is multiple-sources, but in case of single-source the client should stress technical support and product reliability.

Conversely, Cathy (1995) confirmed that there are many firms today are developing collaborative long-term relationship with their suppliers. Due to partnership, all suppliers are well respected and trusted by the client in terms of the company profile, performance history and competencies. Thus, the difference is found between the two on the price and the reliability of the product. While Riccardo and Valeria (2003) said clients focus on technical output evaluation in terms of quality, delivery speed, reliability and price, but when the relationship becomes closer and longer, suppliers are selected according to their global performance. Florez-Lopez (2007) stated that the price and lead time are the traditional approach which is replaced by a new approach that depends on the long relationship between supplier and client. The new approach is based on added-value perspective (value-creation concept) and it focuses on two variables:

- 1) Direct value variables: quantitative approach such as prices, quality and delivery.
- 2) Indirect value variables: relational factors such as: cooperation, commitment of resources, trust, customer orientation, communication, responsiveness, and customized services and products.

The second approach is critical as it improves the communication between both parties the supplier and the client. It also allows closer relationship and reduces the conflict as the supplier will have better understanding of the client requirements and this will lead to greater opportunities for innovation.

In late eighties Ford company reengineered its procurement process in order to better lead their projects and improve corporate performance (Kemal et al, 1998). Whereas, David (1996) argued that project procurement arrangement usually examine the level of project complexity as it is an important indicator for ensuring project success and might determine the effectiveness of project management. Obviously, the less complexity level in project components would allow for more opportunities to achieve project success. Peter (2002) found that procurement methods affect the project performance in terms of cost and schedule. Both of them are significantly associated with the project rework which can adversely influence the project performance. Ped et al (1998a) said traditional procurement approach is greatly criticised for its negatively impact on project delivery which it most probably creates "procurement gap". According to them, the reason for such gap is the cultural and organisational differences between project team members.

2.1.3 - Organisational Structure

In today's complex business environment, organisations seek new ways of doing the work. The tasks are combined together as activities that ultimately will deliver a project. The new way became very common as it increase productivity, reduce the cost, improve processes and increase customer focus to meet their expectations. Managing these various projects along with their recourses, people and communications is a big challenge and require a dedicated function to oversee the management of projects. Firms started to establish project management office (PMO) as a creative solution for centralising the management of diverse projects within the organisation (Kent, 2002). Nowadays organisations all over the world are changing rapidly as they search for the most suitable form that have more effective business environment. According to Andrew and Silvia (2003) organisations run multiple simultaneous projects and have become project based rather than functional structure. This is a mature form of organisation structure that enable consistent structure and delivery of strategy. Moreover, researches exposed that PMO have become very popular in last decades and increasingly implemented in the organisations as part of integrative approaches to link strategy, project and organisational structure (Monique et al, 2007).

Organisations have responded to the new challenges such as increase competition and increase demand on product and service innovation by developing more flexible organisational forms in which projects are more strategically important. Therefore, PMO is implemented as a new concept in organisational structure to increase strategic importance of projects and response effectively to the challenges (Monique et al, 2007). The major role of PMO is linking the corporate strategy with individual project attributes in order to turn business strategy into implementation (Tony, 1998). Whereas, Christine and William (2004) concluded that PMO practically proved that it provide high level of confidence for management due to the strong correlation between PMO and project performance.

Throughout the 20th century, the management paradigm has been shifted from functional bureaucratic approach to the process and project-based approach in order to response to the rapidly changes in the technology and in the nature of work to become more customer oriented (Rodney and Anne, 1999). The growing popularity of knowledge management accelerated movement towards project-oriented organisational structure (Michel and Manon, 2007). In addition, organisations establish PMO structure that have evolved from traditional

pyramidal structure (see figure 2.2) in order to monitor and control project performance and develop competencies to support the project managers in carrying out their duties.

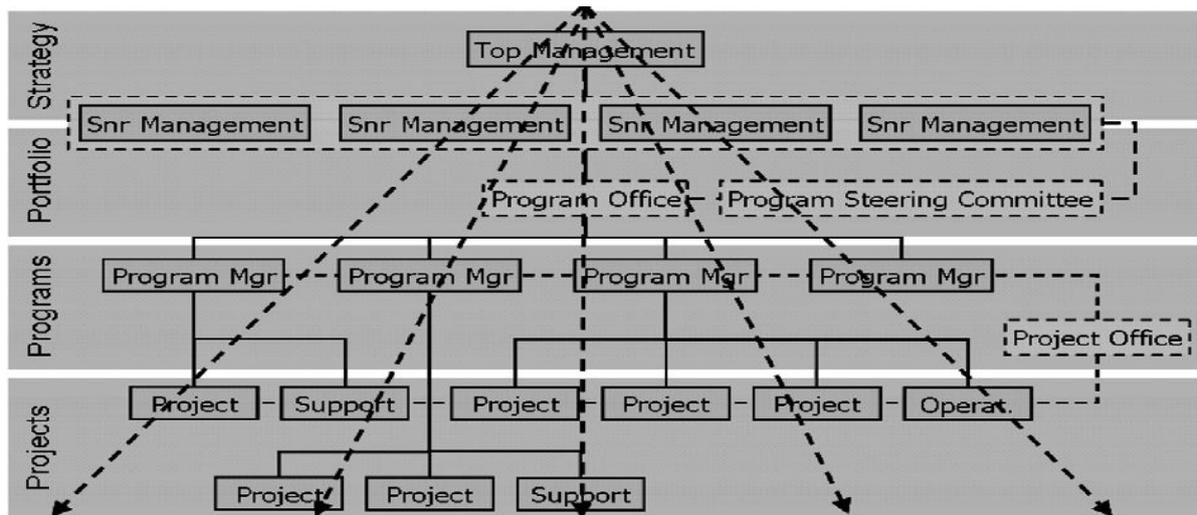


Figure 2.2: Typical mechanistic Project-Based Organisation Model (Michel and Manon, 2007)

Identification of critical knowledge and utilise it consider as one of the major challenges of project management in the organisation. The main reason for this challenge is that a project has specific start and end date, where people involvement and lessons learned are dispersed when the project ends. Jyrki et al (2003) said "successful project management is based, on the one hand on accumulated knowledge, and, on the other hand, on individual and collective competences". They argue that facilitating inter-organisational interaction requires appropriate tools that support organisation in managing projects. On the other hand, Huang and Newell (2003) and Naomi et al (2006) believe that in the project environment capturing the knowledge and transfer it among the organisation are rely heavily on social patterns, practices and processes. While Terry (2004) confirmed the same as he mentioned that in complex project, it is important to analyse what went wrong and why to gain understanding on the project behaviour. Terry (2002) investigated on the success factors of project-based organisation and stated indicated that "an effective means of learning from experience on projects, that combines explicit knowledge with tacit knowledge in a way that encourages people to learn and to embed that learning into continuous improvement of project management processes and practices". Competitive advantage for project success relay on the degree to which project team member effectively access and apply the learning opportunities within project (Andrew and Marc, 2003).

Implementing a PMO is an important organisational change that would capture innovations and knowledge and provide better environment for projects. PMO is an important phenomenon that can be put in place to manage multiple and complex projects and to obtain support from top management to increase the power of the project (Brian et al, 2008). The primary rules of PMO is to improve organization strategy in alignment, integration and accessibility to projects information by implement efficient systems and leading practices of project management with focus on innovation and learning.

Companies achieve project success through the investment in project management office and project management methodologies, guidelines, tools and techniques (Kam et al, 2007). According to Robert and Michael (1998) and Scott et al (2003), project management involves tangible and intangible assets. Tangible assets are concrete and based on explicit knowledge, whereas intangible assets are the tacit knowledge which is also called the “know-what” and “know-how” as per Ikujiro (1994). Project management literature extensively focuses on the tangible assets as a knowledge sharing through PMO tools and techniques (Kloppenborg and Opfer, 2002). With reference to (Kam et al, 2007) journal, companies establish PMO to support the projects and ensure the consistency of using reporting system, project tools and technologies “PMO reflect a coordinated and structured way of implementing tangible project management assets”.

PMO will enable standardisation and avoid duplication of work by centralizing certain project management functions. In addition, a new technology and reporting system will be put into practice on organisational wide to create efficient processes for reporting on the progress and allowing better monitoring and controlling to the projects (Gerard, 2004). It is noticed that the primary role of PMO is to provide the suitable framework and technique for project selection process in order to help the top management in the decision making and apply project governance model across organisation. Deploy such technique for project selection would enhance the standardisation in the selection process that would address the most critical issues and business priority elements of particular organisation Rodney and Ralf (2003). Therefore, the existence of PMO as a dedicated function is very important to improve overall performance of the organisation through enhancing the prospects for project performance and reduce the risk of failure. Christine and William (2004) believe that the PMO and new models are required especially in project-driven organisation to improve project performance and allow more effective operation.

2.1.4 - Leadership

In today's changing environment, organisations seek to invest on leadership to manage diverse projects, resources, people relationship, team effectiveness and communications. Therefore Anne et al (2006) thought leaders are the main shaper and builder of organisational culture due to their high capability in influencing people's behaviors during their interaction with different corporate aspects. In addition, the optimistic insight of leaders helps them to lead the change across the organisation and act as major transmitter and maintainer of organisational culture (Davis, 1984). Moreover, effective leaders are the main pillars for organisational success, thus their perspective in demonstrating an appropriate leadership style is important to achieve better performance (Rodney and Ralf, 2005). Catherine and Chery (2007) found a strong correlation between organisational culture and leadership.

Martin and Jouko (1996) conducted a research in Europe countries on the leadership style. They asked more than 2500 subordinates about their superior's characteristics. The research revealed that leaders are more employees oriented rather task oriented or change and development oriented. On the other hand, Marko (2004) believes that leadership is more oriented towards developing the status quo rather than maintaining it.

Effective strategic leadership provides insights and assumptions about future practices of the firm and enhances its performance while competing in unpredictable environment (Duane and Michael, 1999). Interestingly, Dusya and Mary (2004) argue that learning organisations requires both transformational and transactional leadership style to enable exploration (feed-forward learning) and exploitation (feedback learning). Transformational leaders best suits in the changing of current learning, while the transactional leaders involve in reinforcement and refinement of current learning.

Henry (1998) divided the leadership exercises into three levels. At the individual level, leaders motivate, coach, mentor and energize people by treating them as a respected member of a cohesive social system. At the group level leaders build their teams and resolve conflicts, at the organisational level leaders build culture. Leader's mood and behavior drive the behaviors of everyone else so that the right emotional and behavioral chain of reaction occurs which are important for organisational success (Daniel et al, 2001). According to them "many leaders whose emotional styles create a dysfunctional environment are eventually fired".

Dennis and Jeffrey (1991) believe leadership is very essential in project management for two reasons. First, leaders determine the effectiveness of project planning process. Second, leader's style has high influence on team member effectiveness. According to them leaders need to be both task and relationship oriented during the project phases in order to ensure the motivation and create constructive project atmosphere. The Project Management Institute asked Rodney and Ralf to investigate if leadership style of project managers is a success factor in project, and how different leadership style impact on different type of projects (Rodney and Ralf, 2005). Unexpectedly, from the initial review of literature they found that the project manager and his or her leadership style is not mentioned in the project success factors literature, however it does consider in the general management and project management literatures. Successful leaders have different traits such as: intelligence, technical knowledge, self-confidence, ambition and can lead and influence others (Shelley and Edwin, 1991). While a successful project manager has also different traits such as: problem solving, negotiating ability, communication and result orientated (Rodney, 1999).

The theories of leadership have been considered since early years of last century. For example Chester (1938) differentiated the functions into two main roles. The first is managerial functions which included directing subordinates, guiding and taking actions. The second is emotional functions which include motivation, moral, setting objectives and showing commitment. Erling et al (1987) argue that project manager should be selected based on his or her managerial proficiency rather than technical competency. Peter (1987) believes that project manager's leadership style is a critical success factor in all project life cycle except in the implementation phase as he or she should be sufficiently competent in executing the project.

Recent studies examine the leadership in terms of team player. For example Hans (2004) stated that project climate has high influence on project success, thus project managers should have high leadership role in improving teamwork effectiveness. Leaders can adapt to the cultural diversity by showing emotional and conscientiousness traits Jan (2002). Liz et al (2003) found that demonstrating certain leadership style will significantly influence the project manager's perception on project success. Therefore it is important that project managers demonstrate self-confidence and self-belief as leadership traits in order to enhance their ability and deliver project successfully.

2.1.5 - Project Teamwork

In today's rapidly changing environment, organisations have relied greatly on teams to align the internal dynamics of the firm with the external community trends. Therefore, nowadays teamwork is more important than ever due to increased pace of changes in the work and project climate. Martin and Hans (2001) define team as "a social system of three or more people, which is embedded in an organization context, whose members perceive themselves as such and are perceived as members by others (identity), and who collaborates on a common task (teamwork)". While teamwork is defined as "behaviors that facilitate effective team member interaction, common examples include communication, situational monitoring, and decision making" (Joseph and David, 2004).

Martin and Hans (2001) developed a comprehensive framework of the team called Teamwork Quality (TWQ). This TWQ framework consists of six features of team collaboration: communication, coordination, balance of member contributions, mutual support, effort, and cohesion. In order to identify the relation between TWQ and project success, the researchers used data from 575 team members and team leaders of 145 German software teams. They found significant relationship between TWQ and project success. In addition, they also found significant correlation between team performance in terms of effectiveness and efficiency with TWQ.

Many organisations are seeking for enhancing their project management techniques and heavily relying on cross-functional teams to improve the performance of project teams. Mary et al (1993) confirmed that a successful execution of projects can be achieved through organisational cross-functional teams. Mary and Jeffrey (1990) emphasized that developing a new product or program successfully is highly depended on cross-functional cooperation and eventually it leads the project to the success.

Larry (1993) believes that successful project teamwork depends on team member interpersonal skills as this will ensure full participation and involvement by each member in the group. Thus, select the right people with relevant skills is important to achieve effective team building. Larry (1993) said "effective team building helps a team establish an appropriate organization and work culture and accelerates the accumulation of experience in functioning as a team".

Karl (2002) studied the teamwork in the context of project management. According to him, a successful teamwork focuses on following team-related aspects:

- Getting to know each member interested and ability to allocate the right task to the right member
- Conduct focused meeting and put the actions in writing for ease following up the agreed and recommended course of actions.
- Every member should have the right to talk and express his or her ideas, while team leader should allow more time for listening.

While David and Roger (1991) argue that decision making is one of the critical practices of teamwork as the team is formed to make the decisions and execute them accordingly. It is important to have different approaches of decision making strategy in order to use one of the most appropriate decisions for particular situation. Peter et al (1996) simplified the process of team to make effective decisions by going through each of the following team development stages:

- Forming
- Storming
- Norming
- Performing

Edward Russo and Paul (2002) described four steps that highlight the key concepts of the decision making process:

1. Framing (what to decide on and what not to decide).
2. Gathering information (all relative information that supports the decision).
3. Conclusions-determining (how to act with available information).
4. Learning from experience.

Xingxing et al (2010) argue that leadership support and participation in the organisational activities would enable committed personal across the firm and would ensure their participation in the projects. In addition, promoting team culture is important for encouraging learning, providing open communication work climate and improving team member knowledge and competencies. Sai et al (2011) conducted a research study on organisational culture and reinforced that team orientation and goal setting are the most important factors in construction projects. Moreover, they found team orientation is critical aspect as teamwork is highly needed in the project management practices, and importantly in the strategic development and implementation of the organisation long-term strategic plan.

2.2 - Project Commitment

Project commitment can be defined as a strong belief and value to project goals by each member of project working group; as a result people behavior would be attached to high enthusiasm and willingness to engage in the project activities in which they aspire to preserve their membership in such project (Richard et al, 1979). While Edward (2000) believes that “commitment refers to a sense of duty that the team feels to achieve the project’s goals and to the willingness to do what’s needed to make the project successful”. Thus, the interpersonal characteristic of individuals working in high project commitment environment can be: passions, keenness, motivation, readiness, self-initiation and desire for high involvement and participation (Klein and Mulvey, 1995). In addition, William (1988) said team member should demonstrate a commitment to the overall corporate and teamwork goals particularly during the interaction of multi organisation's groups. Team members show solidarity with their project because would be part of innovative project and feel proud of participating in the development of new product (Blake and Fred, 1989).

Project commitment might influence negatively on the performance of team and project, if the commitment is misunderstood by team members. According to Robert et al (2000) the natural tendency of committed team is to strongly focus on their own team's goals by enhancing their cohesions. Whereas, it is important that every team effectively interact and cooperate with others especially in multi teams projects. They should do so in order to develop an integrated module and ensure the technical interdependencies are properly taken into the consideration during the design stage. However, it is similarly important that teams avoid conflict and should commit to the overall goals of project not strictly commit to their own team's goals as this will lead to isolation between teams and if the teams ignored the technical integration due to unwilling for cooperation with other. This isolation between the teams will adversely affect the project performance and would require an extra cost, time and resources to resolve such issue. Therefore, the concept of "project commitment" is essential in project management particularly in the multi teams projects as it reduces the destructive effects of strong team identities (Robert et al, 2000) and encourages the teams demonstrate commitment to the project through creating boundary around the project not around their team (Rajesh, 2000b).

Arnon (1985) think that project commitment can reduce the non productive behaviors of team members such as job avoidance and aggression. It does so because commitment is attached with high keenness to perform project task innovatively. Klein and Mulvey (1995) studied the operation of team cohesion and goal processes in terms of difficulty and commitment on team performance. They explored a significant correlation between team's goal commitment and team's performance. A strong project commitment lead the team focuses their contribution to the overall project's goals through achieving well-integrated module within the planed budget and the agreed project timeline.

Martin et al (2004) conducted a study in the European automotive industry to investigate the new product development project which costs around 500 USD. Interestingly, the project includes 39 cross-functional teams performing the project tasks in one building. Each team consists of an average of 9 tem members. They hypothesized that commitment to the overall project is positively associated with team performance. Whereas throughout their study, they found partial support to their proposition as project commitment is highly related to the overall performance only in early and middle sages of project life cycle. Moreover, a further analysis on all 39 teams revealed indirect influence of project commitment on team performance through the relationship with team coordination and teamwork quality. In this case project team leader can enhance the commitment towards project goals by improving teamwork's interactions. In addition, the direct effect of project commitment on team performance could take place with low and high task interdependency. The results indicate that low task interdependencies increase project commitment, while high task interdependencies decrease project commitment. Thus, project commitment can be significant factor of overall team performance.

Richard (1977) found that the high organisational commitment can reduce the turnover rate, improve productivity and better delivery of services. If people demonstrate less commitment to the organisation they are more likely to leave their current job in their current organisation. According Michael and Christina (1988) "if employees are feeling emotionally exhausted by their work, are developing depersonalized views of the people they serve, and are feeling that they are not accomplishing much, then they would probably become less enthusiastic and accepting of the organization's goals, less dedicated to achieving them, and more prone to withdrawing from work both psychologically and physically".

2.2.1 - Affective and Continuance Commitment

Affective commitment is defined as "the employee's positive emotional attachment to the organisation. An employee who is affectively committed strongly identifies with the goals of the organisation and desires to remain a part of the organisation. This employee commits to the organisation because he/she wants to" (wikipedia 2011). However, Affective commitment has been undertaken by many authors and conceptualized with different terms. In some literature it called "emotional attachment", while Rosabeth (1968) described it as "cohesion commitment" as the individual's fund attached to their emotion to the group. Moreover, affective commitment explained by Bruce (1974) as a "partisan, affective attachment to the goals and values of the organization, to one's role in relation to the goals and values and to the organization for its own sake, apart from its purely instrumental worth".

Affective commitment or emotional attachment is the most common approach of organisational commitment in the journal of organisational behaviors. Simply this term can be associated with individuals who are strongly committed to the organisation by enjoying their membership and involvements in different organisational aspects. Similarly, affective commitment can be associated with projects, if project team member demonstrate strong belief and value to the project goals and strive to achieve those goals (Richard et al, 1979).

Natalie and John (1990) stated that the link between organisation and employees (practically in decreasing the likelihood of turnover rate) exist in both approaches of organisational commitment the affective and continuance. With regard to the strong affective commitment, employees would like to remain in the organisation because they "want to". While, in terms of strong continuance commitment employees would like to stay longer in the organisation because they "need to".

Accordingly, John et al (1989) argued that it can be observed from on-the-job behavior of employees who are affectively committed to the organisation or strongly linked to the organisation due to the continuance commitment. Those who perform their tasks proactively and strive to achieve the organisational goals are affectively committed. On the other hand, those who work as minimum required and spend few efforts on their jobs in order to preserve their employment are continuance committed. Employees who are strongly attached to continuance approach most probably afraid from disruption of personal relation created by moving to another organisation or not willing to put efforts in seeking new job.

Therefore, continuance commitment is defined as "the individual commits to the organization because he/she perceives high costs of losing organisational membership, including economic costs (such as pension accruals) and social costs (friendship ties with co-workers) that would be incurred. The employee remains a member of the organisation because he/she has to" (wikipedia 2011). Rosabeth (1968) described continuance commitment as "that which occurs when there is a profit associated with continued participation and a cost associated with leaving". Robert (1970) said continuance commitment is the responsiveness by the individual as there are limited opportunities to choose another social identity where lots of penalties might take place if he or she decided to switch.

John and Natalie (1984) investigated on likelihood of employees leaving their organisations taking into consideration the range of inducements given from another firms such as more pay, promotional opportunities and freedom. They found that affective commitment is positively correlated to the organisational effectiveness. Which means employees performs better and at their highest level if affectively attached to their organisation. Conversely, continuance commitment is negatively linked to employees and organisational performance. However, they noticed that employees are less contributing to their organisation because it would cost them a lot if they left their current job. Whereas, employees are more likely to leave their current organisation are more associated with perceiving less costs if they decided to change. Lyman et al (1974) investigated on organisational and job satisfaction. They found that the attitudes demonstrated by individual are linked with turnover rates, as there is an inverse relationship between the two variables. Employees who are planning to leave the firm showing less favorable attitudes. On contrast, employees who are planning to stay in the organisation showing more favorable attitudes. Suliman and Iles (2000) studied in non-western context and proposed that organisations should encourage both types of commitment. For continuance committed people, the organisation can improve their moral to make them emotionally attached to the organisation.

Harold and James (1981) anticipated that organisational commitment is significantly associated with organisational effectiveness. However, organisational effectiveness is dependent upon the employee's behaviors as well as the extent to which type of organisational commitment they are attached with. Bruce (1974) believes that it is important for managers to maintain high organisational commitment as it is affect the effectiveness and survival of the organisation. They have to maintain the organisational sustainability by taking

the responsibility of overall management including proper allocation of resources and proactively improve the organisational day-to-day activities.

2.3 - Project Climate and Project Commitment

In fact, project that has been initiated in public or private sector has to be coordinated intensively with different internal and external partners. Apparently, project management team will face diversified culture due to the interaction with different organisational culture and heavily coordination with people from different culture and background. Marrewijk (2007) thinks that strong commitment and non traditional style of project management might create dysfunctional culture primary caused by non cooperative behavior with involved parties. According to him, cultural cooperation between different partners is the most difficult part in project climate. John (1991) said in addition to the external environment, project's performance is influenced by the business culture which can be controlled by firm's management to effectively manage the project. He added, commitment is important for achieving project objective, particularly in the procurement and implementation phases in order to ensure that all the required items are considered. However, the project can be extremely influenced in the design phase by the commitments made during the feasibility study and strategy planning.

Managers would agree that work climate and its interactive prospect with internal procedures, systems, information and people of the organisation is likely impact on project performance. Roderic (2001) believes that there is less agreement of the ideal climate that could be considered as an optimum for achieving high performance in organisational projects. Enabling effective climate among projects yet has many dependents' variables and is princely influenced by the organisational top management as they create and maintain their own culture (Anne et al, 2006). Whilst, an integrated climate can be promoted by the managers through fulfillment of employees own goals and directing their efforts towards the achievement of corporate objectives.

According to Roderic (2001), providing an encouragement work atmosphere in different organisational construct including project management would enhance employees' commitment to achieve the desired goals. The author, for example, emphasized that when managers use the 'carrot and stick' approach in their interaction with followers, they would achieve the desired target as people would perform effectively to accomplish the tasks and to perceive rewards rather than being punished. On the other hand, when managers encourage empowerment and promote trust during their interface with subordinates, they most probably expect greater commitment from team members as they in return would strive to put their best efforts in achieving the stated goals. Moreover, such encouragement climate can position the organisation in better standing through enhancing employees' satisfaction and realizing of self-initiative by all members of the organisation.

Commitment of project team members is the most critical success factor for large projects (Walid and Oya, 1996). Paula (1983) presumes it is possible that team members believe that work is a determinant of their worth, but they do not feel loyal and affectively commit to their employment. Although, employees' commitment can be enhanced by the amount of on-job feedback offered by the manager (Porter et al, 1974), it can be affected negatively by dysfunctional conflict and increased stress as stated by Hedia and Victoria (2003):

"The more the job represents a challenge - is important to the organization and receives feedback - the more the employee commits himself. Clarity of objectives positively correlated to involvement, and work overload reinforces commitment if objectives are clear and challenging, but commitment decreases in situations of conflict or stress".

Morris and Steers (1980) found that facilitating both job and role clarity to employees would positively enhance their commitment. Buchanan (1974) also suggests that providing rules and procedure to employees should improve their perceptions of organisation's dependability. Swallow (2002) developed a framework for culture profile. One dimension of this framework called "Clan Culture" which facilitates sharing of knowledge and provides a friendly place to work. This culture is seen to be like an extended family, where the leaders are like the mentors or even parents of this family. In such culture the loyalty is high, people are highly committed and emphasised on long-term benefits by nurturing human resource development. Both customers and employees are the main concern of the organisation as the

leaders places a premium on teamwork, participation and consensus to achieve greater level of cohesion and improve employees' moral

Hedia and Victoria (2003) interviewed employees from different companies in information technology sector and found that employees believe their project or their firm is innovative because it has some of the following characteristics: high degree of reactivity in human resources activities such as promotion, space for flexibility, autonomy, low formalization, lack of functional barriers and opportunities for learning. According to the researcher, innovative structure is more flexible than the traditional. While the traditional design have more turnover rate and less opportunities for career development. Noticeably, the innovative design is more preferable as it provide more relaxed atmosphere and increases employees' commitment towards their projects.

Nowadays organisation is more reliant on projects. There are more tendencies by those organisations to place premium efforts and resources for the purpose of team cohesion and improve employees' morale through encouraging the mangers to attempt to be mentor and facilitator or in other word to demonstrate more people-oriented style (Tony and Martin, 2006). The researchers believe that this approach would enhance the project performance and would lead to achieve the positives results. Also it will ensure high commitment from team members.

Chapter 3: Research Methodology

Chapter 3: Research Methodology

This chapter explains the method used to design the research hypotheses and which tool is used and developed to gather the data. Also it describes in detail why the selected method is the most appropriate method for conducting this research study. In addition, in this chapter there is description on how the factors are measured and analysed using the scale developed by the author and by others researchers.

3.1 - Research Design

This research paper is designed to investigate thoroughly the relationships between different project climate variables and project commitment. The previous chapter examined in depth the theory part of this relationship and explained in details the consequences of each variable on the project. While, it is important to conduct practical investigation and on-site data gathering in order to confirm or reject the research hypotheses.

The conceptual framework demonstrates the research variables and illustrates the correlations within them. The two main variables of this research paper are "project climate" and "project commitment". Thus, the researcher studied them and investigated in the relationship between them. In addition, as project climate concept is very abroad and it consist of many different factors that each of them might have different degree of impact on the project commitment. Hence, the researcher investigated in other five factors that have been studied extensively in the literature by various schools. These factors are highlighted by many authors as essential element of project climate and they are: "strategic alignment", "project procurement", "organisational structure", "leadership" and "project teamwork". All these variables and sub variables are studied in the context of Abu Dhabi Government in order to be aligned with the research scope. According to Cooper and Schindler (2003), a research can be called co-relational study when it studies the relationship between 2 or more variables. For that reason, the co-relational study is selected for this research paper in order to find the proper correlation between different variables as well as test the research hypotheses. Therefore, the conceptual framework of this research is designed as diagram (3.1):

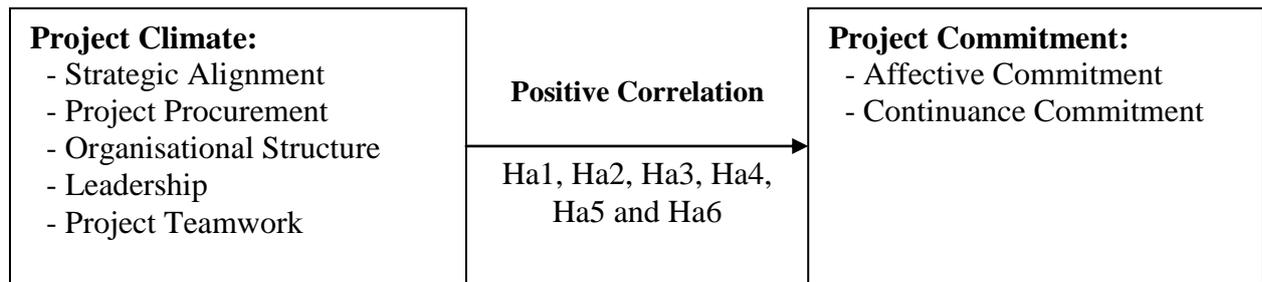


Figure 3.1: Conceptual Framework of the Research Design

From the above diagram, it is noticed that all independent variables which are listed in the left side box will exert positive effects on the dependent variable which is "project commitment". Accordingly, the main hypothesis of this research is:

Ha1: There is a positive correlation between Project Climate and Project Commitment

The main hypothesis indicates that "project climate" is the independent variable and the "project commitment" is the dependent variable. However, as mentioned earlier that the project climate has many influential aspect on project commitment, thus it is important to develop sub-hypotheses to investigate the impact of project climate in more details. The additional sub-hypotheses are mentioned below and they indicate that all five project climate factors are the independent variables and the project commitment is the dependent variable:

Ha2: There is a positive correlation between Strategy Alignments and Project Commitment

Ha3: There is a positive correlation between Project Procurement and Project Commitment

Ha4: There is a positive correlation between Organisational Structure and Project Commitment

Ha5: There is a positive correlation between Leadership and Project Commitment

Ha6: There is a positive correlation between Project Teamwork and Project Commitment

This research is designed based on quantitative approach in which a questionnaire will be developed and utilised as the principle tool for gathering the data. The rationale behind using quantitative approach rather than qualitative approach in this research design is that:

- 1) Quantitative approach is found to be as most appropriate method for conducting this research study, because it provides more accurate data based on wide range of samples. People can easily provide accurate data as it will take short time to fill up one questionnaire.
- 2) It is more easy to capture the data by filling up a questionnaire and it will ensure high number of participation by employees, whereas in qualitative approach the researcher has to conduct several interviews which obviously consume longer time and the participants might not express accurate information as they afraid from their employer in which they believer the bad impression might affect negativity on their job security.
- 3) The data that are collected in the field through questionnaire is easy for the researcher to undergo quantitative analysis using up-to-date computerised tool to generate findings based on quantitative analysis.
- 4) In addition, quantitative method can produce more reliable data and would allow to test and confirm the hypotheses and find correlations between variables, while qualitative will help to develop theories based on people perception.

3.2 - Questionnaire Instrument

As mentioned earlier that the questionnaire was the most appropriate tool to conduct this research. The questionnaire is planned to be distributed as a survey rather than interviewing people because of following reasons:

- 1) The survey can be developed online and can be easily distributed to almost all government organisations in Abu Dhabi in order to ensure the compliance with the research scope and cover wide range of project environment in different governmental sectors, such as municipal services, economic development, community development and regulatory and governance sectors.
- 2) Particularly the online survey can maintain the secrecy of respondents, and this will ensure more response rate as well as more accuracy of data.
- 3) Conduct personal interview with respondent would not ensure high response rate due to time constrains.

- 4) Most of the studies that conducted a research in similar theme or similar variables have utilised the questionnaire survey.

3.3 - Measures

Structured questionnaire was developed and utilised to gather the data from employees in Abu Dhabi Government Organisations. The questionnaire consists of 3 sections. The first section is called "general information". It has 6 demographic questions such as: gender, education, age, years of experience, job status and nationality. Section 2 measures all independent variables which are: "strategic alignment", "project procurement", "organisational structure", "leadership" and "project teamwork". Each of these variables is measured using 3 items, however the "project climate" variable measured by 15 items as a result of total 5 factors. All the items of this section are developed by the researcher based on critical review of literatures using Likert scale, except 4 items were developed by Meyer and Allen (1990). Section 3 measures the dependent variable "project commitment" by using 10 item Likert scale developed by Meyer and Allen (1990), the 10 items are divided between affective commitment and continuance commitment, each has 5 items respectively. An example of the questionnaire is attached in appendix 1.

The total questions of the questionnaire are 30 multiple choice questions summarized below:

- Section 1 (demographic): gender and nationality were measured using 2 options, job status 3 options, educational, age and year of experience 5 options
- Section 2 (project climate): 15 items were used to measure project climate; each 3 items assess one of its 5 dimensional, which are strategic alignment, project procurement, organisational structure, leadership and project teamwork (respectively). 5 points scale in Likert format was used for measuring these variables; 1 for "strongly disagree", 2 for "disagree", 3 for "undecided", 4 for "agree" and 5 for "strongly agree".
- Section3: (project commitment): 10 items were used and the same Likert format was used to measure this variable. The first 5 items measures the affective commitment and the last 5 items measures the continuance commitment.

3.4 - Sample

The population of this study was mainly the employees who are working in Abu Dhabi Government Organisations. A random sampling was used to collect the sample for this study. An electronic questionnaire was developed in online survey website and distributed the link by email to approximately 1400 employees representing around 44 different government departments. 659 completed responses were received back after filtering 392 responses that were uncompleted. The response rate of this survey was 47%.

3.5 - Data Analysis

After collecting the data using online website, the data were transferred to SPSS software (Statistical Package for Social Science). This statistical software is widely used to analyse the data gathered from actual surveys. Particularly, SPSS was used to find out any existence relationships between independent and dependent variables using correlation and regression tests. In addition, the software also used to identify the significance of the relationships between different independent and dependent variables.

Chapter 4: Data Analysis, Findings and Discussion

Chapter 4: Data Analysis, Findings and Discussion

In this chapter different tests are conducted in order to investigate in the relationships between independent variables and dependent variables. The status of every research hypotheses is discussed after analysing the data and generating the research findings. The data that are used in this chapter are analysed by using special computer program called Statistical Package for the Social Sciences (SPSS package v. 19.0).

4.1 - Descriptive Statistics

The distribution of study sample is provided in table (4.1). This table shows the sample based on the demographic, educational and career factors. It is noticed that more male than female participated in the questionnaire. Male accounted for 427 and female accounted for 232, which means 65% of respondents were male and it is almost double the female participants (35%). In addition, most of the respondents aged between 25-35 years by around 58% and then aged between 36-46 years by 25%. In terms of nationality 61% of the respondents were UAE national and 39% of them were from other nationalities. Furthermore, the majority of samples were positioned in middle management by 59% and then junior level by 24%, whereas quite good responses generated from people in senior positions by 18%.

Interestingly, most of the responses were highly qualified in terms of educational degrees as 331 of them studied bachelor, 146 masters and 14 PHDs. Moreover, the respondents are highly experienced as well. It is considerably noticed that the majority of them have more than 11 years experience which was accounted for 45% and 32% have between 6-10 years of experience. Apparently, the high percentage of highly experienced people would strengthen the study and would help in generating more reliable and accurate data since these people have experiences various project climates and extremely participated in different project activities. The histogram of each demographic variable is provided in appendices.

Demographic Variables	Gender	Education	Age	Work Experience	Position	Nationality
Male	427					
Female	232					
High School		81				
Diploma		87				
Bachelor		331				
Masters		146				
PHD		14				
Less than 25			27			
25-35			382			
36-46			171			
47-57			68			
58 or above			11			
0-2				40		
3-5				104		
6-10				215		
11-15				134		
16 or above				166		
Senior					115	
Middle					386	
Junior					158	
UAE						403
Non UAE						256

Table 4.1: The description statistics of the study sample

4.2 - Reliability Statistics

It is important to undertake the reliability test before analysing the relationship between independent and dependent variables. This step is essential because it validate the reliability of the data before conducting the investigation on the relationship between variables. Table (4.2) shows the reliability statistics, and we can notice that most of the variables are reliable as their value of Cronbach's Alpha accounted for 0.6 or more.

Variable	Cronbach's Alpha	Number of Items
Global Project Climate	0.7	15
Global Factor Strategic Alignment	0.3	3
Global Factor Project Procurement	0.5	3
Global Factor Organisational Structure	0.4	3
Global Factor Leadership	0.7	3
Global Factor Project Teamwork	0.5	3
Global Project Commitment	0.6	10
Global Factor Affective Commitment	0.7	5
Global Factor Continuance Commitment	0.6	5

Table 4.2: Reliability test of the study sample

However some of the variables have low value of Cronbach's Alpha, thus it is advised to delete some items that are less reliable in order to increase the value of Cronbach's Alpha which will accordingly improve the reliability of the scale. Therefore, the reliability test is undertaken again with examining the "Cronbach's Alpha if item deleted" in order to delete unreliable items from some factors.

Therefore, the new Cronbach's Alpha value for the scale is shown in table (4.3). One item has been deleted from 4 factors: "Global Factor Strategic Alignment", "Global Factor Organisational Structure", "Global Factor Leadership" and "Global Factor Project Teamwork". The items of those 4 factors become 2 instead of 3 and the total items for "Global Project Climate" become 11 items.

Variable	Cronbach's Alpha	Item Deleted	Number of Items
Global Project Climate	0.7	3, 8, 12, 14	11
Global Factor Strategic Alignment	0.4	3	2
Global Factor Project Procurement	0.5	-	3
Global Factor Organisational Structure	0.5	2	2
Global Factor Leadership	0.8	3	2
Global Factor Project Teamwork	0.7	2	2
Global Project Commitment	0.6	-	10
Global Factor Affective Commitment	0.7	-	5
Global Factor Continuance Commitment	0.6	-	5

Table 4.3: Reliability test of the study sample after deleting items

It can be concluded that the scale used in this study is reliable, thus it is possible to pursue with correlation analyses to test the variables and conduct the regression analyses to test the research hypotheses.

4.3 - Correlation Statistics

The relationships between variables are tested by using correlation statistics. This test also shows the significance of these relationships. Table (4.4) summarizes the result of the correlation test. It can be indicated that project climate variable and its associated factors (strategic alignment, project procurement, organisational structure, leadership and project teamwork) found to be highly significant and positively related to project commitment. As almost all significant values for those variables accounted for .00, thus the variables are significant at 0.01, which means 99% the same correlation will take place if this study was done again.

Nevertheless, the organisational structure factor is seemed to be significant at 0.05 as it is correlated with project commitment by .089 of significant value. Furthermore, the figures in this table indicate that all the 5 factors are significantly related to the project climate at 0.01 level. In addition, the project climate and the other factors are also significantly correlated to project commitment at 0.01 level, except the organisational structure factor which is not showing a correlation with project commitment as the significant value accounted for .089.

Variables		Global.Project.C limate	G.F.Strate gic.Align ment	G.F.Project .Procureme nt	G.F.Organisat ional.Structure	G.F.Leade rship	G.F.Project.T eamwork
G.F.Strategic.Ali gnment	Pearson Correlation	.620**					
	Sig. (2-tailed)	.000					
	N	659					
G.F.Project.Proc urement	Pearson Correlation	.358**	.272**				
	Sig. (2-tailed)	.000	.000				
	N	659	659				
G.F.Organisation al.Structure	Pearson Correlation	.626**	.198**	-.091*			
	Sig. (2-tailed)	.000	.000	.020			
	N	659	659	659			
G.F.Leadership	Pearson Correlation	.752**	.307**	.071	.365**		
	Sig. (2-tailed)	.000	.000	.068	.000		
	N	659	659	659	659		
G.F.Project.Tea mwork	Pearson Correlation	.756**	.339**	.022	.385**	.514**	
	Sig. (2-tailed)	.000	.000	.576	.000	.000	
	N	659	659	659	659	659	
Global.Project.C ommitment	Pearson Correlation	.296**	.213**	.157**	.066	.271**	.591**
	Sig. (2-tailed)	.000	.000	.000	.089	.000	.000
	N	659	659	659	659	659	253

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 4.4: Correlation Matrix

4.4 - Regression Statistics

The regression statistics was undertaken to analyse the relationship between independent and dependent variables as well as test the hypotheses that has been developed earlier. From regression test, a conclusion can be made by either accept or reject the hypotheses. As determined that all the hypotheses have positive relationship between independent and dependent variables. In order to accept such statement, the significant value should range between 0.01 (High significant value) and 0.05 (low significant value). The following are the justifications for the relationships between different variables based on previously developed hypotheses:

Ha1: There is a positive correlation between project climate and project commitment

The below tables demonstrate the results of regression test between project climate and project commitment. The adjusted R-square value is .086 and that means 8% of project commitment depends on the climate that surrounds the project. This figure also tells that other factors rather than climate can influence project commitment by 92%. The tables also indicated that the significant value for the relationship between project climate and project commitment is .00 which is indicates that the relationship between these two variables is highly significant.

The regression statistics showed the evidence that providing healthy climate within project would considerably increase project commitment as it has high impact on the commitment of individual towards their project. This finding was argued by Stewart et al (2002) as they pointed that social and cultural interaction became crucial to the project commitment and its overall success due to the high number of failed and deviated projects in terms of project schedule and budget which raised the attention to the cultural aspects of project management. Therefore, the main hypothesis of this research paper (Ha1) is accepted because project climate is highly correlated with project commitment.

Tables 4.5: Regression test for project climate and project commitment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.296 ^a	.087	.086	4.19136

a. Predictors: (Constant), Global Project Climate

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1104.573	1	1104.573	62.876	.000 ^a
	Residual	11541.864	657	17.568		
	Total	12646.437	658			

a. Predictors: (Constant), Global Project Climate

b. Dependent Variable: Global Project Commitment

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24.348	1.303		18.687	.000
	Global Project Climate	.256	.032	.296	7.929	.000

a. Dependent Variable: Global Project Commitment

Ha2: There is a positive relation between strategic alignment and project commitment

The below tables show the results of regression test between strategic alignment and project commitment. The adjusted R-square value is .044 and that means 4% of project commitment depends on the strategic alignment of project. This figure also tells that there space by around 96% of other factors rather than strategic alignment that can influence project commitment. The tables also indicated that the significant value for the relationship between strategic alignment and project commitment is .00 which is indicates that the relationship between these two variables is highly significant.

Hence, the regression test provided statistical evidence that ensuring the alignment of project objective would improve the degree of project commitment. This is mainly because the project would be strategically important to the organisations and accordingly there will be high commitment form top management toward strategic projects. At the same time, Steven et al (2006) prioritized the projects based on strategic aspect such as long-term strategic direction of the organisation. While Surapon and Chotchai (2007) believe that projects are one of the practical tools for implementing organisational strategic plan and achieving business priorities, thus these projects are critical to the top management. However, these projects highly contributing to the achievement of ultimate organisational strategy. Therefore, (Ha2) is accepted because strategic alignment factor is highly correlated with project commitment.

Tables 4.6: Regression test for strategic alignment and project commitment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.213 ^a	.045	.044	4.28696

a. Predictors: (Constant), G.F. Strategic Alignment

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	572.090	1	572.090	31.129	.000 ^a
	Residual	12074.347	657	18.378		
	Total	12646.437	658			

a. Predictors: (Constant), G.F. Strategic Alignment

b. Dependent Variable: Global Project Commitment

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.454	1.114		25.547	.000
	G.F. Strategic Alignment	.750	.134	.213	5.579	.000

a. Dependent Variable: Global Project Commitment

Ha3: There is a positive relation between project procurement and project commitment

As it shown in the tables (4.7), there is positive correlation between project procurement and project commitment as the significant value is .00. The adjusted R-square value is .023 and that means 2% of project commitment depends on the project procurement. However, 98% of project commitment is influenced by other variances. The tables also indicated that the relationship between project procurement and project commitment is significant at .01 which means the relationship between these two variables is highly significant.

Therefore, the regression test provided statistical evidence that management and individuals' involvement during the project procurement process is important to achieve high project commitment. In addition, effective procurement process would lead to engage the most qualified contractor to the project. Having competent contractor on board will help the project to be performed effectively and efficiently, which ultimately can improve leaders and individuals interaction in such project and increase their commitment. Thomas and Janet (1996) stated that service or product provider for new project has become a key strategic consideration. Whilst, Peter (2002) found that procurement methods affect the project performance significantly in terms of cost and schedule. Moreover, Ped et al (1998a) said traditional procurement approach is greatly criticized for its negative impact on project delivery which it most probably creates "procurement gap", and the reason for such gap is the cultural and organisational differences between project team members.

According to the above, this hypothesis (Ha3) is supported as project procurement is positively and highly correlated with project commitment.

Tables 4.7: Regression test for project procurement and project commitment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.157 ^a	.025	.023	4.33280

a. Predictors: (Constant), G.F. Project Procurement

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	312.464	1	312.464	16.644	.000 ^a
	Residual	12333.973	657	18.773		
	Total	12646.437	658			

a. Predictors: (Constant), G.F. Project Procurement

b. Dependent Variable: Global. Project Commitment

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.369	1.536		18.470	.000
	G.F. Project Procurement	.470	.115	.157	4.080	.000

a. Dependent Variable: Global Project Commitment

Ha4: There is a positive relation between organisational structure and project commitment

As it shown in the tables (4.8), there is not statistical evidence for positive relationship between organisational structure and project commitment. This is noticed from the figures of adjusted R-square and the significant value. The adjusted R-square is .003 which is very low and shows no dependencies between organisational structure and project commitment. In addition, there is no significance in this relationship as the significant vale exceeded .05 level and reached .089 which do not represent significant relationship between the two variables. Therefore this hypothesis (Ha4) is rejected.

On the other hand, other authors such as Monique et al (2007) exposed that effective commitment of people towards project can be determined and by the degree of flexibility and openness within the organisation. Thus long chain of command and centralized decision making could negatively affect on the behaviour of project managers and team members which might lead to poor commitment perceived by them. Whereas, PMO is an important function of organisational structure to manage multiple and complex projects and to obtain support from people at different levels to increase the power of the project (Brian et al, 2008). Moreover, Christine and William (2004) concluded that PMO practically proved that it provide high level of confidence for management and individuals in project due to the strong correlation between PMO and project performance.

Unexpectedly, this correlation did not take place because the items might were not highly reliable as Cronbach's Alpha of organisational structure factor was 0.5 (see table 4.3) which is below the acceptable level (0.6). As the items of this factor were developed by the author, it is better to pretext these items and ensure high reliability of the items before distributing the survey and conducting the study. In future studies the items should be more in terms of number and should be more focused in achieve high accuracy responses.

Tables 4.8: Regression test for organisational structure and project commitment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.066 ^a	.004	.003	4.37766

a. Predictors: (Constant), G.F. Organisational Structure

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	55.753	1	55.753	2.909	.089 ^a
	Residual	12590.684	657	19.164		
	Total	12646.437	658			

a. Predictors: (Constant), G.F. Organisational Structure

b. Dependent Variable: Global Project Commitment

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	33.797	.499		67.690	.000
	G.F. Organisational Structure	.170	.100	.066	1.706	.089

a. Dependent Variable: Global Project Commitment

Ha5: There is a positive relation between leadership and project commitment

The tables (4.9) show the result of correlation between leadership and project commitment. The significant value is .00 and adjusted R-square value accounted for .072 which means that 7% of project commitment depends on leadership. This figure also tells that the percentage other factors might influence project commitment is 93%. The tables also indicated that the significant value for the relationship between leadership and project commitment is .00 which means that the relationship between these two variables is highly significant.

Hence, the regression test provided statistical evidence that leadership have significant impact on project commitment. This is because the charismatic of team leader and leadership in general within the project affect individual performance and commitment towards their project. In particular transformational leadership has more ability to provide synergetic environment between team members and allow team dynamic across the project. Such encouragement environment would help team member to commit and do their best to deliver high quality of performance. Bass et al (2003) and Yukl (1999) stated that leaders are associated with emotional issues, thus they motivate team member by transforming their personal interest into organisational objectives. In addition, Liz et al (2003) found that demonstrating certain leadership style will significantly influence the project manager's commitment on project success. Moreover, Anne et al (2006) thought leaders are the main shaper and builder of the culture due to their high capability in influencing people's behaviors during their interaction with different organisational aspects.

Therefore, (Ha5) is accepted because leadership factor is highly correlated with project commitment.

Tables 4.9: Regression test for leadership and project commitment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.271 ^a	.073	.072	4.22352

a. Predictors: (Constant), G.F. Leadership

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	926.806	1	926.806	51.957	.000 ^a
	Residual	11719.631	657	17.838		
	Total	12646.437	658			

a. Predictors: (Constant), G.F. Leadership

b. Dependent Variable: Global Project Commitment

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	29.959	.664		45.102	.000
	G.F. Leadership	.671	.093	.271	7.208	.000

a. Dependent Variable: Global Project Commitment

Ha6: There is a positive relation between project teamwork and project commitment

The below tables show the results of regression test between project teamwork and project commitment. The adjusted R-square value is .050 and that means 5% of project commitment depends on the teamwork. This figure also tells that other factors rather than teamwork can influence project commitment by 95%. The tables also indicated that the significant value for the relationship between project teamwork and project commitment is .00 which means that the relationship between these two variables is highly significant.

The regression statistics showed the evidence that providing effective teamwork environment within project would considerably increase project commitment as it has high impact on the commitment of individual towards their project. In addition, empowering team members will improve individuals' performance as they will be having full ownership on their immediate task and they can take the necessary decisions on time (Mushin and Joon 2001). This environment motivates the followers to achieve high productivity and improve team cohesion (Elton 1933 and Merle 1992). While, Huw et al (2000) revealed that rewards create positive employees' attitudes. Xingxing et al (2010) argue that leadership support and participation in the organisational activities would enable committed personal across the firm and would ensure their participation in the projects.

Therefore, this hypothesis (Ha6) is accepted as there is clear relationship between project teamwork and project commitment.

Tables 4.10: Regression test for project teamwork and project commitment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.226 ^a	.051	.050	4.27333

a. Predictors: (Constant), G.F. Project Teamwork

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	648.736	1	648.736	35.525	.000 ^a
	Residual	11997.701	657	18.261		
	Total	12646.437	658			

a. Predictors: (Constant), G.F. Project Teamwork

b. Dependent Variable: Global Project Commitment

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	30.752	.666		46.150	.000
	G.F. Project Teamwork	.550	.092	.226	5.960	.000

a. Dependent Variable: Global Project Commitment

4.5 - Discussion of Main Findings

According to the analysis of data and different correlation tests conducted earlier in this chapter, the main finding of this study is captured in the following paragraphs. In general, it is considerably noticed that the project climate has significant affect on project commitment in any organisation particularly in the public sector in which this paper investigated in. moreover, some of project climate factors can also influence the level of commitment towards project and might affect the management and individuals' performance and outcomes during the project life cycle.

Throughout the research of other authors which already undertaken in the literature review section, there are common factors affect the commitment of people towards their project. For example Archer (2000), Steven et al (2006) and Mohanty (1992) exposed that strategic fitness, leadership, competent and technical skills people within project teams are critical for achieving high commitment and ensuring the success of project. Whereas the author point of view is that the most important factors in achieving project commitment in the public sector is the strategic fitness or the strategic alignment of project. Linking the project objectives to the organisational strategy would ensure high commitment from all involved parties as such project would be critical for organisational success. Moreover, the project would have high strategic important as the Chairman and executives would have access to the project information and might give their direction to encourage people to enhance their efforts and accomplish the project successfully.

Archer and Ghasemzadeh (1999) stated that strategic direction must be clearly determined before selection of individual project in order to link the project objective with the organisation strategy. According to them, extensive preparation and planning of strategy should be carried out to ensure strategic focus in the selection process in either way top-down (strategic consideration) or bottom-up (individual project consideration). In terms of project management components, they suggested to analyse the project risks by using Work Breakdown Structure (WBS) to identify the risk and its consequences associated with each activity including dependencies with other projects and stakeholders to ensure their commitment from the beginning. Obviously, the outcome of strategic project should focus on the business direction and its result rather than getting the project done.

Unfortunately, the formal link between business strategy and project is not considered in many organisations. Laura and Adrien (2002) and Chicheng et al (2008) investigated on research and development (R&D) projects and revealed that the major themes of R&D projects are:

- 1) Relating selection criteria to corporate strategies.
- 2) Integrate the needs and desires of stakeholders and,
- 3) Consider the risks and qualitative benefits.

It is clear that lots of project in the government sector is not extensively focused on the strategic fitness rather than it is relevant to the community services. Executives at government organisations are very keen to enhance their organisational business by implementing multiple projects at the same time. The executives' ambitions reflect on the process of selecting project, while some projects might require high budgets, resources and has many project dependencies. Thus, such project might loss the commitment due to its complexity and difficulty to achieve its objectives.

The problems and challenges faced by many government organisations could be articulated and solved in professional manner by establishing Program Management Office (PMO) as it provides suitable framework and technique for project selection process in order to help the top management in the decision making and apply project governance model across organisation. Some researchers such as Brian et al (2008) and Christine and William (2004) emphasized on the role PMO in improving organisational performance and enhancing innovating through effective commitment towards the projects.

Leadership is also considered as significant factor for achieving effective commitment in project. This is mainly because leaders shapes the project climate and have high influence on team members' behaviors. This is agreed by Anne et al (2006) as they believe that leaders are the main shaper and builder of the culture due to their high capability in influencing people's behaviors. While, Davis (1984) thought the optimistic insight of leaders enable them to lead and direct the change across the organisation and act as major transmitter and maintainer of organisational culture. Moreover, Rodney and Ralf (2005) stated that effective leaders are the main pillars for organisational success. These could be the primary reasons for the strong correlation between organisational culture and leadership which was found by Catherine and Chery (2007).

On the other hand, lack of leadership within project environment will negatively impact on the individuals' commitment and adversely affect team synergy. Thus the absence of transformational leadership in particular would create unhealthy climate between team members as it is essential for team effectiveness. Such leadership style cautiously encourages the followers and more often delegate their authority to them while they take the role of guiding and directing them towards project objectives (Joyce and Timothy 2004). In addition, Anne and Deanne (2004) argued that transactional leaders create positive change in subordinates' attitudes with end goal of developing them into leaders by aligning their personal interest with organisational interests. Obviously such encouragement project climate would ensure high commitment by almost all followers as they would be extremely motivated to accomplish their tasks and having full responsibility on their immediate tasks to make on spot decisions. This environment will encourage and motivate people to perform proactively and commit to their project. In fact, some team leaders focus on how to manage the tasks and get the job done by their team member instead of leading by example and encourage innovative solutions by empowering followers. Regrettably, this way of management usually dissatisfy the followers and limited their involvement and contribution to the team activities which might eventually decrease their commitment to the project.

Another important factor for improving project commitment is having effective project teamwork. Surely, no one doubts that teamwork becomes the prime instrument for achieving project success. Mary et al (1993) confirmed organisational cross-functional teams can enable successful execution of projects. Mary and Jeffrey (1990) also confirmed the same as they stated that developing a new product successfully is highly depended on cross-functional cooperation. Nevertheless, project team should have all the necessary features to perform effectively such authorities, motivation, empowerment, charismatic leader, predefined goals and reward scheme. These and other principal elements are critical for creating healthy and dynamic teamwork environment. Scott et al (2004) said self-reliance would help the team members to take immediate decisions based on their own propositions. Moreover, Galagan (1988) found that employee's involvement in team based activities is highly correlated with employee's productivity and work quality. Tracey and Christine (2000) emphasized on team empowerment and proposed that team member should have sense of control over their immediate tasks to feel self-reliance and commit to their works. Castka et al (2001) believe that providing right environment and tools for team members will encourage them to join energetic group and commit to work toward the common goals of the group. Robert et al

(2000) concluded the natural tendency of committed team is to strongly focus on their own team's goals by enhancing their cohesions.

According to findings using statistical analysis that project climate with most of its factors are significantly and positively correlated with project commitment. Thus, the effective work environment within projects becomes very critical for obtaining individuals' commitment. Whereas, all project members' commitment is also essential for project success. Therefore, leaders as they shapes the culture of organisation and projects (Anne et al, 2006) are primarily responsible for creating an encouragement work environment by using their transformational characteristics and effectively consume the available resources. Robert et al (2000) said when teams commit to project, the destructive effects of strong team identities will be reduced, and however it can also increase people commitment by creating boundary around the project not around the team (Rajesh, 2000b). Furthermore, Arnon (1985) Klein and Mulvey (1995) explored a significant correlation between team's goal commitment and team's performance. Martin et al (2004) hypothesized and concluded that commitment to the overall project is positively associated with team performance. When people demonstrate strong commitment to the project, their efforts will be focused on delivering the project goals within agreed time and budget.

Chapter 5: Recommendations and Conclusion

Chapter 5: Recommendations and Conclusion

In this chapter there are many recommendations suggested particularly for the public sector organisations in UAE in order to maintain effective project environment and obtain high level of project commitment.

5.1 - Recommendations

As per the discussion of problem and the analysis of data that were collected in site, there are many recommended actions for government organisations to consider in order to improve their project performance. The author emphasizes the top management and the decision makers to consider these implications as they are the one who creates the change and leads the organisation toward successfully implementing the change. The followings are actionable recommendations concluded from this research paper and it implies to different parts of the community:

5.1.1 - UAE Government organisations

- 1) Although in this study the author did not find correlation between organisational structure and project commitment, the author still recommend the establishment of PMO in all government sectors as it was extensively discussed and recommended by other researchers and that were highlighted in the literature review chapter. For example, Christine and William (2004) concluded that PMO practically proved that it provide high level of confidence for management due to the strong correlation between PMO and project performance. Particularly in government organisations the PMO is recommended as government organisations execute huge projects at the same time. Thus, there is a high need for a dedicated function to oversee those entire projects and manage their dependencies. In addition, PMO will provide integrative approaches to link strategy, project and organisational structure (Monique et al, 2007). Furthermore, PMO will improve organisation performance through applying project management principal such as analyse the stakeholder expectation in order to gain their commitment in advance and keep the project going without being delayed.

5.1.2 - Abu Dhabi Government Departments

- 2) As mentioned earlier that this paper focuses more in the context of Abu Dhabi Government, thus specific recommendations were suggested for the government organisations in Abu Dhabi. Since this government already set an ambitious goal that they aim to be among top five governments in the world, therefore this research study recommended that all projects in the government organisations should have high strategic focus as also confirmed by Archer and Ghasemzadeh (1999) that strategic direction must be clearly determined before selection of individual project in order to link the project objective with the organisation strategy. This is mainly to ensure high commitment toward the project and better utilize the available resources within the organisation and direct the project toward the achievement of organisational goals. Moreover, this would also ensure that projects and initiatives are aligned with organisational strategic plan, and then every governmental body with its strategic plan contributes to the same direction of overall strategy of Abu Dhabi Government. The importance of strategic alignment is agreed by Surapon and Chotchai (2007) and found to be highly significant with project commitment as per the findings of (Ha2).

- 3) In order to ensure the implementation of suggested items mentioned in previous point (2), two main issues should be considered: 1) at the strategic level, strategists should use pre-developed set of criteria for qualifying projects to the strategic plan. This is to ensure high strategic alignment between projects and organisational strategy. 2) at the operational level, project managers should coordinate with procurement section to also develop. However, using standardize criteria for qualifying projects and for selecting the vendors is a principal approach in project management as it will increase the consistency in the processes and will ensure all the priorities and the requirement before starting the project. Nevertheless, Rodney and Ralf (2003) stressed that PMO can enhance the standardisation in the selection process in which addresses the most critical issues including business priority elements of particular organisation in-line with changeable business environment.

5.1.3 - Executive and Senior Manager

- 4) Executive and senior management should regular review organisational strategy and project performance in order to ensure full alignment between their goals, and resolve the challenges if needed from the beginning occurrence of the problem. They also should provide their continuous commitment to the projects and provide support as this will improve team members' commitment as well and will enhance the performance of the projects to meet on time delivery.
- 5) As confirmed that project climate is significantly related to project commitment (Ha1), thus executives and senior mangers should provide healthy project climate and encouragement working environment by facilitating learning between employees, empowerment, open communication and concern for employees' interests. These and other encouraging cultural aspects would increase people satisfaction and commitment to their project in particular and to their organisation in general.
- 6) Provide regularly rewards and appreciation to employees especially after the completion major events in project in order to improve employees' moral and thank them for their excellent efforts. Such appreciation was addressed by Suliman and Iles (2000) as they suggested that organisations should encourage all people even those are continuancely committed, because by appreciation they can improve their moral to make them emotionally attached to the organisation.

5.1.4 - Government Employees

- 7) To participate effectively in teamwork activities as teamwork proved its significant relationship with project commitment (Ha6) in particular and with organisational performance in general (Stewart and Manz 1995). Employees embed in their personality self-confidence and demonstrate proactive and self-initiative behaviors. These traits would help them to develop themselves and swiftly move to higher career levels such as team leader.

- 8) In addition, they should effectively participate in the strategic development process in order to take into consideration employees' feedback from their previous experience with projects and from the challenges they faced during the implementation of their project.

5.1.5 - Community Stakeholders

- 9) Stakeholders should conduct regular benchmarking exercise on the best practices for project management particularly on improving project commitment. This will enable learning and exchange of knowledge between different stakeholders' parties which will ultimately enhance their corporate performance.
- 10) Organisations should consider stakeholders and strategic partnerships expectations and focus on their requirements at the planning stage of strategic project, so that they can align strategically at the right time and avoid lack of commitment by them at earlier stages of project.
- 11) Society and citizens should also provide their suggestion and feedback to the government organisation. This will help the organisation to include the community requirements in their strategic projects.

5.2 - Conclusion

This research study gives a guide for a government organisation on critical topic that influences the strategic direction of the organisation. Managing simultaneously projects with diversified climates and gaining all parties commitment to effectively implement the strategy is a big challenge for many government organisations. Hence, an appropriate culture should be developed and encouraged by the leaders in order to make strategies works through successful project implantation.

As a matter of fact, the above recommended actions are based on the change within the organisation culture or within project climate. However, those radical changes in work environment have to be lead by transformational leadership who can influence their followers and other people so that they "understand and agree about what to be done and how it can be done effectively" (Irja 2006). Thus, the involvement of transformational leadership is crucial in obtaining people commitment towards the change and maintains the lowest level of resistance. During the change the key role of leaders is to give individuals and team direction and guideline to influence people behavior through inspiring and motivation, respect, trust, ethics, sharing of power and be the role model. Moreover, senior managers should be trained and developed on the leadership skills to gain the characteristic of transformational leadership, so they can use their personal power in inspiring others by transforming individual self interest into the project/organisational goals. Through collective efforts, shared objective and high management commitment, organisations can facilitate their journey towards effective organisational change.

5.3 - Future Research Studies

Future research on the same topic should carefully consider the scale as some of items had low reliability figures. Particularly the organisational structure factor which mainly represents the PMO and other structural aspects should be further investigated as this study failed to prove the positive correlation between organisational structure factor and project commitment. However, other studies such as (Kent 2002, Andrew and Silvia 2003 and Monique et al 2007) exposed that PMO have become popular and increasingly implemented in organisation to enhance project performance. Thus, the author argues other researcher to further investigate in the organisational structure and its effects on project commitment.

References

References:

- Aaron, S., Ofer, L., and Dov, D., (1997). Mapping the Dimensions of Project Success. *The Professional Journal Of the Project Management Institute*, 28(2) pp 1-10.
- Andres, M., Darrell, H., Juan, C., and Jorge, S., (2008). A multiobjective model for the selection and timing of public enterprise projects. *Socio-Economic Planning Sciences*, 42 pp 31–45.
- Andrew, M., and Bassam, B., (1996). The role of project management in achieving project success. *International Journal of Project Management*, 14(2) pp 81-87.
- Andrew, P., and Silvia, M., (2003). *Innovative forms of organizing: trends in Europe, Japan and the USA in the 1990s*. London, pp 1–33.
- Andrew, S., and Marc, A., (2003). Exploring the politics of project learning. *International Journal of Project Management*, 21 pp 487- 494.
- Anne, K., and Deanne, D., (2004). Transformational leadership in a project – based environment: a comparative study of the leadership styles of project managers and line managers. *International Journal of Project Management*, 22 pp 609–617.
- Anne, T., Zhi-Xue, Z., Hui, W., Katherine, X., and Joshua, B., (2006). Unpacking the relationship between CEO leadership behavior and Organizational Culture. *The Leadership Quarterly*, 17 pp 113– 137.
- Archer, N., and Ghasemzadeh, F., (1999). An integrated framework for project portfolio selection. *International Journal of Project Management* ,17, (4) pp. 207-216.
- Arnon, R., (1985). A review and reconceptualization of organizational commitment. *The Academy of Management Review*. 10(3) 465–476.
- Barbarosoglu, G., and Phinas, D., (1995). Capital rationing in the public sector using the analytic hierarchy process. *Engineering Economist*, 40 (4) pp 315–41.
- Bass, M., Avolio, J., Jung, L., and Berson, Y., (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88 pp 207–218.
- Bill, D., (1995). Supplier selection criteria on the service dimension. *European Journal of Purchasing and Supply Management*, 1 pp 209-217.
- Blake, A., and Fred, M., (1989). Social identity theory and the organization. *The Academy of Management Review*. 14(1) pp20–39.
- Brian, H., Monique , A., and Denis , T., (2008). The project management office as an organisational innovation. *International Journal of Project Management*, 26 pp 547–555.

- Brian, S., Richard, R., and Aaron, S., (2009). Why projects fail? How contingency theory can provide new insights – A comparative analysis of NASA's Mars Climate Orbiter loss. *International Journal of Project Management*, 27 pp 665– 679.
- Bro, U., (1983). The corporate culture vultures. *Fortune Magazine*, 1983, 17pp 66–72.
- Bruce, B., (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly*, 19 pp 533—546
- Buchanan, B., (1974). Building organizational commitment: The socialization of managers in work organization. *Administrative Science Quarterly*, 19 pp 533-546.
- Castka, P., Bamber, C., Sharp, J., and Belohoubek, P., (2001). Factors affecting successful implementation of high performance teams. *Team Performance Management: An International Journal*, 7(8) pp123-134.
- Catherine, K., and Chery, B., (2007). Perceptions of organizational culture, leadership effectiveness and personal effectiveness across six countries across six countries. *Journal of International Management*, 13 pp 204–230.
- Cathy, O., (1995). Preferences for Single Sourcing and Supplier Selection Criteria. *Journal of Business Research*, 32 pp 105-111.
- Chapman, C., Ward, S., and Klein, J., (2006). An optimized multiple test framework for project selection in the public sector, with a nuclear waste disposal case-based example. *International Journal of Project Management*, 24 pp 373-384.
- Charles, R., John, D., Jeffrey, I., Anand, M, Meg, W., and James, W., (2008). Leadership for the 21st Century. *Harvard Business School*, pp 3-40.
- Charles, W., John, C., and Benton, W., (1991). Vendor selection criteria and methods. *European Journal of Operational Research*, 50 pp 2-18.
- Che, Z., and Wang, H., (2008). Supplier selection and supply quantity allocation of common and non-common parts with multiple criteria under multiple products. *Computers & Industrial Engineering*, 55 pp 110–133.
- Chester, B., (1938). *The functions of the executive*. Cambridge, Harvard University Press.
- Chi-cheng, H., Pin-Yu, C., and Yu-Hsiu, C., (2008). A fuzzy AHP application in government-sponsored R&D project selection. *Omega The International Journal of Management Science*, 36 pp 1038 – 1052.
- Christine, X., and William, W., (2004). An exploration of project management office features and their relationship to project performance. *International Journal of Project Management*, 22 pp 523–532.
- Colin, H., (1995). Building the culture of organizational networking Managing projects in the new organization. *International Journal of Project Management*, 13(4) pp 259-263.

- Cooper, D., and Schindler, P., (2003). *Business Research Methods*. McGraw Hill International, pp1-20.
- Daniel, G., Richard, B., and Annie, M., (2001). Primal Leadership: The Hidden Driver of Great Performance. *Harvard Business Review*, pp 41-51.
- David, B., (1996). The concept of project complexity- a review. *International Journal of Project Management*, 14(4) pp201-204.
- David, J., and Roger, J., (1991). Teaching Students to Be Peacemakers: Results of Five Years of Research Peace and Conflict. *Journal of Peace Psychology*. 1,(4)pp 417 – 438.
- David, L., Michael, H., and Richard, B., (1996). Dynamic Core Competences through Meta-Learning and Strategic Context. *Journal of Management*, 22 pp 549–569.
- David, P., (1996). The project management of organizational change. *International Journal of Project Management*, 14(1) pp 13-21.
- Davis, S. M. (1984). *Managing corporate culture*. New York7 Ballinger.
- Dennis, S., and Jeffrey, P., (1991). Project leadership: understanding and consciously choosing your style. *International Journal of Project Management*, 22(1) pp29–47.
- Dickson, G., (1966). An analysis of vendor selection systems and decisions. *Journal of Purchasing*, 2 pp 5-17.
- Duane, I., and Michael, H., (1999). Achieving and maintaining strategic competitiveness in the 21st century: The role of strategic leadership. *Academy of Management Executive*, 13(1) pp 63-78.
- Dusya, V., and Mary, C., (2004). Strategic Leadership and Organizational Learning. *Academy of Management Review*, 29(2) pp 222-240.
- Edgar, S., (1992). *Organizational culture*. American Psychologist, 45 pp 109–119.
- Edward, M., (2000). Investigation of factors contributing to the success of cross-functional teams. *Journal of Product Innovation Management*, 17 pp221–235.
- Edward, R., and Paul, S., (2002). *Winning decisions: getting it right the first time*. New York: Currency Doubleday.
- Elton, M., (1933). The human problems of an industrial civilization [online]. Available from: <http://www.google.com/books?id=1KbHAo6AIs4C&printsec=frontcover#v=onepage&q&f=false> [Accessed 12 May 2011].
- Erling, A., Kristoffer, G., and Tor, H., (1987). *Goal directed project management*, London: Coopers & Lybrand.
- Fevzi, O., (2001). Towards a strategy implementation framework. *International Journal of Contemporary Hospitality Management*, 13(7) pp 327-338.

- Florez-Lopez, R., (2007). Strategic supplier selection in the added-value perspective: A CI approach. *Information Sciences*, 177 pp 1169–1179.
- Galagan, P., (1998). Donald E. Petersen : Chairman of Ford and champion of its people. *Training and Development Journal*, 42 pp 20-24.
- Gary, D., (1998). Which contractor selection methodology. *International Journal of Project Management*, 16 (3) pp 153-164.
- Gerard, H., (2004). Evolving the project management office: A competency continuum. *Information Systems Management*, pp 45-51.
- Ghasemzadeh, F., and Archer, N., (2000). Project portfolio selection through decision support. *Decision Support Systems*, 29 pp 73–88.
- Gretchen, S., (1995). Psychological Empowerment in the workplace: Dimensions, Measurement, and Validation. *Academy of Management Journal*, 38(5) pp1442-1465.
- Hans, T., (2004). Linkages of project environment to performance: Lessons for team leadership. *International Journal of Project Management*, 22(7) pp533-544.
- Harold, A., and James, P., (1981). An Empirical Assessment of Organizational Commitment and Organizational Effectiveness. *Administrative Science Quarterly*, 26 pp1-18.
- Hatush, Z., and Skitmore, M., (1997). Criteria for contractor selection. *Construction Management and Economics*, 15(1) pp 19-38.
- Hedia, Z., and Victoria, R., (2003). Organizational Commitment in innovative companies. *International Management Strategy*, pp1-25.
- Henry, M., (1998). Covert Leadership: Notes on Managing Professionals. *Harvard Business Review*, pp 137-148.
- Hess, S., (1993). Swinging on the branch of a tree: project selection applications, *Interfaces* 23 (6) pp 5–12.
- Huang, J., Newell, S., (2003). Knowledge integration processes and dynamics within the context of cross-functional projects. *International Journal of Project Management*, 21 pp167–76.
- Huw, D., Sandra, N., and Russell, M., (2000). Organisational culture and quality of health care. *Organisational culture and quality of health care*, 9 pp 111-119.
- Ikujiro, N., (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5(1) pp 14-37.
- Irja, H., (2006). Project management effectiveness in project-oriented business organizations. *International Journal of Project Management*, 24 pp 216-225.

- Isaac, M., Mansour, R., Najmedin, M., Deepak, M., Kevin, P., and Meredith, S., (2005). Cultural influence on the implementation of lessons learned in project management. *International Journal of Engineering Management*, 17(4) pp17–24.
- Jan, S., (2002). Coping strategies applied by western vs. overseas Chinese business expatriates in China. *International Journal of Human Resource Management*, 13(1), pp 19-34.
- Javier, L., Antonia, R. and Victor, G., (2005). Influence of support leadership and teamwork cohesion on organizational learning, innovation and performance: an empirical examination. *Technovation*, 25 pp 1159-1172.
- John, D., (1991). Cultural issues in the planning and development of major projects. *Butterworth-Heinmann*. 9(1) pp29-33.
- John, K., and James, H., (1992). *Corporate culture and performance*. New York: The Free Press.
- John, M., and Natalie, A., (1984). Testing the "side-bet theory" of organizational commitment: Some methodological considerations. *Journal of Applied Psychology*, 69 pp 372-378.
- John, M., Sampo, P., Ian, G., Richard, G., and Douglas, J., (1989). Organizational Commitment and Job Performance: It's the Nature of the Commitment That Counts. *Journal of Applied Psychology*, 74(1) pp152-156.
- Joseph, B., and David, B., (2004). The use of simulation for training teamwork skills in health care: how low can you go? *Qual Saf Health Care*, 13 pp51-56.
- Joyce, B., and Timothy, J., (2004). Personality and Transformational and Transactional Leadership: A Meta-Analysis. *Journal of Applied Psychology*, 89(5) pp 901-910.
- Juuso, L., Pekka, M., and Ahti, S., (2006). Preference programming for robust portfolio modeling and project selection. *European Journal of Operational Research*, 181 pp 1488–1505.
- Jyrki, K., Matti, V., and Milla, H., (2003). Managing knowledge and knowledge competences in projects and project organisations. *International Journal of Project Management*, 21 pp 571–582.
- Kam, J., Gita, M., and Tak, S., (2007). Project management assets and their relationship with the project management capability of the firm. *International Journal of Project Management*, 25 pp 560–568.
- Kaplan, R., Norton, D., (2001). The strategy-focused organization: how balanced scorecard companies thrive in the new business environment. *Harvard Business School Press*, 21 pp 1-8.
- Karl, S., (2002). *Teamwork and Project Management*. Mc Graw-Hill, pp1-198.

- Kemal, A., Chaturvedi, A., Kondareddy, S., (1998). Business Process Reengineering and Organizational Performance: An Exploration of Issues. *International Journal of Information Management*, 18 (6) pp381-392.
- Kent, C., (2002). *The strategic project office*. New York, Marcel Dekker.
- Kim, C., and Robert, Q., (1999). *Diagnosing and Changing Organizational Culture: Based on the competing values framework*. Addison Wesley, New York.
- Klein, H., and Mulvey, P., (1995). Two investigations of the relationships among group goals, goal commitment, cohesion and performance. *Organizational Behavior and Human Decision Processes*, 61(1) pp 44–53.
- Kloppenborg, T., and Opfer, W., (2002). The current state of project management research: trends, interpretations, and predictions. *International Journal of Project Management*, 33(2) pp5–18.
- Larry, C., (1993). Work Organization: Paradigms For Project Management and Organization. *Project Organization and Management*, 36(10) pp 34-43.
- Laura, M., and Adrien, P., (2002). R&D Project Selection Using the Analytic Network Process. *IEEE Transactions on Engineering Management*, 49 (1) pp 59- 66.
- Liang, Z., Matthew, L., Zhe, Z., and Probir, B., (2002). Critical Success Factors of Enterprise Resource Planning Systems Implementation Success in China. Proceedings of the 36th Hawaii. *International Conference on System Sciences*, pp 1-10.
- Liberatore, M., and Titus, G., (1983). The practice of management science in R&D project selection. *Management Science*, 29 pp 962–974.
- Liz, L., Kin, L., and Loong, J., (2003). Turner's five functions of project-based management and situational leadership in IT services projects. *International Journal of Project Management*, 21(8), pp583-591.
- Lyman, P., Richard, M., Richard, T., and Paul, B., (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5) pp 603-609.
- Margaret, A., (1988). *Culture and agency: the place of culture in social theory*. Cambridge: Cambridge University Press.
- Marko, M., (2004). Coping with multicultural projects: the leadership styles of Finnish project managers. *International Journal of Project Management*, 22 pp 387–396.
- Marrewijk, A., (2007). Managing project Culture: The case of Environ Megaproject. *Journal of Project Management*, 25 (3) pp 290-299.
- Martin, H., and Hans, G., (2001). Teamwork Quality and the Success of innovative Projects: A Theoretical Concept and Empirical Evidence. *Organization Science*, 12(4) pp435-449.

- Martin, H., Katharina, W., and Hans, G., (2004). Interteam Coordination, Project Commitment, and Teamwork in Multiteam R & D Projects: A Longitudinal Study. *Organization Science*, 15(1) pp38-55.
- Martin, L., and Jouko, A., (1996). The Nordic management style in a European context. *International Studies of Management and Organization*, 26(3) pp 73–92.
- Martin, S. and Martin, J., (2003). Harvesting project knowledge: a review of project learning methods and success factors. *International Journal of Project Management*, 21 pp 219-228.
- Mary, P., and Jeffrey, K., (1990). Project Team Communication and Cross-Functional Cooperation in New Program Development. *Journal Production Innovation Management*, 7 pp200-212.
- Mary, P., Jeffrey, K., and John, E., (1993). Antecedents and Consequences of Project Team Cross-Functional Cooperation. *Management Science*, 39(10) pp 1281-1297.
- Mathieu, R., and Gibson, J., (1993). A methodology for large scale R&D planning based on cluster analysis. *IEEE Transactions On Engineering Management*, 30 (3) pp 283–291.
- Mats, A., (1993). *Cultural perspectives on organizations*. Cambridge: Cambridge University Press.
- Merle, C., (1992). The Hidden Costs of Accelerated Product Development. *Journal of Product Innovation Management*, 9 pp 188-199.
- Meyer, P., and Allen, J., (1990). Affective and continuance commitment to the organization: Evaluation of measures and analysis of concurrent and time-lagged relations. *Journal of Applied Psychology*, 75 pp 710-720.
- Michael, L., and Christina, M., (1988). The impact of interpersonal environment on burnout and organizational commitment. *Journal of Organizational Behavior*, 9 pp297-308.
- Michel, T., and Manon, D., (2007). Recent developments in project-based organisations. *International Journal of Project Management*, 25 pp 649-658.
- Mohanty, R., (1992). *Project selection by a multiple-criteria decision-making method: an example from a developing country*. Butterworth-Heinemann Ltd, 10 (1) pp 31-38.
- Monique, A., Brian, H., and Denis, T., (2007). A new framework for understanding organisational project management through the PMO. *International journal of Project management*, 25 pp328-336.
- Morgan, H., and Sousa, P., (2005). Project management: a cultural review. *International Journal of Project Management*, 36(1) pp5–14.
- Morris, J., and Steers, R., (1980). Structural Influences on Organizational Commitment. *Journal of Vocational Behavior*, 17 PP 50-57.

- Munns, A. and Bjeirmi, B., (1996). The role of project management in achieving project success. *International Journal of Project Management*, 14(2) pp 81-87.
- Mushin, L., and Joon, K., (2001). Is empowerment really a new concept?. *International Journal of Human Resource Management*, 12(4) pp 684–695.
- Nabil, S., David, E., and Rifat, R., (2007). Contractor pre-qualification model: State-of-the-art. *International Journal of Project Management*, 25 pp 465–474.
- Naomi, B., Morton, S., Dainty, A., and Burns, N., (2006). Social processes, patterns and practices and project knowledge management: A theoretical framework and an empirical investigation. *International Journal of Project Management*, 24 pp474-482.
- Natalie, A., and John, M., (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of occupational Psychology*, 63 pp1-18.
- Paul, B., (1994). *Strategies for cultural change*. Oxford: Butterworth Heinemann.
- Paula, M., (1983). Concept Redundancy in Organizational Research: The Case of Work Commitment. *Academy of Management Review*, 8(3) pp486-500.
- Ped, L., Gunasekaran, A., and Li, H., (1998a). Concurrent engineering: a strategy for procuring construction projects. *International Journal of Project Management*, 16(6) pp375-383.
- Peter, L., (2002). Influence of Project Type and Procurement Method on Rework Costs in Building Construction Projects. *Journal Of Construction Engineering and Management*, pp 18-29.
- Peter, M., and George, H., (1987). *The anatomy of major projects: A study of the reality of project management*. Chichester, UK: Wiley.
- Peter, S., Brian, J., and Barbara, S., (1996). *The team*, Madison, WI: Joiner Associates.
- Pina, T., and Joe, L., (2002) Employees, teamwork and social interdependence – a formula for successful business?“, *Team Performance Management*, 8 (4) pp 54 – 59.
- Porter, W., Richard, M., Richard, T., and Paul V., (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59 pp 603-609.
- Rajesh, S., (2000b). Superordinate identity in cross-functional product development teams: Its antecedents and effect on new product performance. *Journal of the Academy of Marketing Science*, 28(3) pp330–344.
- Rapcsak, T., Sagi, Z., and Ketszeri, L., (2000). Evaluation of tenders in information technology. *Decision Support Systems*, 30 pp 1–10.
- Riccardo, D., and Valeria, M., (2003). Supplier selection using a multi-criteria decision aid method. *Journal of Purchasing & Supply Management*, 9 pp 177–187.

- Richard, M., (1977). Antecedents and outcomes of organizational commitment. *Administrative Science Quarterly*, 22 pp 46-56.
- Richard, M., Richard, S., and Lyman, P., (1979). The Measurement of Organizational Commitment. *Journal of Vocational Behavior*, 14 pp224-247.
- Robert, D., and Michael, A., (1998). Paradox in Project –Based Enterprise: The Case of Film Making. *California Management Review*, 4(2) pp125-139.
- Robert, K., Robert, D., and Mary, A., (2000). Creativity and technological learning: The roles of organization architecture and crisis in large-scale projects. *Journal of Engineering and Technology Management*, 17pp 273–298.
- Robert, L., (2002). Working towards best practices in project management: a Canadian study. *International Journals for Project Management*, 20 pp 93–108.
- Robert, S., (1970). On misunderstanding the concept of commitment: A theoretical clarification. *Social Forces*, 48 pp526-529.
- Roderic, G., (2001). Organizational climate and project success. *International Journal of Project Management*, 19 pp103-109.
- Rodney, T. and Ralf, M., (2003). On the nature of the project as a temporary organization. *International Journal of Project Management*, 21 pp 1-8.
- Rodney, T. and Ralf, M., (2005). The Project Manager's Leadership Style As A Success Factor on Project: A Literature Review. *Project Management Journal*, 36 (1) pp 49-61.
- Rodney, T., (1999). *Improving the processes for achieving strategic objectives*. London: McGraw-Hill.
- Rodney, T., and Anne, K., (1999). The Versatile Project-based Organization: Governance and Operational Control. *European Management Journal*, 17(3) pp 296–309.
- Roger, A., (1999). Project management :Cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria. *International Journal of Project Management*, 17(6) pp 337-342.
- Rosabeth, M., (1968). Commitment and social organization: A study of commitment mechanisms in Utopian communities. *American Sociological Review*, 33 pp 499-517.
- Sai, C., Peter,W., and Ada,W., (2011). Towards an Organizational culture framework in construction. *International Journal of Project Management*, 29 pp33-44.
- Scott, F., Stuart, G., Stephanie, W., and Robert, N., (2003). Knowledge sharing: context, confusion and controversy. *International Journal of Project Management*, 21 pp 177–187.

- Scott, S., Seth, S., Alan, R., (2004). Taking Empowerment to the Next Level: A Multiple-Level Model of Empowerment, Performance, and Satisfaction. *Academy of Management Journal*, 47(3) pp 332–349.
- Sergio, P., and Cliff, B., (1994). Implementing Strategy Through Projects. *Long Range Planning*, 27(4) pp 125-132.
- Shelley, K., and Edwin, L., (1991). Leadership traits do matter. *Academy of Management Executive*, pp 44-60.
- Son , H., and Min, K., (1998). Capital budgeting process for electric power utilities: an analytic hierarchy process approach. *International Journal of Energy Research*, 22 (7) pp 671–81.
- Stelios, Z., Tomislav, M., Sushil, G., Sundeep, S., and Sungway, H., (1995). A Review of Program Evaluation and Fund Allocation Methods Within the Service and Government Sectors. *Elsevier Science Ltd*, 29 (1) pp 59-79.
- Steven, G., Satheesh, K., Javier, O., and Amirali, N., (2006). A multiobjective optimization model for project selection with probabilistic considerations. *Socio-Economic Planning Sciences*, 40 pp 297–313.
- Stewart, C., Tyrone, P., Thekla, R., and Marton, M., (2002). Governmentality matters: designing an alliance culture of interorganizational collaboration for managing projects. *Organization Studies*, 23(3) pp 317–38.
- Stewart, G., and Manz, C., (1995). Leadership for self-managing work teams: A typology and integrative model. *Human Relations*, 48 pp 747–770.
- Suliman, A. and Iles, P., (2000). The multi-dimensional nature of organizational commitment in a non-western context. *Journal of Management Development*, 19 (1) PP 71-83
- Surapon, P., and Chotchai, C., (2007). Strategic project selection in public sector: Construction projects of the Ministry of Defense in Thailand. *International Journal of Project Management*, 25 pp 178–188.
- Susan, G., (1994). Teamwork and Communication A 3 Year Case Study of Change, *Management Communication Quarterly*, 7 (3) pp 282-296.
- Swallow, D., (2002). Corporate Culture: Creating a Customer Focused Culture in Financial Services. *VRL Publishing*, 2002
- Taro, K., Keiichi, N., and Kazuo, F., (2006). A method for conflict detection based on team intention inference. *Interacting with Computers*, 18 pp 747-769.
- Terry, C., (2002). The “real” success factors on projects. *International Journal of Project Management*, 20 pp 185–190.
- Terry, W., (2004). Identifying the hard lessons from projects – easily. *International Journal of Project Management*, 22 pp 273–279.

- Thomas, Y., and Janet, L., (1996). An exploration of supplier selection practices across the supply chain. *Journal of Operations Management*, 14 pp 333-343.
- Tony, G., (1998). Strategy implementation and project Management. *International Journal of Project Management*, 16(1) pp 43-50.
- Tony, I., Martin, S., (2006). *Diagnosing the organizational culture of an Australian engineering consultancy using the competing values framework*. Emerald, 3pp1-30.
- Tracey, H., and Christine, P., (2000). Creating an empowering culture: examining the relationship between organizational culture and perceptions of empowerment. *Journal of Quality Management*, 5 pp 27-52.
- Turban, K., and Walls, J., (1995). *Executive information systems - a special issue. Decision Support and Expert Systems*. Prentice-Hall, 14 pp 85-88.
- Vijay, W., and Ravi, R., (2007). Vendor selection in outsourcing. *Computers & operations research*, 34 pp 3725-3737.
- Walid, B., and Oya, I., (1996). A new framework for determining critical success/failure factors in project. *International Journal of Project Management*, 14(3) pp 141–51.
- Watt, D., Kayis, B., and Willey, K., (2009a). Identifying key factors in the evaluation of tenders for projects and services. *International Journal of Project Management*, 27 pp 250–260.
- Wei, G., Yu, L., Wang, S., and Lai, K., (2007). Study on Incentive Factors of Team Cooperation based on Synergy Effect. *System Engineering – Theory & Practice*, 27 (1) pp 1-6.
- Weijun, X., and Zhiming, W., (2007). Supplier selection with multiple criteria in volume discount environments. *Omega The International Journal of Management Science*, 35 pp 494-504.
- Wikipedia, Analytic Hierarchy Process. Available from:
http://en.wikipedia.org/wiki/Analytic_Hierarchy_Process [Accessed 23 March 2011].
- Wikipedia, Organizational Commitment. Available from:
http://en.wikipedia.org/wiki/Organizational_commitment [Accessed 04 May 2011]
- William, H., and Xiaowei, X., Prasanta, K., (2009). Multi-criteria decision making approaches for supplier evaluation and selection. *European Journal of Operational Research*, 202 pp 16-24.
- William, S., (1988). Managing relations between R&D and marketing in new product development projects. *Journal of Product Innovation Management*, 5(1) pp 6–20.
- Xingxing, Z., Tina, R., and Lawrence, F., (2010). Mapping the critical links between organizational culture and TQM/Six Sigma practices. *International Journal Production Economics*, 123 pp86-106.

Yukl, G., (1999). *Leadership in organizations*. Englewood Cliffs, NJ, *Prentice-Hall*, 3 pp 650-680.

Zhuge, H., (2002). A knowledge flow model for peer-to-peer team knowledge sharing and management. *Expert Systems with Applications*, 23 (1) pp 23-30.

Appendences

Appendix1: Questionnaire

QUESTIONNAIRE	استبيان
<p>Dear Sir / Madam,</p> <p>This questionnaire gives you the opportunity to express your views on a wide range of issues related to the project conditions. Please note that there is no right or wrong answer.</p> <p>The questionnaire will be used to collect the primary data needed for a research study. Therefore, we seek your assistance to be as open, fair, honest as possible as you can in your responses.</p> <p>The researcher assures you that no individuals will be identified from their responses and there are no requests for confidential information included in the questionnaire. The results of the analysis will be strictly used by the researcher for study purposes <i>only</i>.</p> <p>The questionnaire comprises 3 parts:</p> <ol style="list-style-type: none">1. General Information2. Project Climate3. Project Commitment <p>Thank you</p> <p>Researcher</p>	<p>سيدي / سيدتي</p> <p>إن هذا الاستبيان يعطيك الفرصة لعرض وجهة نظرك لمجموعة من المواضيع تتعلق بأجواء المشروع. الرجاء ملاحظة أنه ليس هناك إجابة خاطئة أو صحيحة.</p> <p>سيتم استخدام هذا الاستبيان لجمع البيانات الأولية لعمل دراسة بحثية. لذا نطلب مساعدتكم في الإجابة على الأسئلة بكل وضوح وحرية وصدق وأمانة قدر المستطاع.</p> <p>يؤكد لكم الباحث بأنه لن يتم التعريف أو الإشارة إلى الأفراد من خلال الإجابات المقدمة ولن يكون هناك أية إجابات تستوجب السرية يتضمنها الاستبيان. سيتم استخدام نتائج التحليل من قبل الباحث لأغراض الدراسة فقط.</p> <p>يتكون الاستبيان من ثلاثة أقسام:</p> <ol style="list-style-type: none">1. معلومات عامة2. أجواء المشروع3. الإلتزام في المشروع <p>مع الشكر</p> <p>الباحث</p>

PART ONE: GENERAL INFORMATION <i>Please tick one box for each question:</i>	الجزء الأول : معلومات عامة الرجاء وضع علامة لكل سؤال:
A. Gender: (1) Male () () (2) Female () ()	أ – الجنس: (1) ذكر (2) أنثى
B. Education: (1) High school () () (2) Diploma () () (3) Bachelor () () (4) Masters () () (5) PHD () ()	ب – المرحلة التعليمية: (1) الثانوية العامة (2) دبلوم (3) بكالوريوس (4) الماجستير (5) الدكتوراه
C. Age: (1) Less than 25 () () (2) 25 - 35 () () (3) 36 - 46 () () (4) 47 - 57 () () (5) 58 or above () ()	ج – العمر: (1) أقل من 25 عاماً (2) 35 - 25 (3) 46 - 36 (4) 57 - 47 (5) 58 وأكثر
D. Total years of work experience: (1) 0 – 2 () () (2) 3 – 5 () () (3) 6 – 10 () () (4) 11 – 15 () () (5) 16 or above () ()	د – مجموع سنوات الخبرة: (1) 2 – 0 (2) 5 – 3 (3) 10 – 6 (4) 15 – 11 (5) 16 أو أكثر
E. Job Status: (1) Senior level () () (2) Middle level () () (3) Junior level () ()	هـ – المستوى الوظيفي: (1) ادارة عليا (2) ادارة وسطى (3) ادارة دنيا
F. Nationality: (1) UAE National () () (2) Non UAE National () ()	ز – الجنسية: (1) مواطني دولة الإمارات العربية المتحدة (2) غير مواطني دولة الإمارات العربية المتحدة

This part is about your "Project Climate" which refers to different factors that influences the project such as: strategic alignments, project procurement, organisational structure, leadership and project teamwork. Please tick one box for each question which best describes your opinion:

هذا القسم هو حول "مناخ المشروع" والذي يشير إلى العوامل المختلفة التي تؤثر على المشروع من مثل: الترابط الاستراتيجي وعقد المشروع والهيكل التنظيمي والقيادة والعمل الجماعي في المشروع. يرجى وضع علامة في المربع الذي يعبر عن رأيك:

#	Questions	strongly disagree	disagree	undecided	Agree	strongly agree
		(1)	(2)	(3)	(4)	(5)
1	I think our projects are highly contributing to business goals and strategy of our organisation أعتقد بأن مشاريع المؤسسة تسهم بشكل فعال في تحقيق أهداف المؤسسة واستراتيجيتها	1	2	3	4	5
2	Project objectives have to be aligned to overall organisational objectives أهداف المشروع يجب أن تتماشى مع أهداف المؤسسة	1	2	3	4	5
3	We can invest in projects that has no positive impact on achieving organisational strategic plan من الممكن الاستثمار في المشاريع التي ليس لها تأثير إيجابي في تحقيق الخطة الاستراتيجية للمؤسسة	1	2	3	4	5
4	It is important to use set of financial and non financial criteria to evaluate the contractor من المهم أن نستخدم مجموعة من المعايير المالية وغير المالية من أجل تقييم الإستشاريين والمقاولين	1	2	3	4	5
5	Project procurement process is critical for project success إجراءات العقود والمشتريات مهمة من أجل إنجاز المشروع	1	2	3	4	5
6	Projects could fail because of hiring incompetent consultant to carry out the job من الممكن أن يفشل المشروع في حال تعيين استشاري غير كفاء للقيام بالمهام المتعلقة بالمشروع	1	2	3	4	5
7	Our organisational structure is not flexible and provide less healthy environment for executing projects يعتبر الهيكل التنظيمي لمؤسستنا غير مرن ويوفر بيئة غير صحية لتنفيذ المشاريع	1	2	3	4	5
8	The role of Project Management Office (PMO) is important for every project in achieving its goals مهام مكتب إدارة المشاريع مهم لأي مشروع من أجل تحقيق أهدافه	1	2	3	4	5

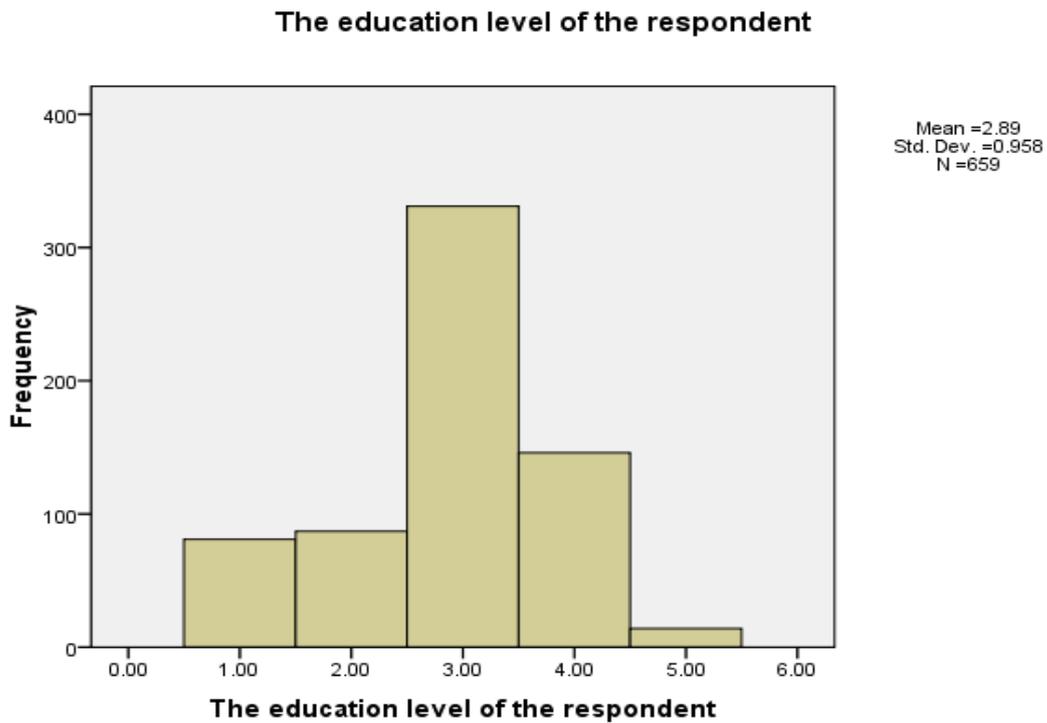
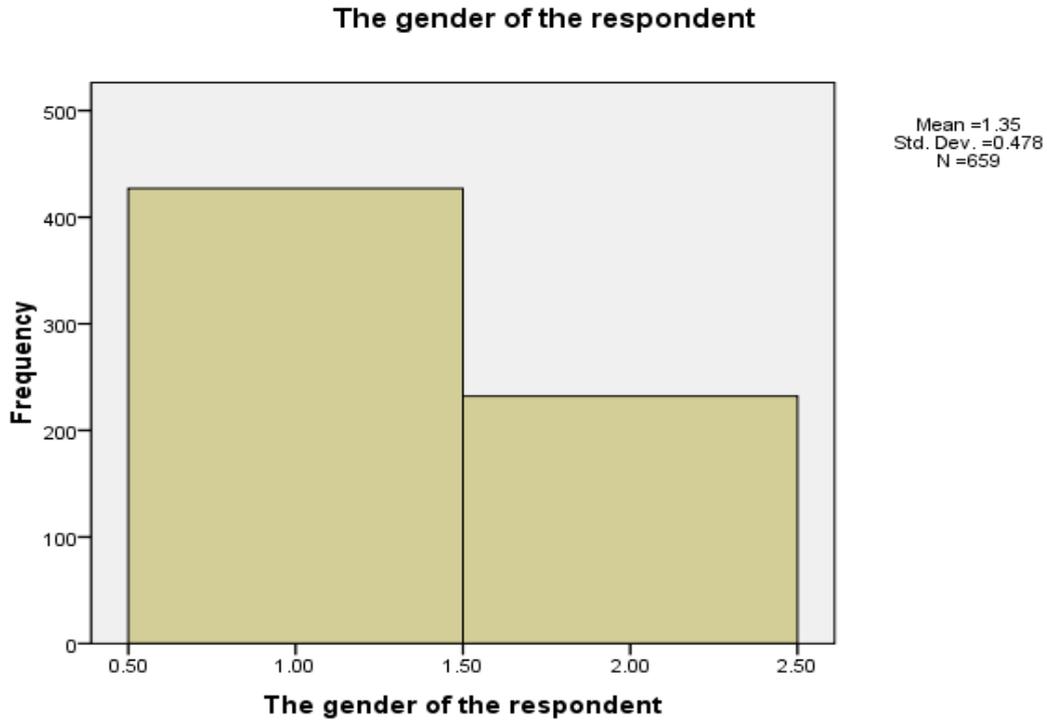
9	Management decision making takes long time and it might affect on project plan إتخاذ القرارات من قبل القادة تستغرق وقتاً طويلاً والذي بدوره يؤثر على سير خطة المشروع	1	2	3	4	5
10	Our leader takes a personal interest in employees قائد المشروع يبدي إهتماماً دائماً بشؤون الموظفين	1	2	3	4	5
11	Our leader is flexible when needed قائد المشروع متعاون ومتواجد عند الحاجة	1	2	3	4	5
12	I am Not able to speak openly and honestly with my team leader لا أستطيع أن أتحدث بحرية وبمصادقية مع قائد المشـرع	1	2	3	4	5
13	There is a friendly atmosphere among project team member بيئة العمل مشجعه بين أعضاء فريق المشروع	1	2	3	4	5
14	Team members should have the right knowledge and skills to perform project activities أعضاء الفريق يجب أن تتوفر لديهم المعرفة والمهارات اللازمة لتنفيذ نشاطات المشروع	1	2	3	4	5
15	Project teamwork is encouraged in my organisation يتم تشجيع العمل ضمن فريق عند تنفيذ أي مشروع في مؤسستنا	1	2	3	4	5

This part measures your commitment towards the project. Please tick one box for each question which best describes your opinion:

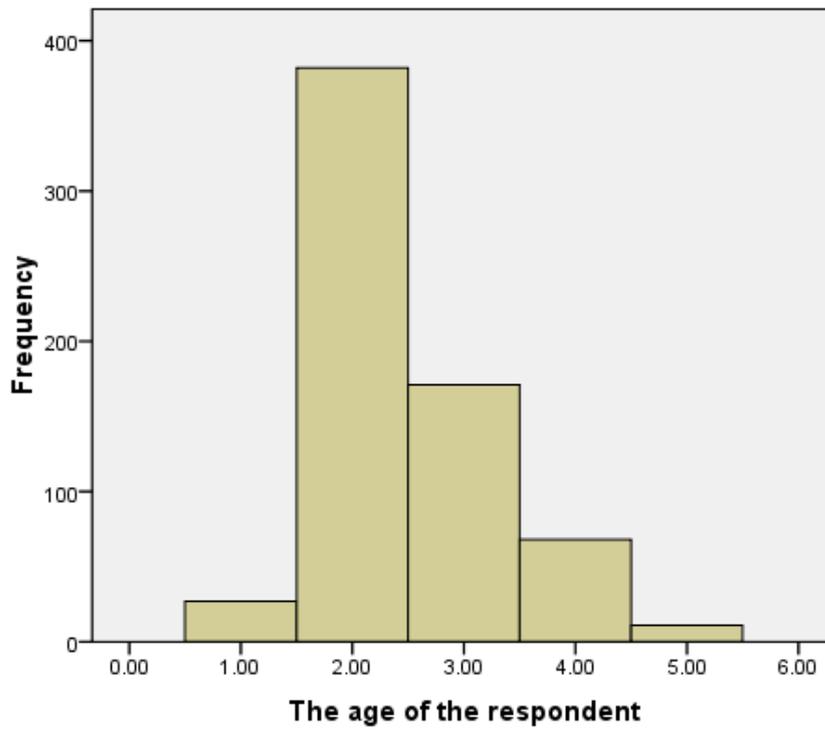
هذا القسم يقيس مدى التزامكم تجاه المشروع، يرجى اختيار الإجابة التي تعبر عن رأيكم:

#	Questions	strongly disagree	disagree	undecided	Agree	strongly agree
		(1)	(2)	(3)	(4)	(5)
1	I try to do my best for this project أبذل قصارى جهدي في هذا المشروع	1	2	3	4	5
2	I would be very happy to spend the rest of my career working in projects سأكون مسروراً إذا ما قضيت بقية حياتي المهنية في المشاريع	1	2	3	4	5
3	I do not feel “emotionally attached” to this project لا أشعر بأنني مرتبطاً عاطفياً لهذا المشروع	1	2	3	4	5
4	I do not feel a strong sense of belonging to this project لا أشعر شعوراً قوياً بالانتماء لهذا المشروع	1	2	3	4	5
5	I enjoy discussing my project with people outside it استمتع بمناقشة المشروع الذي أقوم به مع أشخاص آخرين	1	2	3	4	5
6	Too much in my life would be disrupted if I decided to leave the project in the near future سأخسر كثير من الأشياء في حياتي إذا ما قررت ترك المشروع في المستقبل القريب	1	2	3	4	5
7	Right now, staying with the project is a matter of necessity as much as desire في الوقت الراهن البقاء في هذا المشروع هي مسألة ضرورية وليست بقدر الرغبة	1	2	3	4	5
8	One of the few negative consequences of leaving this project would be the shortage of available alternatives أحد الآثار السلبية التي ستترتب على ترك هذا المشروع هو قلة البدائل المتاحة	1	2	3	4	5
9	One of the major reasons I continue to work for this project is that an alternative project may not match the overall benefits I have here أحد الأسباب الرئيسية التي تجعلني أواصل العمل في هذا المشروع هو حصولي على مميزات وظيفية قد لا أجدّها في أي مشروع آخر	1	2	3	4	5
10	It would be very hard for me to leave the project right now, even if I wanted to من الصعب جداً أن أترك المشروع في الوقت الراهن حتى لو كنت أرغب بذلك	1	2	3	4	5

Appendix 2: Histogram for Demographic Factors

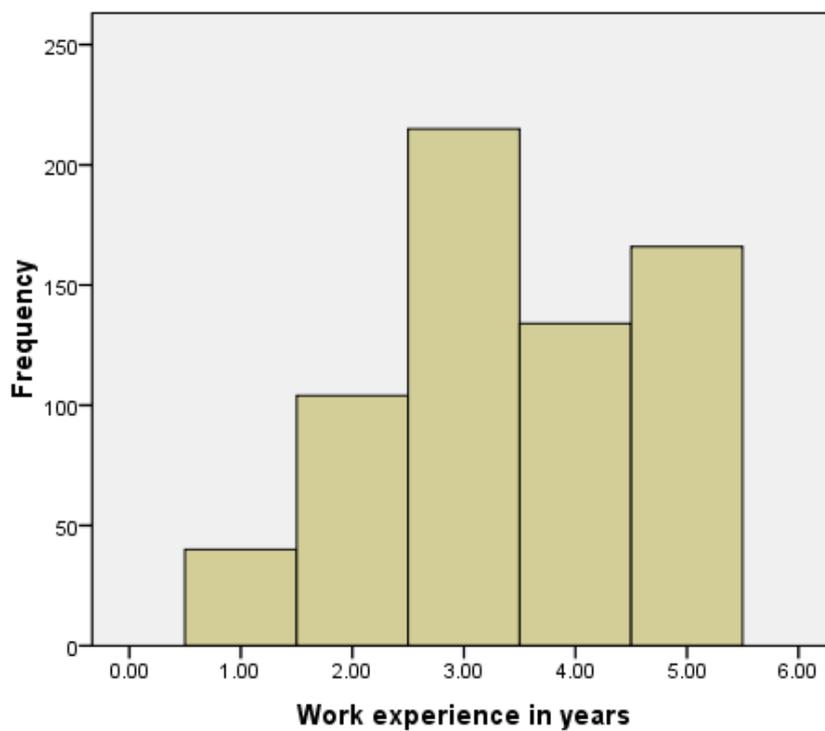


The age of the respondent



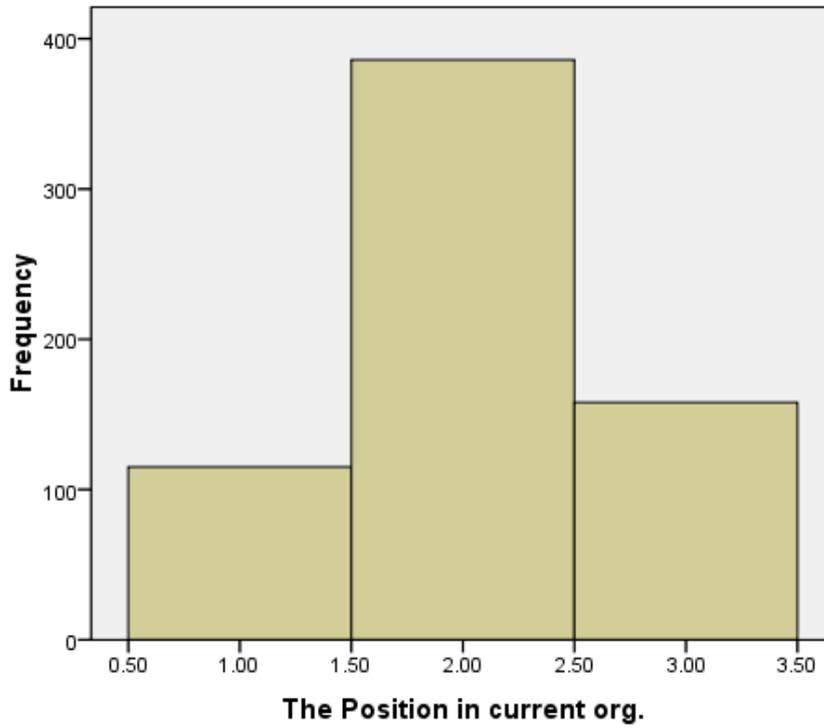
Mean =2.47
Std. Dev. =0.799
N =659

Work experience in years



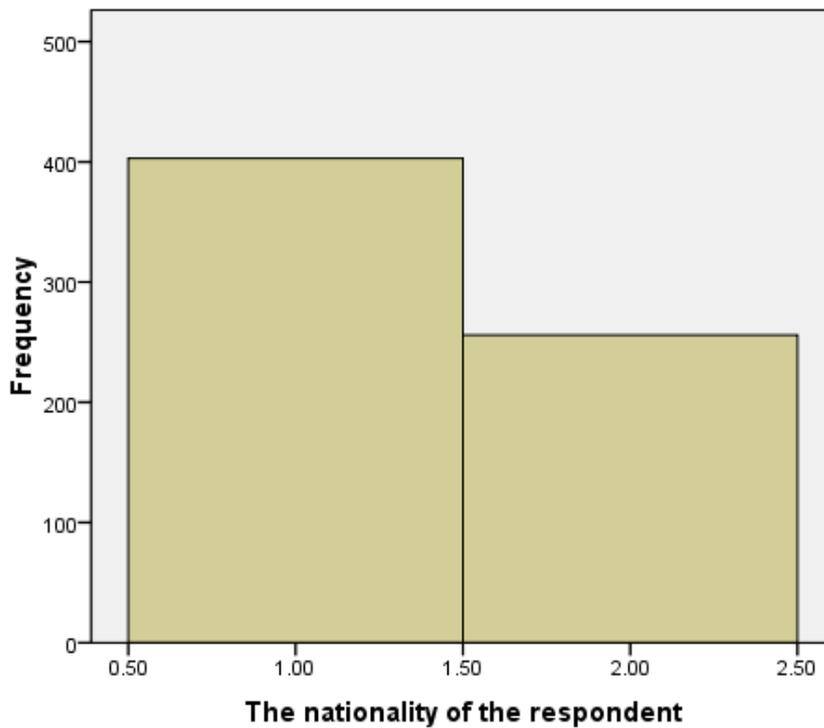
Mean =3.43
Std. Dev. =1.196
N =659

The Position in current org.



Mean =2.07
Std. Dev. =0.641
N =659

The nationality of the respondent



Mean =1.39
Std. Dev. =0.488
N =659

