

***HIGH PERFORMANCE TEAMS
IN THE UAE:
A CASE STUDY IN ETISALAT***

Faculty of Business

MSc in Project Management

March 2009

Dissertation by:

Mohammed Saeed Obaid Al Ansari - 60015

Supervised by:

Prof. Ashly Pinnington

Table of Content

Chapter 1 - Introduction	4
1.1 OVERVIEW	4
1.2 EMIRATES TELECOMMUNICATION CORPORATION – ETISALAT	5
1.2 PROBLEM STATEMENT (PURPOSE OF THE STUDY)	11
1.3 AIM	12
1.4 OBJECTIVES	12
1.5 DISSERTATION STRUCTURE	12
Chapter 2 – Literature Review	14
2.1 OVERVIEW	14
2.2 TEAM DEFINITION	14
2.3 TEAM ADVANTAGES	17
2.4 TEAM PERFORMANCE:	18
2.5 TEAM TYPES:	20
2.6 CHARACTERISTICS OF TEAMS.....	22
2.7 TEAMBUILDING MODELS	24
2.8 HIGH PERFORMANCE TEAMS (HPTS).....	26
2.9 CONCLUSION	35
Chapter 3 – Research Methodology.....	37
3.1 INTRODUCTION.....	37
3.2 RESEARCH APPROACH	37
3.3 DESIGNING THE QUESTIONNAIRE	39
3.4 QUESTIONNAIRE QUESTIONS.....	39
3.5 DISTRIBUTION AND RESULTS COLLECTION.....	54
3.6 SUMMARY	56
Chapter 4 – Research Analysis & Results	58
4.1 OVERVIEW	58
4.2 OVERALL PARTICIPANTS STATISTICS	58
4.3 DETAILED QUESTIONNAIRE RESULTS AND ANALYSIS	59
4.4 ANALYZING RESPONSES USING SPSS APPLICATION	101
4.5 SUMMARY	100
Chapter 5 – Recommendations & Conclusions.....	139
5.1 RECOMMENDATIONS	139
5.2 CONCLUSIONS	148
Chapter 6 – References.....	151

Chapter 1

[Introduction]

Chapter 1 - Introduction

1.1 Overview

Information Technology (IT) is one of the major advancing sectors in the United Arab Emirates (UAE). Most of the large organizations have an IT department that handles the day-to-day tasks related to employees' personal computers such as securing them, installing new software and hardware, fixing them and solving issues and problems. Other organizations expand their IT department to automate paper work and routine tasks that delays daily activities. An example of this the Dubai's Electronic Government where most of the daily requests are now handled fully using an online application that can be accessed through the Internet.

With the continuous increase in complexity in life and work, IT departments are currently facing many challenges not only in tracking the latest changes in technology but also in accomplishing projects within the decided time, the given budget and the desired quality.

Most of the IT projects involve building systems that are dedicated to accomplish certain activities like building a human resources system that will maintain a database of the organization's staff along with their details and ways to track their leaves, requests, trainings, annual appraisals and yearly objectives and key performance indicators (KPIs). Starting a new IT project will move through a step by step approach or what is called "Project live cycle". In this cycle, project requirements will be obtained, teams will be formed, activities will be circulated and the whole process will be managed.

Teams are usually the important element of any project as they can be considered as the black box that the inputs are fed into and the outputs are obtained from. If the black box is not maintained well then outputs will not be as desired and requested. Therefore, teams and teamwork are critical pillars in projects world and especially in the IT sector.

In this study, teams will be placed under the spot light to investigate their effect on IT projects' life cycle and how they would improve the quality and efficiency of the desired output. In addition to that, more concentration will be applied on a special type of teams called High Performance Teams (HPT) which are in short a group of people who are highly focused on their goals by holding the greatest challenge as well as the opportunity to improve productivity.

To support this study, the IT department in Emirates Telecommunication Corporation – Etisalat was taken as a case study. One of the largest projects in the IT department was the billing system that Etisalat has just completed and started using it throughout the UAE. Teams and teamwork will be studied to pinpoint the issues that caused the project to get delayed for over 5 years.

High Performance Teams will be discussed to analyze the effect of adopting such teams in Etisalat's IT mainly and a comparison with other organizations like Emirates Airlines IT department and Abu Dhabi National Oil Company (ADNOC) will be conducted.

1.2 Emirates Telecommunication Corporation – Etisalat

1.2.1 Background

Etisalat is the brand name of the first telecommunication corporation in the United Arab Emirates. It started in 1976 as land line telephone services provider and expanded its services throughout the years to cover Internet, mobile, networks, cable TV and many other services.

This study focuses on the Information Technology department of Etisalat, thus more details will be provided about this department. The IT department is part of the main Head Office of Etisalat in Abu Dhabi. This department is divided into a number of sections that handles the day to day tasks.

The primary sections in IT are Billing, Development and Operations. **The billing section is responsible for:**

- Acquiring the raw data from engineering exchanges and making sure that they are not corrupted or misplaced. Those raw data contains everything recorded by the exchange software about the customers' calls. For instance, the exchange will register a text record that contains the caller's number, called number, start time, end time, duration and type of the call, exchange codes, area codes and more details. Collecting the necessary information and presenting them in a useful format for the billing system to process it is one major activity of the billing section.
- Performing the billing process three times a month to make sure that customers' bills are generated on their billing cycle on time. The first bill cycle is on the first of the every month, the second is on the eleventh and the last one is on the twenty first. So, if the customer bought a GSM SIM card for his mobile phone on the 25th of the month then he will be part of cycle three.
- Maintain and clear all issues related to exchange records that have problems and errors. For example, a customer has cancelled his subscription to the GSM and there was a missing record about his usage that he didn't pay for then this record will be marked as an error. The billing section will work on this and find a way to correct it and bill it the same customer by putting the amount on one of his other accounts like the Internet account.

The Operations section is handling all the routine work like:

- Maintaining servers both Windows and UNIX.
- Ensuring security and latest patches installed on all corporate computers and servers.
- Daily Backup services and Database operations and optimizations.
- Providing on site help using the help desk technicians.
- Upgrading software and hardware for the whole organization.

The **Development section** is responsible for tracking requirements from marketing and developing those requirements into the billing system. There are small teams within the development team to handle paper work automation requests like the Intranet team which uses Microsoft's .NET technology to build web applications accessible by all employees in all branches across the UAE.

The main objectives of the IT can be summarized as follows:

- Maintain software and hardware for the whole corporate.
- Provide help for employees in terms of help desk and automation processes.
- Securing revenue by completing and maintaining all the billing procedures and issues.

New projects were overtaken by a dedicated project manager and a dedicated team to work on it entirely. In other words, a new section is being established to build this project and eventually support it after completion. The selected team members are nominated by their managers to help the new project from their expertise point of view. For example, a new application that is going to process warehouse data is going to need a person from the warehouse who knows the whole warehouse work cycle. Also, systems analysts and programmers are required. Those people eventually will create a separate team for the new project and they will never return to the previous tasks they were handling before.

1.2.2 Needs for the IT department

Telecommunication firms are responsible for providing the latest technology and services in the field of voice and data communication. Mobile phones work nowadays on a technology called GSM which is an abbreviation for Global System for Mobile communication. They also provide other services like sending messages and files between customers even if they are roaming outside the country.

Keeping track of calls and usage of services is not an easy task. Thus, telecom firms tend to spread many exchanges throughout its perimeters to record all transactions of voice calls and services usage. However, those exchanges record data in a raw format that actually

need further processing to get useful and storable information. Not all services require all the data recorded by the exchange. For an instance, GPRS (General Packet Radio Service) service depends on how many bytes have been downloaded or sent by the customer. In other words, if the customer got connected for an hour and he only downloaded 5 Kilobytes then he will be charged for the downloaded 5 Kilobytes and not the connection time. On the contrary, voice calls depend heavily on the duration of the call and not how many words or data got transferred between the two customers.

Processing this raw data requires especially tailored software that will handle these differences in services and calls requirements. This indicates that although telecom firms work with services and engineering issues, they need to have an information technology department or a section to handle the processing part of the overall flow of the firm to be able to produce correct bills to the customers based on their usage of services. In addition to that, having an IT department will help to centralize all the IT issues for the whole firm.

Most IT departments handle the following:

- Providing help desk services like fixing PC and software issues.
- Monitoring servers and databases of the firm.
- Keeping backup of all data in a periodic fashion.
- Maintaining the firm's internal electronic mail system.
- Automating manual tasks for other departments and sections.
- Using readymade package software to handle employees' accounts and information.
- Using readymade package software to process raw data from exchanges to produce customers' bills and financial reports for the finance department.

1.2.3 The billing system project

The IT department tasks mentioned earlier was taken from Etisalat's IT department day to day activity. By focusing on the tasks carefully, it is obvious that most of them are either usage or monitoring procedures. There was some development tasks directed for automating a manual process like building forms and simple store maintaining utilities.

There were no tasks related to handling large software development projects. In addition to that, the management did not provide a specific section to handle and manage IT projects as they were doing with other sections and departments like the project management section in the engineering department.

Since Etisalat completed more than 3 decades, IT section was almost performing the same tasks without any consideration of improving the section to handle large scale software projects. In other words, employees working within IT department are used to specific tasks and cannot handle new technology challenges like building new applications from scratch. They were either asking a vendor to build it or they just buy a readymade package.

This implied that Etisalat's IT department can not in any way build a comprehensive software solution without outside help because of the following:

- Using the same old technology and tools for more than 2 decades.
- Rapid Technology advancement with less training for IT employees.
- Lack of qualified IT project management team to handle large scale projects.
- Short term solutions are much preferred rather than long term solutions.

Billing customer calls and usage of services is the ultimate goal of processing the raw data coming from the exchanges. In 2003, Etisalat started a new project to build a new billing system specific for its services. **The main reasons for that were:**

- More customers meant more data to be processed to produce bills in the same period.
- Etisalat started to open new markets outside UAE.
- New services and technology became complicated enough that the current billing system is unable to fulfill their needs.
- Marketing section is trying to offer packaged services but the billing system does not support packaging.

Therefore, IT management decided to build a new billing system that will be able to achieve the following:

- Process huge amount of raw data in a fast and consistent way.
- Produce bills for all customers on time with minimum error.
- Enable packaging of services with no issues.
- Accept any new service without any changes in the system.
- Modify any information or configuration without the need to change the system code.

The system was intended also to work as a package that can be installed and used in other companies that Etisalat open in other countries like Mobily in Saudi Arabia. Etisalat's IT management thought that this could be implemented in the same way that they have implemented previous patches and utilities. They did not study the whole system thoroughly using project management techniques and rules. They have performed simple management but not to an extent that covers such a huge in house software project. They simply gave the requirements to a company to start building the system.

After two years, the company couldn't continue due to limited time offered by Etisalat to finish this huge software along with tremendous added requirements and workflows. The following sequence happened:

- Etisalat gave the software company the right to start working on the system.
- Etisalat was helping the company by giving business requirements and instructions.
- The company after two years requested an extension of 6 months to finish the project.
- Etisalat did not agree on that and cancelled the contract.
- IT management decided that the internal IT team can handle the rest of the project.
- Internal IT team was sent to attend a course within a week to study new programming languages and techniques.
- Etisalat hired more than 40 new programmers to help the internal IT team.
- Project Manager of the billing system got replaced 3 times.
- The project passed its deadline more than 4 times.
- After almost 5 years, the system was forced to be used to cover up for all the costs.

Looking at the billing system project and the way its teams were managed, it is obvious that there were no clear understanding of how teams should be formed and managed. This study is targeting teams and high performance teams in Etisalat's IT department. It aims at studying the impact that might have happened to the project if proper team management was conducted.

Although, at this point of time, Etisalat managed to declare a success of the billing system project it is still obvious that tremendous amount of money, time and effort was applied to the project to make it work. By looking at the billing system project, it is obvious that it had no problem with money and cost and neither with time and efforts. The remaining part where things went wrong drastically was the project's team and team management. It was clear to everybody that teams, teamwork and team management were not handled efficiently. Therefore, this study was conducted to find out the mistakes and issues that caused this problem along with the possibility of using High Performance Teams in future projects.

1.2 Problem statement (purpose of the study)

Etisalat in the year 2002 decided to build a new Billing System to replace the old billing system, due to following reasons:

- Any additional requirements to the old billing system will result in slow implementation and many changes in the core of the system which might affect the overall behavior of the system.
- Difficulty in achieving Marketing requirements easily in the old system.
- Packaging services and providing special offers for customers were difficult due to the fact that the system cannot for example support the first 2 minutes to be free of charge and the first 10 SMS messages are free.
- The old system has been doing its job for the last 15 years, thus it was the time to change.

The main problem that this study is focusing on is how teams were formed, managed and trained to accomplish this new Billing System project. Even though money and time were not limited for Etisalat, still the project got delayed for almost 5 years. Looking at the 5 years and how work went through them it was obvious that a team issue was there. In other words, this study tends to focus on how teams were formed and what were the issues with teams. Also, it will look into the possibility of using the High Performance Teams and how it could have helped in speeding up the project and accomplishing it with flying colors.

1.3 Aim

To study teams in general and High Performance Teams in depth in order to provide better perspective of the best practices that Etisalat can follow to ensure smooth projects execution and completion.

1.4 Objectives

- Investigating teams and High Performance Teams and they are maintained.
- Study High Performance Teams and the possibility of applying them in IT department in Etisalat.
- Conduct a survey to collect information about teams and high performance teams in different companies.
- Provide suggestions, solutions and recommendations for Etisalat's billing system

1.5 Dissertation Structure

The dissertation is divided up into 5 chapters; the following gives a brief explanation about each chapter:

- Chapter 1 – Introduction.
- Chapter 2 – Literature Review.
- Chapter 3 – Research Methodology.
- Chapter 4 – Research Analysis and Results.
- Chapter 5 – Recommendations and Conclusions.

Chapter 2

[Literature Review]

Chapter 2 – Literature Review

2.1 Overview

This study investigates the possibility of forming and using High Performance Teams (HPTs) within Etisalat's IT department. Therefore, an in depth investigation about HPTs have been performed. This chapter looks into the definition of teams, how they are formed and what type of models are used to created effective teams. As the name implies teams must have high performance. Thus performance in teams is also discussed. Finally, High Performance Teams are discussed in terms of how they can be formed.

2.2 Team definition

Teams or groups are in general a number of people who work together to accomplish certain tasks defined to them by management. Teams have many other specific definitions like:

- Bales (1953) defines a “team” as any number of persons engaged in interaction with one another in a single face-to-face meeting or a series of such meetings, in which each member receives some impression or perception of each other member distinct enough so that he can give some reaction to each of the others as an individual person, even though it be only to recall that the other was present.
- According to Cattell (1951) “a group is a collection of organisms in which the existence of all (in their given relationships) is necessary to the satisfaction of certain individual needs in each.”
- Homans (1950) implied that "a group is defined by the interaction of its members. If we say that individuals A, B, C, D and E form a group, this will mean that A interacts more with B, C, D, and E than he does with M, N and O who we choose to consider outsiders or members of other groups."

- Krech and Crutchfield (1948) define "group" as two or more people who bear an explicit psychological relationship to each other. This means that for each member of the group the other group members must exist in some more or less immediate psychological way so that their behavior and their characteristics influence him.
- The sociological concept of a group for Merton (1957) refers to a number of people who interact with one another in established patterns. One objective criterion of the group is frequency of interaction. A second criterion is that the interacting persons define themselves as members, i.e., that they have patterned expectations of forms of interaction which are morally binding on them and on other "members". The correlative and third criterion is that the persons in interaction be defined by others as "belonging to the group."
- Finally, Newcomb (1963) states that the distinctive thing about a group is that its members share norms about something. The range covered by the shared norms may be great or small, but at the very least they include whatever it is that is distinctive about the common interests of the group members. They also include, necessarily, norms concerning the roles of the group members-roles which are interlocking, being defined in reciprocal terms.

The previous five definitions have been studied and evaluated by John DeLamater (1974). He found out that most of the definition authors have focused on certain defining properties like interaction between individuals, perceptions of other members and the development of shared perceptions, affective ties and development of interdependence or roles. Those properties can be used to formulate a more comprehensive definition of teams or groups. Thus, he further explained each property as follows:

- **Interaction** is referred as a face to face interaction between persons so that each member of the team gets affected by the behavior of the other team members.
- **Mutual Perception** refers to understanding each other in the normal interaction. It also includes the understanding of the shared norms among the team members that have been

built with time. In addition to that, perception or understanding of each other personality is included in this property of teams.

- **Affective ties** refer to the development of feelings between members of the team who interact with each other whether they are positive or negative feelings. Those feelings are influenced by the ways that others in the team perform their roles and whether their behavior satisfies the others standards and norms.
- **Interdependence** refers to accomplishing tasks and achieving them as a group or a team since some tasks can not be completed by individuals alone. Thus interdependency measures how members of a team depends on each other to achieve a shared task or goal.

DeLamater also emphasized on using those properties as a way to measure the development of the team and not to use them as available or not in the team. By combining the previously explained properties a much proper group or team definition can be obtained.

Eugene McKenna (2000) stated that it is difficult to arrive at a complete embracing definition of a group or team. For example, the behavior of team members is influenced by shared norms and standards. Members work hard to achieve a common objective normally under the influence of a leader. Interdependency is viewable when members of the team are dependant on each other for support and help. The level of interdependency increases by having more interactivity between team members. However there are occasions when a member of a team may not share the group norms and he might work together with the rest of the group as a team but he achieves his goals at the expense of others.

In another study about teams and their prevalence, characteristics and effectiveness by Dennis J., Laura D., Jennifer L., Benjamin B. and Sarah B., teams were defined broadly as “a collection of three or more individuals who interact intensively to provide an organizational product, plan, decision, or service.”

In the United Arab Emirates teams are defined based on the researcher’s experience as a group of people who are given a list of tasks to accomplish within a predefined time under the supervision of higher management. This group of people can only perform tasks with justification from management. Higher management never gave teams any self managing

abilities and all decisions should only come from them ignoring any attempts by the team members to help in decision making.

2.3 Team Advantages

It has been shown by (Colenso, 2000) that effective use of teams can bring significant improvement in productivity, creativity and employee satisfaction. Sometimes an individual can perform and produce enough output but there are cases when a team outperforms individuals as argued by (Scholtes, 1996). He stated that this happens when:

- **The task is complex** and requires more than one person to build up shared knowledge to complete it in an appropriate way.
- **Creativity is needed;** some individuals can complete tasks very fast and in a professional way but some times creativity is required to solve the issue in a better way which can be obtained from a group of people who can through ideas here and there to reach to a more efficient solution i.e. a team.
- **The path forward is unclear;** more ideas and solutions can be obtained from experienced team members to help in clearing the way to the planned target rather than depending on a single person.
- **More efficient use of the resources is required;** thus using a team will help in speeding up the process of completion with minimum mistakes and flaws. However, using an individual to complete the task will cause him/her to rush things out to complete the task.
- **Fast learning is required;** any new task can be taken by several people to learn the knowledge behind it and share it among themselves rather than putting the whole knowledge load on a single employee.
- **High commitment is desirable;** to commit to a task with a team is much easier than with a single candidate as the load can be distributed over team members.
- **The implementation of the plan requires the cooperation of others;** an individual can not develop a full scale map of a project or a task alone as he/she might forget or miss

required parts. Having a group of people to work together in completing the final plan of a project is more meaningful.

- **The task of process is cross-functional;** an individual in a certain department can not complete the whole task alone as it requires action from other departments thus a team comprises of team members from each required department is better to accomplish the task.

In addition to the previously mentioned benefits of teams over individuals, (Katzenbach and Smith 1993) summarized **the advantages of teams as follows:**

- The sum of all the knowledge and experience brought into the organization by the team exceeds those of any individual. This enables teams to respond to multifaced challenges like innovation, quality and customer service.
- Communication between team members will develop strongly to help in implementing clear goals and approaches. Moreover, real-time problem solving and initiatives will be more supported.
- Teams provide a social dimension that enhances the economic and administrative aspects of work.
- Working within team provides much more lively environment and fun times that helps in building good relations and friendships that will finally improve the work output and organization loyalty.

2.4 Team Performance:

Performance can be understood as the ability to accomplish the given task as requested within the given time. It is the result of the work that can be measured in such a way to determine wither it was completed with high or low performance. How to measure the accomplishment of a task can be considered as performance measurement. According to (Stott and Walker, 1995) performance in general can be determined by three factors: ability, work environment and motivation.

(Jack Zigon, 1997) stated that team performance measurement is difficult unless you have a systematic process for analyzing the work of a team and measurement methods that can handle the wide variety of work teams undertake. He also indicated that there are **three major reasons for having difficulties in measuring team performance**:

1. It is not always clear which results should be measured. Therefore, teams will be using measures that might not actually measure their results or they might not even know if they have done a good job.
2. It is difficult to identify the measurement methods even if the team can identify which results or outputs to be measured. This is due to the fact that some work related features like “creativity” can not be measured using numbers.
3. Since teams are made up of individuals, measurements must be applied on both the team and the individual levels.

Based on a 15 years experience of measuring hard to measures work and three years of trial and error experience in measuring the work of teams, (Jack Zigon, 1997) created **seven steps to measures team performance** which are briefly listed below:

1. **Review the existing organizational measures**; all currently available measures should be known to the team members. Those measures are usually representing the goals that need to be supported by the team to be successful.
2. **Define team measurement points**; understanding the results that the team is trying to accomplish is vital in the process of identifying the measurement methods. Results can be easily identified as they represent the accomplishments of the team. There are several reasons for this:
 - a. Agreeing on the results that a team must produce is much faster and easier than identifying the required activities to achieve the results.
 - b. Collecting feedback data is less costly as studying the results and outcomes is much faster than investigating the activities and monitoring them.
 - c. It helps the team to focus on what is really important.

3. **Identify individual team-member accomplishments that support the team;** which indicates the necessity of monitoring the results that each member of a team produces that will help in building up the final result of the whole team.
4. **Weight the accomplishments;** this process is team oriented where each member should contribute in the process of identifying the relative importance of each accomplishment.
5. **Develop team and individual performance measures;** at this step the numeric and descriptive yardsticks need to be identified. Those will be used to rate how well results have been achieved.
6. **Develop team and individual performance standards;** level of required performance by teams and individuals must be identified to meet expectations.
7. **Decide how to track performance;** identify how the team will collect data for each performance standard and feed this data back to the team.

2.5 Team types:

Although teams are very important in any project there seems to be no widely accepted topology to categorize teams or classify them into types. However an attempt to classify them as organizational teams into four types was made (Dennis J., Laura D., Jennifer L., Benjamin B. and Sarah B. 1999) as follows:

- 1- **Ad hoc project teams;** their primary tasks are to solve problems and issues, design plans, make decisions and interact with customers or clients. In other words, ad hoc means that this team is formed for a specific period.
- 2- **Ongoing project teams;** this type of teams handle the same tasks as the ad hoc except that teams has relatively stable membership in solving problems, making decision and handling customers or clients.
- 3- **Ad hoc production teams;** those teams are temporary and they are formed for a specific purpose or case to build, construct or assemble products.
- 4- **Ongoing production teams;** they perform the same tasks of the previous type except that they perform them on a regular or recurrent basis.

From the previous four types it was found by the study that most of the organizations tend to use short term teams to tackle a new project. It was also found that ad hoc project teams are much suitable for projects based organizations as they are not connected strongly to a specific production or procedures. They can help every new project and report back the outcomes as fast as possible since their tasks are focused on solving problems of new projects.

There are other team categories specified by others like (McKenna, 2000) who categorized teams into the following types:

- 1- **Work teams**; these teams are permanent and engaged in daily work.
- 2- **Management teams**; these teams coordinate the activity of work teams drawn from a number of areas along with support and advice.
- 3- **Top management teams**; top layer of management find it difficult to work as a team since every member do not want to lose his/her individuality or independence, specially if they have a record of success.
- 4- **Cross-functional teams**; teams brought from the same hierarchical level but from different functional areas within an organization. They come together to accomplish particular tasks.
- 5- **Quality circles**; these teams are concerned with improving quality and effectiveness. They enhance commitment to necessary changes in work practices.
- 6- **Self-managed teams**; these teams perform many tasks like planning and scheduling of work, collective control over the pace of work, making operating decisions and solving problems. Selection of people to join the team and allowing members to evaluate each other are features of this type of teams.
- 7- **Affinity groups**; these teams are composed of professionals who meet regularly to share information, capitalize on opportunities and solve problems relating to the work team and organization.
- 8- **Virtual teams**; members of these teams never meet in a room but they relate to each other using computers and telecommunications like video conferencing, electronic mail and internet.

2.6 Characteristics of Teams

There are some key features about teams that play a vital role in forming and constructing good teams. (McKenna, 2000) listed and explained some of the **characteristics of teams** such as:

- 1- **Norms**; they are guides to behaviour on a number of issues ranging from how tasks are done and level of output to appropriate level of tardiness. According to (Chell, 1993) norms has the following characteristics:
 - a. Majority of team members find them acceptable.
 - b. Only significant aspects of team life are covered.
 - c. Members of the team accept them in varying degrees.
 - d. They develop slowly and change also slowly.
 - e. Team behaviour is the focal point of attention.

Moreover, (Feldman, 1984) provided **four main purposes** that can be served by norms:

1. Norms express the central values of the team.
 2. Norms simplify and make the behaviour of the team more predictable.
 3. Norms assist the team in avoiding embarrassing situations.
 4. Norms help the team to survive.
-
- 2- **Cohesiveness**; it exists when there is a high level of agreement among team members with respect to values, beliefs and objectives. It resembles the motivation of team members to stay together and resist any attempts of leaving the team. There are seven determining factors that help in inducing and sustaining the cohesiveness among team members:
 - a. **Similarity of attitudes and goals**; having a number of people with similar goals and objectives will act as a source of satisfaction between them.
 - b. **Time spent together**; according to (Insko & Wilson, 1977) as people spend more time together they are given the opportunity to explore common interests and experience greater interpersonal attractions.
 - c. **Isolation**; isolated teams see themselves as special.

- d. **Threats**; cohesiveness can be dented where the team feels it is unable to withstand external threat or attack. For example, unreasonable demand from management to change working practices.
- e. **Size**; smaller sizes of teams offer better opportunities for interaction among members. Thus cohesiveness tends to evolve more in this situation and vice versa with larger groups.
- f. **Stringent entry requirements**; the more difficult it is to get into a team, the greater the likelihood that the team is cohesive. Once the new member enters the team he/she will feel the importance of upholding the standards that contribute to the exclusive nature of the group.
- g. **Rewards**; incentives based on the team performance as a whole is much better than individual incentives. Thus cohesiveness is improved and enhanced.

3- **Communication and Interaction**; According to (Leavitt, 1951) there are 4 types of communication networks: circle, chain, Y and wheel. It is suggested that centralized networks like the wheel provided better execution of small tasks while the more complex tasks were found to be better executed using less centralized networks like the circle. This because in a circle network all members of the team communicate with each other while in the wheel network members can be overwhelmed and overloaded with many tasks.

4- **Structural Factor**; Teams have a structure that influences the behaviour of members. There are certain team characteristics often called structural factors, like:

- a. **Structure and atmosphere**; in a team has a part to play in facilitating the performance of tasks and the satisfaction of individual needs.
- b. **Roles**; Team members play a specific role in a team and how they understand how to perform their roles has great influence on how the team operates.
- c. **Status**; it is the social ranking given to an individual because of the position he/she occupies in a team.
- d. **Composition**; identifies the types of team by checking if it is homogeneity or heterogeneity. The first is said to exist when the profile of the members is similar in one or more ways that are relevant to the functioning of the team. The latter exists when the profile of the members is dissimilar.

- e. **Size;** Smaller size of teams gives the members more opportunity to interact frequently, facilitate the free flow of information and provide a setting in which it is easier to reach agreement. Larger team sizes, the potential of the individual is limited and communication is formalized.
- f. **Leadership;** it is an important structural characteristic of a team. It can be both formal and informal. The first one is a manager appointed by the organization with the authority to use rewards and sanctions. While the latter derives a mandate from the team members and usually reflects the team's values. In a self directed team, leadership rotates naturally to the person best qualified to run specific parts of a task and supervisory positions become less important.

2.7 Teambuilding models

Building the proper team for the task is a vital process that needs to be well planned and organized. Since teams overcome individuals, more studies and investigations were performed to come up with the best strategies to select a group of people who can work together in harmony to achieve the desired goals and outcomes. In this section, brief description about teambuilding models is provided (McKenna, 2000).

2.7.1 Tuckman model

(Tuckman, 1950) developed a set of stages that worked as the building blocks for creating a team. There are 5 stages as mentioned by (McKenna, 2000) as follows:

- 1- **Forming stage;** in this stage there is a focus on the nature of the task to be accomplished and how best to do it with the available set of resources. Members try to establish the most appropriate behaviour to adopt and look to the leader for guidance.
- 2- **Storming stage;** in this stage there appears to be emotional resistance to the demands of the job particularly when there is a mismatch between the demands of the job and the individual's interpretation of what the job entails. Also, opinions of members seem to be polarized especially on key interpersonal issues.

- 3- **Norming stage;** in this stage there is an open exchange of views and feelings. There is willingness to listen and accept views of other members. New standards and roles emerge and are accepted by group members. There is also a conscious effort to avoid situations typified by conflict.
- 4- **Performing stage;** in this stage solutions to problems are emerging and constructive attempts are made to complete the job. The team members have developed a purposeful way of members relating to each other in the performance of tasks and functions with flexibility being apparent. Also, interpersonal issues have been resolved.
- 5- **Adjourment stage;** in this stage mixed emotions are created in the form of euphoria at completing the tasks and regret at terminating the existence of the team.

2.7.2 Woodcock four stages model

Another model which comprises of four stages has been developed by (Woodcock, 1979). The stages are as follows:

- The first stage suggests that many aspects of life in a team leave much to be desired. It is also characterized by low level of involvement in the planning process, poor listening, unconsidered feelings and weaknesses are covered up.
- In the second stage some indications that the team is prepared for experiment, risky ventures are debated and wider options are considered. Also, there is more concern for listening and personal feelings.
- In the third stage procedures are agreed and ground rules are established.
- Finally, the forth stage builds on the foundations of stages two and three by developing new activities from a healthy base. The team is now sensitive to members' needs and cherished principles and development is a priority.

2.7.3 Punctuated equilibrium model

According to (Romanelli & Tushman, 1994), in this model the forming and the Norming stage are combined together. Then, there is a stage characterized by low performance, which is followed by the storming stage and a period of high performance and finally adjournment.

2.8 High Performance Teams (HPTs)

2.8.1 Definitions

Teams were defined earlier in this chapter and since this study focuses on High Performance Teams, then they need to be defined to identify exactly what is meant by them. According to (P. Castka, C.J. Bamber, J.M. Sharp and P. Belohoubek, 2001), (Katzenbach and Smith, 1993) argued that “ a team is a small group of people with complementary skills who are committed to a common purpose, performance goals and approach for which they hold themselves mutually accountable”. Performance in general can be determined by three factors: ability, work environment and motivations (Stott and Walker, 1995).

The following definitions provided by (P. Castka, C.J. Bamber, J.M. Sharp and P. Belohoubek, 2001):

- (Kur, 1996) defines HPTs as teams that “consistently satisfy the needs of customers, employees, investors and others in its area of influence and as a result these teams outperform other teams that produce similar products and services under similar conditions and constraints”.
- (Sharp, 2000) proposed that a high performance team is a team of people who have unleashed their potential towards their stakeholders shared purpose. He also defined six key enablers of HPTs which are:
 1. Team member competencies;
 2. Skills, processes, tools and techniques;

3. Interpersonal skills, communication and personality preferences;
 4. Value system;
 5. Shared vision, purpose, goals, direction; and
 6. Organisational values including openness.
- (Colenso, 2000) defines HPT through preconditions (purpose, empowerment, support, objectives) and characteristics (interpersonal skills, participation, decision making, creativity, managing the external environment).
 - (Katzenbach and Smith, 1993) argue that HPTs have a deeper sense of purpose , more ambitious performance goals, more complete approaches, fuller mutual accountability and interchangeable as well as complementary skills.
 - (Rickards and Moger, 1999) call HPTs as “dream teams” and define seven factors that distinguish them from normal teams:
 1. Strong platform of understanding
 2. Shared vision
 3. Creative climate
 4. Ownership of ideas
 5. Resilience to setbacks
 6. Network activators, and
 7. Learn from experience.

2.8.2 Characteristics of HPTs

(McKenna, 2000) provided a number of characteristics associated with HPTs as follows:

1. **Abilities and Skills;** According to (Larson & La Fasto, 1989; Stevens & Campion, 1994) team members must be equipped with technical expertise and knowledge about the faced problems. In addition to that, problem solving and decisions making skills are needed along with effective feedback, conflict resolution and other interpersonal skills.

2. **Commitment to specific, challenging and clearly defined goals;** which means that goals should be spread over the group and not individual.
3. **Potency;** which indicates the ability of the team members to achieve and handle the work with great effort and efficiency. It also includes social support where each member helps the other. In addition to that, the load is shared among the members to balance the work load and prevent work pressure on part of the team.
4. **Group based rewards rather than individual rewards;** this rewarding system will reduce jealousy feelings among team members as some of them might feel that he performed better but he can not convey his efforts as his colleague did.
5. **Size;** the size of the team must be reasonable as large teams tend to be difficult to track accomplished work and who performed it. It will also make it hard for team members to understand each other since some of the members will no be interacting with others. However, having a small team will work better as they will be like a family.
6. **High Mutual trust;** (Hosmer, 1995; Schindler & Thomas, 1993) pointed that values such as honesty, truthfulness, competence, loyalty and openness are present but they are difficult to sustain.
7. **Familiarity;** of the job knowledge, colleagues and the work environment that will enhance the momentum between team members.
8. **Capacity to tap external sources** of reputed information and resources benefit to the team as pointed out by (Larson & La Fasto, 1989).

2.8.3 Key features of effective and ineffective teams

(McKenna, 2000) provided a comparison between effective and ineffective teams that depends on the work of (McGregor, 1960):

Effective Teams	Ineffective Teams
Informality; relaxed atmosphere; involvement; interest	Formality; tense atmosphere; indifference; boredom
Much discourse; high contributions	Domination by few; contributions often lack relevance
Understanding/acceptance of common aims	Aims ill-defined and misunderstood; conflict between private aims and common aims exists
Listen; consider; put forward ideas	Unfair hearing; irrelevant speeches;
Examine disagreements; dissenters are not over-powered	Disagreements are suppressed or conflict develops
Consensus decision making; members feel free to disagree.	Lack of consensus; premature decision making; formal voting
Constructive criticism	Personalized destructive criticism
Feelings and attitudes are aired	Feelings remain under the surface
Awareness of decisions/actions; clear assignments	Lack of awareness of decisions; unclear assignments
Leadership role undertaken by most suitable member	Leadership role is jealousy guarded
Frequent review of team operations	Not too concerned with deficiencies of the team.

Table 2.1

2.8.4 Implementation of HPTs

After getting an idea about the meaning of HPTs and the features that they have, an expected question will arise asking about the ways and methodologies to build such dream teams. (McKenna, 2000) has provided the basic principles put forward by Katzenbach and Smith to build a high performance team and they are as follows:

- Create a sense of urgency and direction.
- Choose people on the basis of skill, track record and potential. However, do not choose people on the basis of their personality.
- Ensure that the first meeting goes well and put the accent on action.
- Lay down some explicit ground rules to govern behaviour.
- Focus on critical but urgent matters to address and set clear objectives.
- Devote a lot of time to interactions between members.
- Provide regular up-to-date information to members, recognize the potency of feedback at all times and ensure members receive proper recognition and rewards.

(P. Castka, C.J. Bamber, J.M. Sharp and P. Belohoubek, 2001) have provided critical factors that helped in providing the basis for the conceptual model of factors affecting successful implementation of HPTs. The factors are grouped into two main categories and seven sub categories as follows:

I – Category 1: System Factors

1. Organizational Impact;

The support from the organization is very important for all activities that contain factors of change. The organization is responsible for:

- Creating the organization culture which encourages team empowerment, experimentation, creativity and innovation, win-win approach to conflicts, failures and mistakes and ensures open communication.

- Team formation which includes the size of the team and how team composition is performed. Training the team members and consolidating the purpose and aim of the team to all the members is also a vital step.
- Providing a supportive environment which is presented by senior management and the person to whom the team reports. Furthermore, the organization has to make possible access to resources like time, money, data, information, knowledge, talents and materials.
- Monitoring team performance based on measurement of the key performance indicators (KPIs) which should be mutually agreed on by team and management.
- Team reward and appraisal system.

2. Defined Focus;

Successful HPTs must have defined their mission, vision and goals which are understood by the team members. According to (Adair, 1986) teams must have clearly defined purposes and goals that serve the organization. Also, he proposed that they need clearly defined parameters within which to work and the team members must know the relative importance of the task and the expectations from the organization. Furthermore, (Finley, 1996) argued that a good team focus must contain the following building blocks:

- Task;
- Promised limit of what a team member is doing;
- Promised level of performance;
- Deadline; and
- Definition of the customer.

3. Alignment and Interaction with external entities;

This factor can be called the outer focus of HPTs which means looking at the team as part of the system as a whole. In other words, it is called system thinking which according to (Senge, 1990) lies in seeing relationships rather than linear cause-effect

chains and seeing process of change rather than snapshots. The external entities can be teams, managers, suppliers, customers, society and government.

4. Measures of Performance;

These are a trigger to improvement and the reason why many improvement programs fail is the lack of measurement. According to (Zigon, 1997) performance system measurement should include the following:

- A statement of the results the team will be working to achieve with measures and performance standard for each result;
- Statements of each individual's results with measures and performance standards for each result;
- A clear picture of the priorities and relative importance of the team and individual results; and
- A plan how to collect and summarize performance data, so the team and individuals will know how they are performing compared to the performance standards.

Success or failure may not always be measured at the team level and the best indicators of the success of teams in organizations may be the organizational level of analysis as stated by (Church, 1998). Measurement of Performance has to tell team members what they must do to improve their performance rather than trace the performance of all business as indicated by (Mayer, 1998).

II – Category 2: Human Factors

1. Knowledge and skills;

In order for the team members to acquire sufficient knowledge and skills they must receive training and personal development in areas suggested by (Nonaka and Takeuchi, 1995; Imai, 1986; Kets De Vries, 1999) such as:

- Interpersonal and joint skills that deals with conflict, dynamics of teamwork, how to conduct meetings, effective decision making, communication skills and effective record keeping.
- Analytical and statistical skills like problem solving methods, improvement techniques, and quality control tools.
- Improvement techniques, creativity approach and system thinking.
- Technical skills which are related to a particular job.

2. Need of the individual;

Aligning team member with the team is a must as stated by (Senge, 1990). He also argues that alignment is a necessary condition for empowering the individual and results in the empowerment of the whole team.

Knowing the needs of each individual can help in quickly and effectively form the team as according to the observations of (Robbins and Finley, 1996) that people will only agree to team if it meets their own needs first. This means that knowing those needs of people at earlier stages of the team formation life cycle will be better for the team.

Most teams suffer from individualism in which each team member wants to be recognized for his effort and contribution in the project rather than assessing the results of the team as a whole. Moreover, regular assessment systems in the organizations look at the personal contribution to the whole project and not the team contribution. This clearly states that there is no team assessment. Teamwork represents an interdependent balance between the needs of the individual and the needs of the organization as stated by (Kets De Vries, 1999).

3. Group Culture;

One of the demands of the HPTs is having a strong group culture which is based on empowerment, shared vision, creativity, participation, learning ability, trust and

shared consensus. (Kets De Vries, 1999) researched the Pigmy society and based in this investigation he suggests seven principles of effective teamwork:

- (1) Members respect and trust each other.
- (2) Members protect and support each other.
- (3) Members engage in open dialogue and communication.
- (4) Members share a strong common goal.
- (5) Members have strong shared values and beliefs.
- (6) Members subordinate their own objectives to those of the team.
- (7) Members subscribe to distributed leadership.

The culture of HPTs is not necessarily conflict free as argued by (Senge, 1990). He says that great teams are not characterized by an absence of conflict but they can take advantage of such conflicts.

2.8.5 Problems and disadvantages of High Performance Teams:

Creating a high performance team is not an easy process and the establishment of a team based organization could pose a threat to the established management order. Giving the responsibility and empowering a team can cause problems to the organization if the HPT is not formed on strong basis that ensures smooth processing of organization work.

According to (Hackman, 1994) the following mistakes which are listed by (McKenna, 2000) are common while building HPTs:

- Treating a unit as a team but when it comes to the allocation of tasks the set of individuals are dealt with individual basis and not as a whole team.
- There is a failure in the right balance between the exercise of authority and the use if democratic practices. The best option here is give the objectives to the

team and leave it to the team members to decide the most appropriate way to achieve them.

- Organizational structures are kept unchanged, when ideally they should be replaced by an enabling structure.
- After forming the teams they are left unsupported when they have to be provided with adequate resources, training and group based rewards.
- There is an invalid assumption that individuals are eager to work in teams whereas this might not be true in some individualistic cultures.

(Hackman, 1994) also provided a set of guidelines or advices that help in confronting the problems, such as:

- Think clearly and take appropriate action in spelling out the tasks to be performed, team formation and group norms.
- Ensure authority is bounded and specify the ends.
- Issue clear instructions and keep an eye over the motivational implications.
- Recognize the importance of intrinsic motivation.
- Create a supportive organizational context.
- Provide training and expert coaching in the process of teamwork.

2.9 Conclusion

In this chapter, in depth details were provided starting from general knowledge of teams and their type, models and characteristics. Then the chapter started narrowing down the point of the research where it focused on High Performance Teams. It features answers to questions like what HPTs are, how they are formed, what characteristics they have and finally what are the factors that can help in implementing such teams into an organization.

Chapter 3

[Research Methodology]

Chapter 3 – Research Methodology

3.1 Introduction

One of the main objectives of this study is to investigate the way teams are formed in Etisalat mainly and other companies like ADNOC and Emirates Airlines. The important billing system project started by Etisalat 6 years ago has been under severe delays and project management issues. No body knows exactly why there were delays in completing the project and bypassing all the deadlines given by management.

By looking at the project pillars like time, cost and resources it is obvious that Etisalat has given unlimited support in terms of money and the time spent on the project. Therefore, only the people who work on the project are remaining. In other words, it is teams that had the bad effect on the project completion. The billing project was divided into almost 10 modules that have teams and team leaders. Not only communication and interaction between teams seemed to be weak and shallow causing a lot of delays but also the culture between team members was not clear and everybody was looking for his own benefits rather than the overall corporate benefits.

This study conducts a questionnaire that will investigate how teams are formed and treated within Etisalat and other companies. Also, it will discuss High Performance Teams and the possibility of using them in Etisalat in an attempt to find out if the project would have been completed earlier.

3.2 Research approach

In order for the study to accomplish its objectives, it was decided to use a questionnaire to collect necessary information. Questionnaires are one of the research methods that are used widely as a main way to collect as much as possible of responses from people for a set of closed questions. This method has many advantages such as:

- **Low cost;** since it consists of a set of written questions.
- **Easy distribution and collection;** with the availability of the Internet and e-mails it is very easy to start the questionnaire for a group of people over the internet and wait for their responses. It is much easier to fill in an electronic page by selecting answers and submitting the results.
- **Anonymity is guaranteed;** to make people feel that their identity is covered and hidden to feel safe to respond without fearing from consequences.
- **Easiness in answering;** questionnaires make it easy on respondent to complete the questions as they are provided with questions with fixed answers and they do not need to fill their answers in writing.

However, questionnaires may have a couple of disadvantages like:

- **Forced answers;** which imply that some people might not find the appropriate answer to the question from the fixed list of answers.
- **Terms interpretation;** where some respondents might understand a term in a different way from others which will result in giving different answers.
- **Irrelevant questions;** some respondents might feel that some questions are not related to them and yet they are forced to answer them.

For this study, it was decided to use an online questionnaire with closed questions. The online site which is used to create the survey is <http://www.questionpro.com>. This company provides a highly professional surveys and questionnaires for specific fees per month. It also provides research students to have a free account to use their site and features in conducting their research questionnaire. It was decided to use this site as it offered the following features:

- Free account for research students with one questionnaire for 6 months.
- Vast variety of question types like selecting from a list, selecting multiple answers, Likert scale questions or even rating answers to the percentage they are relevant to the respondent.

- Results of questions can be obtained in many ways such as an Excel file with detailed results. In addition to the online results that can be viewed at anytime during the questionnaire duration.
- Ability to control the questionnaire by means of starting, pausing and closing it at any time.
- Security and duplicated answers from same respondents can be easily controlled.

3.3 Designing the questionnaire

Using the free student account provided by “QuestionPro” company, the questionnaire for High Performance Teams was created and distributed. The questionnaire was constructed in five parts as follows:

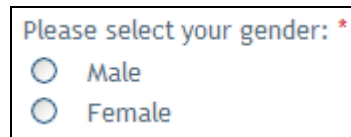
- **Part 1: General details;** this section contained simple fast question related to the respondent like his gender and his age range.
- **Part 2: Work details;** this section focused on the current job of the respondent and check if he/she is a manager, team leader or simple a team member.
- **Part 3: Technology awareness;** since this study is more Information Technology oriented then this section will be useful to find out if respondents have enough IT knowledge and how they keep them selves up to date.
- **Part 4: Teams and Projects;** in this section general question about teams and how projects are performing in the organization are asked. It will help in finding out the current situation of how teams are formed.
- **Part 5: High Performance Teams;** this is the section that will identify if a company has the concept of HPTs or not. Respondents will provide answers to questions that define the availability of HPTs in their organizations.

3.4 Questionnaire questions

This section will explain all the questions that were used in the questionnaire to justify their usage as follows:

Part[1]: General details:

The first part of the questionnaire, which consists of 5 questions, is intended to get some general details about the respondents of the questionnaire. The **first question** is to find out if the participant is male or female. This knowledge will help in determining who is dominating the IT field in the United Arab Emirates. The question appears like this:

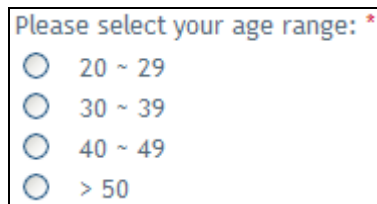


Please select your gender: *

Male

Female

The **next question** is targeting age range of the participants to indicate whether young people are interested in IT jobs. The question gives the following ranges:



Please select your age range: *

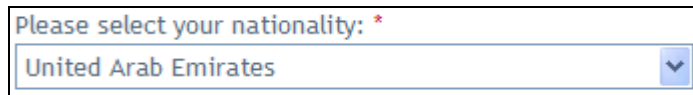
20 ~ 29

30 ~ 39

40 ~ 49

> 50

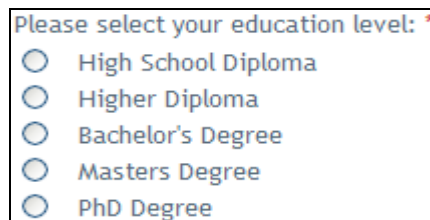
The **third question** tries to give an indication of the range of nationalities in the IT filed in several companies like Etisalat, ADNOC and Emirates Airlines. The question is shown as a simple drop down list with the United Arab Emirates being select as default:



Please select your nationality: *

United Arab Emirates

The **fourth question** is aiming at finding out the highest level of education that every participant has achieved. This will help in having a rough idea about the education level of most of the IT sector employees targeted by this survey. The question appears like this:



Please select your education level: *

High School Diploma

Higher Diploma

Bachelor's Degree

Masters Degree

PhD Degree

The last question in the first part is to get the number of years that the participant has spent working in his current organization. This will show roughly if people like to remain in one company or move to another one to get better offers. This can also show a simple measure of employee loyalty to his company. The question shows a range of years of experience in the current company as follows:

Please specify your working experience in the current company:

- Less than 1 year
- Between 1 to 5 years
- Between 6 to 10 years
- More than 10 years

Part [2]: Work Details:

This part is looking forward to collect more specific details about the current job for each participant. It consists of 8 simple and fast questions. The first question is intended to classify respondents based on their working companies or organizations. Since this report is targeting Etisalat IT staff most of the participants are from this company. However, ADNOC and Emirates Airlines were also targeted to get a variety of answers and investigate differences between Etisalat and other organizations. The question appears like this:

Which organization do you work for? *

- Etisalat
- ADNOC
- Emirates Airlines
- Other

The second question target is to identify the role of the respondent in the organization. Is it a managerial level or is it a team membership level. The question is asked as follows:

Which role of the following best describes your job in the corporate? *

- Manager
- Team Leader
- Team Member

The third question is asked to get the amount of years spent by the respondents in the same role that was selected in the previous question. The question is as follows:

How long have you been working in this job? *

- Less than a year
- 1 to 5 years
- 6 to 10 years
- More than 10 years

The fourth question is a yes or no question that tries to determine whether the right person is placed in the right position or not. Some people work in areas that are not related to their studies. The question is as follows:

Does your current work matches your studies and qualifications? *

- Yes
- No

The fifth question is a sensitive one; it provides a range of satisfaction about the current tasks and activities performed by the respondents in their work. High performance teams usually need highly satisfied team members to function properly. The question goes like this:

To what extent you are satisfied with your current work and tasks? *

- Very Dissatisfied
- Not Satisfied
- Neutral
- Satisfied
- Very Satisfied

The sixth question is trying to fetch the main point the keeps the respondent from changing the current company to another one. The question lists 4 answers and the respondents must select one of them.

What makes you continue working in this organization? *

- Company reputation
- Salary & benefits
- Technical experience
- Managerial experience
- All the above

The seventh question measures the expectancy of each respondent to answer whether the company will help in improving the career path or not. Some people work just for the sake of salary or reputation of the company. This implies that some respondents

might not feel that their current work will actually improve their career path. The question is shown below:

Working in this company will improve your career path? *

Yes

No

Maybe

The eighth and last question in part 2 is to measure the loyalty of the respondents towards their companies. The scale given here is low, medium and high. Low indicates that the respondents do not care about their company and they just stay as long as they do not find other companies that offer better options like higher salary. Medium indicates that the respondents think twice before attempting to change their current company for another one that provides higher salary or has better reputation. Finally, high indicates that the respondents are loyal to their company and will always feel happy and proud of working with this company and their intendency to shift to another company is very low. The question is provided as follows:

How do you scale your loyalty to the company? *

Low

Medium

High

Part [3]: Technology awareness

This part is based on likert-scale to find out the level of technology awareness among the respondents of the questionnaire. Typically, IT staff should be having enough technology awareness. However, this question will show the degree of agreement of the respondents toward the following issues:

- Being up to date with latest IT knowledge indicate that respondents are keeping up with all available technology relating to their field or section point of interest. For example, database systems are getting updated and improved in fast pace which requires continuous up to date technology grasping to stay in shape.

- Some respondents may improve themselves by attending courses, workshops or seminars regularly.
- Having initiative to build up more knowledge is also a vital indication of technology awareness as respondents develop their own skills on their own time.
- Some respondents use their expertise in IT to help other sections in automating processes to increase efficiency and reduce time used to complete activities.
- Some respondents feel that their IT knowledge is higher than needed in their current position and they feel that they can perform more but their current tasks do not allow them to do so.
- Some managers support their employees to gain additional knowledge and expertise by sending them to courses and workshops. There are respondents who are working on the same tasks for many years without being supported by their manager to improve themselves.
- By working in a company some respondents may hear about products and services that other companies provide or support. They will try to import such systems into their company to improve the IT solutions provided by the company.

The question is provided as follows:

Please rate your technology awareness in your work field					
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
You are up to date with new IT knowledge *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You attend specialized IT courses regularly *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You eagerly develop your work skills and knowledge *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You contribute in improving your company's IT processes *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your IT knowledge is higher than needed in your job *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your manager supports you to gain more IT knowledge *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You try to bring new IT solutions to the company *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part [4]: Teams and Projects

This part has two sections, teams and projects. The **teams section** consists of thirteen questions focusing on teams in the organization of the respondents. Question 1 starts by

asking the respondents to give the range of team members that they work with. The question is as follows:

What is the size of the team that you are working with? *

- 1 - 5 team members
- 6 - 10 team members
- > 10 team members
- I don't belong to a specific team

Question 2 tries to identify the number of team members that reports to the respondents if they are managers or team leaders. If they are team members then they can select none to indicate that they actually report to a team leader. The question is presented like this:

How many team members report to you ? *

- None
- 1 - 5 team members
- 6 - 10 team members
- > 10 team members

Question 3 tries to measure the rate of the relation between respondents and their team members whether they are team leaders or team members. Having poor relation indicates that High Performance Teams can not be constructed here. The question is placed as follows:

How do you rate the relation between you and your team members ? *

- Poor
- Below Average
- Average
- Good
- Excellent

Question 4 is rather a general question than being specific. It asks the respondents for their agreement on the level of importance of teams as building blocks of any project that they work on. The question shows how important teams are for the respondents as follows:

To what extent do you agree on the importance of teams as building blocks of any project? *

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Question 5 tries to capture the level of motivation that the respondents feel among the team members of their organization. High Performance Teams requires highly motivated team members to ensure proper team environment and to prevent jealousy and hateful environments. The question appears as this:

How do you rate the motivation level among team members in your organization?

- Poor
- Below Average
- Average
- Good
- Excellent

Question 6 looks at the possibility of the effects of language and culture differences among team members. Since UAE is country with more than 80 nationalities living in it, some times it is difficult to work with other nationalities due to language or cultural differences. The question goes like this:

Does nationality and language differences have an effect on the relation between team members ?

- Yes
- No

Question 7 is meant to discover the power source that changes routes and forwards the whole team to work in a specific way. As part of the High Performance Teams, team members should alternate the leadership and management among them. In other words, if team member number 1 is more experienced in the first phase of the project then automatically he/she should be leading and guiding the team. Once the second phase starts, team member number 2 can be more suitable and thus he/she can take the lead and guide the team. This means that managing projects and decisions making must not be always from a single manager or leader. The question is given with 4 options, management, team leader, Experts and team members vote and agreement. Usually

most of the organizations in the UAE are getting their directions directly from management; however the questionnaire might prove that wrong.

Who perform the decision making process in projects ?

- Management
- Team Leader
- Experts or Consultants
- Team members' vote and agreement

Question 8 is a simple question to find out whether respondents like to work individually or with a team. People usually are afraid of working in a team due to some earlier incidents that have taken their efforts and given to others who didn't work hard in a project.

Do you like working independently or with in a group of employees(Teams)?

- Work independently
- Work in a team

Question 9 is looking at the respondents rating of the level of the proficiency of their organizations' teams. Sometimes, talented people are working in a team with people who have been routinely performing their tasks in a certain manner that prevents talented people from improving the over all progress of the project.

How do you rate the level of proficiency of your organization's teams ?

- Poor
- Below Average
- Average
- Good
- Excellent

Question 10 investigates one of the important features of High Performance Teams which is to evaluate the output of the project based on the team's overall work and not individual rating of each team member. This question will fetch the respondents' organization behaviour in evaluating the team members individually or as a whole team.

Does your organization evaluate the team's output as a whole team contribution or as an individual evaluation?

- Individual evaluation
- Whole team contribution evaluation

Question 11 looks at the respondents' opinion in rating their own team's results. This also can highlight the motivation level of the respondent as poor results means that team members are not working as a whole unit that looks forward to achieve the goals and objectives of the team.

How do you rate your team results and outcomes?

- Poor
- Below Average
- Average
- Good
- Excellent

Question 12 is meant to see the respondents' ratings against their organizations' rating towards the results and outcomes of their teams. Most organizations do not rate their teams based on their outcome however they tend to appreciate the whole department if a major accomplishment was met.

How does your organization rate the results and outcomes of your team?

- Poor
- Below Average
- Average
- Good
- Excellent

Finally in section 1 of part 3 is question 13 which is meant for respondents who are in the role of team members. Managers and team leader should select not applicable option to continue the questionnaire. This question provides a likert scale from poor to excellent. The respondents must select one of the five scales to rate the features provided about their managers. For example, some managers are excellent in distributing tasks and setting goals but they might be poor in communication with members. These manager features help in recognizing the most missed feature among managers that needs to be empowered. Needless to say that it will also point to the most powerful feature among respondents' managers.

How do you rate the following features of your team manager?
(select Not Applicable if you are a manager)

	Poor	Below Average	Average	Good	Excellent	Not Applicable
Goals and targets setting *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tasks distribution *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tasks management *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Monitoring work progress *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with members *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Listening to members *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solving issues and obstacles *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section two of this part is dedicated to projects and it provides a range of agreement levels towards statements related to projects. This question is intended to capture how respondents feel about the projects that they are involved with. For example, many respondents may feel that their project managers are not qualified enough to handle the project. This question also enables respondents to rate how the three major pillars of projects – cost, time and resources – are rated.

Please indicate your level of agreement for the following project related phrases:

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Your are in a project oriented team *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your project managers are professional *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Projects are completed on time *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Projects are completed within given budget *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Projects are completed with available resources *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experiences are used to select team members *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part [5]: High Performance Teams

This is the last part of the questionnaire which contains the most important set of questions that will indicate if a certain organization has the concept of High Performance Teams or not. It has 3 questions

The first question is to figure out whether the respondents have ever heard about the term “High Performance Teams”. Despite the fact that respondent might not have heard

about HPTs their organization may be applying all the practices that ensures the availability of those teams.

Have you ever heard about the term "High Performance Teams" ? *

Yes

No

The second question tries to pin point the fact that organizations of respondents have specific guidelines or arrangements to build suitable teams for projects. For example, for new IT project does the management understands the requirements in such a way to select suitable team members to work on it? Or is it only a normal procedure to give new projects to same people to perform it normally.

Does your organization have special arrangements for allocating teams for projects?

Yes

No

The final question is the most important set of agreements that respondents must provide. Those statements provide features and characteristics of High Performance Teams. Respondents reading those statements have two options only; either to agree or to disagree. This question will help in identifying whether HPTs are available in UAE firms like Etisalat, ADNOC and Emirates Airlines. The following is a list of all the statements:

- **Trust environment is built between team members in such away that they can say what they feel without fear ***
Most of the team members fear the consequences of criticizing their work or managers. They are afraid of being laid off or being ignored from future projects or promotions. Therefore, they prefer to stay quite and perform their tasks even though they feel that there are wrong procedures performed. To be an HPT team member, respondents must be able to express their own opinions and ideas without fear.
- **Defined guidelines and business objectives that helps the team member to be part of the firm**
This statement tries to find out if guidelines and objectives are provided upfront to the team members so that they can pick up their tasks and desired outcomes earlier

in the project life time rather than wasting most of the time in trying to get things right.

- **Availability of core values like honesty, integrity, loyalty and determination** Some values like honesty and loyalty are missing from some team members thus the whole project is getting affected by those people. To build a successful high performance team, team members must be honest and loyal to their project and organization.
- **Accepted norms and behavior where team members are empowered and provide full participation in meetings along with positive reinforcement *** Empowering team members is a vital feature of high performance teams. Team members should be able to take decisions and lead themselves based on an alternating leadership between the team members according to the more qualified team member at certain stages of the project.
- **Usage of well defined standards for continuous improvements** Having defined standards and guidelines will always help team members to refer to them when they are faced with certain situations that can normally delay the project. The benefit here is progress through the project without any issues. New issues will be thought off and they will be added to the standards for the next time. New team members who join a project can keep up quickly by understanding the standards and guidelines that the rest of the team are applying.
- **Plugged in team members where they can take the challenge to take up responsibility** Team members normally face difficulties in adjusting new employees into their projects. New candidates may require training or they might lack the responsibility towards the project. One of the main features of high performance team members is to be able to take up the challenge and responsibility of any project they get plugged into.

- **Sense of urgency and momentum where each team member builds on the ideas of the rest of the team and they work on time with seriousness in mind ***
This feature is almost missing among team members as everybody wants to push his ideas over others and normally management pushes their ideas over others and team members should perform. This also tends to lose seriousness among team members which will normally lead to project overrun its time and cost.
- **Work Life balance where the firm encourages team members to achieve success at work and at home. ***
This is a simple feature where a fair balance between home and work lives is maintained. Some organization have a specific working periods but the amount of work or critical processes forces employees to stay even longer than required without being paid for their extra time or even being appreciated for their efforts.
- **The Right DNA where team members have great ethics, eager to learn, develop their skills and passion for excellence *** Te
am members of the High Performance Team must be having great characteristics among them. For example, members must have great ethics and work with conscious to achieve the planned goals. They also must be eager and enthusiastic to learn and grasp more knowledge about their knowledge. In addition to that, skills and high level output are always being revised to improve the overall quality of the team member.
- **Members respect each other** ; HPT members must respect each other in terms of day to day interaction and being polite in communication and listening to others and discuss issues with clear vision.
- **Members trust each other** ; Trust is a vital issue that can destroy the whole team if ignored. Members of the HPT are working together to achieve desired goals. Losing trust between team members will definitely have negative effect on the project and

the other team members as groups within the same team will start to show up. One member can for example steal some ideas of his colleague and use them as his own.

- **Members protect and support each other**; Once trust and respect is maintained among team members then they will automatically start supporting and protecting each other to accomplish their targets and deadlines.
- **Members engage in open dialogue and communication**; Due to the openness between team members and having trust and respect among each other, members can talk to each other easily and with confidence. Negotiations will always be beneficial and healthy to the project. Discussions and brain storming session are fruitful.
- **Members share a strong common goal**; The ultimate goal of the HPT is to complete the project on time, within budget and with available resources efficiently. They all work with one goal in their mind that they have decided on it at the start of the project.
- **Members have strong shared values and beliefs**; The HPT team members must always have a common belief of their desire and ultimate outcome of working together.
- **Members subordinate their own objectives to those of the team**; Working for the team's objective is the dominant idea in HPTs. Members must not use the team to achieve their own goals and benefits. They must give up on their personal benefits for those that will strengthen the team to achieve goals and tasks.
- **Members subscribe to distributed leadership**; Leadership should not be monopolized with higher management all the time. The idea with the HPTs is to give the opportunity of leadership to the most appropriate candidate for the currently

executed task or process. Once this process is completed, the next stage could be more suitable for another member who can lead the team to achieve better results and outcomes.

The whole question looks like this:

To indicate if your organization have High Performance Teams (HPTs), please indicate wither any of the following HPTs features are available:		
	Agree	Disagree
Trust environment is built between team members in such away that they can say what they feel without fear *	<input type="radio"/>	<input type="radio"/>
Defined guidelines and business objectives that helps the team member to be part of the firm *	<input type="radio"/>	<input type="radio"/>
Availability of core values like honesty, integrity, loyalty and determination *	<input type="radio"/>	<input type="radio"/>
Accepted norms and behavior where team members are empowered and provide full participation in meetings along with positive reinforcement *	<input type="radio"/>	<input type="radio"/>
Usage of well defined standards for continuous improvements *	<input type="radio"/>	<input type="radio"/>
Plugged in team members where they can take the challenge to take up responsibility *	<input type="radio"/>	<input type="radio"/>
Sense of urgency and momentum where each team member builds on the ideas of the rest of the team and they work on time with seriousness in mind *	<input type="radio"/>	<input type="radio"/>
Work Life balance where the firm encourages team members to achieve success at work and at home. *	<input type="radio"/>	<input type="radio"/>
The Right DNA where team members have great ethics, eager to learn, develop their skills and passion for excellence *	<input type="radio"/>	<input type="radio"/>
Members respect each other *	<input type="radio"/>	<input type="radio"/>
Members trust each other *	<input type="radio"/>	<input type="radio"/>
Members protect and support each other *	<input type="radio"/>	<input type="radio"/>
Members engage in open dialogue and communication *	<input type="radio"/>	<input type="radio"/>
Members share a strong common goal *	<input type="radio"/>	<input type="radio"/>
Members have strong shared values and beliefs *	<input type="radio"/>	<input type="radio"/>
Members subordinate their own objectives to those of the team *	<input type="radio"/>	<input type="radio"/>
Members subscribe to distributed leadership	<input type="radio"/>	<input type="radio"/>

3.5 Distribution and results collection

The distribution of the questionnaire was based on an online website that offers free account for students for research purposes. The web site is www.questionpro.com . After building the whole questionnaire online, the website generates a unique web link for this specific questionnaire. The link was spread over almost 70 persons over three main organizations: Etisalat, ADNOC and Emirates Airlines. Most of the targeted people were from Etisalat. Some additional people from other organization were sent an invitation to contribute in the questionnaire. The direct link to participate in the questionnaire is: <http://www.questionpro.com/akira/TakeSurvey?id=1130377>.

Here is a copy of the sent e-mail to the participants:

Hello,

Your help is required to complete a questionnaire about "High Performance Teams in the UAE". This is part of an MSc program in project management. I am an MSc student in British University in Dubai and I am studying Project Management. In order for me to complete my studies and graduate, I have to complete a dissertation in Project Management. I have chosen you to help me by completing the following questionnaire which will take almost 15 minutes of your valuable time.

The questionnaire requires an Internet connection; you can access the questionnaire by clicking [here](#).

If you don't have an Internet connection please forward this mail to your own mail and open it from home, this is the URL link:

<http://www.questionpro.com/akira/TakeSurvey?id=1130377>

Once the participants open the questionnaire link they will see a welcoming page with step by step instructions on how to advance through it. The online system provided by "QuestionPro" automatically saves the results of the respondents into a database. From the Reports section in the website a complete Microsoft Excel sheet of raw data of all the questions and answers are provided to the author of the questionnaire. In addition to that, an instant online track of the number of respondents who completed the questionnaire is available. Moreover, detailed information is given for each question like the average answer and the mean values.

3.6 Summary

This chapter described the method used to perform a research study for High Performance Teams in organizations in the UAE. It was decided that a questionnaire is going to be used due to its various advantages. An online questionnaire was developed and distributed over almost 70 people in 3 main organizations in the UAE.

The online questionnaire was built using a commercial company that provides free access to its questionnaire system for students who are working on research universities. Results collection was through downloading the whole raw responses of all respondents as a Microsoft Excel file.

In this chapter also, every question was discussed and explained to point out the purpose and the meaning of the results.

Chapter 4
[Research Analysis]
&
[Results]

Chapter 4 – Research Analysis & Results

4.1 Overview

This chapter concentrates on the results obtained from the questionnaire explained in the previous chapter. An in depth analysis of the response of each question will be covered here. In addition to that, overall analysis and results will be provided to investigate how teams operate in the UAE in different organizations like Etisalat, ADNOC and Emirates Airlines.

4.2 Overall Participants Statistics

Since the questionnaire was hosted on an online web site that provides instant access to the result at any time, it was easy to grab an over all participant statistics which shows the number of people who have contributed in the questionnaire.

Looking at the following table:

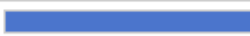
Completes	
Viewed	114
Started	<u>79</u>
Completed	<u>58</u>
Completion Rate	 73.42%
Dropout/Terminates	
Drop Outs (After Starting)	<u>21</u>

Table 4.1 – Completed responses

It is obvious that the number of people who have opened the link to the questionnaire is about 114 respondents. Out of those only 79 respondents started answering the questionnaire. Unfortunately, only 58 respondents out of 79 have completed the entire questionnaire.

In addition to that, more detailed information about each response has been collected also. For example, the maximum time spent by a respondent to complete the whole questionnaire was almost 1.8 hours which indicates that the respondent was not

focusing on the questionnaire since most of the responses were having an average time of 17 minutes only. The fastest respondent has completed the entire questionnaire in almost 4.1 minutes.

4.3 Detailed questionnaire results and analysis

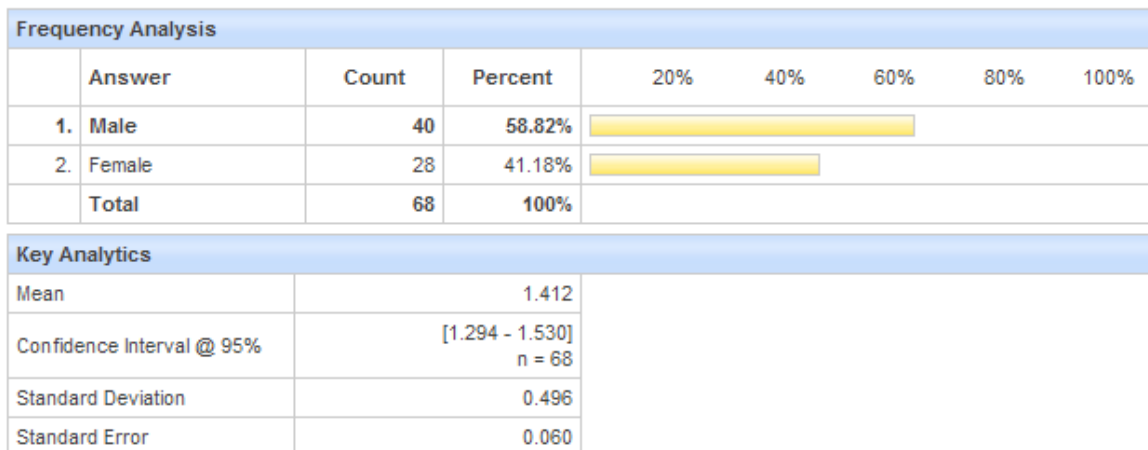
This section contains all the obtained results that show the most selected answers, percentages of each selection, mean value, confidence interval, standard deviation and standard error.

4.3.1 Part [1]: General Details

Part 1 of the questionnaire was intended to collect general information about the respondents like their gender and age range. The following are the questions along with the obtained results and supported by explanation were required.

Q1 –

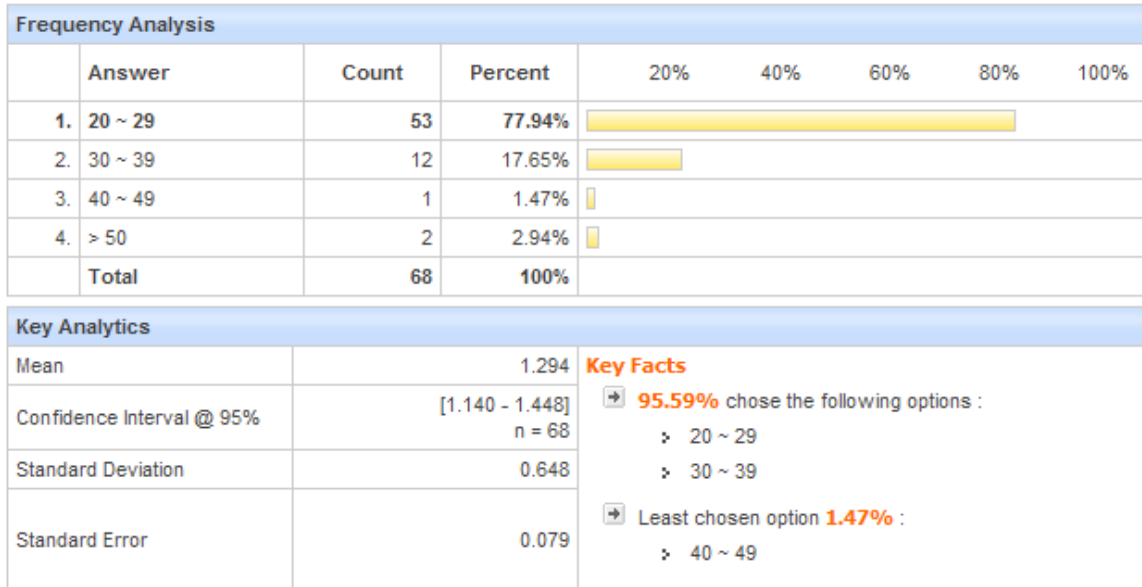
Please select your gender:



Knowing the gender of the respondent is not that much important but it helped in giving an overall picture of the dominant gender in IT sections in organizations in the UAE. From the above chart it is obvious that males count reached to 40 respondents while females were reaching 28 respondents. This indicates that there is almost a balance between the two groups.

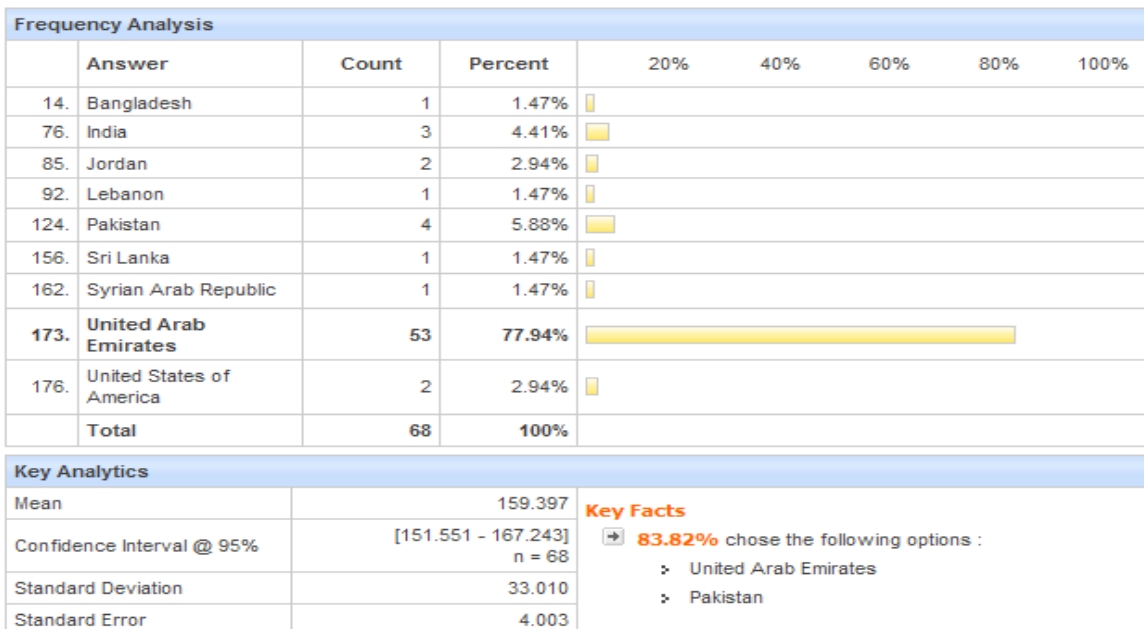
Q2 –

Please select your age range:



The age level question showed that almost 78% of the respondents were in their twenties of age. This means that most of them might have completed 3 to 5 years of experience in their job just right after graduation from colleges. In addition to that, 17.65% of the respondents were in the range of their thirties. The rest of the respondents were in the forties and fifties of their age range.

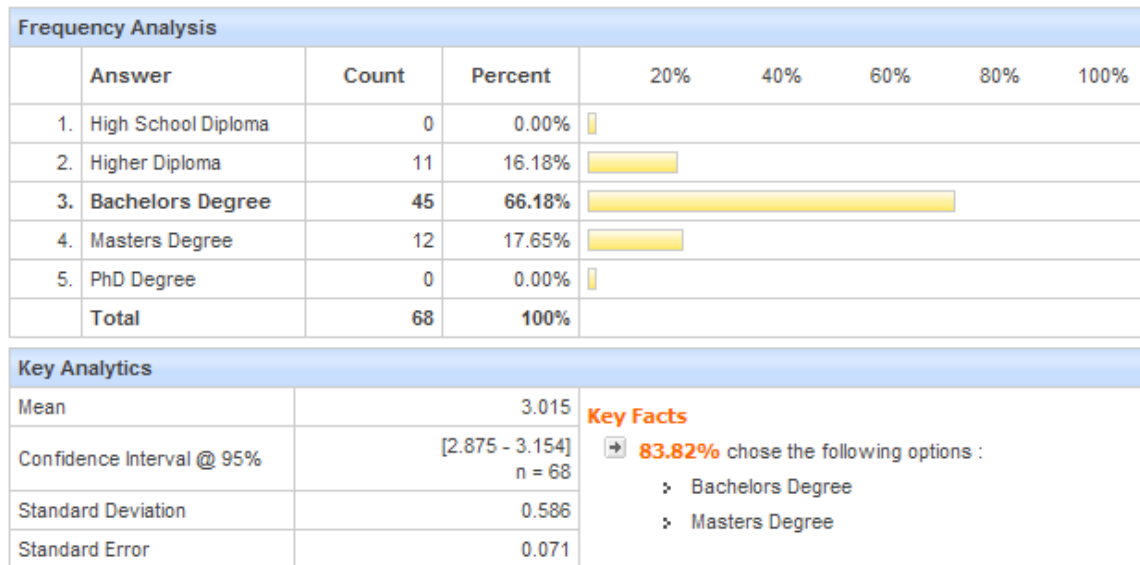
Q3 –



Although the questionnaire was sent to many people in the IT department in Etisalat, ADNOC and Emirates Airlines, many of the respondents who were targeted were from the UAE nationality. That is why almost 78% of the respondents are from the UAE. Whereas respondents from other countries also participated in the questionnaire in the remaining percentage of 28% from India, Pakistan, Jordan and others as listed in the above chart. One of the major issues that faced this questionnaire is that people were afraid of this questionnaire. They think that they are telling unnecessary information that might threaten their position in the organization. Most of those people are from Asian countries like India and Pakistan. Although, 90% of the employees in Etisalat’s IT department are from India and Pakistan, their responses were limited to 7 people only.

Q4 –

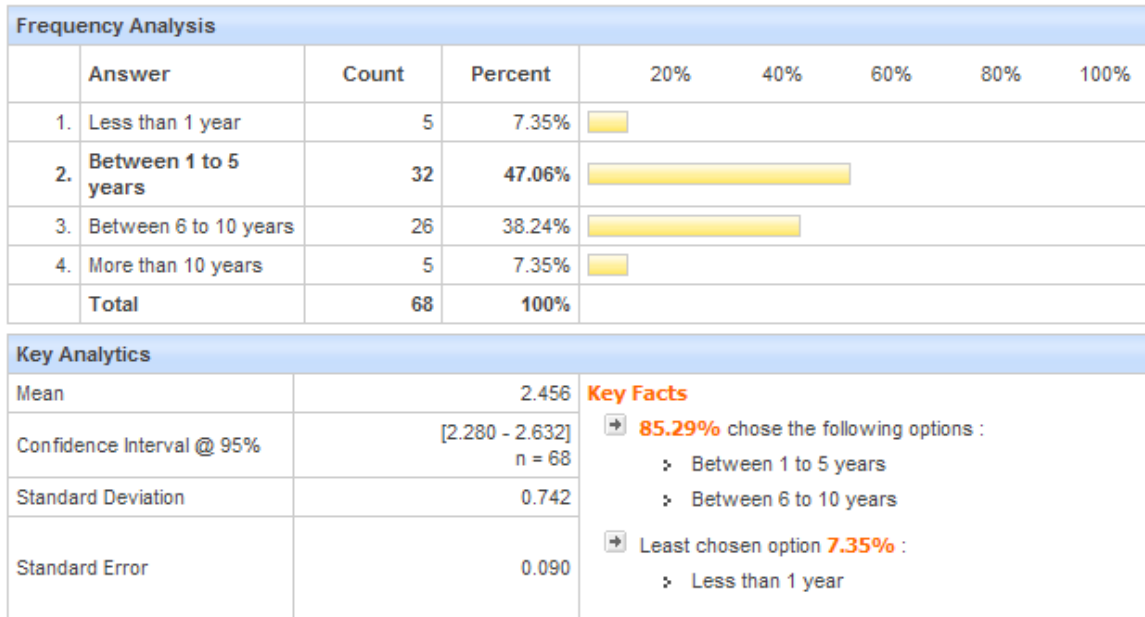
Please select your education level:



Having a bachelor’s degree is the dominant selection for the education level question with almost 66% of the total respondents. Only 17% were having master’s degree while the rest 16% were having a higher diploma.

Q5 –

Please specify your working experience in the current company:

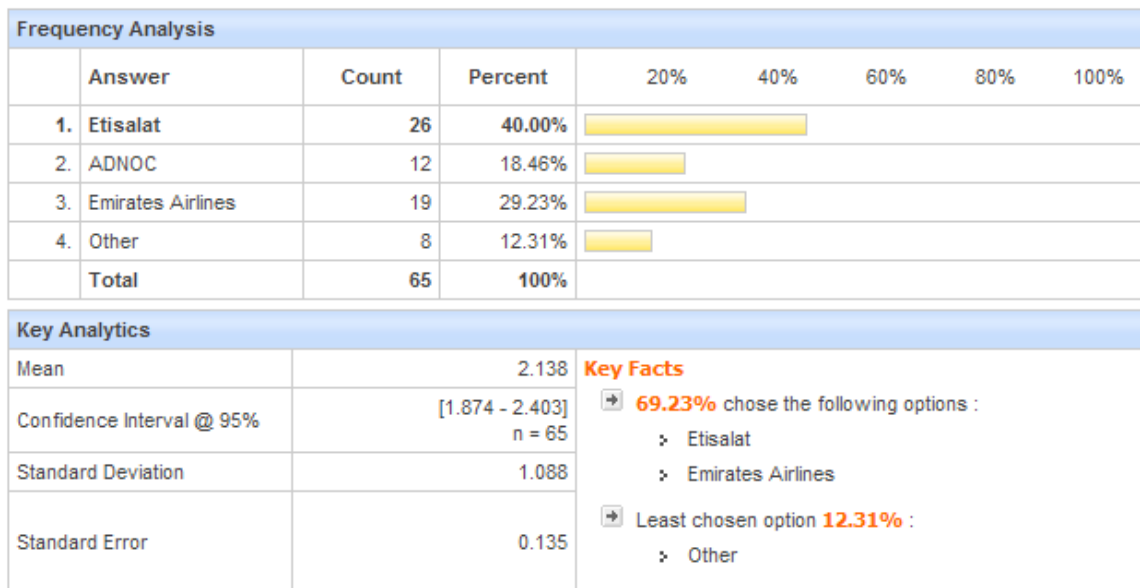


As expected from the age range question, 47% of the respondents were having an experience range of 1 to 5 years. A percentage of 38% was for the next range of 6 to 10 years. Only 7% of the respondents were having more than 10 years of experience.

4.3.2 Part [2]: Work Details

Q1 –

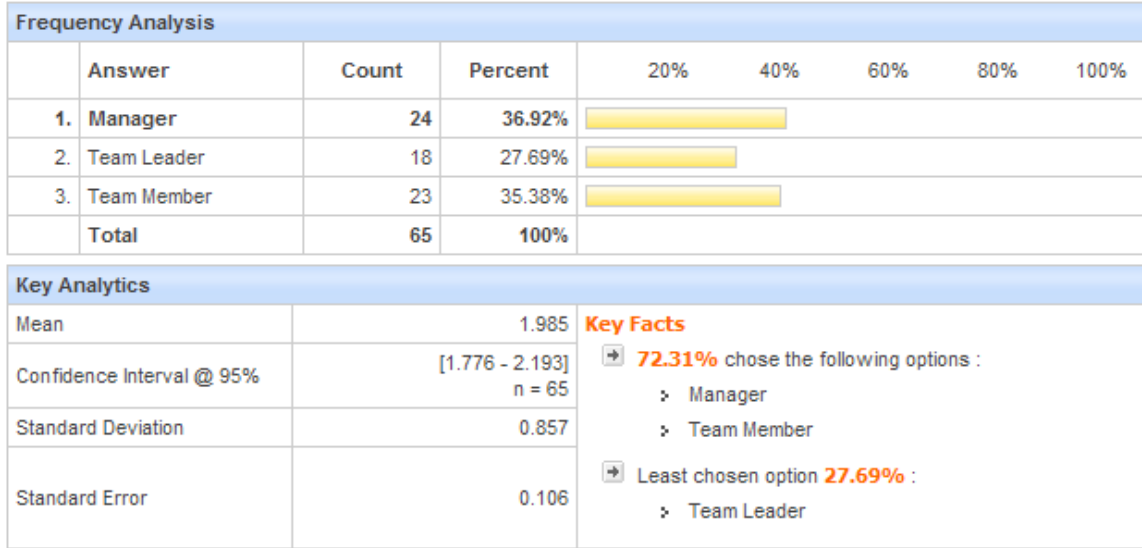
Which organization do you work for?



Most of the respondents were from Etisalat with 40% since they were targeted by this questionnaire. Emirates Airlines also showed enough responses of 30% which indicates that they were more interactive and encouraging such questionnaires. ADNON was the least with only 18% of the respondents as most of the employees there are afraid of filling anything online.

Q2 –

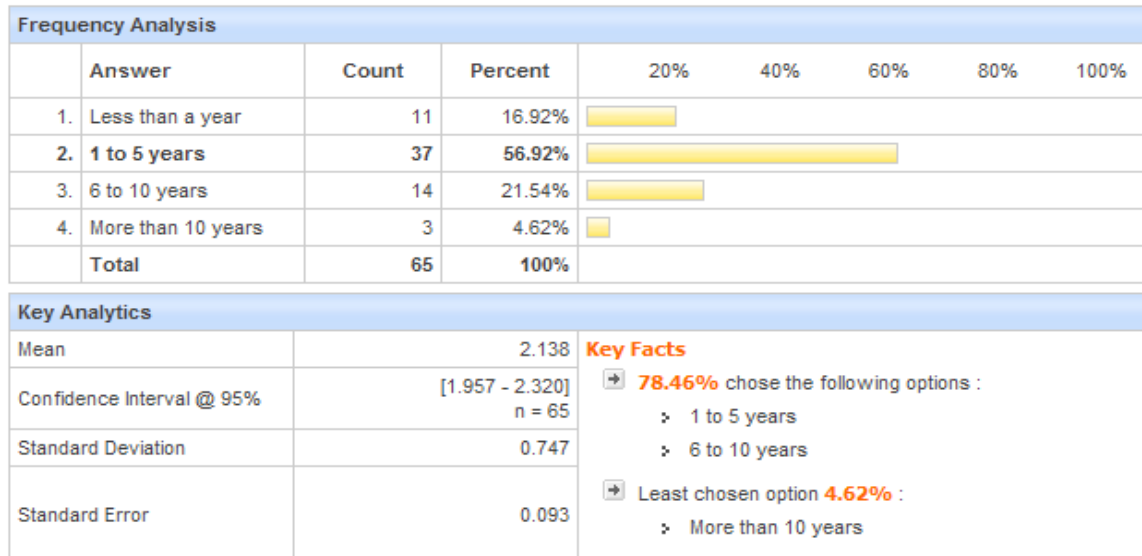
Which role of the following best describes your job in the corporate?



Most of the respondents were either managers or team leaders while the remaining 35% were team members.

Q3 –

How long have you been working in this job?



Once again, based on the age range and work experience it was obvious that the range of years spent on the respondent’s current job is between 1 to 5 years which is almost 57% of the total responses.

Q4 –

Does your current work matches your studies and qualifications?

Frequency Analysis								
	Answer	Count	Percent	20%	40%	60%	80%	100%
1.	Yes	47	72.31%					
2.	No	18	27.69%					
	Total	65	100%					

Key Analytics	
Mean	1.277
Confidence Interval @ 95%	[1.167 - 1.387] n = 65
Standard Deviation	0.451
Standard Error	0.056

Surprisingly, 27.7% of the respondents were having qualifications that do not match to their current work tasks while the remaining 72.3% are matching.

Q5 –

To what extent you are satisfied with your current work and tasks?

Frequency Analysis								
	Answer	Count	Percent	20%	40%	60%	80%	100%
1.	Very Dissatisfied	3	4.62%					
2.	Not Satisfied	9	13.85%					
3.	Neutral	16	24.62%					
4.	Satisfied	33	50.77%					
5.	Very Satisfied	4	6.15%					
	Total	65	100%					

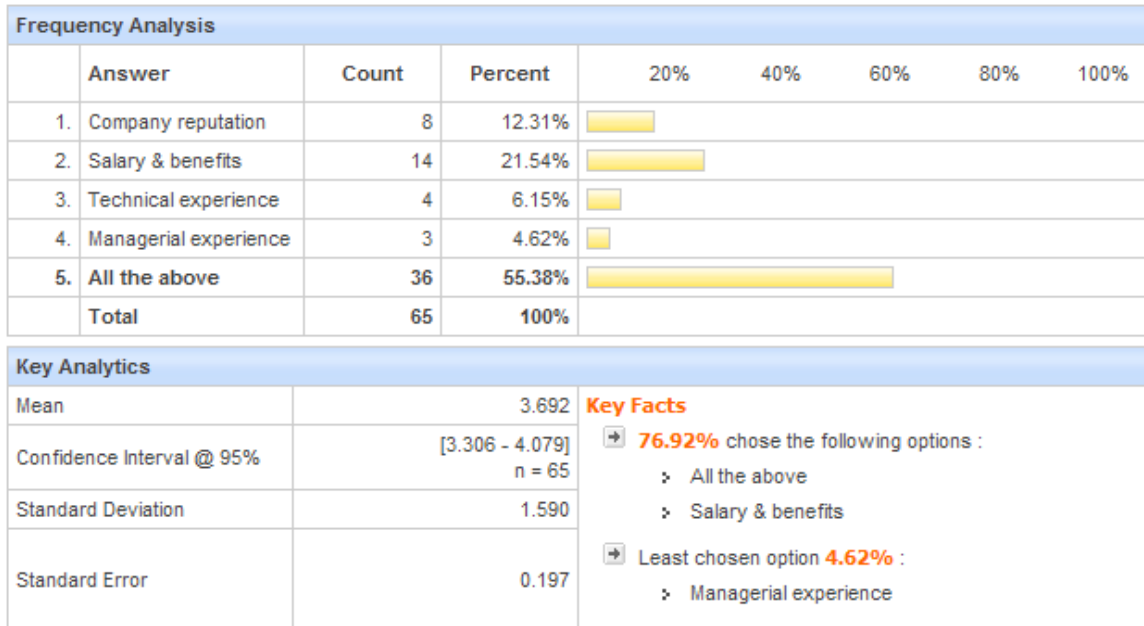
Key Analytics	
Mean	3.400
Confidence Interval @ 95%	[3.165 - 3.635] n = 65
Standard Deviation	0.965
Standard Error	0.120

Key Facts	
→	75.38% chose the following options : <ul style="list-style-type: none"> ✦ Satisfied ✦ Neutral
→	Least chosen option 4.62% : <ul style="list-style-type: none"> ✦ Very Dissatisfied

Almost 50% of the respondents feel that they are satisfied with their current work and tasks whereas 4.6% were very dissatisfied. The above chart shows the rest of the selected answers.

Q6 –

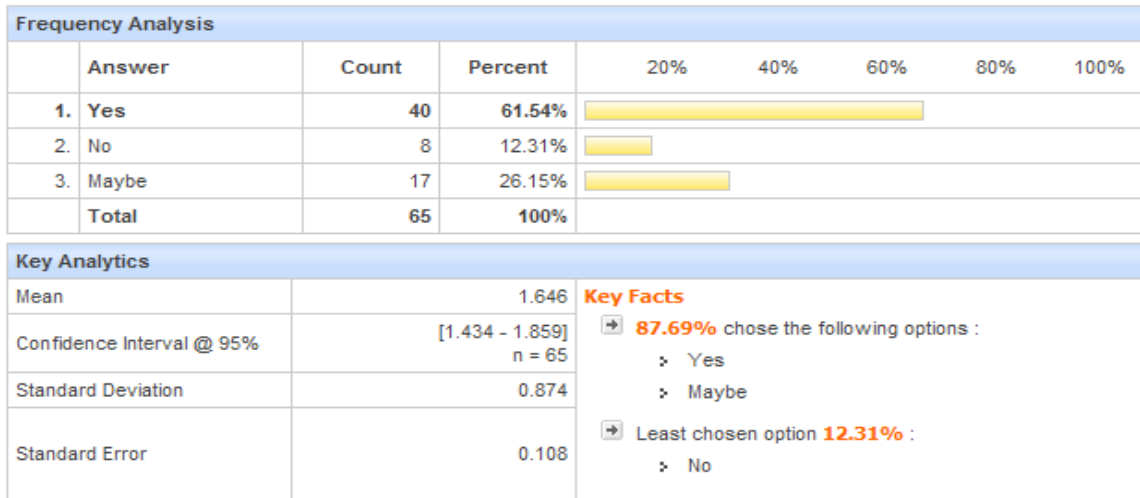
What makes you continue working in this organization?



As a consequent question of the previous one, 50% of the respondents chose to be satisfied of their current job and this question explains why they continue to work in their current organization whether they are satisfied or dissatisfied. It was obvious that most of the respondents were staying for all the provided reasons whereas 21.5% of the respondents are staying in the same organization just because of the salary and benefits. Nearly 10% of the respondents are concerned with technical and managerial experiences.

Q7 –

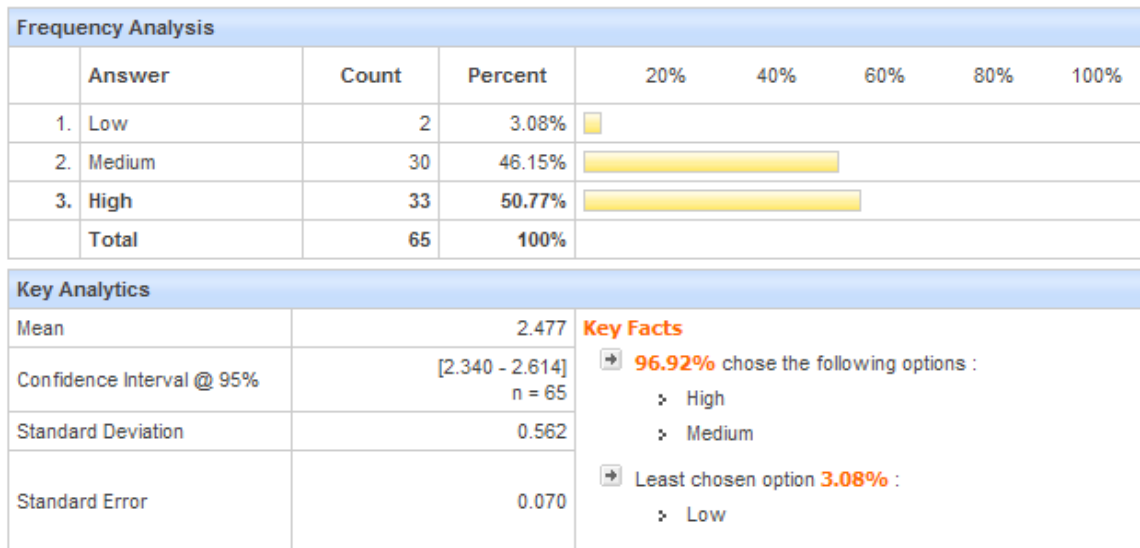
Working in this company will improve your career path?



61.54% of the respondents answered with “yes” for this question which indicates that people are convinced that their current work is helping them in building a successful career path.

Q8 –

How do you scale your loyalty to the company?



Between high and medium, respondents chose to be loyal to their own organization. The remaining 3% strangely chose to have low loyalty to their own organizations.

4.3.3 Part [3]: Technology Awareness

Q1 – This question focuses on the technology awareness of respondents. It contains 7 statements with the respondents to choose their level of agreements. The following chart shows the total responses for the whole 7 statements. More detailed results for each statement are provided also.

Please rate your technology awareness in your work field

Overall Matrix Scorecard				
	Question	Count	Score	Strongly Disagree Disagree Undecided Agree Strongly Agree
1.	You are up to date with new IT knowledge	65	3.723	
2.	You attend specialized IT courses regularly	65	2.954	
3.	You eagerly develop your work skills and knowledge	65	3.877	
4.	You contribute in improving your company's IT processes	65	3.538	
5.	Your IT knowledge is higher than needed in your job	65	3.200	
6.	Your manager supports you to gain more IT knowledge	65	3.200	
7.	You try to bring new IT solutions to the company	65	3.292	
Average			>3.398	

Q2 –

You are up to date with new IT knowledge

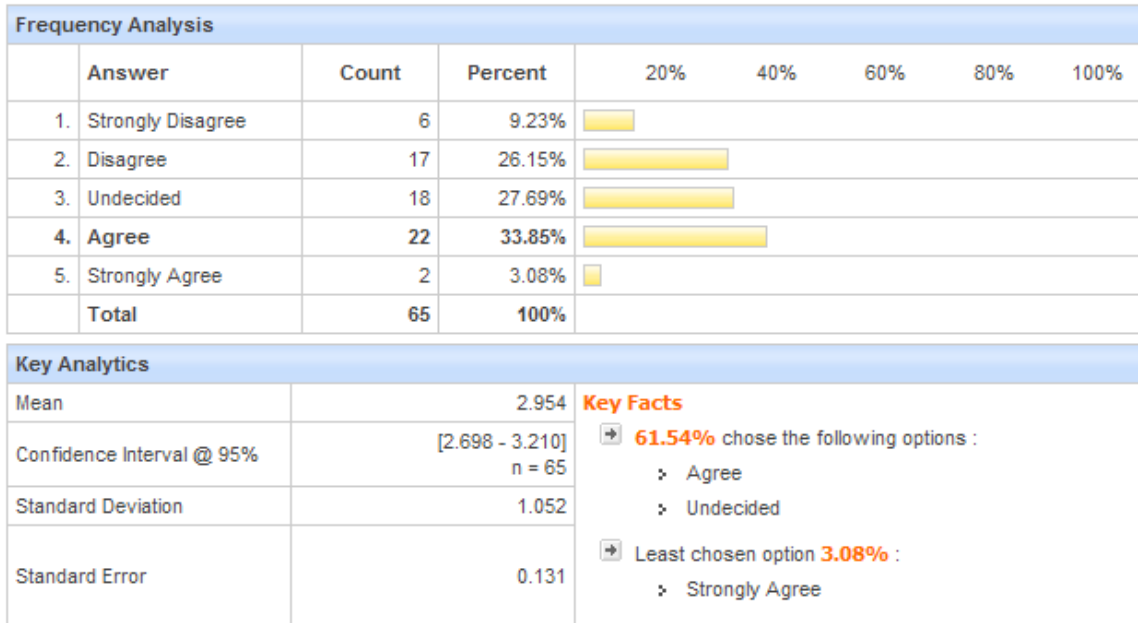
Frequency Analysis				
	Answer	Count	Percent	20% 40% 60% 80% 100%
1.	Strongly Disagree	0	0.00%	
2.	Disagree	8	12.31%	
3.	Undecided	10	15.38%	
4.	Agree	39	60.00%	
5.	Strongly Agree	8	12.31%	
Total		65	100%	

Key Analytics		
Mean	3.723	Key Facts 75.38% chose the following options : > Agree > Undecided
Confidence Interval @ 95%	[3.519 - 3.927] n = 65	
Standard Deviation	0.839	
Standard Error	0.104	

Most of the respondents – 60% - agreed on the fact that they are up to date with the latest IT knowledge. 12.3% strongly agreed on this while the rest were either undecided or disagreed on the fact that they follow up latest IT news and knowledge.

Q3 –

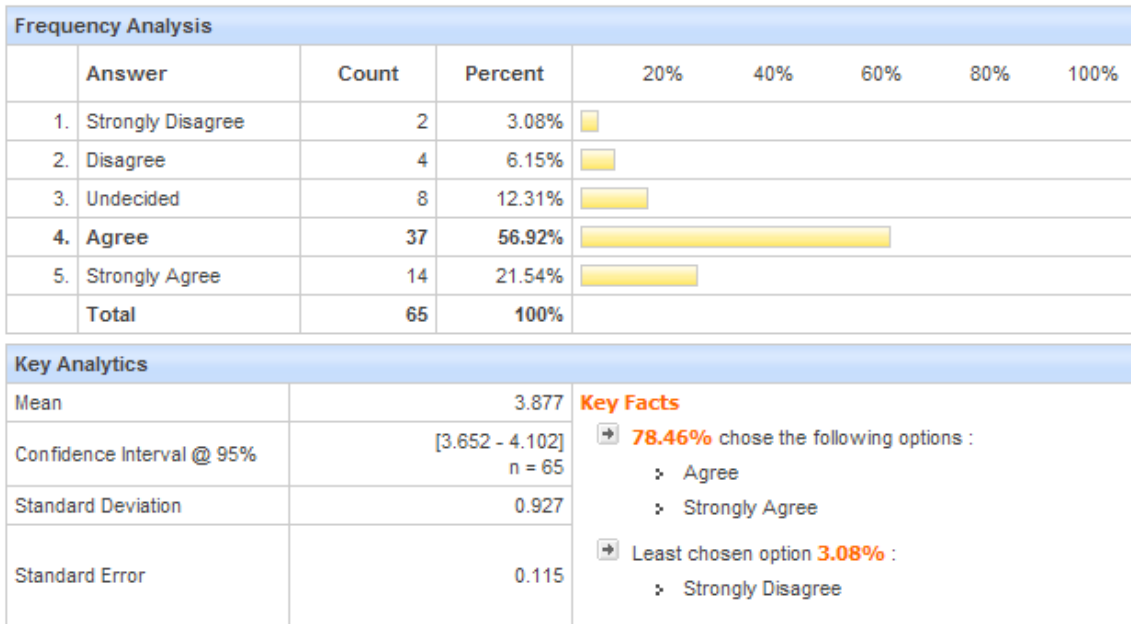
You attend specialized IT courses regularly



Attending specialized IT courses regularly is not common among the respondents as more than 65% have chosen to disagree or undecided. Almost 37% of the respondents agreed on attending courses that will enrich their IT knowledge and expertise. This result indicates that most people either they do not care for courses or their management do not consider offering them courses to enhance their IT level.

Q4 –

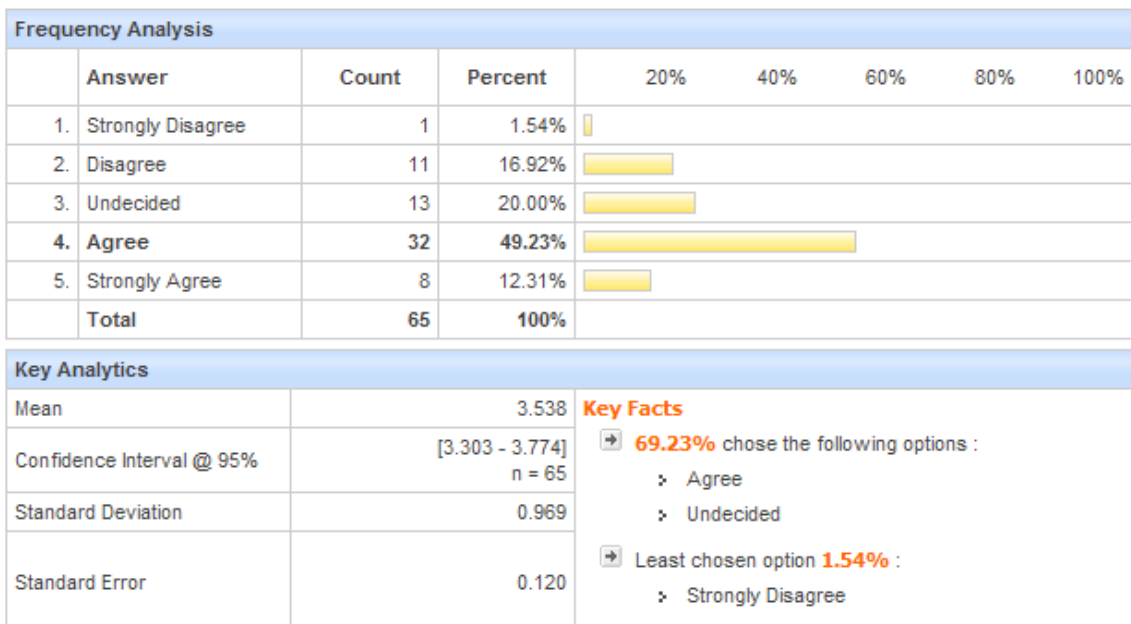
You eagerly develop your work skills and knowledge



If the respondents have disagreed to have courses regularly then they must be developing themselves in terms of developing their own skills and knowledge. The result of this question proved that more than 77% of the respondents have agreed on this statement which implies that employees are aware of their knowledge needs.

Q5 –

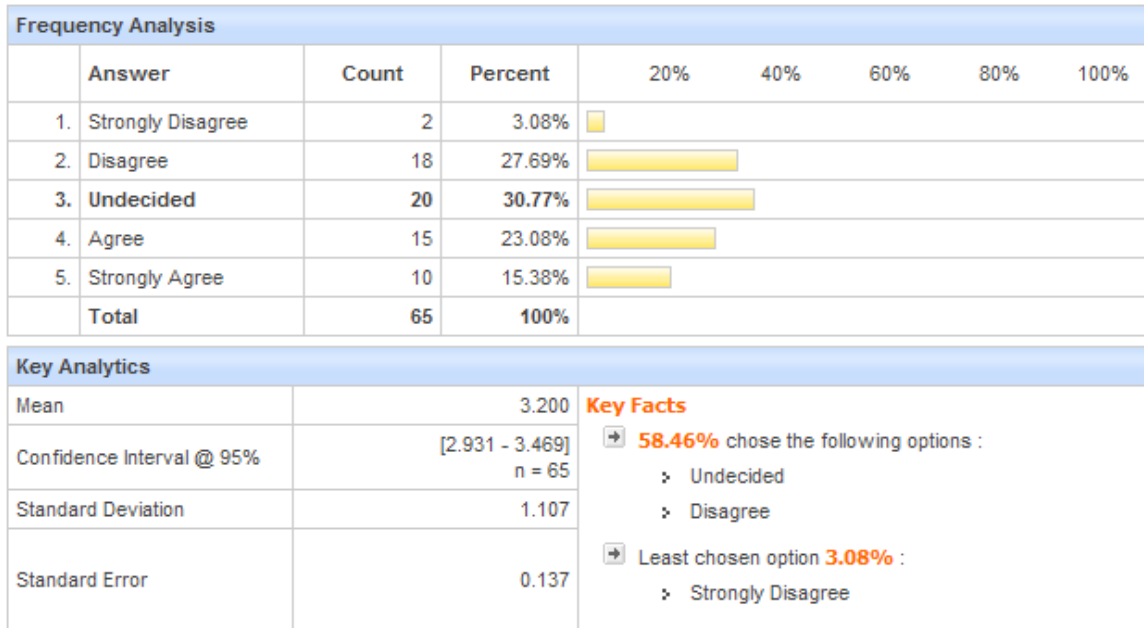
You contribute in improving your company's IT processes



More than 60% of the respondents agreed on this statement where they contribute in improving their organization’s IT processes.

Q6 –

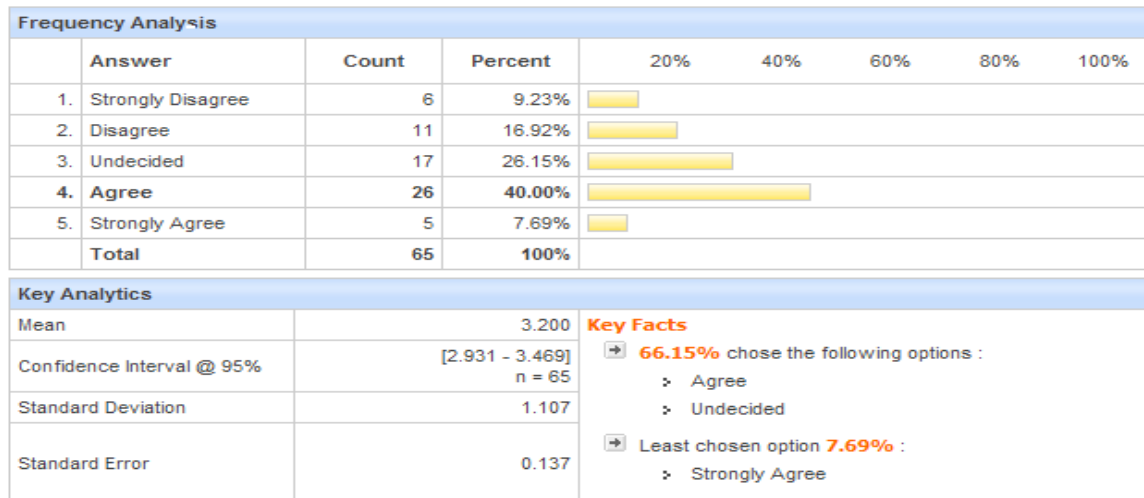
Your IT knowledge is higher than needed in your job



Some respondents think their IT knowledge is higher than their current position or assigned work. Others think that their level of knowledge is either enough or just a little bit behind. Almost all answers are quite average and in the range between 20% ~ 30% as can be seen in the above chart.

Q7 –

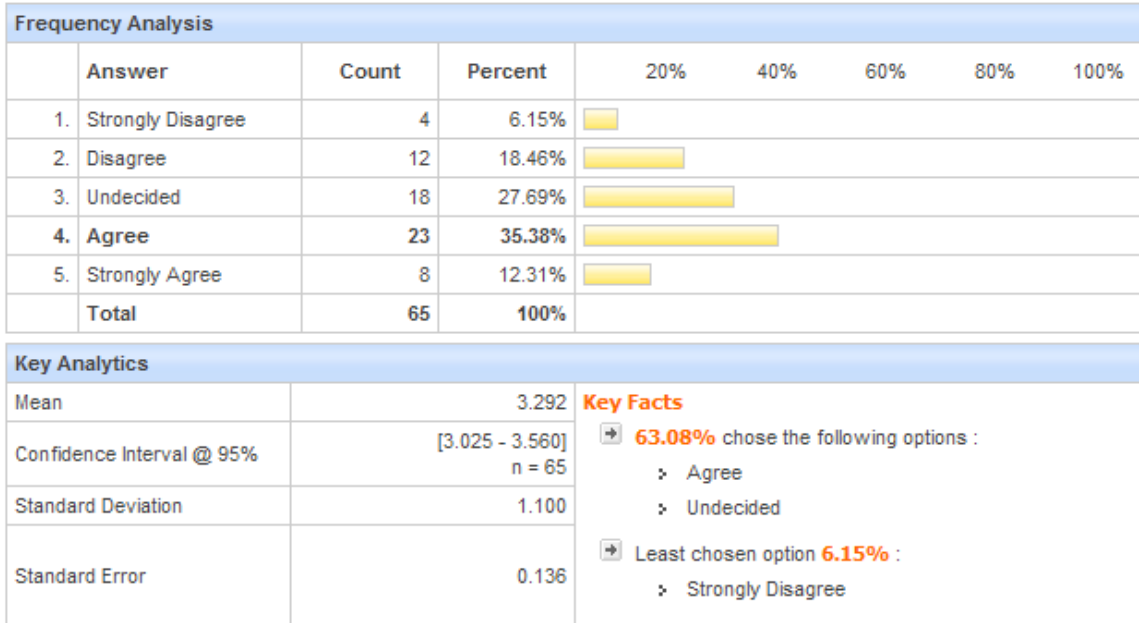
Your manager supports you to gain more IT knowledge



Some managers do not care about their staff and never plans a map for their development. But our respondents of more than 47% agreed on the fact that their manager supports their development in IT knowledge. While almost 53% of the respondents are disagreeing or uncertain of the situation.

Q8 –

You try to bring new IT solutions to the company



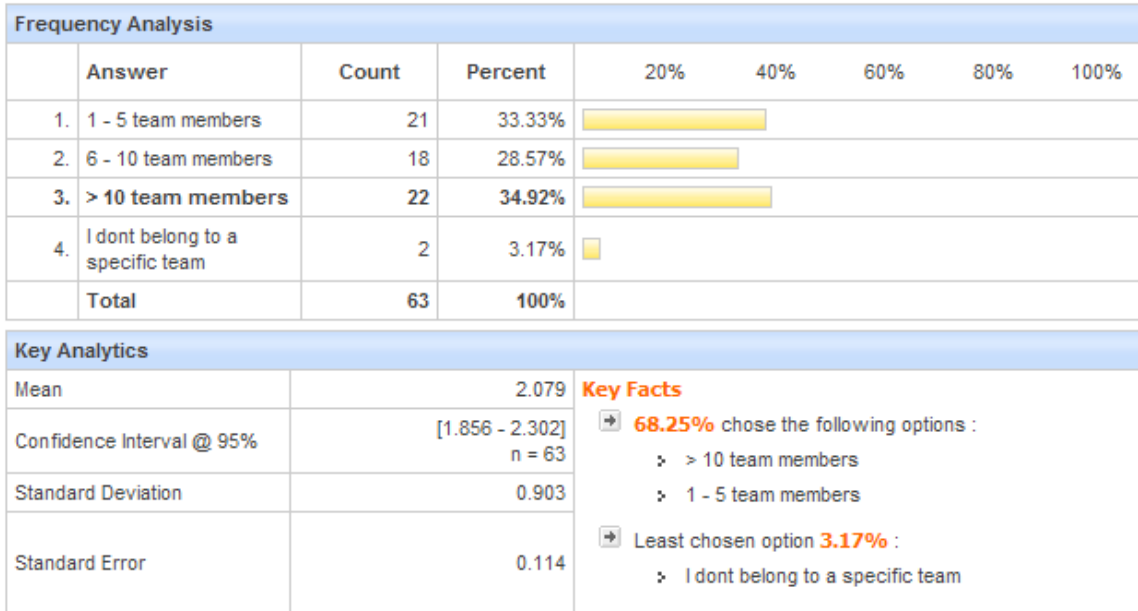
This question is to investigate whether respondents contribute in bringing new IT solutions to the company like suggesting new HR systems to the organization and helping the company to implement it. 47% of the respondents agreed on this statement while the rest just disagree which is quite obvious since it is difficult for normal employees to convince the management to take new systems.

4.3.4 Part [4]: Teams & Projects

4.3.4.1 Teams

Q1 –

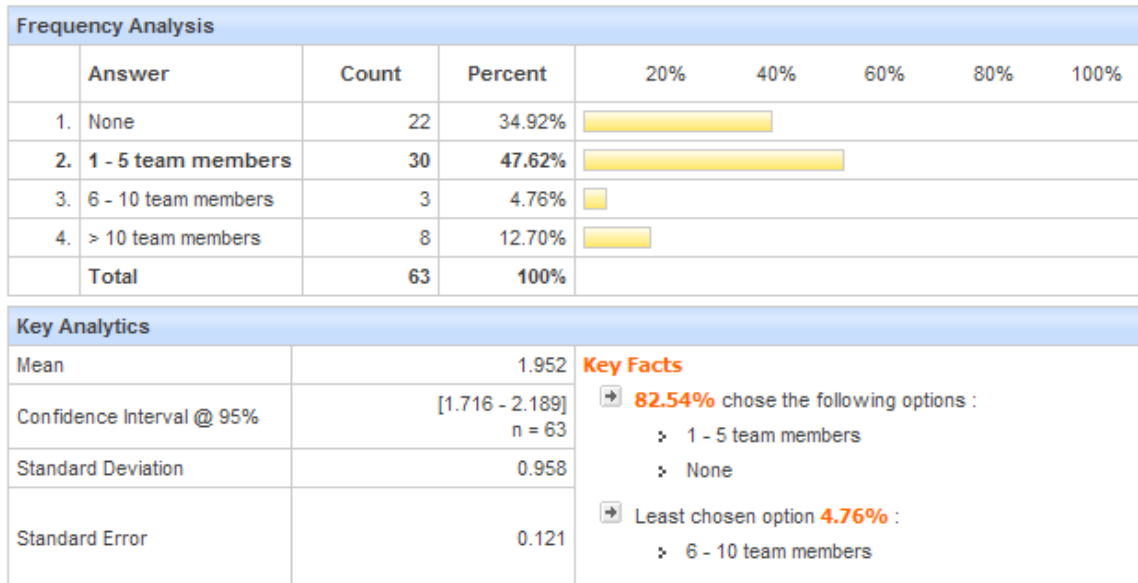
What is the size of the team that you are working with?



There are only 3.17% of the respondents who do not belong to a specific team while the rest are ranging between the provided ranges in the question as can be seen in the chart above.

Q2 –

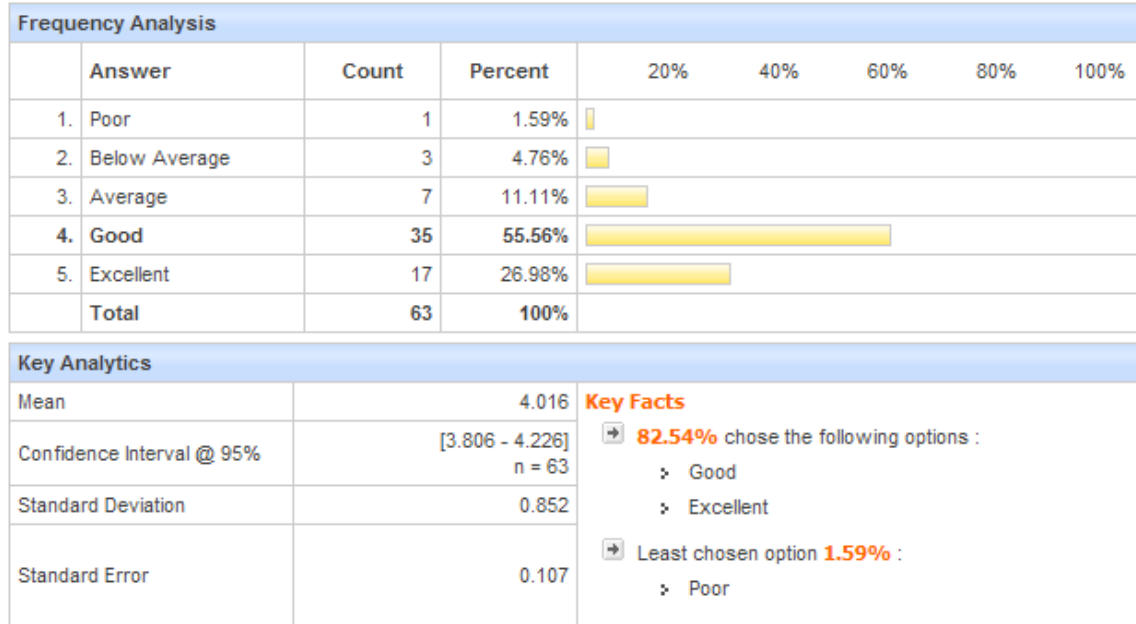
How many team members report to you ?



34.92% of the respondents seemed that they are normal team members who do not have staff reporting to them. On the other hand, almost 50% of the people were having between 1 to 5 team members reporting to them. 12.7% of the respondents have more than 10 team members reporting to them.

Q3 –

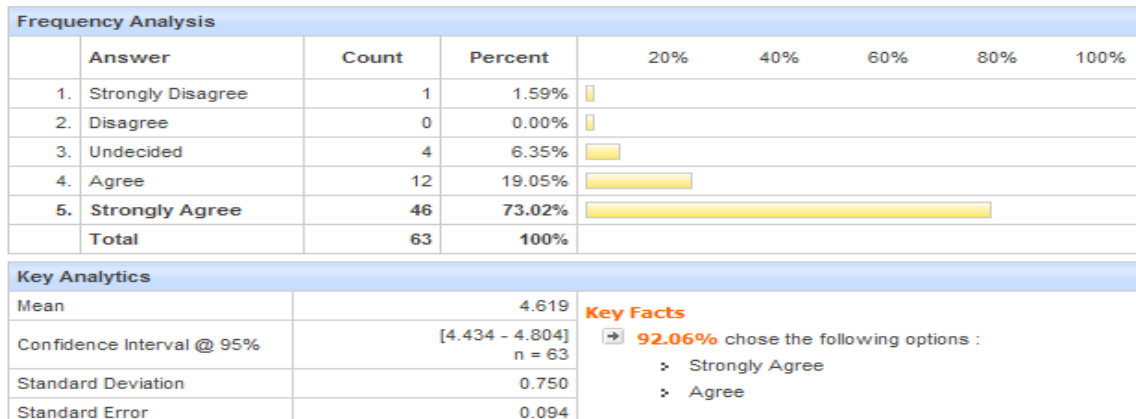
How do you rate the relation between you and your team members ?



Most of the relations between respondents and their team members were good and excellent. Only a small factor of the respondents was choosing an average, below average and poor relations with team members with a percentage of 16%.

Q4 –

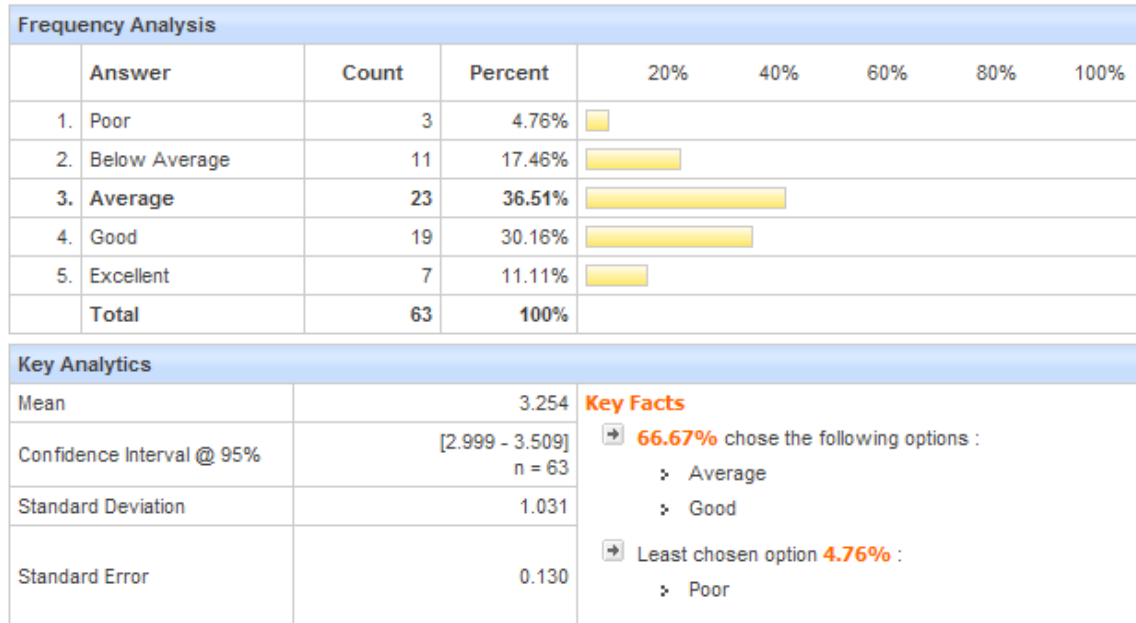
To what extent do you agree on the importance of teams as building blocks of any project?



94% of the respondents believe that teams are vital for the success of any project, that is why most of them have chosen either agree or strongly agree. There is an odd case with one respondent who strongly disagrees with teams being important in projects.

Q5 –

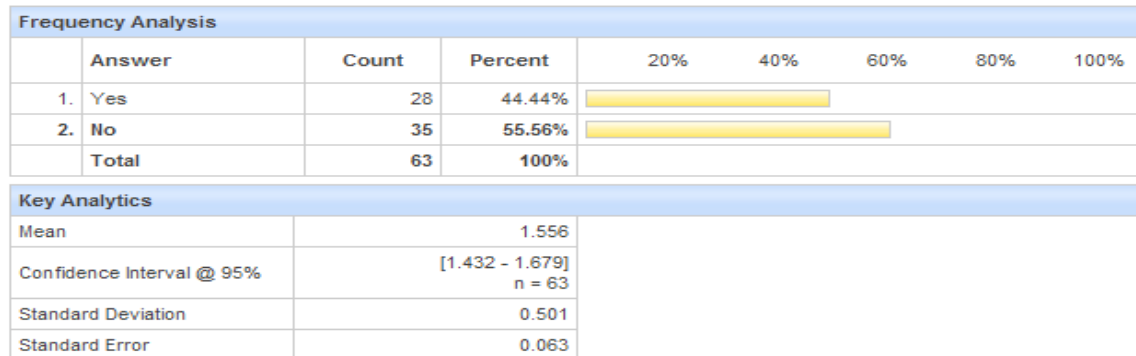
How do you rate the motivation level among team members in your organization?



Motivation is measured differently among people. Some might see motivation as more salary or more benefits. Others might see it as more friendly relation with management and the rest of the team members. In this question, respondents rated the level of motivation as average with 36.5% of the responses. Only 11.11% rated it as excellent. The remaining percentages can be seen in the provided chart.

Q6 –

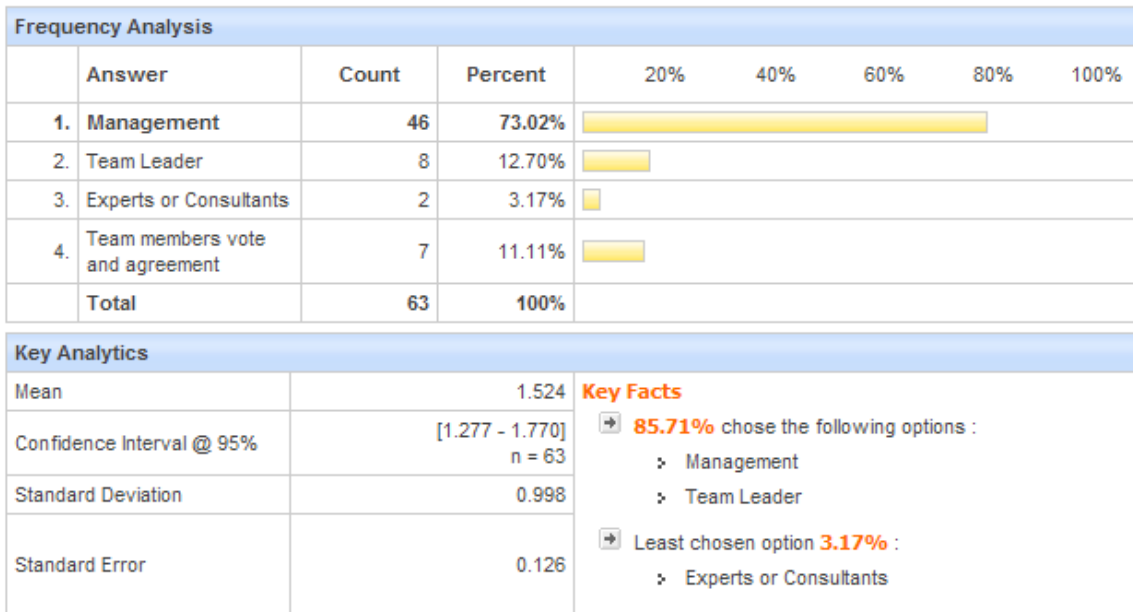
Does nationality and language differences have an effect on the relation between team members ?



Due to the highly mixed cultures in the United Arab Emirates, people of different languages and cultures are dealing with each other in projects. The question aims at finding out whether language and culture affects the relation between team members. The result shows that almost 55.5% of the respondents answered no which means that they are not feeling any problems in working with others from different cultures. On the other hand, almost 45% are accepting this fact.

Q7 –

Who perform the decision making process in projects ?



Since most of the organizations in the UAE are based on higher management and their active role in moving things around, respondents were asked who usually makes decisions. It was obvious that almost 73% of the respondents selected management as the dominant source of decision making. As a High Performance Team, the team member shall be working together to achieve the best decisions that will direct the whole project toward success. Amazingly, 11% of the respondents confirmed that team members are the ones who make the decisions.

Q8 –

Do you like working independently or with in a group of employees(Teams)?

Frequency Analysis				
	Answer	Count	Percent	
1.	Work independently	5	7.94%	
2.	Work in a team	58	92.06%	
	Total	63	100%	

Key Analytics	
Mean	1.921
Confidence Interval @ 95%	[1.853 - 1.988] n = 63
Standard Deviation	0.272
Standard Error	0.034

This question was intended to see if there is actually team members who like to work alone. The results of this question showed that around 8% of the respondents like to work independently while the remaining 92% like to work in groups and teams.

Q9 –

How do you rate the level of proficiency of your organization's teams ?

Frequency Analysis				
	Answer	Count	Percent	
1.	Poor	2	3.17%	
2.	Below Average	4	6.35%	
3.	Average	19	30.16%	
4.	Good	28	44.44%	
5.	Excellent	10	15.87%	
	Total	63	100%	

Key Analytics	
Mean	3.635
Confidence Interval @ 95%	[3.403 - 3.867] n = 63
Standard Deviation	0.938
Standard Error	0.118

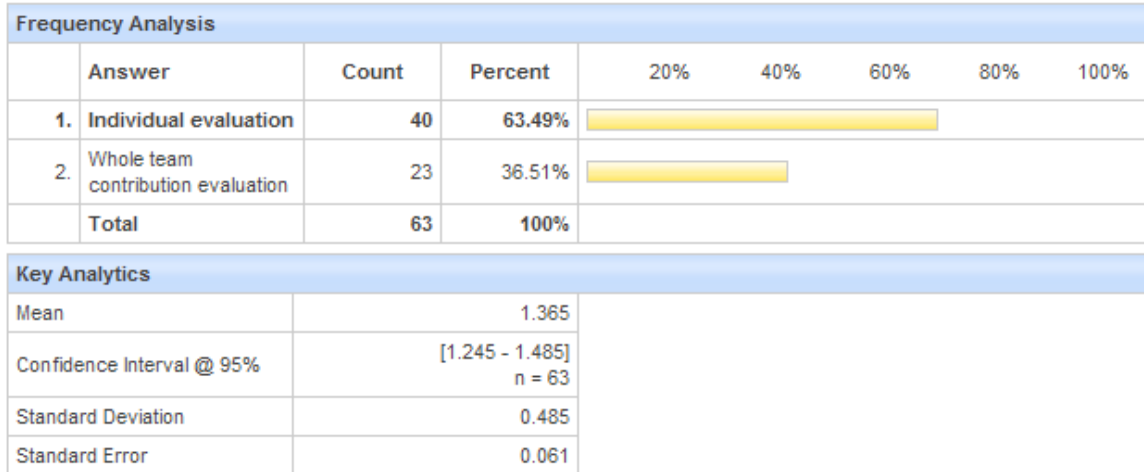
Key Facts	
<ul style="list-style-type: none"> ➔ 74.6% chose the following options : ➤ Good ➤ Average 	
<ul style="list-style-type: none"> ➔ Least chosen option 3.17% : ➤ Poor 	

Level of proficiency helps in knowing whether team members are able to provide quality results. The output of this question showed that 44.44% of the respondents decided that the level of

proficiency is good. 15% selected excellent proficiency level. The remaining majority selected average and minority selected poor and below average as shown in the chart above.

Q10 –

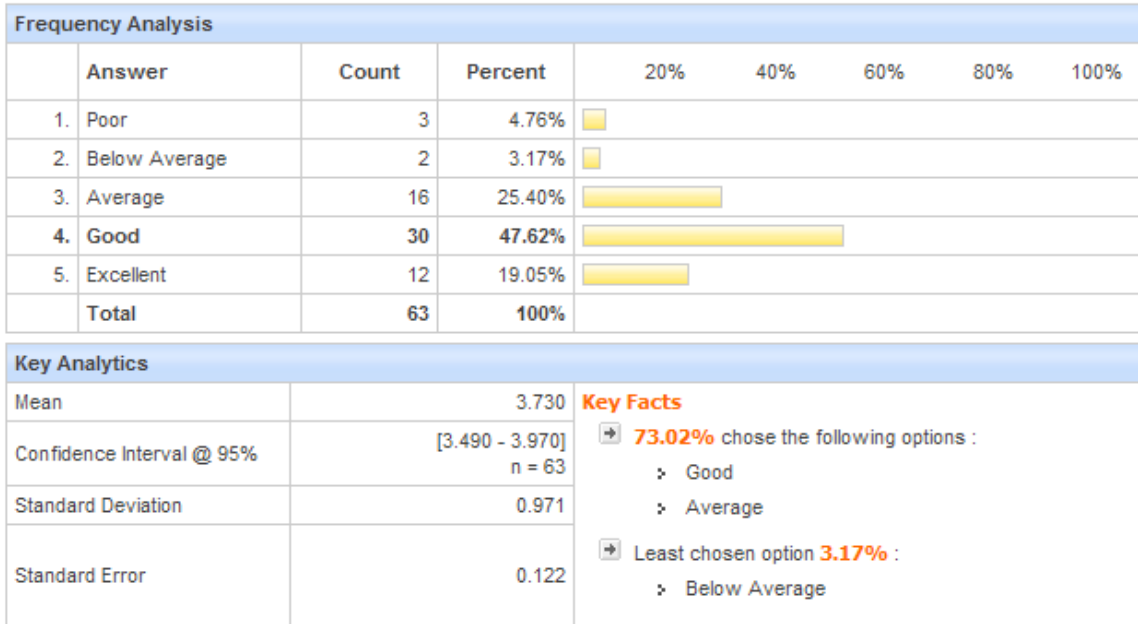
Does your organization evaluate the team's output as a whole team contribution or as an individual evaluation?



One of the major points of the HPTs is that teams are usually evaluated based on their final output and not by what each individual or team member has contributed. The team should be treated as one unit as everybody has worked together to achieve the final targets. Unfortunately, most of the answers - around 64% - selected individual evaluation as an answer. However, there are almost 36% of the respondents who answered that they are evaluated as the whole team contribution.

Q11 –

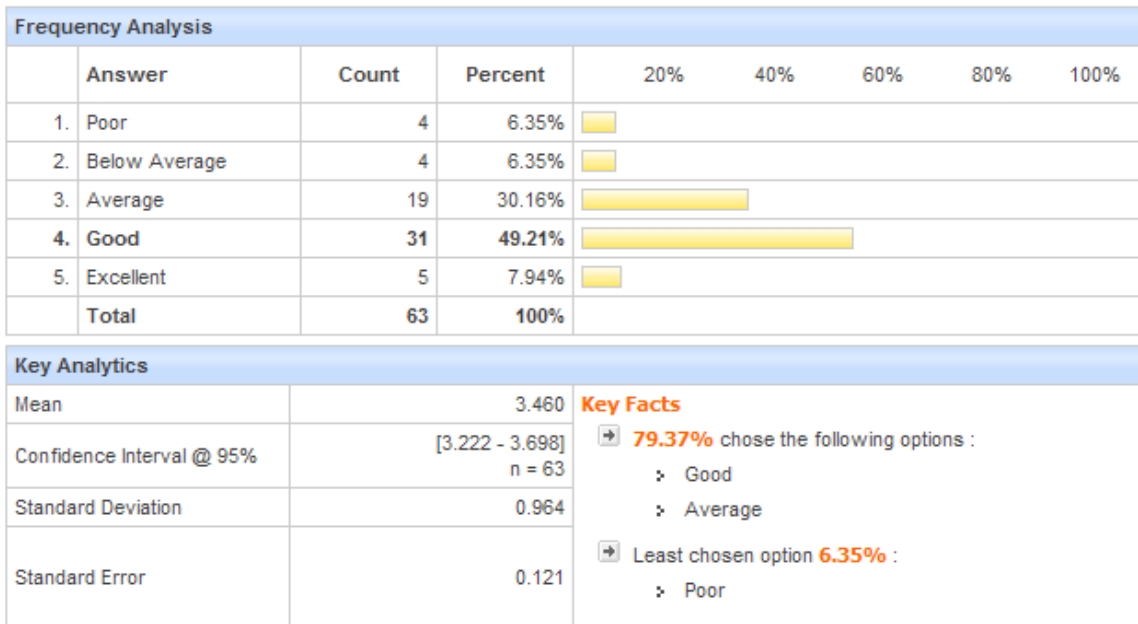
How do you rate your team results and outcomes?



As a team member or manager, respondents were asked to rate the results of their own team. 48% of the respondents selected good and another 25% selected average. Excellent rating was selected by almost 19% of the respondents.

Q12 –

How does your organization rate the results and outcomes of your team?



The same question was asked again but with the rating of the organization to the output of teams. Respondents responded to this question with almost 50% to a rating of good. The remaining of the selection can be seen in the provided chart.

Q13 –

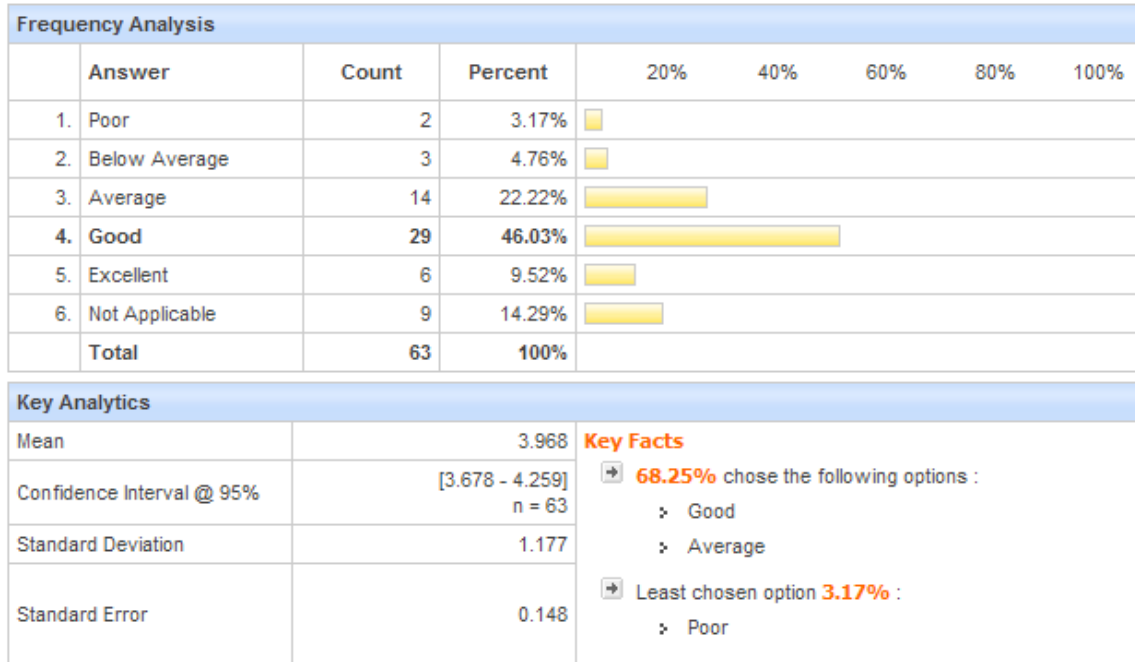
The next question shows a list of features of managers and the respondents who belong to team members' category must answer it. This question shows how team members rate their managers. The provided chart shows a compact view of the responses. The detailed results will follow after it.

How do you rate the following features of your team manager?
(select *Not Applicable* if you are a manager)

Overall Matrix Scorecard										
	Question	Count	Score	Poor	Below Average	Average	Good	Excellent	Not Applicable	
1.	Goals and targets setting	63	3.968							
2.	Tasks distribution	63	4.032							
3.	Tasks management	63	3.937							
4.	Monitoring work progress	63	4.095							
5.	Communication with members	63	4.127							
6.	Listening to members	63	4.111							
7.	Solving issues and obstacles	63	4.127							
Average			>4.057							

Q14 –

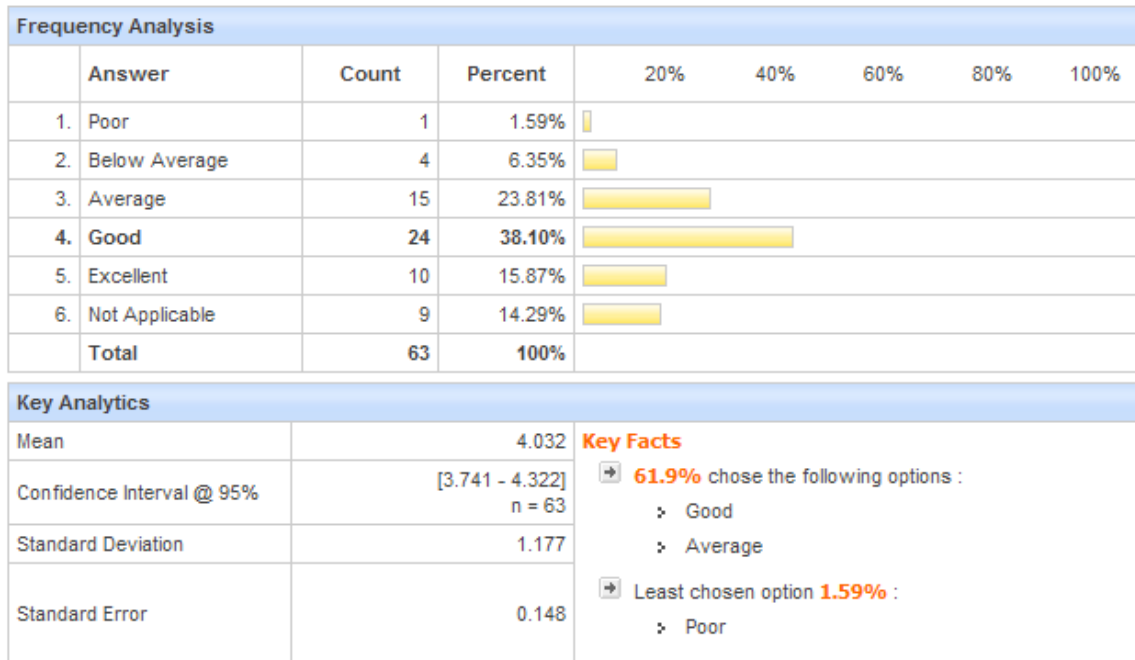
Goals and targets setting



46% of the respondents selected good for setting goals and targets. Another 22.2% selected average. This indicates that most of the managers are actually good in setting goals.

Q15 –

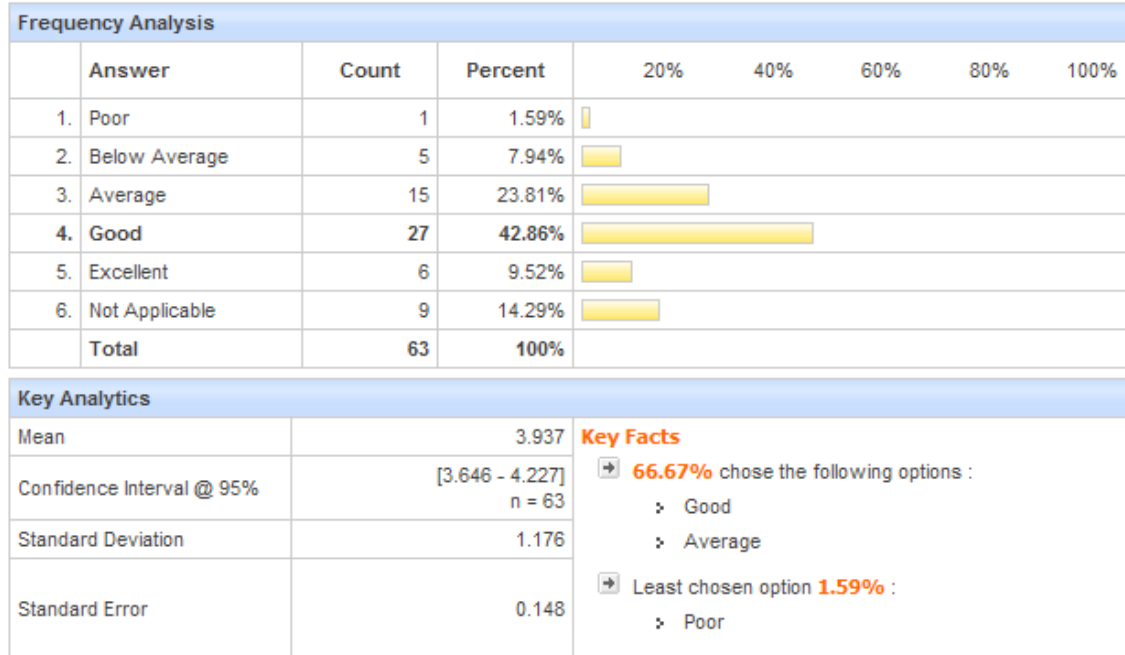
Tasks distribution



Distributing tasks is not easy among the team members as some managers might feel more comfortable with some members over others. Therefore, 53% of the respondents selected good and excellent to indicate that they are satisfied with the task distribution. Average and below average were having almost 30% of the total respondents.

Q16 –

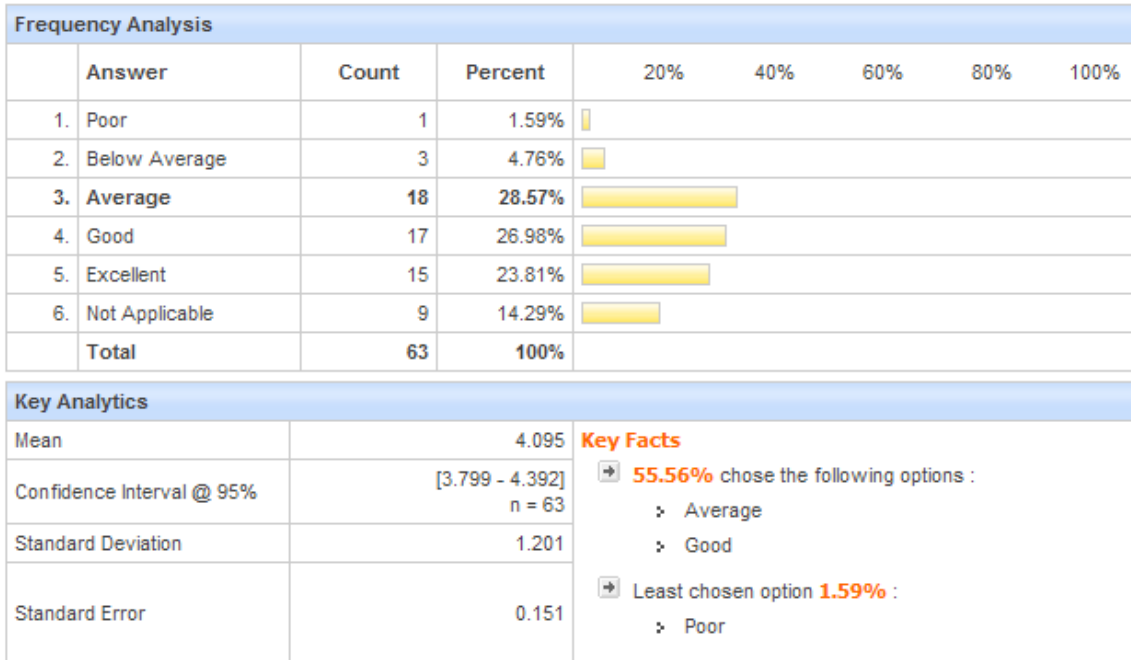
Tasks management



Managing tasks is also important in the life of the project while managing teams. Team members must feel that their manager is following up with them all the time so that they can feel safe that their own work is counted for them and not for others. In this question, most of the responses were in the range of average, good and excellent while there is a percentage of 10% who feel that there managers are poor or below average in managing tasks.

Q17 –

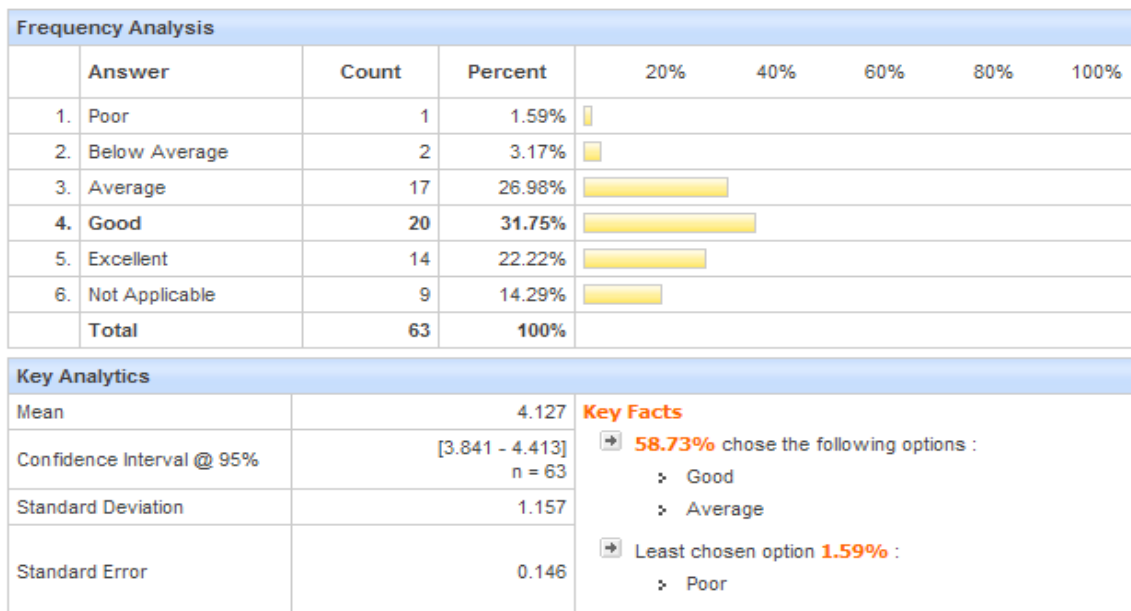
Monitoring work progress



Monitoring work progress is vital to ensure that the project is moving smoothly and according to the plan. Most of the respondents' answers were around average, good and excellent with a total percentage of almost 80%.

Q18 –

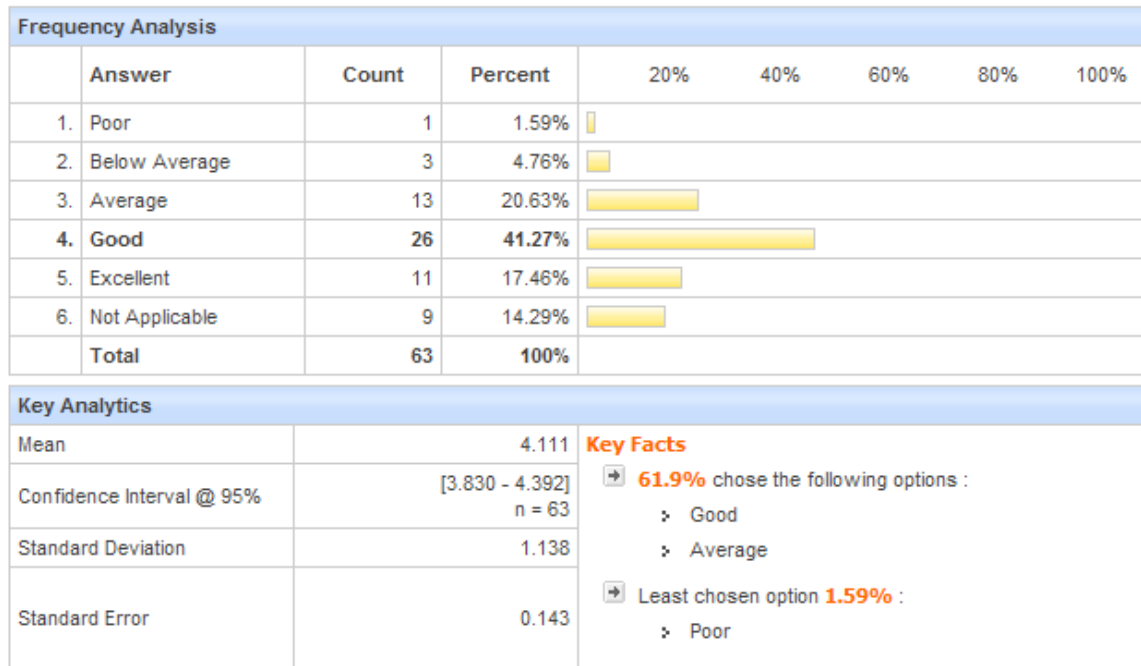
Communication with members



One of the most important skills of the managers is to communicate with their team members regularly to maintain the good relation between them. 32% of Respondents felt that their managers are quite good communicators. Good percentage of 22% find their managers as excellent communicators while a minority portion of 5% feel that their managers do not communicate will enough.

Q19 –

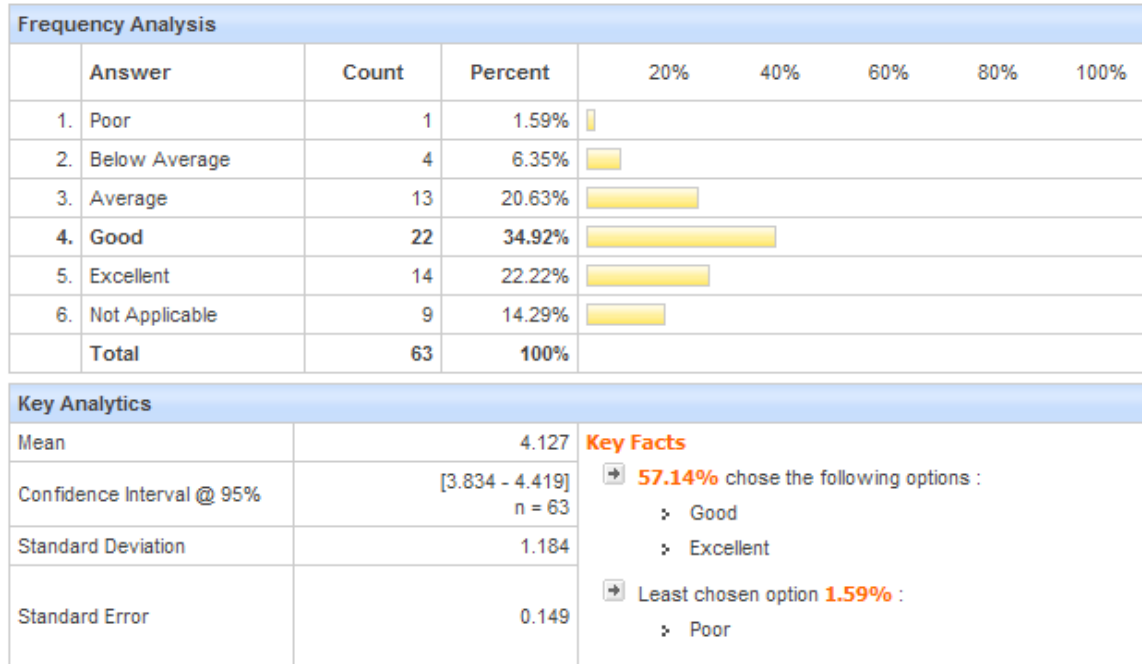
Listening to members



Listening to members and their concerns is one of the good points that managers should be having. 41.2% of the total respondents agreed on their managers and rated them as good listeners. Only 5% rated them as not good listeners.

Q20 –

Solving issues and obstacles



Solving issues and obstacles helps managers to quickly move the project to continue executing without being interrupted for any issues. 35% of the respondents felt that their managers are good in resolving issues. Another 22% has rated managers as excellent.

4.3.4.2 Projects

Q1 –

The next set of questions provides project related statements and requests the respondents to rate their agreements with them. The below provided chart shows the results for all questions in general while the next set of charts will provide more details.

Please indicate your level of agreement for the following project related phrases:

Overall Matrix Scorecard				
	Question	Count	Score	Strongly Disagree Disagree Undecided Agree Strongly Agree
1.	Your are in a project oriented team	63	3.556	
2.	Your project managers are professional	63	3.397	
3.	Projects are completed on time	63	2.937	
4.	Projects are completed within given budget	63	3.270	
5.	Projects are completed with available resources	63	3.429	
6.	Experiences are used to select team members	63	3.444	
Average			>3.339	

Q2 –

Your are in a project oriented team

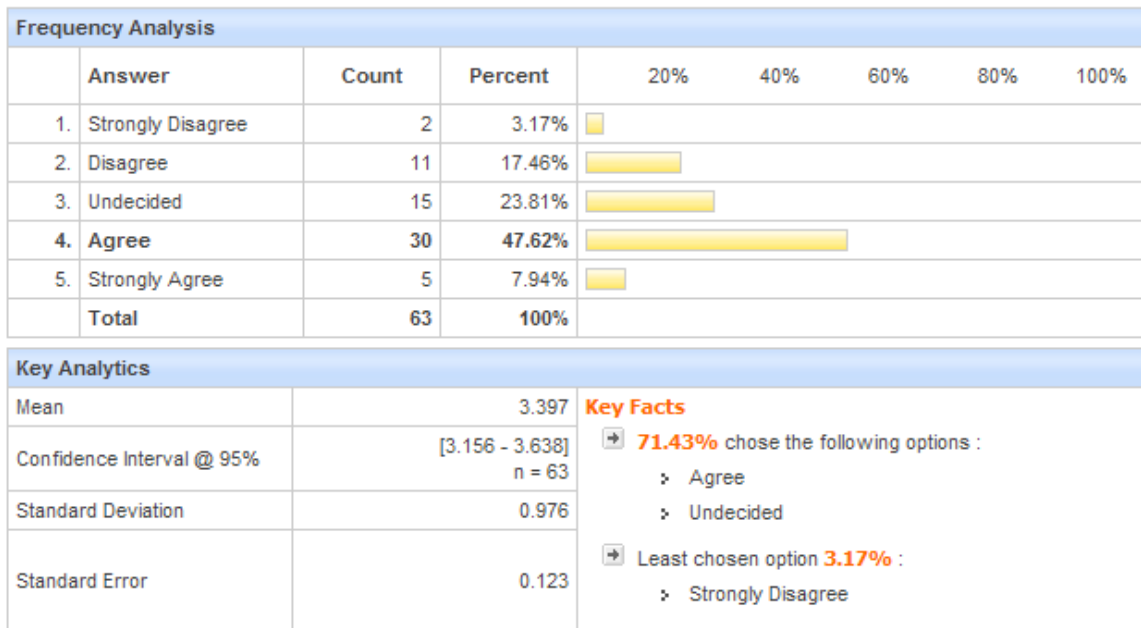
Frequency Analysis				
	Answer	Count	Percent	20% 40% 60% 80% 100%
1.	Strongly Disagree	1	1.59%	
2.	Disagree	8	12.70%	
3.	Undecided	16	25.40%	
4.	Agree	31	49.21%	
5.	Strongly Agree	7	11.11%	
Total		63	100%	

Key Analytics		
Mean	3.556	Key Facts ▶ 74.6% chose the following options : > Agree > Undecided ▶ Least chosen option 1.59% : > Strongly Disagree
Confidence Interval @ 95%	[3.330 - 3.781] n = 63	
Standard Deviation	0.912	
Standard Error	0.115	

This statement was meant to indicate whether the respondents are working within a project oriented environment or not. According to the results, almost 61% agreed or strongly agreed on this statement. About 25% of the respondents selected undecided which implied that they actually do not know for sure whether they work in projects or in normal routine work and this is actually strange and unwanted situation. Staff must know exactly their role in the section they are working with. A minority percentage of 14% disagreed with this statement indicating that they do not work in projects.

Q3 –

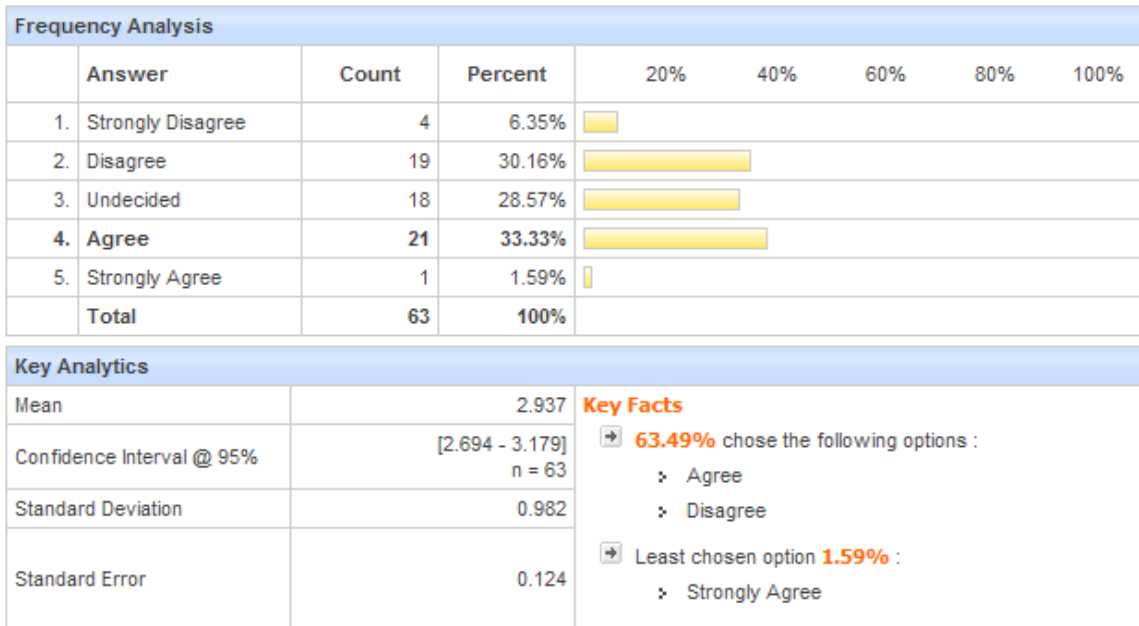
Your project managers are professional



This statement shows the level of agreement of team members of the proficiency of their project managers. 56% of the total respondents either agreed or strongly agreed on this fact while the remaining are scattered between not to being sure or disagreeing.

Q4 –

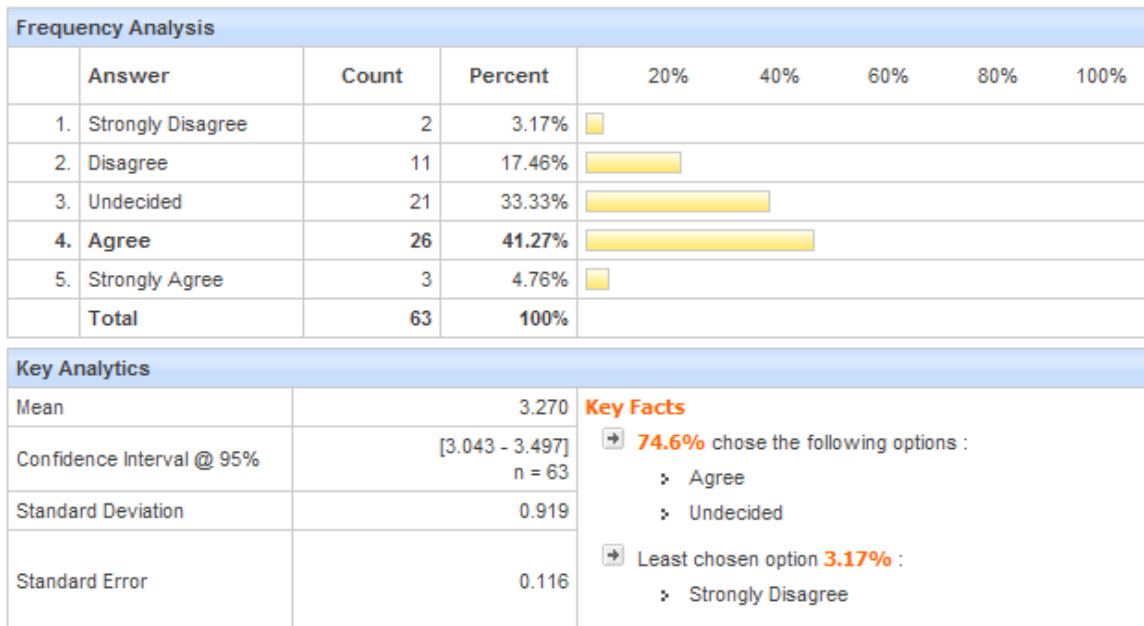
Projects are completed on time



Completing projects on time is not an easy task, based on the results of this question it seems that 33.3% agreed that projects are completed on time. Another 30% disagreed with this statement.

Q5 –

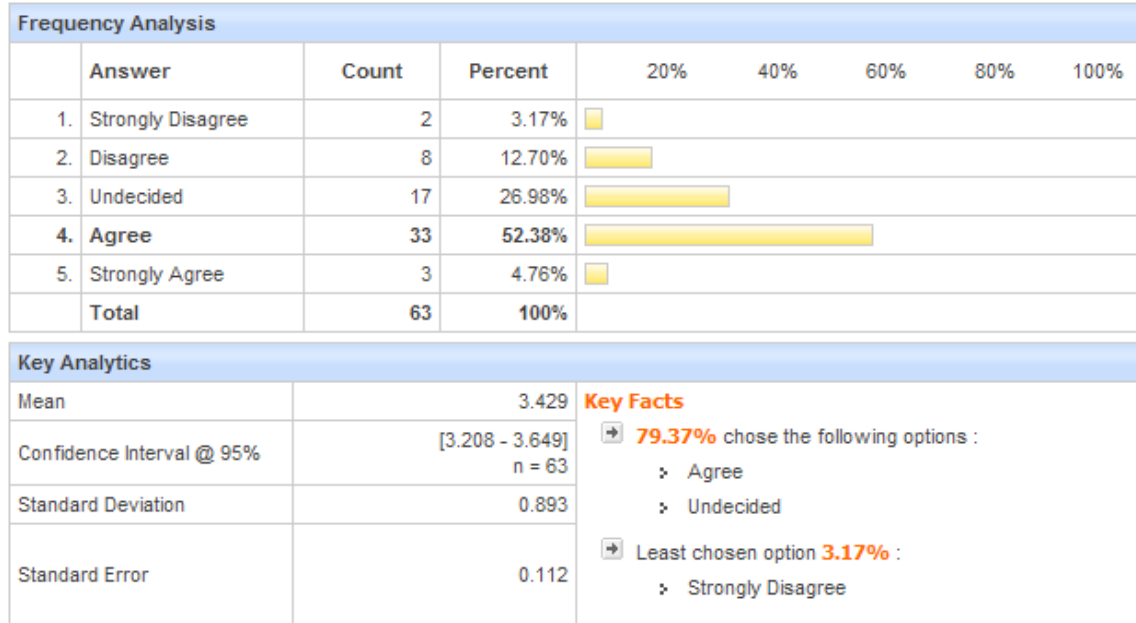
Projects are completed within given budget



Completing a project within the desired or planned budget is most of the times difficult. However, 41% of the respondents agreed on the fact that they complete their projects within the given budget. In addition to that, there are quite enough responses - almost 33.3% - that are still unable to decide whether to agree or to disagree.

Q6 –

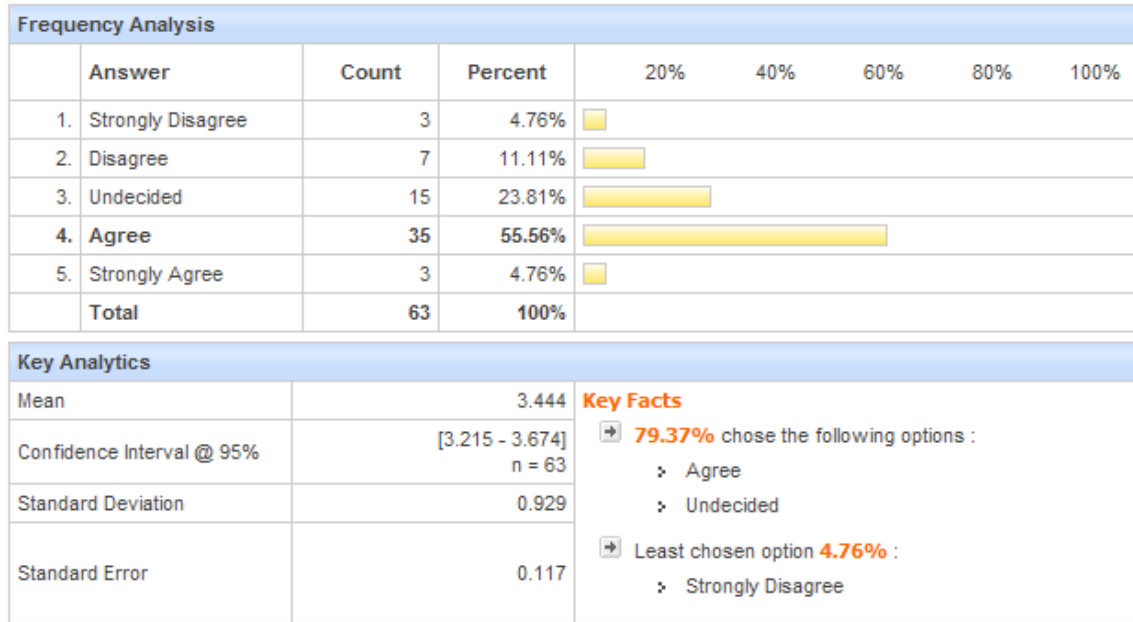
Projects are completed with available resources



Managing resources efficiently to help in completing projects successfully is a vital issue. Based on the collected results, 52% of the respondents agreed on this fact. Only 15% disagreed and another 27% have no clear answer whether to agree or disagree.

Q7 –

Experiences are used to select team members

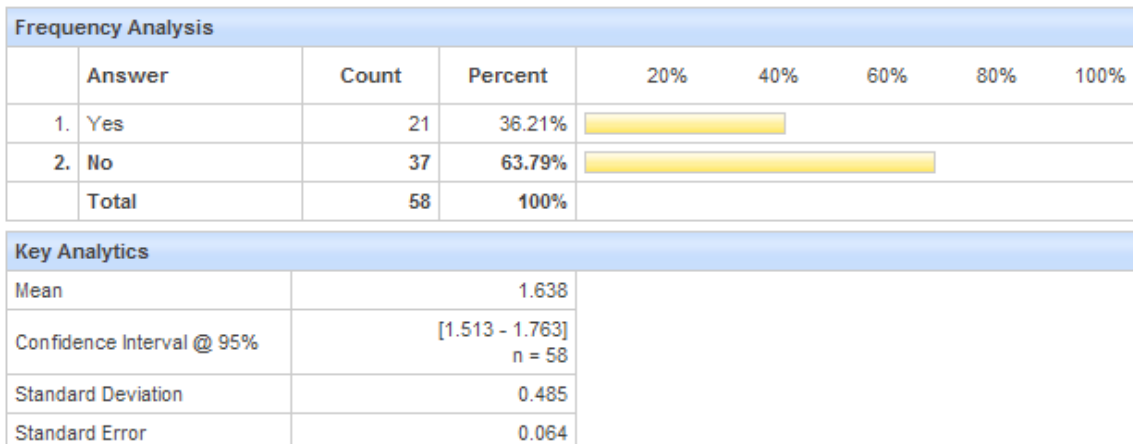


Selecting the team members that will work on a project is a very important procedure. Experience is necessary to select enough people to accomplish the tasks and declare the completion of the project within time and budget. Most of the respondents agreed on this statement with a percentage of 55. However, 24% are still undecided and another 15% who are disagreeing with this statement.

4.3.5 Part [5]: High Performance Teams

Q1 –

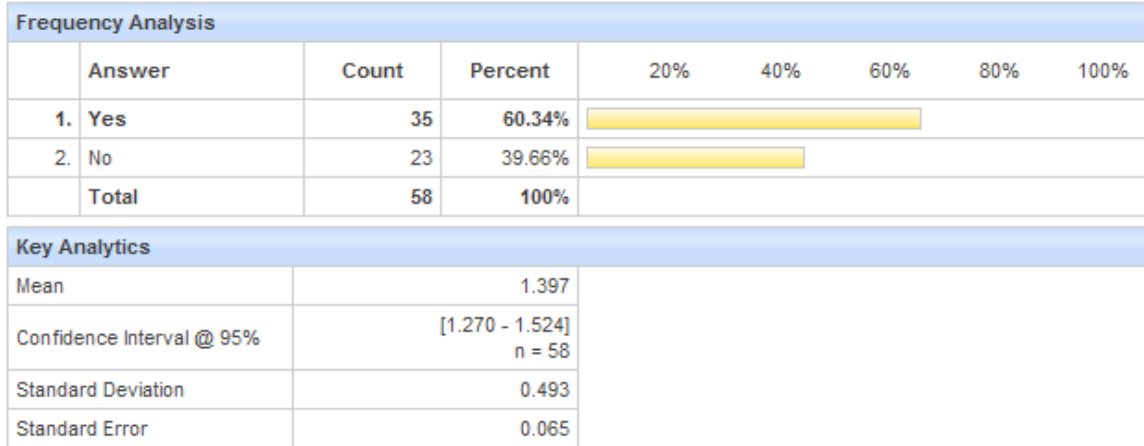
Have you ever heard about the term "High Performance Teams" ?



High Performance Teams are kind of teams that have special features. Such teams are hardly known by regular employees. This question was intended to check the knowledge of the respondents with HPTs. As expected, 64% of the respondents did not hear about HPTs. However and surprisingly, 36% of the respondents are aware of this kind of teams.

Q2 –

Does your organization have special arrangements for allocating teams for projects?



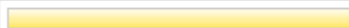
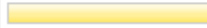
The next question tries to see if the respondents' organizations have special arrangements to allocate teams for projects like maintaining good experience among team members. More than 60% have agreed on this question while the rest selected no.

Q3 –

The next 17 statements are features of High Performance Teams that if exists in a team then it might be called HPT. Respondents must select one of two options, either to agree or disagree on those statements.

Q4 –

Trust environment is built between team members in such away that they can say what they feel without fear

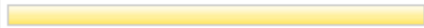
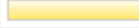
Frequency Analysis				
	Answer	Count	Percent	
1.	Agree	36	62.07%	
2.	Disagree	22	37.93%	
	Total	58	100%	

Key Analytics	
Mean	1.379
Confidence Interval @ 95%	[1.253 - 1.505] n = 58
Standard Deviation	0.489
Standard Error	0.064

Feature 1 is for the team member to be fearless of the consequences of speaking up and saying what they feel about their work, tasks or even managers. 62% of the respondents agreed on this although it was expected that most of the team members in UAE organizations are hesitating to expose their own feelings. Only 38% disagreed with this statement.

Q5 –

Defined guidelines and business objectives that helps the team member to be part of the firm

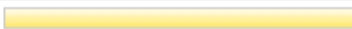
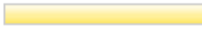
Frequency Analysis				
	Answer	Count	Percent	
1.	Agree	44	75.86%	
2.	Disagree	14	24.14%	
	Total	58	100%	

Key Analytics	
Mean	1.241
Confidence Interval @ 95%	[1.130 - 1.352] n = 58
Standard Deviation	0.432
Standard Error	0.057

75% of the respondents agreed on the second feature of having defined guidelines and objectives to help team members to be part of the firm. Only 24% have disagreed with this statement.

Q6 –

Availability of core values like honesty, integrity, loyalty and determination

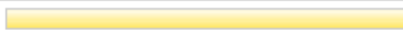
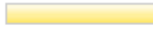
Frequency Analysis				
	Answer	Count	Percent	
				20% 40% 60% 80% 100%
1.	Agree	37	63.79%	
2.	Disagree	21	36.21%	
	Total	58	100%	

Key Analytics	
Mean	1.362
Confidence Interval @ 95%	[1.237 - 1.487] n = 58
Standard Deviation	0.485
Standard Error	0.064

63.8% of the respondents again approved this feature of having core values within the team members like honesty, loyalty and determination. Another 36.2% have disagreed.

Q7 –

Accepted norms and behavior where team members are empowered and provide full participation in meetings along with positive reinforcement

Frequency Analysis				
	Answer	Count	Percent	
				20% 40% 60% 80% 100%
1.	Agree	42	72.41%	
2.	Disagree	16	27.59%	
	Total	58	100%	

Key Analytics	
Mean	1.276
Confidence Interval @ 95%	[1.160 - 1.392] n = 58
Standard Deviation	0.451
Standard Error	0.059

The next feature had a tremendous agreement of 72.5% where team members are empowered and provided full participation in meetings. Only 27.6% have disagreed with this feature.

Q8 –

Usage of well defined standards for continuous improvements

Frequency Analysis								
	Answer	Count	Percent	20%	40%	60%	80%	100%
1.	Agree	40	68.97%					
2.	Disagree	18	31.03%					
	Total	58	100%					

Key Analytics	
Mean	1.310
Confidence Interval @ 95%	[1.190 - 1.430] n = 58
Standard Deviation	0.467
Standard Error	0.061

Sticking to defined standards is important to ensure continuous improvements and success at work and output. 69% of the respondents agree on this feature to be available among their teams. 31% of them disagreed which means that they do not have standards that they must follow to achieve the best of their effort.

Q9 –

Plugged in team members where they can take the challenge to take up responsibility

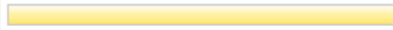
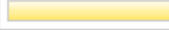
Frequency Analysis								
	Answer	Count	Percent	20%	40%	60%	80%	100%
1.	Agree	43	74.14%					
2.	Disagree	15	25.86%					
	Total	58	100%					

Key Analytics	
Mean	1.259
Confidence Interval @ 95%	[1.145 - 1.372] n = 58
Standard Deviation	0.442
Standard Error	0.058

74% of the respondents accepted this feature which implies that team members are flexible and can perform very well once they are assigned to any responsibility. The remaining 25.8% disagreed with this feature which means that they do not see their team members capable of handling challenges easily.

Q10 –

Sense of urgency and momentum where each team member builds on the ideas of the rest of the team and they work on time with seriousness in mind

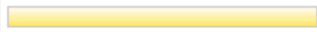
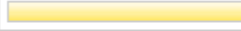
Frequency Analysis				
	Answer	Count	Percent	
1.	Agree	41	70.69%	
2.	Disagree	17	29.31%	
	Total	58	100%	

Key Analytics	
Mean	1.293
Confidence Interval @ 95%	[1.175 - 1.411] n = 58
Standard Deviation	0.459
Standard Error	0.060

Another feature of HPTs is where team members work together to achieve desired outcomes by building up ideas together and working out as one unit. 70% responses agreed on this while almost 30% disagreed.

Q11 –

Work Life balance where the firm encourages team members to achieve success at work and at home.

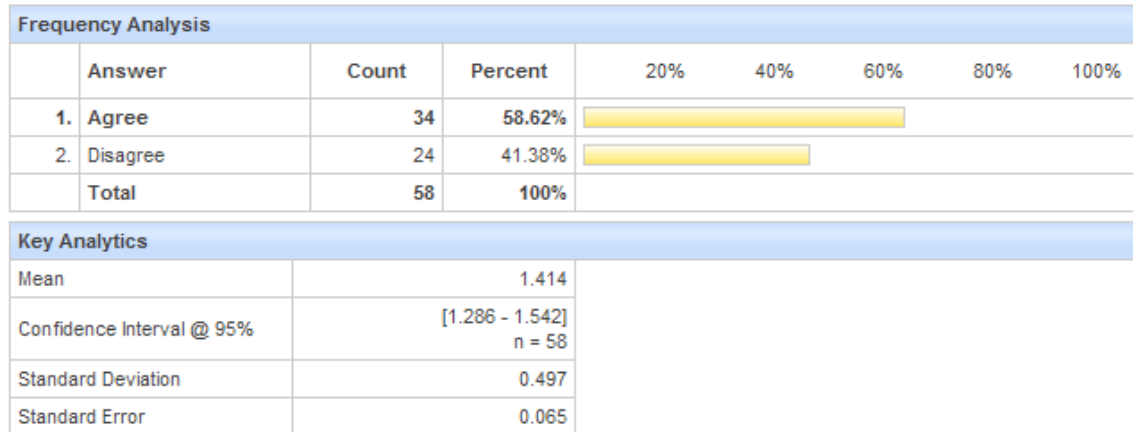
Frequency Analysis				
	Answer	Count	Percent	
1.	Agree	33	56.90%	
2.	Disagree	25	43.10%	
	Total	58	100%	

Key Analytics	
Mean	1.431
Confidence Interval @ 95%	[1.302 - 1.560] n = 58
Standard Deviation	0.500
Standard Error	0.066

Having a balance between work life and private life is one of the important features of HPTs. The results are almost equal to each other here, as 56% of the responses agree while the remaining 43 disagree.

Q12 –

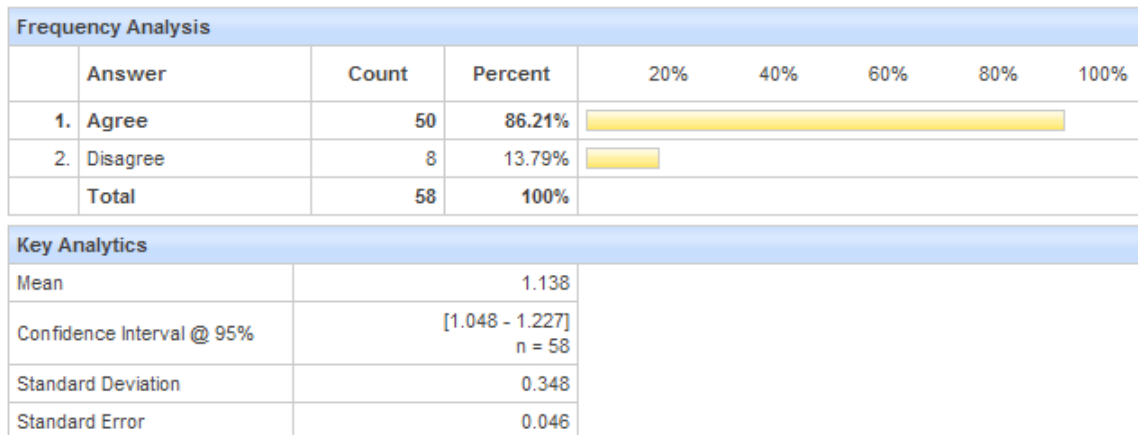
The Right DNA where team members have great ethics, eager to learn, develop their skills and passion for excellence



Great ethics, eager to learn, develop skills and passion for excellence are features of the HPT team members. 58.6% felt that their team members are having those features while 41% have disagreed with the availability of such features among their teams.

Q13 –

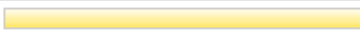
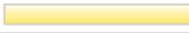
Members respect each other



86% of the responses agreed on the feature that members are respecting each other. Only 13.7% have disagreed which implies that there are issues between team members causing disrespect to spread among them. Respecting each other is one of the simple things that must be established between team members to ensure smooth project progress.

Q14 –

Members trust each other

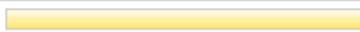
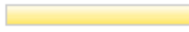
Frequency Analysis				
	Answer	Count	Percent	
1.	Agree	38	65.52%	
2.	Disagree	20	34.48%	
	Total	58	100%	

Key Analytics	
Mean	1.345
Confidence Interval @ 95%	[1.221 - 1.468] n = 58
Standard Deviation	0.479
Standard Error	0.063

Trust is seen between members by 65% of the respondents while 34.5% do not see it available. Members can respect each other but they might not trust each other. Some team members may not trust the work of others and thus they might not accept it or they might deliver a false image of the output of certain member to the manager or the team leader.

Q15 –

Members protect and support each other

Frequency Analysis				
	Answer	Count	Percent	
1.	Agree	38	65.52%	
2.	Disagree	20	34.48%	
	Total	58	100%	

Key Analytics	
Mean	1.345
Confidence Interval @ 95%	[1.221 - 1.468] n = 58
Standard Deviation	0.479
Standard Error	0.063

Protecting and supporting each other is vital for the team spirit to continue working and delivering outcomes. 65% of the responses agreed on this fact while only 34.4% have disagreed with this feature.

Q16 –

Members engage in open dialogue and communication

Frequency Analysis								
	Answer	Count	Percent	20%	40%	60%	80%	100%
1.	Agree	45	77.59%					
2.	Disagree	13	22.41%					
	Total	58	100%					

Key Analytics	
Mean	1.224
Confidence Interval @ 95%	[1.116 - 1.332] n = 58
Standard Deviation	0.421
Standard Error	0.055

Members of the team must be able to communicate without any issues or fears. This was obvious by the high responses of acceptance by 77.5% of the respondents. Only 22.4% disagreed with this fact which means that they do not have the chance to communicate freely within their team.

Q17 –

Members share a strong common goal

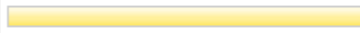
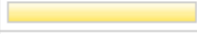
Frequency Analysis								
	Answer	Count	Percent	20%	40%	60%	80%	100%
1.	Agree	38	65.52%					
2.	Disagree	20	34.48%					
	Total	58	100%					

Key Analytics	
Mean	1.345
Confidence Interval @ 95%	[1.221 - 1.468] n = 58
Standard Deviation	0.479
Standard Error	0.063

A team must be sharing a common goal so that everybody can perform their best to achieve them. 65.5% of the responses were agreeing on this feature while 34.4% disagreed.

Q18 –

Members have strong shared values and beliefs

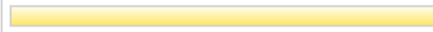
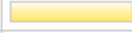
Frequency Analysis				
	Answer	Count	Percent	
1.	Agree	38	65.52%	
2.	Disagree	20	34.48%	
	Total	58	100%	

Key Analytics	
Mean	1.345
Confidence Interval @ 95%	[1.221 - 1.468] n = 58
Standard Deviation	0.479
Standard Error	0.063

This feature had the same results as the previous one due to sharing values and beliefs can be similar to shared goals. 65.5% of the responses agreed while 34.4% disagreed.

Q19 –

Members subordinate their own objectives to those of the team


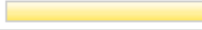
Frequency Analysis				
	Answer	Count	Percent	
1.	Agree	45	77.59%	
2.	Disagree	13	22.41%	
	Total	58	100%	

Key Analytics	
Mean	1.224
Confidence Interval @ 95%	[1.116 - 1.332] n = 58
Standard Deviation	0.421
Standard Error	0.055

Leaving members' own objective for the main objectives of the team is one feature that must be applied for HPTs. 77.6% of the responses agreed on this feature to be available with their team members while 22.4% have disagreed. This implies that for the sake of the team objectives, members sacrifice their own objectives to the overall success of the team.

Q20 –

Members subscribe to distributed leadership

Frequency Analysis				
	Answer	Count	Percent	20% 40% 60% 80% 100%
1.	Agree	36	63.16%	
2.	Disagree	21	36.84%	
	Total	57	100%	

Key Analytics	
Mean	1.368
Confidence Interval @ 95%	[1.242 - 1.495] n = 57
Standard Deviation	0.487
Standard Error	0.064

63.1% of the respondents agreed on this feature which implies that team members are distributing the leadership of the team among them. If a team member is adequate to lead the team for the working stage then he/she can work as a team leader with the approval of the others. Once this stage is completed the next stage can be led by another team member who is an expert in this field. 36.8% of the respondents have disagreed with this feature which means that they are following a normal leadership procedure.

4.4 Analyzing responses using SPSS application

All of the raw results of the questionnaire were provided as a Microsoft Excel file. Those data could be further processed to extract more useful information about team members in the three main organizations which are Etisalat, ADNOC and Emirates Airlines. The tool used to provide such analysis and data processing is called SPSS.

SPSS provides a powerful statistical-analysis and data-management system in a graphical environment, using descriptive menus and simple dialog boxes to do most of the work. SPSS stands for “Statistical Package for the Social Sciences”. The application is used to provide statistical analysis using numerical data with specific variables.

For example, the following figure shows an example of the type of input that must be provided for SPSS:

	Company	UptodateITKnowledge	AttendITcourses	Developworkskills	ImproveITprocesses
1	4	5	4	4	4
2	1	4	3	4	4
3	1	4	2	4	2
4	1	2	2	4	2
5	1	2	2	2	2
6	1	2	2	4	2
7	1	4	3	4	1
8	1	3	1	2	4
9	1	4	4	5	4
10	1	4	4	4	4
11	1	4	4	4	4
12	1	4	3	4	2
13	1	4	4	4	4

Figure 4.4.1: SPSS Data view window

As it can be seen from the previous figure, the top horizontal row must have variables, while the vertical column has the serial number for the cases of the questionnaire for example. Each row represents a response from the questionnaire.

In this study, the questions that were providing a Likert-Scale answers type were used to create the top horizontal variables. The textual values were replaced by numerical values. For example, Strongly Disagree is given a numerical value of “1” whereas strongly agree is given another

numerical value of “5”. For the cases that are like “none” or “not applicable”, it was given a null or zero numeric value. Other scales like: “Poor, Below Average, Average, Good, Excellent” were given numerical values like “1, 2, 3, 4, 5” respectively.

The following questions were used to create the input file for SPSS application:

Please rate your technology awareness in your work field					
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
You are up to date with new IT knowledge *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You attend specialized IT courses regularly *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You eagerly develop your work skills and knowledge *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You contribute in improving your company's IT processes *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your IT knowledge is higher than needed in your job *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your manager supports you to gain more IT knowledge *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You try to bring new IT solutions to the company *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What is the size of the team that you are working with? *

1 - 5 team members

6 - 10 team members

> 10 team members

I don't belong to a specific team

How many team members report to you? *

None

1 - 5 team members

6 - 10 team members

> 10 team members

How do you rate the relation between you and your team members? *

Poor

Below Average

Average

Good

Excellent

To what extent do you agree on the importance of teams as building blocks of any project? *

Strongly Disagree

Disagree

Undecided

Agree

Strongly Agree

How do you rate the motivation level among team members in your organization?

Poor

Below Average

Average

Good

Excellent

How do you rate the level of proficiency of your organization's teams? *

Poor

Below Average

Average

Good

Excellent

How do you rate your team results and outcomes?

Poor
 Below Average
 Average
 Good
 Excellent

How does your organization rate the results and outcomes of your team?

Poor
 Below Average
 Average
 Good
 Excellent

How do you rate the following features of your team manager?
(select Not Applicable if you are a manager)

	Poor	Below Average	Average	Good	Excellent	Not Applicable
Goals and targets setting *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tasks distribution *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tasks management *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Monitoring work progress *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with members *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Listening to members *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solving issues and obstacles *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your level of agreement for the following project related phrases:

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Your are in a project oriented team *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your project managers are professional *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Projects are completed on time *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Projects are completed within given budget *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Projects are completed with available resources *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experiences are used to select team members *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Each question or statement was converted into a short text to create a variable name that can represent the core of the question. The following are the list of variables used:

1	P2_Q1_Company	21	P4.1_Q13_F_Listening
2	P3_Q1_A_Up to date IT Knowledge	22	P4.1_Q13_G_Solving issues and obstacles
3	P3_Q1_B_Attend IT courses	23	P4.2_Q1_A_Project oriented team
4	P3_Q1_C_Develop work skills	24	P4.2_Q1_B_Professional project managers
5	P3_Q1_D_Improve IT processes	25	P4.2_Q1_C_Project time
6	P3_Q1_E_Superior IT knowledge	26	P4.2_Q1_D_Project budget
7	P3_Q1_F_Manager Support for IT Knowledge	27	P4.2_Q1_E_Project Resources
8	P3_Q1_G_Add new IT solutions	28	P4.2_Q1_F_Experience
9	P4.1_Q1_Team Size	29	P5_Q3_A_Trust
10	P4.1_Q2_Reporting members	30	P5_Q3_A_Guidelines
11	P4.1_Q3_Relation among team	31	P5_Q3_A_Core values
12	P4.1_Q4_Importance of teams	32	P5_Q3_A_Empowerment
13	P4.1_Q5_Motivation	33	P5_Q3_A_Standards
14	P4.1_Q9_Proficiency	34	P5_Q3_A_Responsibility
15	P4.1_Q11_Outcomes	35	P5_Q3_A_Urgency
16	P4.1_Q13_A_Goals Targets	36	P5_Q3_A_Work Life
17	P4.1_Q13_B_Task Distribution	37	P5_Q3_A_Ethics
18	P4.1_Q13_C_Tasks management	38	P5_Q3_A_Respect
19	P4.1_Q13_D_Work Progress monitoring	39	P5_Q3_A_Support
20	P4.1_Q13_E_Communication	40	P5_Q3_A_Cooperation

Table 4.4.1: List of variables for the SPSS application

T-Test Analysis:

After uploading the raw data into the SPSS system, many types of tests can be performed. One of the tests that were performed is the T-Test. It is a type of tests that assesses whether the means of two groups are statistically different from each other. Statistically different means that how much overlapping is happening between the two means of the two groups. If the difference is high then this means that there are more differences between the two groups. The following example is prepared using the collected questionnaire data. The two groups here are Etisalat and Emirates Airlines. By performing the T-Test it will be easy to identify if there are significant differences in the means between any variable among the two companies.

Company 1 is Etisalat while company 2 is Emirates Airlines. “N” represents the number of responses for each company. By looking at the results which are shown below it is obvious that

almost all means were close to each other which indicate that team members in both companies are having the same variable answers.

Two values of the processed results using SPSS are of importance, the significant value of Levene's Test for Equality of Variance and the significant value of the t-test for Equality of Means. If the first value is between 0.01 and 0.05 threshold then it is a significant value. Also, the other value is checked to see if it is significant and within the same defined range. The yellow highlighted variances in both columns indicate that they are significant and further studies and analysis will be performed on them.

The result is as follows:

Group Statistics					
	Company	N	Mean	Std. Deviation	Std. Error Mean
P3_Q1_A_Up to date IT Knowledge	1	23	3.39	.839	.175
	2	18	3.89	.900	.212
P3_Q1_B_Attend IT courses	1	23	2.74	1.010	.211
	2	18	3.06	.998	.235
P3_Q1_C_Develop work skills	1	23	3.57	1.080	.225
	2	18	3.83	.857	.202
P3_Q1_D_Improve IT processes	1	23	3.00	1.087	.227
	2	18	3.67	.686	.162
P3_Q1_E_Superior IT knowledge	1	23	2.83	.834	.174
	2	18	3.22	1.114	.263
P3_Q1_F_Manager Support for IT Knowledge	1	23	3.04	1.022	.213
	2	18	3.17	1.295	.305
P3_Q1_G_Add new IT solutions	1	23	2.70	.974	.203
	2	18	3.67	1.029	.243
P4.1_Q1_Team Size	1	23	2.13	.815	.170
	2	18	2.17	.924	.218
P4.1_Q2_Reporting members	1	23	1.00	.953	.199
	2	18	1.00	1.085	.256
P4.1_Q3_Relation among team	1	23	3.96	.878	.183
	2	18	4.28	.752	.177

P4.1_Q4_Importance of teams	1	23	4.83	.388	.081
	2	18	4.39	1.092	.257
P4.1_Q5_Motivation	1	23	3.00	1.128	.235
	2	18	3.72	.895	.211
P4.1_Q9_Proficiency	1	23	3.74	.864	.180
	2	18	3.89	.900	.212
P4.1_Q11_Outcomes	1	23	3.52	.947	.198
	2	18	4.00	.767	.181
P4.1_Q13_A_Goals & Targets	1	23	2.39	1.877	.391
	2	18	3.17	1.383	.326
P4.1_Q13_B_Task Distribution	1	23	2.48	1.928	.402
	2	18	3.22	1.353	.319
P4.1_Q13_C_Tasks management	1	23	2.52	1.974	.412
	2	18	3.11	1.278	.301
P4.1_Q13_D_Work Progress monitoring	1	23	2.57	1.950	.407
	2	18	3.44	1.617	.381
P4.1_Q13_E_Communication	1	23	2.57	1.996	.416
	2	18	3.50	1.543	.364
P4.1_Q13_F_Listening	1	23	2.70	2.055	.428
	2	18	3.17	1.465	.345
P4.1_Q13_G_Solving issues and obstacles	1	23	2.65	2.080	.434
	2	18	3.11	1.410	.332
P4.2_Q1_A_Project oriented team	1	23	3.26	.915	.191
	2	18	4.00	.840	.198
P4.2_Q1_B_Professional project managers	1	23	3.04	1.107	.231
	2	18	3.61	.850	.200
P4.2_Q1_C_Project time	1	23	2.78	.951	.198
	2	18	3.22	1.166	.275
P4.2_Q1_D_Project budget	1	23	3.17	.984	.205
	2	18	3.44	.922	.217
P4.2_Q1_E_Project Resources	1	23	3.39	.988	.206
	2	18	3.39	1.037	.244
P4.2_Q1_F_Experience	1	23	3.17	1.230	.257

	2	18	3.89	.583	.137
P5_Q3_A_Trust	1	23	1.61	.499	.104
	2	18	1.17	.383	.090
P5_Q3_B_Guidelines	1	23	1.39	.499	.104
	2	18	1.11	.323	.076
P5_Q3_C_Core values	1	23	1.48	.511	.106
	2	18	1.22	.428	.101
P5_Q3_D_Empowerment	1	23	1.43	.507	.106
	2	18	1.06	.236	.056
P5_Q3_E_Standards	1	23	1.39	.499	.104
	2	18	1.11	.323	.076
P5_Q3_F_Responsibility	1	23	1.35	.487	.102
	2	18	1.17	.383	.090
P5_Q3_G_Urgency	1	23	1.43	.507	.106
	2	18	1.22	.428	.101
P5_Q3_H_Work & Life	1	23	1.57	.507	.106
	2	18	1.28	.461	.109
P5_Q3_I_Ethics	1	23	1.57	.507	.106
	2	18	1.28	.461	.109
P5_Q3_J_Respect	1	23	1.17	.388	.081
	2	18	1.06	.236	.056
P5_Q3_L_Support	1	23	1.43	.507	.106
	2	18	1.28	.461	.109
P5_Q3_P_Cooperation	1	23	1.26	.449	.094
	2	18	1.11	.323	.076

Table 4.4.2: Etisalat vs. Emirates Airlines T-Test results

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
P3_Q1_A_Up to date IT Knowledge	EVA	.071	.791	-1.826	39	.076	-.498	.273	-1.049	.054
	EVNA			-1.810	35.341	.079	-.498	.275	-1.056	.060
P3_Q1_B_Attend IT courses	EVA	.664	.420	-1.001	39	.323	-.316	.316	-.956	.323
	EVNA			-1.002	36.861	.323	-.316	.316	-.956	.323
P3_Q1_C_Develop work skills	EVA	.598	.444	-.861	39	.394	-.268	.311	-.898	.361
	EVNA			-.886	38.983	.381	-.268	.303	-.880	.344
P3_Q1_D_Improve IT processes	EVA	8.555	.006	-2.269	39	.029	-.667	.294	-1.261	-.072
	EVNA			-2.394	37.514	.022	-.667	.278	-1.231	-.103
P3_Q1_E_Superior IT knowledge	EVA	2.208	.145	-1.303	39	.200	-.396	.304	-1.011	.219
	EVNA			-1.258	30.625	.218	-.396	.315	-1.039	.247
P3_Q1_F_Manager Support for IT Knowledge	EVA	1.273	.266	-.341	39	.735	-.123	.361	-.854	.608
	EVNA			-.331	31.770	.743	-.123	.372	-.881	.635
P3_Q1_G_Add new IT solutions	EVA	.078	.781	-3.091	39	.004	-.971	.314	-1.606	-.336
	EVNA			-3.070	35.653	.004	-.971	.316	-1.613	-.329
P4.1_Q1_Team Size	EVA	1.544	.222	-.133	39	.895	-.036	.272	-.586	.514
	EVNA			-.131	34.212	.896	-.036	.276	-.597	.525
P4.1_Q2_Reporting members	EVA	.547	.464	.000	39	1.000	.000	.319	-.645	.645
	EVNA			.000	34.133	1.000	.000	.324	-.658	.658
P4.1_Q3_Relation among team	EVA	.518	.476	-1.237	39	.224	-.321	.260	-.847	.204
	EVNA			-1.261	38.639	.215	-.321	.255	-.837	.194
P4.1_Q4_Importance of teams	EVA	11.258	.002	1.787	39	.082	.437	.245	-.058	.932
	EVNA			1.620	20.363	.121	.437	.270	-.125	.999

P4.1_Q5_Motivation	EVA	.381	.540	-2.222	39	.032	-0.722	.325	-1.380	-.065
	EVNA			-2.286	38.985	.028	-0.722	.316	-1.361	-.083
P4.1_Q9_Proficiency	EVA	.009	.924	-.541	39	.592	-.150	.277	-.710	.410
	EVNA			-.538	35.927	.594	-.150	.278	-.714	.415
P4.1_Q11_Outcomes	EVA	3.038	.089	-1.740	39	.090	-.478	.275	-1.034	.078
	EVNA			-1.786	38.937	.082	-.478	.268	-1.020	.063
P4.1_Q13_A_Goals & Targets	EVA	9.564	.004	-1.467	39	.150	-.775	.528	-1.844	.294
	EVNA			-1.523	38.890	.136	-.775	.509	-1.805	.255
P4.1_Q13_B_Task Distribution	EVA	7.898	.008	-1.390	39	.172	-.744	.535	-1.827	.339
	EVNA			-1.450	38.613	.155	-.744	.513	-1.782	.294
P4.1_Q13_C_Tasks management	EVA	10.546	.002	-1.098	39	.279	-.589	.537	-1.675	.497
	EVNA			-1.155	37.834	.255	-.589	.510	-1.622	.443
P4.1_Q13_D_Work Progress monitoring	EVA	2.096	.156	-1.542	39	.131	-.879	.570	-2.033	.274
	EVNA			-1.578	38.840	.123	-.879	.557	-2.007	.248
P4.1_Q13_E_Communication	EVA	3.957	.054	-1.639	39	.109	-.935	.570	-2.089	.219
	EVNA			-1.691	38.999	.099	-.935	.553	-2.053	.183
P4.1_Q13_F_Listening	EVA	7.880	.008	-.822	39	.416	-.471	.573	-1.630	.688
	EVNA			-.856	38.722	.397	-.471	.550	-1.584	.642
P4.1_Q13_G_Solving issues and obstacles	EVA	9.690	.003	-.802	39	.427	-.459	.572	-1.617	.699
	EVNA			-.840	38.318	.406	-.459	.546	-1.565	.647
P4.2_Q1_A_Project oriented team	EVA	1.636	.208	-2.659	39	.011	-.739	.278	-1.301	-.177
	EVNA			-2.687	37.950	.011	-.739	.275	-1.296	-.182
P4.2_Q1_B_Professional project managers	EVA	1.741	.195	-1.798	39	.080	-.568	.316	-1.206	.071
	EVNA			-1.857	38.994	.071	-.568	.306	-1.186	.051
P4.2_Q1_C_Project time	EVA	.781	.382	-1.330	39	.191	-.440	.331	-1.108	.229
	EVNA			-1.297	32.511	.204	-.440	.339	-1.130	.250
P4.2_Q1_D_Project budget	EVA	.058	.810	-.898	39	.375	-.271	.301	-.880	.339
	EVNA			-.905	37.684	.371	-.271	.299	-.876	.335
P4.2_Q1_E_Project Resources	EVA	.001	.975	.008	39	.994	.002	.318	-.640	.645
	EVNA			.008	35.783	.994	.002	.320	-.646	.651
P4.2_Q1_F_Experience	EVA	16.420	.000	-2.270	39	.029	-.715	.315	-1.352	-.078

	EVNA			-2.457	32.926	.019		-.715	.291	-1.307	-.123
P5_Q3_A_Trust	EVA	11.337	.002	3.106	39	.004		.442	.142	.154	.730
	EVNA			3.207	38.995	.003		.442	.138	.163	.721
P5_Q3_B_Guidelines	EVA	22.947	.000	2.064	39	.046		.280	.136	.006	.555
	EVNA			2.172	37.844	.036		.280	.129	.019	.541
P5_Q3_C_Core values	EVA	9.540	.004	1.708	39	.096		.256	.150	-.047	.559
	EVNA			1.746	38.787	.089		.256	.147	-.041	.553
P5_Q3_D_Empowerment	EVA	69.854	.000	2.930	39	.006		.379	.129	.117	.641
	EVNA			3.176	32.615	.003		.379	.119	.136	.622
P5_Q3_E_Standards	EVA	22.947	.000	2.064	39	.046		.280	.136	.006	.555
	EVNA			2.172	37.844	.036		.280	.129	.019	.541
P5_Q3_F_Responsibility	EVA	7.643	.009	1.294	39	.203		.181	.140	-.102	.464
	EVNA			1.333	38.994	.190		.181	.136	-.094	.456
P5_Q3_G_Urgency	EVA	7.926	.008	1.425	39	.162		.213	.149	-.089	.514
	EVNA			1.455	38.740	.154		.213	.146	-.083	.508
P5_Q3_H_Work & Life	EVA	3.963	.054	1.874	39	.068		.287	.153	-.023	.598
	EVNA			1.897	38.062	.066		.287	.152	-.019	.594
P5_Q3_I_Ethics	EVA	3.963	.054	1.874	39	.068		.287	.153	-.023	.598
	EVNA			1.897	38.062	.066		.287	.152	-.019	.594
P5_Q3_J_Respect	EVA	6.089	.018	1.139	39	.261		.118	.104	-.092	.328
	EVNA			1.207	37.011	.235		.118	.098	-.080	.317
P5_Q3_L_Support	EVA	3.963	.054	1.024	39	.312		.157	.153	-.153	.467
	EVNA			1.036	38.062	.307		.157	.152	-.150	.464
P5_Q3_P_Cooperation	EVA	6.667	.014	1.192	39	.240		.150	.126	-.104	.404
	EVNA			1.241	38.781	.222		.150	.121	-.094	.394

Table 4.4.3: Etisalat vs. Emirates Airlines Independent sample test

The same test was performed but between two different groups: Etisalat (1) and ADNOC (3) and there were some significant differences between both companies in the following variables:

Variable	ETISALAT mean	ADNOC mean	Difference in means
Improve IT processes	3.00	4.27	1.27
Add new IT solutions	2.70	3.91	1.21
Goals & Targets	2.39	3.45	1.06
Listening	2.70	3.73	1.03
Solving issues	2.65	3.73	1.07

Table 4.4.4: Mean values and differences

Between Etisalat and ADNOC there are a wider range of selected answers of the questions associated with the variables in the table above. Higher values of mean indicate that ADNOC is more toward the agreement rather than disagreement as in the case of Etisalat.

As seen in the above figure, there is a difference of at least 1 between 5 variables like Listening for example. This means that team members of both companies selected a wider range of answers which indicates that managers are listening to team members in some cases while they don't in other cases.

The rest of the T-Test is shown below:

Group Statistics					
	Company	N	Mean	Std. Deviation	Std. Error Mean
P3_Q1_A_Up to date IT Knowledge	1	23	3.39	.839	.175
	3	11	3.82	.751	.226
P3_Q1_B_Attend IT courses	1	23	2.74	1.010	.211
	3	11	3.09	1.136	.343
P3_Q1_C_Develop work skills	1	23	3.57	1.080	.225
	3	11	4.45	.688	.207
P3_Q1_D_Improve IT processes	1	23	3.00	1.087	.227
	3	11	4.27	.905	.273
P3_Q1_E_Superior IT knowledge	1	23	2.83	.834	.174
	3	11	3.45	1.368	.413

P3_Q1_F_Manager Support for IT Knowledge	1	23	3.04	1.022	.213
	3	11	3.64	1.206	.364
P3_Q1_G_Add new IT solutions	1	23	2.70	.974	.203
	3	11	3.91	.944	.285
P4.1_Q1_Team Size	1	23	2.13	.815	.170
	3	11	1.18	.751	.226
P4.1_Q2_Reporting members	1	23	1.00	.953	.199
	3	11	.82	.603	.182
P4.1_Q3_Relation among team	1	23	3.96	.878	.183
	3	11	3.64	1.206	.364
P4.1_Q4_Importance of teams	1	23	4.83	.388	.081
	3	11	4.45	.688	.207
P4.1_Q5_Motivation	1	23	3.00	1.128	.235
	3	11	3.00	1.095	.330
P4.1_Q9_Proficiency	1	23	3.74	.864	.180
	3	11	3.09	1.300	.392
P4.1_Q11_Outcomes	1	23	3.52	.947	.198
	3	11	3.45	1.440	.434
P4.1_Q13_A_Goals & Targets	1	23	2.39	1.877	.391
	3	11	3.45	.820	.247
P4.1_Q13_B_Task Distribution	1	23	2.48	1.928	.402
	3	11	3.45	.934	.282
P4.1_Q13_C_Tasks management	1	23	2.52	1.974	.412
	3	11	3.36	.924	.279
P4.1_Q13_D_Work Progress monitoring	1	23	2.57	1.950	.407
	3	11	3.36	.809	.244
P4.1_Q13_E_Communication	1	23	2.57	1.996	.416
	3	11	3.55	.688	.207
P4.1_Q13_F_Listening	1	23	2.70	2.055	.428
	3	11	3.73	.647	.195
P4.1_Q13_G_Solving issues and obstacles	1	23	2.65	2.080	.434
	3	11	3.73	.647	.195
P4.2_Q1_A_Project oriented team	1	23	3.26	.915	.191

	3	11	3.09	.831	.251
P4.2_Q1_B_Professional project managers	1	23	3.04	1.107	.231
	3	11	3.36	.924	.279
P4.2_Q1_C_Project time	1	23	2.78	.951	.198
	3	11	2.64	.674	.203
P4.2_Q1_D_Project budget	1	23	3.17	.984	.205
	3	11	3.18	.751	.226
P4.2_Q1_E_Project Resources	1	23	3.39	.988	.206
	3	11	3.27	.786	.237
P4.2_Q1_F_Experience	1	23	3.17	1.230	.257
	3	11	3.18	.751	.226
P5_Q3_A_Trust	1	23	1.61	.499	.104
	3	11	1.45	.522	.157
P5_Q3_B_Guidelines	1	23	1.39	.499	.104
	3	11	1.27	.467	.141
P5_Q3_C_Core values	1	23	1.48	.511	.106
	3	11	1.45	.522	.157
P5_Q3_D_Empowerment	1	23	1.43	.507	.106
	3	11	1.36	.505	.152
P5_Q3_E_Standards	1	23	1.39	.499	.104
	3	11	1.45	.522	.157
P5_Q3_F_Responsibility	1	23	1.35	.487	.102
	3	11	1.36	.505	.152
P5_Q3_G_Urgency	1	23	1.43	.507	.106
	3	11	1.18	.405	.122
P5_Q3_H_Work & Life	1	23	1.57	.507	.106
	3	11	1.45	.522	.157
P5_Q3_I_Ethics	1	23	1.57	.507	.106
	3	11	1.45	.522	.157
P5_Q3_J_Respect	1	23	1.17	.388	.081
	3	11	1.18	.405	.122
P5_Q3_L_Support	1	23	1.43	.507	.106
	3	11	1.36	.505	.152

P5_Q3_P_Cooperation	1	23	1.26	.449	.094
	3	11	1.36	.505	.152

Table 4.4.5: T-Test results between Etisalat (1) and ADNOC (3)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
P3_Q1_A_Up to date IT Knowledge	EVA	2.737	.108	-1.434	32	.161	-.427	.298	-1.033	.180
	EVNA			-1.492	21.948	.150	-.427	.286	-1.020	.166
P3_Q1_B_Attend IT courses	EVA	.035	.852	-.913	32	.368	-.352	.385	-1.137	.433
	EVNA			-.875	17.827	.393	-.352	.402	-1.197	.494
P3_Q1_C_Develop work skills	EVA	1.049	.313	-2.490	32	.018	-.889	.357	-1.617	-.162
	EVNA			-2.906	29.101	.007	-.889	.306	-1.515	-.263
P3_Q1_D_Improve IT processes	EVA	1.020	.320	-3.359	32	.002	-1.273	.379	-2.044	-.501
	EVNA			-3.589	23.493	.002	-1.273	.355	-2.005	-.540
P3_Q1_E_Superior IT knowledge	EVA	10.002	.003	-1.662	32	.106	-.628	.378	-1.399	.142
	EVNA			-1.404	13.673	.183	-.628	.448	-1.591	.334
P3_Q1_F_Manager Support for IT Knowledge	EVA	.713	.405	-1.494	32	.145	-.593	.397	-1.401	.215
	EVNA			-1.407	17.123	.177	-.593	.421	-1.482	.296
P3_Q1_G_Add new IT solutions	EVA	.395	.534	-3.431	32	.002	-1.213	.354	-1.934	-.493
	EVNA			-3.471	20.376	.002	-1.213	.350	-1.942	-.485
P4.1_Q1_Team Size	EVA	.305	.584	3.253	32	.003	.949	.292	.355	1.543
	EVNA			3.352	21.361	.003	.949	.283	.361	1.537
P4.1_Q2_Reporting members	EVA	.486	.491	.577	32	.568	.182	.315	-.460	.824
	EVNA			.675	29.221	.505	.182	.269	-.369	.733
P4.1_Q3_Relation among team	EVA	2.819	.103	.880	32	.385	.320	.364	-.421	1.061
	EVNA			.786	15.265	.444	.320	.407	-.546	1.187
P4.1_Q4_Importance of	EVA	10.075	.003	2.023	32	.051	.372	.184	-.003	.746

teams	EVNA			1.670	13.132	.119	.372	.222	-.109	.852
P4.1_Q5_Motivation	EVA	.287	.596	.000	32	1.000	.000	.410	-.835	.835
	EVNA			.000	20.339	1.000	.000	.405	-.845	.845
P4.1_Q9_Proficiency	EVA	2.166	.151	1.732	32	.093	.648	.374	-.114	1.410
	EVNA			1.502	14.380	.155	.648	.432	-.275	1.571
P4.1_Q11_Outcomes	EVA	2.678	.112	.163	32	.872	.067	.412	-.773	.907
	EVNA			.141	14.291	.890	.067	.477	-.954	1.088
P4.1_Q13_A_Goals & Targets	EVA	25.949	.000	-1.788	32	.083	-1.063	.595	-2.275	.148
	EVNA			-2.297	31.891	.028	-1.063	.463	-2.006	-.120
P4.1_Q13_B_Task Distribution	EVA	13.673	.001	-1.584	32	.123	-.976	.616	-2.232	.279
	EVNA			-1.989	31.958	.055	-.976	.491	-1.976	.023
P4.1_Q13_C_Tasks management	EVA	14.075	.001	-1.338	32	.190	-.842	.629	-2.124	.440
	EVNA			-1.694	31.999	.100	-.842	.497	-1.855	.171
P4.1_Q13_D_Work Progress monitoring	EVA	13.644	.001	-1.297	32	.204	-.798	.615	-2.052	.455
	EVNA			-1.684	31.663	.102	-.798	.474	-1.765	.168
P4.1_Q13_E_Communication	EVA	17.245	.000	-1.574	32	.125	-.980	.623	-2.249	.288
	EVNA			-2.108	30.183	.043	-.980	.465	-1.930	-.031
P4.1_Q13_F_Listening	EVA	27.003	.000	-1.616	32	.116	-1.032	.638	-2.332	.269
	EVNA			-2.192	29.293	.036	-1.032	.471	-1.994	-.069
P4.1_Q13_G_Solving issues and obstacles	EVA	27.219	.000	-1.664	32	.106	-1.075	.646	-2.391	.241
	EVNA			-2.261	29.168	.031	-1.075	.476	-2.048	-.103
P4.2_Q1_A_Project oriented team	EVA	.421	.521	.521	32	.606	.170	.326	-.495	.834
	EVNA			.540	21.654	.595	.170	.315	-.484	.824
P4.2_Q1_B_Professional project managers	EVA	.614	.439	-.829	32	.413	-.320	.386	-1.107	.466
	EVNA			-.885	23.413	.385	-.320	.362	-1.068	.428
P4.2_Q1_C_Project time	EVA	3.333	.077	.456	32	.651	.146	.320	-.507	.799
	EVNA			.515	26.990	.611	.146	.284	-.437	.729
P4.2_Q1_D_Project budget	EVA	.553	.463	-.024	32	.981	-.008	.336	-.693	.677
	EVNA			-.026	25.393	.980	-.008	.306	-.637	.621
P4.2_Q1_E_Project Resources	EVA	.935	.341	.348	32	.730	.119	.341	-.576	.813
	EVNA			.378	24.467	.709	.119	.314	-.529	.766
P4.2_Q1_F_Experience	EVA	4.466	.042	-.020	32	.985	-.008	.404	-.832	.816
	EVNA			-.023	29.823	.982	-.008	.342	-.707	.691

P5_Q3_A_Trust	EVA	.322	.575	.830	32	.412	.154	.186	-.224	.532
	EVNA			.817	18.994	.424	.154	.189	-.241	.549
P5_Q3_B_Guidelines	EVA	2.130	.154	.661	32	.513	.119	.179	-.247	.484
	EVNA			.677	21.046	.506	.119	.175	-.246	.483
P5_Q3_C_Core values	EVA	.072	.790	.126	32	.901	.024	.189	-.360	.408
	EVNA			.125	19.397	.902	.024	.190	-.374	.421
P5_Q3_D_Empowerment	EVA	.686	.414	.383	32	.704	.071	.186	-.307	.449
	EVNA			.384	19.879	.705	.071	.185	-.315	.458
P5_Q3_E_Standards	EVA	.322	.575	-.341	32	.736	-.063	.186	-.441	.315
	EVNA			-.335	18.994	.741	-.063	.189	-.458	.332
P5_Q3_F_Responsibility	EVA	.029	.865	-.088	32	.931	-.016	.181	-.384	.352
	EVNA			-.086	19.167	.932	-.016	.183	-.398	.367
P5_Q3_G_Urgency	EVA	11.807	.002	1.446	32	.158	.253	.175	-.103	.609
	EVNA			1.567	24.402	.130	.253	.161	-.080	.586
P5_Q3_H_Work & Life	EVA	.038	.846	.590	32	.559	.111	.188	-.271	.493
	EVNA			.584	19.263	.566	.111	.190	-.286	.507
P5_Q3_I_Ethics	EVA	.038	.846	.590	32	.559	.111	.188	-.271	.493
	EVNA			.584	19.263	.566	.111	.190	-.286	.507
P5_Q3_J_Respect	EVA	.012	.914	-.055	32	.957	-.008	.144	-.301	.286
	EVNA			-.054	19.039	.957	-.008	.146	-.314	.298
P5_Q3_L_Support	EVA	.686	.414	.383	32	.704	.071	.186	-.307	.449
	EVNA			.384	19.879	.705	.071	.185	-.315	.458
P5_Q3_P_Cooperation	EVA	1.178	.286	-.600	32	.553	-.103	.171	-.452	.246
	EVNA			-.575	17.846	.572	-.103	.179	-.478	.273

Table 4.4.6: Etisalat (1) and ADNOC (3) Independent sample test

Again the T-Test was performed but now between ADNOC and Emirates Airlines but there were no significant differences in the mean values but some of the values were almost 1 which indicates that there is a wide range of answers selected. For example, the variable “communication” in Emirates Airlines has a mean value of 3.50 while in ADNOC it was 3.55 which show that both companies have almost similar level of agreement from the communication with management point of view. Another example, “project oriented teams” variable has a mean difference of 0.909 which is the maximum difference between ADNOC and

Emirates Airlines. ADNOC mean was 3.09 while Emirates Airlines mean was 4.00. This shows that in Emirates Airlines there is wider agreement on the fact that they use teams for specific projects. On the other hand, ADNOC mean shows the slightly agreement or the undecided answers which itself means that team members in ADNOC are not fully aware of their situation.

The following table shows full results of T-Test between ADNOC (3) and Emirates Airlines (2):

Group Statistics					
	Company	N	Mean	Std. Deviation	Std. Error Mean
P3_Q1_A_Up to date IT Knowledge	2	18	3.89	.900	.212
	3	11	3.82	.751	.226
P3_Q1_B_Attend IT courses	2	18	3.06	.998	.235
	3	11	3.09	1.136	.343
P3_Q1_C_Develop work skills	2	18	3.83	.857	.202
	3	11	4.45	.688	.207
P3_Q1_D_Improve IT processes	2	18	3.67	.686	.162
	3	11	4.27	.905	.273
P3_Q1_E_Superior IT knowledge	2	18	3.22	1.114	.263
	3	11	3.45	1.368	.413
P3_Q1_F_Manager Support for IT Knowledge	2	18	3.17	1.295	.305
	3	11	3.64	1.206	.364
P3_Q1_G_Add new IT solutions	2	18	3.67	1.029	.243
	3	11	3.91	.944	.285
P4.1_Q1_Team Size	2	18	2.17	.924	.218
	3	11	1.18	.751	.226
P4.1_Q2_Reporting members	2	18	1.00	1.085	.256
	3	11	.82	.603	.182
P4.1_Q3_Relation among team	2	18	4.28	.752	.177
	3	11	3.64	1.206	.364
P4.1_Q4_Importance of teams	2	18	4.39	1.092	.257
	3	11	4.45	.688	.207
P4.1_Q5_Motivation	2	18	3.72	.895	.211
	3	11	3.00	1.095	.330
P4.1_Q9_Proficiency	2	18	3.89	.900	.212

	3	11	3.09	1.300	.392
P4.1_Q11_Outcomes	2	18	4.00	.767	.181
	3	11	3.45	1.440	.434
P4.1_Q13_A_Goals & Targets	2	18	3.17	1.383	.326
	3	11	3.45	.820	.247
P4.1_Q13_B_Task Distribution	2	18	3.22	1.353	.319
	3	11	3.45	.934	.282
P4.1_Q13_C_Tasks management	2	18	3.11	1.278	.301
	3	11	3.36	.924	.279
P4.1_Q13_D_Work Progress monitoring	2	18	3.44	1.617	.381
	3	11	3.36	.809	.244
P4.1_Q13_E_Communication	2	18	3.50	1.543	.364
	3	11	3.55	.688	.207
P4.1_Q13_F_Listening	2	18	3.17	1.465	.345
	3	11	3.73	.647	.195
P4.1_Q13_G_Solving issues and obstacles	2	18	3.11	1.410	.332
	3	11	3.73	.647	.195
P4.2_Q1_A_Project oriented team	2	18	4.00	.840	.198
	3	11	3.09	.831	.251
P4.2_Q1_B_Professional project managers	2	18	3.61	.850	.200
	3	11	3.36	.924	.279
P4.2_Q1_C_Project time	2	18	3.22	1.166	.275
	3	11	2.64	.674	.203
P4.2_Q1_D_Project budget	2	18	3.44	.922	.217
	3	11	3.18	.751	.226
P4.2_Q1_E_Project Resources	2	18	3.39	1.037	.244
	3	11	3.27	.786	.237
P4.2_Q1_F_Experience	2	18	3.89	.583	.137
	3	11	3.18	.751	.226
P5_Q3_A_Trust	2	18	1.17	.383	.090
	3	11	1.45	.522	.157
P5_Q3_B_Guidelines	2	18	1.11	.323	.076
	3	11	1.27	.467	.141

P5_Q3_C_Core values	2	18	1.22	.428	.101
	3	11	1.45	.522	.157
P5_Q3_D_Empowerment	2	18	1.06	.236	.056
	3	11	1.36	.505	.152
P5_Q3_E_Standards	2	18	1.11	.323	.076
	3	11	1.45	.522	.157
P5_Q3_F_Responsibility	2	18	1.17	.383	.090
	3	11	1.36	.505	.152
P5_Q3_G_Urgency	2	18	1.22	.428	.101
	3	11	1.18	.405	.122
P5_Q3_H_Work & Life	2	18	1.28	.461	.109
	3	11	1.45	.522	.157
P5_Q3_I_Ethics	2	18	1.28	.461	.109
	3	11	1.45	.522	.157
P5_Q3_J_Respect	2	18	1.06	.236	.056
	3	11	1.18	.405	.122
P5_Q3_L_Support	2	18	1.28	.461	.109
	3	11	1.36	.505	.152
P5_Q3_P_Cooperation	2	18	1.11	.323	.076
	3	11	1.36	.505	.152

Table 4.4.7: ADNOC vs. Emirates Airlines T-Test results

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
P3_Q1_A_Up to date IT Knowledge	EVA	1.164	.290	.218	27	.829	.071	.325	-.595	.737
	EVNA			.228	24.272	.822	.071	.310	-.569	.711
P3_Q1_B_Attend IT courses	EVA	.158	.694	-.088	27	.931	-.035	.402	-.861	.790
	EVNA			-.085	19.155	.933	-.035	.416	-.905	.834
P3_Q1_C_Develop work skills	EVA	.177	.677	-2.032	27	.052	-.621	.306	-1.248	.006
	EVNA			-2.146	24.843	.042	-.621	.290	-1.218	-.025
P3_Q1_D_Improve IT processes	EVA	2.817	.105	-2.046	27	.051	-.606	.296	-1.214	.002
	EVNA			-1.912	17.028	.073	-.606	.317	-1.275	.063
P3_Q1_E_Superior IT knowledge	EVA	2.114	.158	-.500	27	.621	-.232	.465	-1.186	.722
	EVNA			-.475	18.007	.641	-.232	.489	-1.260	.795
P3_Q1_F_Manager Support for IT Knowledge	EVA	.035	.853	-.972	27	.340	-.470	.483	-1.461	.522
	EVNA			-.989	22.486	.333	-.470	.475	-1.453	.514
P3_Q1_G_Add new IT solutions	EVA	.636	.432	-.635	27	.531	-.242	.382	-1.026	.542
	EVNA			-.648	22.744	.523	-.242	.374	-1.016	.532
P4.1_Q1_Team Size	EVA	2.798	.106	2.980	27	.006	.985	.331	.307	1.663
	EVNA			3.136	24.648	.004	.985	.314	.338	1.632
P4.1_Q2_Reporting members	EVA	1.919	.177	.508	27	.616	.182	.358	-.553	.917
	EVNA			.580	26.863	.567	.182	.314	-.462	.826
P4.1_Q3_Relation among team	EVA	2.382	.134	1.772	27	.088	.641	.362	-.101	1.384
	EVNA			1.586	14.823	.134	.641	.405	-.222	1.505
P4.1_Q4_Importance of teams	EVA	.972	.333	-.178	27	.860	-.066	.368	-.821	.690
	EVNA			-.199	26.939	.844	-.066	.331	-.744	.613
P4.1_Q5_Motivation	EVA	.013	.911	1.938	27	.063	.722	.373	-.043	1.487
	EVNA			1.843	18.052	.082	.722	.392	-.101	1.545

P4.1_Q9_Proficiency	EVA	1.615	.215	1.956	27	.061	.798	.408	-.039	1.635
	EVNA			1.790	15.913	.093	.798	.446	-.148	1.743
P4.1_Q11_Outcomes	EVA	6.943	.014	1.336	27	.193	.545	.408	-.292	1.383
	EVNA			1.160	13.530	.266	.545	.470	-.466	1.557
P4.1_Q13_A_Goals & Targets	EVA	.858	.362	-.624	27	.538	-.288	.461	-1.234	.659
	EVNA			-.704	26.997	.488	-.288	.409	-1.127	.552
P4.1_Q13_B_Task Distribution	EVA	.521	.477	-.500	27	.621	-.232	.465	-1.186	.722
	EVNA			-.546	26.476	.590	-.232	.425	-1.106	.641
P4.1_Q13_C_Tasks management	EVA	.194	.663	-.569	27	.574	-.253	.444	-1.163	.658
	EVNA			-.615	26.079	.544	-.253	.410	-1.096	.591
P4.1_Q13_D_Work Progress monitoring	EVA	4.500	.043	.154	27	.879	.081	.526	-.998	1.160
	EVNA			.179	26.283	.860	.081	.452	-.849	1.010
P4.1_Q13_E_Communication	EVA	3.579	.069	-.092	27	.928	-.045	.495	-1.062	.971
	EVNA			-.109	25.298	.914	-.045	.419	-.907	.816
P4.1_Q13_F_Listening	EVA	3.253	.082	-1.193	27	.243	-.561	.470	-1.524	.403
	EVNA			-1.414	25.210	.170	-.561	.397	-1.377	.256
P4.1_Q13_G_Solving issues and obstacles	EVA	2.621	.117	-1.358	27	.186	-.616	.454	-1.547	.315
	EVNA			-1.599	25.570	.122	-.616	.385	-1.409	.176
P4.2_Q1_A_Project oriented team	EVA	.241	.628	2.838	27	.009	.909	.320	.252	1.566
	EVNA			2.846	21.464	.010	.909	.319	.246	1.572
P4.2_Q1_B_Professional project managers	EVA	.127	.724	.736	27	.468	.247	.336	-.442	.937
	EVNA			.721	19.878	.479	.247	.343	-.469	.964
P4.2_Q1_C_Project time	EVA	4.235	.049	1.513	27	.142	.586	.387	-.209	1.381
	EVNA			1.714	26.968	.098	.586	.342	-.116	1.287
P4.2_Q1_D_Project budget	EVA	1.418	.244	.796	27	.433	.263	.330	-.415	.940
	EVNA			.837	24.620	.411	.263	.314	-.384	.909
P4.2_Q1_E_Project Resources	EVA	.764	.390	.319	27	.752	.116	.364	-.631	.864
	EVNA			.341	25.565	.736	.116	.340	-.584	.817
P4.2_Q1_F_Experience	EVA	2.605	.118	2.842	27	.008	.707	.249	.197	1.218
	EVNA			2.670	17.343	.016	.707	.265	.149	1.265
P5_Q3_A_Trust	EVA	7.734	.010	-1.710	27	.099	-.288	.168	-.633	.058
	EVNA			-1.586	16.615	.132	-.288	.182	-.672	.096
P5_Q3_B_Guidelines	EVA	4.791	.037	-1.103	27	.280	-.162	.147	-.462	.139

	EVNA			-1.009	15.913	.328	-.162	.160	-.501	.178
P5_Q3_C_Core values	EVA	4.231	.049	-1.305	27	.203	-.232	.178	-.597	.133
	EVNA			-1.243	18.093	.230	-.232	.187	-.625	.160
P5_Q3_D_Empowerment	EVA	25.236	.000	-2.239	27	.034	-.308	.138	-.590	-.026
	EVNA			-1.902	12.712	.080	-.308	.162	-.659	.043
P5_Q3_E_Standards	EVA	14.943	.001	-2.197	27	.037	-.343	.156	-.664	-.023
	EVNA			-1.963	14.759	.069	-.343	.175	-.717	.030
P5_Q3_F_Responsibility	EVA	4.853	.036	-1.191	27	.244	-.197	.165	-.536	.142
	EVNA			-1.113	17.057	.281	-.197	.177	-.570	.176
P5_Q3_G_Urgency	EVA	.263	.612	.252	27	.803	.040	.160	-.289	.370
	EVNA			.255	22.232	.801	.040	.158	-.288	.368
P5_Q3_H_Work & Life	EVA	2.244	.146	-.953	27	.349	-.177	.185	-.557	.204
	EVNA			-.924	19.223	.367	-.177	.191	-.577	.223
P5_Q3_I_Ethics	EVA	2.244	.146	-.953	27	.349	-.177	.185	-.557	.204
	EVNA			-.924	19.223	.367	-.177	.191	-.577	.223
P5_Q3_J_Respect	EVA	4.853	.036	-1.067	27	.295	-.126	.118	-.369	.117
	EVNA			-.942	14.220	.362	-.126	.134	-.413	.161
P5_Q3_L_Support	EVA	.774	.387	-.470	27	.642	-.086	.183	-.461	.289
	EVNA			-.459	19.775	.651	-.086	.187	-.476	.304
P5_Q3_P_Cooperation	EVA	10.257	.003	-1.649	27	.111	-.253	.153	-.567	.062
	EVNA			-1.484	15.092	.158	-.253	.170	-.615	.110

Table 4.4.8: ADNOC vs. Emirates Airlines Independent Sample test

Having low values of variances indicate that most of the respondents have almost selected close answers of the questionnaire. The Levene's test for equality of variances was performed to find out if the assumption of variances being equal across a group of samples or respondents. From the highlighted values in the previously provided tables, it was obvious that some variables have almost equal variances and means. This indicates that respondents are sharing the same thinking and experience in most of the variables covered by the questionnaire.

Bivariate Correlation:

Another feature of the SPSS application is to provide Bivariate Correlation tests. The Bivariate Correlation measures the relationship between two variables. The correlation measures the strength of the relationship.

The strength of a correlation ranges from the absolute value from 0 to 1; the closer the correlation is to 1, the stronger the relationship, the closer the correlation is to 0, the weaker the relationship. For example, the relationship between temperature and ice cream cones sold may be 80. This indicates a strong relationship. The direction can be positive or negative. For example, the positive correlation in the ice cream example is positive; as the temperature increase, ice cream cones sold increase. A negative correlation may be found between spending and saving in the bank; as spending increases, saving decrease.

The number of variables extracted from the questionnaire is large and thus the bivariate correlation process produced a large table showing the correlation coefficient between each variable and the rest of the variables. This large table can be viewed in the Appendix section of this dissertation. From this table, a number of variables were considered most effective by looking at their correlation coefficients. If the coefficient is between 0.7** and 0.9** then it was selected. The list of selected variables is: Goals & targets, task distribution, task management, project time, project budget, listening, communication, work progress monitoring and solving issues and obstacles.

The result of bivariate correlation for the selected variables is provided here:

		P4.1_Q13_A_Goals & Targets	P4.1_Q13_B_Task Distribution	P4.1_Q13_C_Tasks management	P4.1_Q13_D_Work Progress monitoring	P4.1_Q13_E_Communication	P4.1_Q13_F_Listening	P4.1_Q13_G_Solving issues and obstacles	P4.2_Q1_C_Project time	P4.2_Q1_D_Project budget
P4.1_Q13_A_Goals & Targets	Corr. Coeff.	1.000	.824**	.854**	.794**	.741**	.738**	.823**	.297*	.248
	Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000	.024	.060
P4.1_Q13_B_Task Distribution	Corr. Coeff.	.824**	1.000	.881**	.822**	.725**	.708**	.756**	.242	.199
	Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000	.067	.133
P4.1_Q13_C_Tasks management	Corr. Coeff.	.854**	.881**	1.000	.811**	.714**	.746**	.756**	.276*	.242
	Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.036	.068
P4.1_Q13_D_Work Progress monitoring	Corr. Coeff.	.794**	.822**	.811**	1.000	.837**	.667**	.795**	.344**	.287*
	Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000	.008	.029
P4.1_Q13_E_Communication	Corr. Coeff.	.741**	.725**	.714**	.837**	1.000	.802**	.827**	.175	.143
	Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000	.190	.283
P4.1_Q13_F_Listening	Corr. Coeff.	.738**	.708**	.746**	.667**	.802**	1.000	.846**	.169	.209
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.	.000	.206	.115
P4.1_Q13_G_Solving issues and obstacles	Corr. Coeff.	.823**	.756**	.756**	.795**	.827**	.846**	1.000	.263*	.264*
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.	.046	.046
P4.2_Q1_C_Project time	Corr. Coeff.	.297*	.242	.276*	.344**	.175	.169	.263*	1.000	.721**

	Sig. (2-tailed)	.024	.067	.036	.008	.190	.206	.046	.	.000
P4.2_Q1_D_Project budget	Corr. Coeff.	.248	.199	.242	.287*	.143	.209	.264*	.721**	1.000
	Sig. (2-tailed)	.060	.133	.068	.029	.283	.115	.046	.000	.

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

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

Some of the correlation results provided in the previous table were highlighted to indicate that the relation between those two variables is high and have a meaning. Each correlation coefficient is studied to figure out the reasons of having such high values:

- Setting clear and obvious “Goals and Targets” of a certain project will have a great impact on both the progress of the project and the team’s contribution to the overall results of the project. It can be seen from the correlation coefficients that “Goals and Targets” variable has high coefficients values with the following variables:
 - “Task Distribution” has a correlation coefficient value of 0.824. This indicates that for the tasks to be distributed evenly among team members, they need to have a clearly defined goals and targets that will even help the project manager to easily distribute the tasks over team members.
 - “Tasks management” has a correlation coefficient value of 0.854 which strengthens the need for a well defined goals and targets to be able to manage tasks easily and obviously instead of getting unorganized at the start of the project.
 - “Listening” and “Communication” have high correlation values with “Goals and Targets” because listening to the team members and giving them the chance to express their ideas at the goals setting stage will definitely enhance the resulting goals and targets. Thus team members will feel more inbound with their own targets and goals.
- Another variable “Work Progress monitoring” and “Solving issues and obstacles” has a high correlation coefficient value of 0.795. This indicates that clearing issues and obstacles will be fast and easy if the work progress is monitored and observed all the time to ensure smooth operation and outcomes. In addition to that, “Communication” with “Work Progress monitoring” showed a high correlation coefficient value which

means that communicating with team members often will enhance the process of monitoring the work progress without the need for seeking this knowledge from team members all the time.

- “Solving issues and obstacles” variable has high correlation coefficients with most of the variables which indicates that this is a very important variable. “Listening” to team members will for sure improve the process of solving issues and obstacles. Even clearly defined “Goals and Targets” and well “Managed Tasks” help in solving issues and obstacles. Those coefficients prove the availability of such relations and this is what can be obtained from the correlation test.

Cross Tabulation:

P4.1_Q13_A_Goals & Targets * Company Crosstabulation

Count						
	Company					Total
	1	2	3	4		
P4.1_Q13_A_Goals & Targets	0	7	2	0	0	9
▪	1	2	0	0	0	2
▪	2	1	1	1	0	3
▪	3	2	7	5	0	14
▪	4	10	6	4	5	25
▪	5	1	2	1	1	5
▪						
Total		23	18	11	6	58

P4.1_Q13_B_Task Distribution * Company Crosstabulation

Count						
	Company					Total
	1	2	3	4		
P4.1_Q13_B_Task Distribution	0	7	2	0	0	9
	1	1	0	0	0	1
	2	2	1	1	0	4
	3	3	5	6	0	14
	4	7	9	2	4	22
	5	3	1	2	2	8
Total		23	18	11	6	58

P4.1_Q13_C_Tasks management * Company Crosstabulation

Count						
	Company					Total
	1	2	3	4		
P4.1_Q13_C_Tasks management	0	7	2	0	0	9
	1	1	0	0	0	1
	2	2	1	2	0	5

	3	3	6	4	1	14
	4	6	9	4	4	23
	5	4	0	1	1	6
Total		23	18	11	6	58

P4.1_Q13_D_Work Progress monitoring * Company Crosstabulation

Count	Company					Total
	1	2	3	4		
P4.1_Q13_D_Work Progress 0 monitoring	7	2	0	0	9	
1	1	0	0	0	1	
2	0	2	1	0	3	
3	6	4	6	1	17	
4	5	4	3	2	14	
5	4	6	1	3	14	
Total	23	18	11	6	58	

P4.1_Q13_E_Communication * Company Crosstabulation

Count	Company					Total

		1	2	3	4	
P4.1_Q13_E_Communicatio	0	7	2	0	0	9
n	1	1	0	0	0	1
	2	1	1	0	0	2
	3	5	4	6	1	16
	4	4	6	4	3	17
	5	5	5	1	2	13
Total		23	18	11	6	58

P4.1_Q13_F_Listening * Company Crosstabulation

Count		Company				Total
		1	2	3	4	
P4.1_Q13_F_Listening	0	7	2	0	0	9
	1	1	0	0	0	1
	2	1	2	0	0	3
	3	2	6	4	0	12
	4	7	5	6	5	23
	5	5	3	1	1	10
Total		23	18	11	6	58

P4.1_Q13_G_Solving issues and obstacles * Company Crosstabulation

Count						
		Company				Total
		1	2	3	4	
P4.1_Q13_G_Solving issues and obstacles	0	7	2	0	0	9
	1	1	0	0	0	1
	2	2	2	0	0	4
	3	2	6	4	0	12
	4	5	6	6	3	20
	5	6	2	1	3	12
Total		23	18	11	6	58

P4.2_Q1_C_Project time * Company Crosstabulation

Count						
		Company				Total
		1	2	3	4	
P4.2_Q1_C_Project time	1	1	2	0	1	4
	2	10	3	5	0	18
	3	5	3	5	3	16
	4	7	9	1	2	19

	5	0	1	0	0	1
Total		23	18	11	6	58

P4.2_Q1_D_Project budget * Company Crosstabulation

Count		Company				Total
		1	2	3	4	
		P4.2_Q1_D_Project budget 1	1	1	0	
	2	4	4	2	0	10
	3	10	3	5	1	19
	4	6	10	4	4	24
	5	2	1	0	0	3
Total		23	18	11	6	58

Reliability test:

Case Processing Summary

		N	%
Cases	Valid	58	100.0
	Excluded ^a	0	.0

Total	58	100.0
-------	----	-------

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.947	.934	9

Inter-Item Correlation Matrix

	P4.1_Q13_A_Goals & Targets	P4.1_Q13_B_Task Distribution	P4.1_Q13_C_Tasks management	P4.1_Q13_D_Work Progress monitoring	P4.1_Q13_E_Communication	P4.1_Q13_F_Listening	P4.1_Q13_G_Solving issues and obstacles	P4.2_Q1_C_Project time	P4.2_Q1_D_Project budget
P4.1_Q13_A_Goals & Targets	1.000	.915	.920	.894	.867	.874	.898	.205	.203
P4.1_Q13_B_Task Distribution	.915	1.000	.944	.912	.865	.865	.875	.150	.162
P4.1_Q13_C_Tasks management	.920	.944	1.000	.908	.867	.895	.884	.183	.191
P4.1_Q13_D_Work Progress monitoring	.894	.912	.908	1.000	.916	.853	.900	.243	.241
P4.1_Q13_E_Communication	.867	.865	.867	.916	1.000	.911	.913	.097	.111
P4.1_Q13_F_Listening	.874	.865	.895	.853	.911	1.000	.934	.108	.163

P4.1_Q13_G_Solving issues and obstacles	.898	.875	.884	.900	.913	.934	1.000	.170	.194
P4.2_Q1_C_Project time	.205	.150	.183	.243	.097	.108	.170	1.000	.744
P4.2_Q1_D_Project budget	.203	.162	.191	.241	.111	.163	.194	.744	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
P4.1_Q13_A_Goals & Targets	25.05	95.348	.928	.891	.933
P4.1_Q13_B_Task Distribution	24.98	95.035	.918	.917	.933
P4.1_Q13_C_Tasks management	25.05	95.208	.934	.928	.932
P4.1_Q13_D_Work Progress monitoring	24.90	93.077	.940	.928	.932
P4.1_Q13_E_Communication	24.86	94.437	.901	.915	.934
P4.1_Q13_F_Listening	24.88	94.740	.906	.922	.934

P4.1_Q13_G_Solving issues and obstacles	24.88	93.476	.930	.920	.932
P4.2_Q1_C_Project time	25.16	119.783	.233	.586	.962
P4.2_Q1_D_Project budget	24.79	119.816	.253	.575	.961

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
28.07	125.855	11.219	9

Since the number of variables is large in this questionnaire, it was decided to take interesting variables and perform a Bivariate Correlation on them.(the full result can be found in the appendix).

[1]: Manager Support for IT knowledge and Up to date IT knowledge variables were entered to the SPSS system and analyzed using Bivariate Correlation. The results are shown below:

Correlations

		Manager Support for IT Knowledge	Up to date IT Knowledge
Spearman's rho	Manager Support for IT Knowledge	1.000	.493**
			.000
		58	58

Up to date IT Knowledge	Correlation Coefficient	.493**	1.000
	Sig. (2-tailed)	.000	.
	N	58	58

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

As shown in the above table, there is a relation between the employees' updated IT knowledge and their manager's support for IT knowledge. The correlation coefficient is almost 0.5 which indicates that if the manger was providing support to team members by giving them training and courses then their IT knowledge will increase.

[2]: Team size and the relation among the team variables were also used to check the relation among them, and the result obtained from SPSS was:

			Team Size	Relation among team
Spearman's rho	Team Size	Correlation Coefficient	1.000	.124
		Sig. (2-tailed)	.	.355
		N	58	58
	Relation among team	Correlation Coefficient	.124	1.000
		Sig. (2-tailed)	.355	.
		N	58	58

As shown in the previous table, the significance is low which means that there is no actual or obvious relation between the size of the team and the relation among team members.

[3]: This test shows a very interesting result as 5 variables were entered into the SPSS system to measure the relation among them and the result is provided below:

		Motivation	Outcomes	Goals & Targets	Communication	Listening
Spearman's rho	Corr. Coefficient	1.000	.556**	.196	.294*	.152

	Sig. (2-tailed)	.	.000	.140	.025	.254
Outcomes	Corr. Coefficient	.556**	1.000	.409**	.416**	.314*
	Sig. (2-tailed)	.000	.	.001	.001	.016
	N	58	58	58	58	58
Goals & Targets	Corr. Coefficient	.196	.409**	1.000	.741**	.738**
	Sig. (2-tailed)	.140	.001	.	.000	.000
	N	58	58	58	58	58
Communication	Corr. Coefficient	.294*	.416**	.741**	1.000	.802**
	Sig. (2-tailed)	.025	.001	.000	.	.000
	N	58	58	58	58	58
Listening	Corr. Coefficient	.152	.314*	.738**	.802**	1.000
	Sig. (2-tailed)	.254	.016	.000	.000	.
	N	58	58	58	58	58

** . Corr. is significant at the 0.01 level

* . Corr. is significant at the 0.05 level

Looking at the motivation variable, it is obvious that if motivation level is high then the outcome of the team member will also be high as the correlation coefficient is 0.556. However, motivation seems to have no significant relation with goals, communication and listening variables.

Communication variable shows significant results against goals, listening and outcomes. The correlation coefficient between communication and outcome is 0.416 which indicates that good communication with teams members help in delivering the requirements correctly to achieve the desired outcomes. In addition to that, a score of 0.741 correlation coefficient was made against goals and targets which is obviously right as comprehensive communication will pinpoint all the desired goals and targets and the ways to approach them.

Finally, listening scored 0.802 against communication which is correct as communication is based on listening, understanding and then replying. Team members will always have more ideas that can help in improving the work, thus giving them the opportunity to communicate their ideas to the management is vital. On the other side, management should provide patient ears to the employees to have the full picture rather than imposing orders on them.

[4]: Another 4 variables were also put together to check their correlation, the following table shows the SPSS results:

			Correlations			
			Professional project managers	Project time	Project budget	Project Resources
Spearman's rho	Professional project managers	Corr. Coefficient	1.000	.447**	.386**	.368**
		Sig. (2-tailed)	.	.000	.003	.004
		N	58	58	58	58
	Project time	Corr. Coefficient	.447**	1.000	.721**	.452**
		Sig. (2-tailed)	.000	.	.000	.000
		N	58	58	58	58
	Project budget	Corr. Coefficient	.386**	.721**	1.000	.594**
		Sig. (2-tailed)	.003	.000	.	.000
		N	58	58	58	58
Project Resources	Corr. Coefficient	.368**	.452**	.594**	1.000	
	Sig. (2-tailed)	.004	.000	.000	.	
	N	58	58	58	58	

** . Correlation is significant at the 0.01 level

Project time seems to be the dominant variable here with most of the significant values of correlation coefficients. It was found that the correlation coefficient for time against professional project managers was 0.447 which is quite meaningful as expert managers can deal with projects in such away to accelerate them and reduce their time based on their expertise in the field.

In addition to that, a score of 0.721 is achieved between time and budget. This means that if the project was provided with high budget then it will be completed faster. Unfortunately this do not seem to be quite right since the billing system in Etisalat had undetermined budget but the progress was very slow and never completed on time. However, it is possible to say that if the project stayed active for a long time then more budgets will be consumed. Looking at this correlation from this perspective makes it correct for the case of Etisalat's billing address.

Time and project resources variables have a correlation coefficient of 0.452 which somehow indicates that if resources are used efficiently within the defined time for them then the project will proceed smoothly. Requesting many resources with no actual use will result in low output and thus time of the project will be wasted as those resources might be needed in other parts of the project.

4.5 Summary

This chapter explained in detail the results obtained from the questionnaire which was filled in by employees from different companies like Etisalat, Emirates Airlines and ADNOC. One of the goals of this questionnaire was to find out whether team members and team leaders know about High Performance Teams. It was found that almost 60% of the respondents did not know the exact naming of High Performance Teams but their responses to the features of the HPTs were showing that their teams are actually performing as if they are HPT with some required refinements to achieve better results of HPTs.

Chapter 5

[Recommendations]

and

[Conclusions]

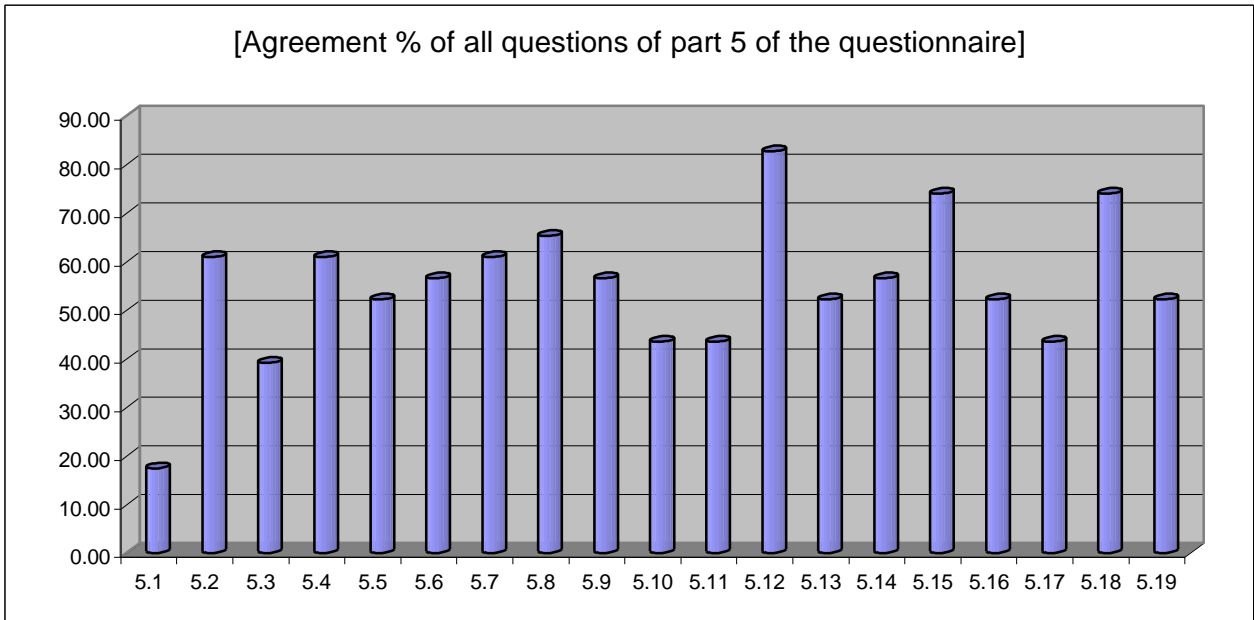
Chapter 5 – Recommendations & Conclusions

5.1 Recommendations

One of the main issues of this study was to investigate the reasons by which Etisalat's new billing system has taken more than 5 years to be completed and ready for service. Although reasons were explained in the first chapter, it was decided that team management was the main factor for the catastrophic situation that Etisalat was put into. One truth that must be stated and presented to readers is that Etisalat's IT department was never ready to go for the whole process of building large scale applications. Yet, management decided without fully investigating the situation in the available teams and experts in the department.

This study focused on the features of teams and High Performance Teams to investigate whether Etisalat's IT teams are capable of doing highly professional work after years of working with old systems and technologies. The used questionnaire also was intended for Etisalat's IT staff. The most important part of the questionnaire was part 5 which contained statements about features of High Performance Teams.

The following chart shows the percentage of agreement for each question in part 5 only for Etisalat employees:



[Figure 5.1]

Questions are presented by their numbers, for example question 1 of part 5 is represented as 5.1. To prevent repetition among chapters, questions can be referred to by looking them up in the previous chapter. By calculating the average agreement for all of the questions, it yielded an average of 54.92%. This means that almost 55% of the employees agree on the availability of HPTs while the remaining 45% do not agree.

According to the time when the questionnaire was conducted, the IT department of Etisalat has already been through a wide scale changes and modification attempts which made employees aware of the issues and problems that made them get delayed to accomplish the project. Therefore, a percentage of 55% can be expected but it is not enough to be a highly performing team.

In the rest of this section, recommendations and possible solutions will be provided to enhance Etisalat’s IT department to function as HPTs.

- **Building trust among team members is very important to give them more confidence in sharing their feelings and thinking among each other and the management.** The environment in Etisalat is not actually friendly in terms of sharing feelings and ideas about certain work procedures or processes.

Only management represented by department executive vice presidents is capable of forcing ideas and orders. Team members can not override their direct managers who never listen to them, they try to push their ideas and if they were lucky they might get a response from management. Higher management depends on mid management who usually keep everything moving for their benefits.

One of the obvious contradictions that happened during the life span of the billing project was the pressure expressed by mid management on higher management to convince them that IT department current employees are more capable than the IT Company assigned to build the system.

With high confidence into the mid management by higher management, the contract with the IT company was cancelled and everything was dumped over Etisalat IT staff causing a tremendous time waste and handover process that never got completed successfully.

- **Defined guidelines and business objectives that help the team member to be part of the firm.** In other words, if the employees found defined objectives and workflow of the overall process of the company then their contribution to the company will be faster and more fruitful.

Knowing what to do to achieve the requirement is one of the most important fundamentals that help in improving the company's development. In the case of Etisalat's IT department with the billing system project, it was completely a chaos situation after handing over the whole project to Etisalat's IT staff by the contractor. There was no written documentation on how to proceed to achieve the project plan and show to the higher management that the employees are capable of developing the whole system.

The situation got even worse when it was decided by management to find out what the contractor was doing and building on it to see if things work out. However, employees got more depressed as they did not know how to proceed to achieve while management is still screaming for results and reasons for delays.

The situation continued to suffer more with the decision from management to hire more than 40 new employees who are experts in Java programming language. How interviews were made, how recruiting was done and how they manage to bring those new programmers in such a short time is a mystery that no one new about. Out of a sudden more than 40 new programmers came to the company and this resulted in much more wasted time and tremendous cost.

All of those issues and wastage of time and money could have been avoided if the management has enrolled the employees who are doing the actual in the process of the project progress to come up with the best step by step and guidelines to effectively build the project.

- **Availability of core values like honesty, integrity, loyalty and determination.** Some of those values were missing actually from the higher management and the mid management who never put team members into the complete picture of the whole process.

Honesty is missing since team members do not know what is actually happening to the project as rumors were spreading about the cancellation of the project and laying off most of the team members. This kind of environment is not healthy for both the project and the team members as they are always afraid of what is going to happen to them. They do not feel comfortable to produce effective output.

Loyalty is becoming lower and lower as people always think that they are not needed and their knowledge is outdated. Determination to achieve goals was missing from team members due to the feeling that the project is beyond their capabilities and experience.

All of this could have been avoided, if higher management have broken the ice between them and team members and stopped the habit of believing mid management in everything

they say. Higher management must meet with the mid management and team members and start a brain storing session to handle all the difficulties and problems that might prevent losing all this time, effort and money. If there was quite a bit of loyalty for Etisalat this would never have happened but it was strangely obvious to all team members that most of the members of the mid management were doing anything just to stay in their position and not to be replaced by others who know the new system more than them.

- **Empowering team members and providing full participation for them in meetings along with positive reinforcement.** It is highly recommended for Etisalat to change their way of looking at employees as soldiers to only take orders and perform them in the shortest time and lowest cost. Life does not work like this anymore, team members must be given the chance to participate in decision making meetings. Their contribution might bring better results to the project progress as they are the people who are doing the work.

They can specify their capabilities and limits towards new challenging projects like the billing system in Etisalat. If team members were given the chance to indicate their level of expertise in the new technologies used then higher management would have thought twice before thinking of canceling the contract with the software company. Etisalat management decided to cancel the contract just because the contractor asked for an extension of 6 months only with a slight addition to the cost and expenses and they promised to finish the whole system. However, mid management convinced higher management that current team members of IT department are more than capable of completing the work on their own.

The situation could have been less destructive if Etisalat higher management accepted the contractor's request because after the cancellation it took Etisalat more than 3 years to complete the project on their own with more money spent here and there to cover all kind of expenses.

It is recommended for Etisalat to consider team members in their next project and give them the chance to express their feelings and capabilities that will ensure a smooth and clear progress of the project rather than taking false information from mid management who were given more than trust and confidence.

- **One of the good points of High Performance Teams is that team members must be ready for any challenge to take up the responsibility and get plugged into work smoothly.** In most of the organization in the UAE people do their own tasks only without looking at the possibility of extending their efforts to cover most of the work performed in their department.

For example, Etisalat could have created rotation type of work where a single team member can work in the same position for a defined period of time and then he/she must change to another position to experience the work their.

This kind of work environment is not easy as most of the employees themselves prefer to stay in one place and perform daily tasks. However, having such an environment will build up team members whom can contribute in building high performance teams.

- **Sense of urgency and momentum where each team member builds on the ideas of the rest of the team and they work on time with seriousness in mind.** In other words, team members must be working like honey bees where they do their work precisely and in a timely manner.

Storm braining sessions must be fruitful by building ideas together to reach the final target in a fast and organized way. There should not be storm braining session where every body is trying to enforce his/her thinking and ideas.

In Etisalat and during the business knowledge transfer sessions between Etisalat mid management and the contractor employees, the situation was awful due to the obvious contradiction between Etisalat employees themselves. The sessions took hours with no clear output and idea. More sessions were created and more time was wasted for both Etisalat and the contractor.

By looking at those sessions and the way Etisalat provided the knowledge to the contractor, it was not strange at all for the contractor to ask for more money and time to complete such a large project that mid management has requested tremendous amount of requirements.

- **Work Life balance where the firm encourages team members to achieve success at work and at home.** For Etisalat's IT team members their work life was consuming more than 80% of their daily life. There were times when they were working 24 hours without any compensation. They were forced to come to complete certain tasks to be on time. Looking at such a situation automatically brings to the listener that their output is going to be of less than 50% in terms of quality and perfection. All team members will just make the pieces of software work at that point of time but no body knows what will happen later on when the actual heavy traffic is fed to the system.

Although the new billing system was released finally, it is still going under the process of corrections and modifications. The system was forced to be released in one of the far areas of the UAE where fewer customers are available to check and investigate if the system is going to work or not.

Due to deployment of the system as a trial version in the emirate of Ras Al Khaimah, many people complaint about mistakes in their bills, wrong bills coming to them, their new requested mobile numbers which never took more than hours now it is taking more than a week.

During this period, team members of the IT department where always on call to support customer services' employees and to try and fix errors and bugs. This was not planned correctly as most of the employees were spending too much time at work for a long period of time.

A better plan could have been thought of by grouping team members and explaining the situation of higher management desire to see the new billing system running and working. Then, all people involved in the project must participate by telling how much confident their developed part of the system. They must tell the management that they are ready to take the challenge and start the system on a trial period in a test environment built to look like a small city.

- **Team members must have great ethics, eager to learn, develop their skills and passion for excellence in order to be part of a high performance team.** Etisalat IT has the same employees for more than 10 years working in the same manner everyday and handling specific tasks that they never deviate from.

It is surprisingly strange to know that such an organization with a reputation that has reached overseas is still suffering from a weak IT department. By looking at the size of the IT department, everything should be automated in the company in all departments. However, that is not the situation. Engineering department for instance is suffering from continuous paper work that consumes more than 60% of the time of the work in searching emails and printed papers.

Etisalat's IT higher management should provide new strategy to encourage team members to learn and develop their skills. They must always be working to be the best in the field. They must be taking the pardon of looking for solutions for other departments to raise the IT level in the corporation. IT should not wait for other employees to come and ask for help in automating workflows. They must have the initiative to take periodic meetings with other departments to fetch out their workflow and suggest better solution that can enhance the overall procedures of the company.

- In order for **Etisalat to build a High Performance Team**, many changes must be performed on how teams are managed and dealt with. There are also many features that members must have to be part of HPTs. The following can be addressed to help achieve HPTs in Etisalat in addition to the previous recommendations:
 - Members must protect and support each other to work as one unit against difficulties and challenges. If one member is in a need for help or explanation then another member can help and support the other member.
 - Members must be given always the chance to contribute in open dialogue and communication among other team members to share knowledge and experiences. One member might have worked in another company with the same situation that the

project is facing then he/she can contribute in by communicating his/her experience to the rest of the team.

- If the members share a strong common goal among themselves then the project will succeed and the output will be perfect. Members must share the desire to complete the project on time and budget by having strong shared values and beliefs in each other.
- Some team members take the advantage of other members so that they show up to the management that they have provided better work than others. In HPTs this must not be the case as member must subordinate their own objectives to those of the team to ensure success for the group as a team and not as a single contributor.
- One of the most pillars of HPTs is to distribute leadership among team members. This is implemented by leaving the leadership to be handled among the team members where they select a temporary team leader based on his/her experience in the current stage of the project. For example, if the current stage is to build a user interface to access functionalities of the system, then one of the team members who have more experience in this field can take the lead and help in achieving the desired output in a fast and efficient way. Then, for the next stage of the project another team member might be having more experience than the others, thus he/she can take over and lead the team.

5.2 Conclusions

In this dissertation, High Performance Teams were studied to investigate their availability in Etisalat's IT department along with other IT departments in other organizations in the UAE. In addition to that, it focuses on how HPTs could have helped Etisalat's IT department to perform better in designing and building the new billing system.

The dissertation was structured in such a way to explain the whole issue with Etisalat's new billing system in chapter 1. The next chapter went through literature review of the concept of HPTs, definitions, features, issues and how to implement them. Chapter 3 started explaining the research method which was used to collect enough data to find out if HPTs are available in Etisalat and other organizations like ADNOC and Emirates Airlines. It also listed all the questions used in the questionnaire with their explanation and what to expect from them. Chapter 4 presented the results obtained from the questionnaire along with comments and how data was collected. The final chapter contained all the possible recommendations that can help Etisalat improve its next IT projects to meet some of the features of HPTs at least.

This dissertation showed that Etisalat's IT department is not in the right direction of building high performance teams. Highly sophisticated projects should not be forced on employees who never got the chance to develop their skills and knowledge over the years. Also, decision making should be taken with caution and deep studies of its effect on the future of the project.

The results obtained from the questionnaire showed that most of the respondents were not that much familiar with the term High Performance Teams. On the other hand, they were agreeing on the availability of some of the HPT features which may mean that some organizations like Emirates Airlines have an organized IT department that is following some features of HPTs but without knowing about them.

Although the billing system built by Etisalat is currently being used all over the country, it was not successfully implemented as it took more than 5 years to complete with time, cost and resources being exhausted and overrun with tremendous amounts. It is advisable for Etisalat to start working on their IT department to improve it to meet worldwide standards.

Chapter 6

[References]

Chapter 6 – References

6.1 References and Bibliography

1. Eugene McKenna. (2000) *Business psychology and organisational behavior – A student handbook*, Third Edition, Psychology Press.
2. Schwalbe, K. (2002) *Information Technology Project Management*, Second Edition, Course Technology.
3. John DeLamater, (1974). *A Definition of "Group"*. Small Group Behavior, Vol. 5 No. 1, February 1974, Sage Publications.
4. Dennis J. Devine, Laura D. Clayton, Jennifer L. Philips, Benjamin B. Dunford and Sarah B. Melner, (1999). Teams in Organizations: Prevalence, Characteristics and Effectiveness. Small Group Research, Vol. 30 No. 6, December 1999, pp. 678 – 711, Sage Publications.
5. P.Castka, C.J. Bamber, J.M. Sharp and P. Belohoubek, (2001). *Factors affecting successful implementation of high performance teams*. Team Performance Management: An International Journal Volume 7 – Number 7/8, 2001, pp. 123 – 134.
6. J. Zigon, (1997). *Team Performance Measurement: A process for creating team performance standards*. Compensation and Benefits Review 1997; 29; 38.
7. Stewart, G. L. Barrick, M.R. (2000). *Team structure and performance: Assessing the mediating role of intrateam process and the moderating role of task type*. Academy of management journal, Vol. 43, No. 2, 135 -148.
8. Stewart, G.L. (2006). *A Meta-Analytic Review of Relationships Between Team Design Features and Team Performance*. Journal of management, Vol. 32, No. 1, February 2006 pp. 29-54.
9. Losada M. and Heaphy E. (2004). *The Role of Positivity and Connectivity in the Performance of Business Teams: A Nonlinear Dynamics Model*. American Behavioral Scientist Vol. 47, No. 6, February 2004 pp. 740 – 765.
10. Roaf, P. F. (1973). *Becoming a high performance team and sharing knowledge in a community of practice*. Royal Roads University, April 2003.
11. Debbie D. DuFrene and Carol M. Lehman. Mason. *Building High Performance Teams*. Thomson/South-Western, 2005.

12. Youngwirth J. (2008). *Building a High-Performance Team*. Journal of Financial Planning; Sep/Oct 2008; pp. 12-13.
13. Goodale M., (2008). Creating High-Performance Teams Helps A/E Firms Compete More Effectively. Design Firm Management & Administration Report. April 2008, issue 08-04 pp. 6-11.
14. Sangvai, D.(2008). Defining High-Performance Teams and Physician Leadership. The physician executive, March/April 2008, pp. 44-51.
15. Castka, P., Bamber C.J., Sharp J.M. and Belohoubek P. (2001). *Factors affecting successful implementation of High Performance Teams*. Team Performance Management: An International Journal. Vol. 7, No. 7/8, pp 123-134.
16. Miesing P. and Preble J., (1985). *Group Processes and Performance in A Complex Business Simulation*. Small Group Behaviour, Vol. 16, No. 3, August 1985, pp. 325-338.
17. Manfred F. R. Kets De Vries, (1999). Lessons from the Pygmies. Organizational Dynamics, winter 1999, pp. 66 – 77.
18. Wislon L., Boudreaux M. A. and Edwards M., (2000). *High-Performance Leadership at the Individual Level*. Chapter 4, pp. 73 – 103.
19. Collins D. B., Lowe J. S. and Arnett C. R., (2000). High-Performance Leadership at the Organization Level. Chapter 2, pp. 18 – 46.
20. Wing L. S., (2005). *Leadership in high-performance teams: a model for superior team performance*. Team Performance Management, Vol. 11, No. ½, 2005 pp. 4-11.
21. Oakley J. G., (1998). *Leadership Processes in Virtual Teams and Organizations*. The Journal of Leadership Studies, 1998, Vol. 5, No. 3.
22. Stanley T. L., (2006). *Managing your team*. Supervision, Jun 2006; Vol 67, No. 6, pp. 10 – 12
23. Miller D. L., (2001). *Reexamining Teamwork KSAs and Team Performance*. Small Group Research, Vol. 32, No. 6, December 2001, pp. 745 – 766.
24. Stanley T. L., (2004). *Taking on the challenges of high-performance teams*. SuperVision, Dec 2004, Vol. 65, No. 12, pp. 10 – 12.
25. Mathieu J., Maynard M. T., Rapp T. and Gilson L., (2008). *Team effectiveness 1997-2007: A Review of Recent Advancements and a Glimpse into the Future*. Journal of Management, Vol. 34, No. 3, June 2008, pp. 410 – 476.

26. Muncherji N. and Singh A. K., (2007). *Team Effectiveness and Its Measurement: A Framework*. Global Business Review, 2007, Vol. 8, No. 1, pp. 119 – 133.
27. O'Connor D. and Yballe L., (2007). *Team Leadership: Critical Steps to Great Projects*. Journal of Management Education, Vol. 31, No. 2, April 2007, pp. 292-312.
28. Zigon J., (1997). *Team Performance Measurement: A Process for creating team performance standards*. Compensation Benefits Review, Vol. 29, pp. 38 – 47.
29. Devine D. J., Clayton L. D., Philips J. L., Dunford B. B. and Melner S.B., (1999). *Teams in Organizations: Prevalence, Characteristics and Effectiveness*. Small Group Research, Dec 1999, Vol. 20, No.6, pp. 678 – 711.
30. Kirkman B. L., Lowe K. B. and Young D. P. (1998). *The Challenge of Leadership in High Performance Work Organizations*. The journal of leadership studies, 1998, Vol. 5, No. 2.
31. Pearsall M. J. and Ellis A. P. J., (2006). *The Effects of Critical Team Member Assertiveness on Team Performance and Satisfaction*. Journal of Management, Vol. 32, No. 4, August 2006, pp. 575 – 594.
32. Bain P. G., Mann L. and Merlo A. P., (2001). *The Innovation Imperative: The Relationships Between Team Climate, Innovation, and Performance in Research and Development Teams*. Small Group Research, Vol. 32, No. 1, Feb 2001, pp. 55 – 73.
33. Kets de Vries M. F. R. *Leadership group coaching in action: The Zen of creating high performance teams*. Publication forthcoming Academy of Management Executive
34. Gundlach M., Zivnuska S. and Stoner J., (2006). *Understanding the relationship between individualism–collectivism and team performance through an integration of social identity theory and the social relations model*. Human Relations, Vol. 59, No. 12, pp. 1603 – 1632.
35. Hulme V. A., (2006). *What makes a good leader?* The China business review, March-April 2006, Vol. 33, No. 2, pp. 24 – 25.
36. Park C., (2005). *Building High-Performance Teams -- Taking A Collaborative Approach To Profitability*. Systems Contractor News, New York, Nov 2005. Vol. 12, No. 11, pp. 98.
37. Steward G. L., (2006). *A Meta-Analytic Review of Relationships Between Team Design Features and Team Performance*. Journal of Management, Feb. 2006, Vol. 32, No.1, pp. 29 – 54.

38. Cohen S. G., Ledford G. E. and Spreitzer G. M., (1996). *A Predictive Model of Self-Managing Work Team Effectiveness*. Human Relations, Vol. 49, No.5, pp. 643 – 676.
39. Thoms P., Pinto J. K., Parente D. H. and Druskat V. U., (2002). *Adaptation to Self-Managing Work Teams*. Small Group Research, Feb 2002, Vol. 33, No. 1, pp. 3 – 31.
40. Langfred C. W., (2005). *Autonomy and Performance in Teams: The Multilevel Moderating Effect of Task Interdependence*. Journal of Management, August 2005, Vol. 31, No. 4, pp. 513 – 529.
41. Douglas C., Martin J. S. and Krapels R. H., (2006). *Communication in the Transition to Self-Directed Work Teams*. Journal of business communication, Vol. 43, No. 4, Oct 2006, pp. 295 – 321.
42. Zimmerman K. and Gallagher, (2006). *Creativity and Team Environment: An Exercise Illustrating How Much One Member Can Matter*. Journal of Management Education, Vol. 30, No. 4, August 2006, pp. 617 – 625.
43. Spreitzer G. M., Cohen S. G. and Ledford G. E., (1999). *Developing Effective Self-Managing Work Teams in Service Organizations*. Group Organization Management, Vol. 24, No. 3, September 1999, pp. 340 – 366.
44. Pasmore W. A. and Mlot S., (1994). *Developing Self-Managing Work Teams: An Approach to Successful Integration*. Compensation Benefits Review, Vol. 26, No. 15, pp. 15 – 23.
45. Neck C. P., Connerley M. L., Zuniga C. A. and Goel S., (1999). *Family Therapy Meets Self-Managing Teams: Explaining Self-Managing Team Performance through Team Member Perceptions*. The journal of applied behavioral science, June 1999, Vol. 35, No. 2, pp. 245 – 259.
46. Neck C. P. and Manz C. C., (1994). *From Groupthink to Teamthink: Toward the Creation of Constructive Thought Patterns in Self-Managing Work Teams*. Human Relations, Vol. 47, No. 8, pp. 929 – 952.
47. Ahearn K. K., Ferris G. R., Hochwater W. A., Douglas C. and Ammeter A. P., (2004). *Leader Political Skill and Team Performance*. Journal of Management, Vol. 30, No. 3, pp. 309 – 327.
48. Solansky S. T., (2008). *Leadership Style and Team Processes in Self-Managed Teams*. Journal of Leadership & Organizational Studies, Vol. 14, No. 4, May 2008, pp. 332 – 341.

49. Marks A. and Lockyer C., (2004). *Producing Knowledge: The Use of the Project Team as a Vehicle for Knowledge and Skill Acquisition for Software Employees*. Economic and Industrial Democracy, Vol. 25, No. 2, pp. 219 – 245.
50. Stevens, M. J., & Campion, M. A. (1994). *The knowledge, skill and ability requirements for teamwork: Implications for human resource management*. Journal of Management, Vol. 20, pp. 503-530.
51. Cox, T. H., Lobel, S. A., & McLeod, P. L. (1991). *Effects of ethnic group cultural differences on cooperative and competitive behavior on a group task*. Academy of Management Journal, Vol. 34, pp. 827-847.
52. Manz C. C., (1992). *Self-Leading Work Teams: Moving Beyond Self-Management Myths*. Human Relations, Vol. 45, No. 11, pp. 1119 – 1140.
53. Poza E. J. and Markus L., (1980). *Success story: The team approach to work restructuring*. Organizational Dynamics, Winter, pp. 3 – 25.
54. Dustin D., (2006). *Skills and Knowledge Needed to Practise as a Care Manager*. Journal of Social work, Vol. 6, No. 3, pp. 293 – 313.
55. McGrew J. F., Bilotta J. G. and Deeney J. M., (1999). *Software Team Formation and Decay: Extending the Standard Model for Small Groups*. Small Group Research, Vol. 30, No. 2, April 1999, pp. 209 – 234.
56. Scholtes, P. R. (1988). *The team handbook*. Madison, WI: Joiner Associates.
57. Tuckman, B.W., & Jensen, M. A. C. (1977). *Stages of small-group development revisited*. Group & Organization Studies, Vol. 2, No. 4, pp. 419-427.
58. Cissna, K. N. (1984). *Phases in group development: The negative evidence*. Small Group Behavior, Vol. 15, No. 1, pp. 3-32.
59. Mills, T. (1967). *The sociology of small groups*. Englewood Cliffs, NJ: Prentice Hall.
60. English A., Griffith R. L. and Steelman L. A., (2004). *Team Performance: The Effect of Team Conscientiousness and Task Type*. Small group research, Vol. 35, No. 6, December 2004, pp. 643 – 665.
61. LePine, J. A., Hollenbeck, J. R., Ilgen, D. R., & Hedlund, J. (1997). *Effects of individual differences on the performance of hierarchical decision-making teams: Much more than g*. Journal of Applied Psychology, Vol. 82, pp. 803-811.

62. Neuman, G. A., & Wright, J. (1999). *Team effectiveness: Beyond skills and cognitive ability*. Journal of Applied Psychology, Vol. 84, pp. 376-389.
63. Neuman, G. A., Wagner, S. H., & Christiansen, N. D. (1999). *The relationship between work-team personality composition and the job performance of teams*. Group and Organization Management, Vol. 24, pp. 28-45.
64. Schneider, F. W., & Delaney, J. G. (1972). *Effect of individual achievement motivation on group problem solving efficiency*. Journal of Social Psychology, Vol. 86, pp. 291-298.
65. Sundstrom, E., de Meuse, K. P., & Futrell, D. (1990). *Work teams*. American Psychologist, Vol. 45, pp. 120-132.
66. Kasl E., Marsick V. J. and Dechant K., (1997). *Teams as Learners: A Research-Based Model of Team Learning*. Journal of Applied Behavioral science, Vol. 33, No. 2, June 1997, pp. 227 – 246.
67. Dechant K., Marsick V. and Kasl E., (1993). *Toward a model of team learning*. Studies in continuing education, Vol. 15, No. 1, pp. 1 – 14.
68. Strauss A. L. and Corbin J., (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.
69. Cohen S. G. and Ledford G. E, (1994). *The Effectiveness of Self-Managing Teams: A Quasi-Experiment*. Human Relations, Vol. 47, No. 1, pp. 13 – 43.
70. Hackman J. R. *Survey of work team characteristics*. In J. R. Hackman, *A set of methodologies for research on task performing groups*. New Haven, CT. Yale University, 1982.
71. Manz C. C. and Sims H. P., (1980). Self-management as a substitute for leadership. A social learning theory perspective. Academy of Management review, Vol. 5, No. 3, pp. 361 – 367.
72. Trochim W. M. K., *The T-Test*, http://www.socialresearchmethods.net/kb/stat_t.php, access in [10 – March – 2009].
73. Lani J., (2008). *Dissertation Statistics Help*, <http://statisticssolutions.blogspot.com/2008/06/what-does-bivariate-correlation.html>, accessed in [11 – March – 2009].
74. Cohen S. G., (1994). *The Effectiveness of Self-Managing Teams: A Quasi-Experiment*, Human Relations, Vol. 47, No. 1, pp. 13 – 43

75. Prichard J. S. and Ashleigh M. J., (2007). *The Effects of Team-Skills Training on Transactive Memory and Performance*. Small Group Research, Vol. 38, No. 6, Dec 2007, pp. 696 – 726.
76. Salas, E., Rozell, D., Mullen, B., & Driskell, J. E. (1999). *The effect of team building on performance: An integration*. Small Group Research, Vol.30, pp. 309-329.
77. Moreland, R. L., Argote, L., & Krishnan, R. (1998). *Training people to work in groups*. In R. S. Tindale, L. Heath, J. Edwards, E. J. Posavac, F. B. Bryant, Y. Suarez-Balcazar, et al. (Eds.), *Theory and research on small groups* (pp. 37-60). New York: Plenum.
78. Kozlowski, S. W. J. & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. *Psychological Science in the Public Interest*, Vol.7, No.3, pp.77-124.
79. Keny, D. A., & La Voie, L. (1985). Separating individual and group effects. *Journal of Personality and Social Psychology*, Vol. 48, pp. 339-348.
80. Kerr, N. L., & Tindale, R. S. (2004). Group performance and decision making. *Annual Review of Psychology*, Vol. 55, pp. 623-655.
81. Klimoski, R., & Mohammed, S. (1994) Team mental model: Construct or metaphor? *Journal of Management*, Vol. 20, pp. 403-437.
82. Zarraga C. and Bonache J.,(2005). *The Impact of Team Atmosphere on Knowledge Outcomes in Self-managed Teams*. *Organization Studies*, Vol. 26, No. 5, pp. 661 – 681.
83. Kirkman B. L. and Shapiro D. L., (2001). *The Impact of Team Members' Cultural Values on Productivity, Cooperation, and Empowerment in Self-Managing Work Teams*. *Journal of Cross-Cultural Psychology*, Vol. 32, No. 5, September 2001, pp. 597 – 617.
84. Salem, M. A., & Banner, D. K. (1992). *Self-managing work teams: An international perspective*. *Leadership & Organization Development Journal*, Vol. 13, pp. 3-9.
85. Manz, C. C., & Sims Jr., H. P. (1993). *Business without bosses: How self-managing teams are building high performance companies*. New York: John Wiley.
86. Stevens M. J. and Campion M. A., (1994). *The Knowledge, Skill, and Ability Requirements for Teamwork: Implications for Human Resource Management*. *Journal of Management*, Vol. 20, No. 2, pp. 503 – 530.
87. Nieva, V. F., Fleishman, E. A. & Rieck, A. (1978). *Team dimensions: Their identity, their measurement, and their relationships*. Washington, DC: Advanced Research Resources Organization.

[Appendix]