

MOTIVATION FACTORS THAT CAN AFFECT THE PERFORMANCE OF A PROJECT TEAM

By

Levakos Ch. Panagiotis

A THESIS REPORT
Presented to the Project Management Program in the
School of Management of
City University of Seattle
In Partial Fulfillment of the Requirements
For the Degree of
MASTER OF SCIENCE in PROJECT MANAGEMENT

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This Master Thesis was elaborated in the frame of the collaboration of the City University of Seattle and the Graduate Technological Education Institute (T.E.I.) of Piraeus to fully implement at TEI of Piraeus Campus the CU's MS in Project Management Program approved by the Hellenic Ministry of National Education and Religion Affairs as by decision E5/58291 published in the Hellenic Government Gazette (FEK) B/924/5- July-2005.

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Levakos Ch. Panagiotis

Motivation Factors on a Project Team

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Athens, June 2008

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Levakos Ch. Panagiotis

Biography

Levakos Ch. Panagiotis

Levakos Ch. Panagiotis, completed his studies in the department of Informatics and Computer Technology, of the Faculty of Technological Applications of Lamia T.E.I., in May 2006, and is a qualified Informatics & Computer technology Engineer of Technological Education.

During his studies he took many IT certifications such as Cisco Certified Network

Professional (CCNP) and Cisco Certified Design Professional (CCDP) and he worked as a

Network Engineer at one of the biggest worldwide IT service providers, Atos Origin S.A.,

participating in the significant project of Olympic Games in Athens in 2004 as a Network

Specialist at the Technical Operation Center. Until the completion of his bachelor degree, he

worked at three IT Companies and at the National Bank of Greece where he had the chance to

serve on different project teams that focused on a variety of different projects and associate

with many significant Greek Project Managers.

Currently, he is working at Siemens Enterprise Communications (SEN), one of the world's leading providers of Open Communications solutions, as a Telecommunication Senior Engineer. He is responsible for assuring that the application under test will behave according to Technical and Customer Specifications. His primary responsibilities encompass: Configuring the testing platform and servers for test preparation, thorough testing, documenting and reporting errors, and analyzing and documenting test results. Moreover, he is working with Project Managers, Technical Leaders and Development to resolve test related issues.

Finally, in parallel with his job, the author is enrolled at City University of Seattle as post-graduate student in the MS in Project Management (PM) Program and he is preparing for

Cisco Voice Professional (CCVP) IT certification and the PMI's Project Management Professional (PMP) certification.

Abstract

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Employee motivation is a complicate subject. The essential need of implementing employee motivation has been of concern for organizations because it has been proved that motivation is one of the deciding factors in work performance and for the success or failure of an organization. To enhance understanding of employee motivation, managers must recognize the importance of employee motivation, its concepts, and differences in individual needs.

Managers need to be aware of employees' motivational factors and the changes in priorities of these factors over the pass of time. Moreover, managers have to learn and understand theories behind motivation in order to be able to identify rewards systems that could be satisfy employee needs. Understanding employee's motivation requires a systematic approach, and organizations must understand that employee's input is very essential, so it must be valued and embedded into the process.

This research aims to explain the importance of employee motivation, describes the concept of motivation and how is linked with job satisfaction and employee performance, and identifies different motivational factors and their priority changes over time. The author's expectation is to provide a useful tool for motivating employees that managers can apply in order to achieve organization success and employee satisfaction.

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Chapter 1 - Introduction

Nature of the Study

Project teams have become the basic work units of the modern organizations. One of the most difficult jobs that a project manager faces is learning how to effectively motivate the members of his/her project team and keep then motivated. The average person, when asked how to motivate someone, will usually indicated what motivates him or her. Unfortunately, everyone is different and what motivates one employee may only make another employee angry or disconnected.

By focusing on motivation factors within a number of projects teams, the author hopes to reveal the factors that most employees want in order to achieve their best performance.

This study will also seek to point out that there is a change over the years regarding what motivates employees and that is essential for managers to know what motivates their employees in order to achieve organisation success.

Needs Assessment

The stakeholders for this thesis include every employee from different departments of the telecommunication company selected for this study along with the upper management and the project managers. The research will try to categorize the motivation factors according to the project teams and this will be determined by the team's status in the company. This analysis will range from the lower level to the senior level project teams with the assumption that there will be different motivation factors between the project teams at different levels within the organization.

This thesis will be beneficial for the following reasons:

- The upper management of the company and the project managers can use the
 outcomes of this research in order to understand the motivation factors and therefore
 apply them properly to the company's project teams.
- The company by itself can benefit from the outcomes of this research because
 assuming the outcomes are properly applied, the performance and productivity of the
 project teams will be increased.
- Project Managers can benefit by developing various motivational principles.
- The employees can benefit from this research because their managers or supervisors will be better aware of their needs in order to increase their performance.

Purpose of the Study

The purpose of the study is to consider the importance of motivation on a project team and how it is related to the team's performance. Secondary purposes include the indication of tools and methods for motivation and making a high performance teams, as well as to provide a useful tool to project managers according to the different factors of motivation that employees need.

The author expects that the research and interviews conducted for this thesis will reveal different motivation factors between the project teams according to their position in the company. During a preliminary interview with the Technical Director of the Telecommunication Company he indicated an enthusiasm for this thesis. The results are going to be shared by the Project Management and Product Management departments and at the Board of Directors.

Employment Position

Levakos Ch. Panagiotis, completed his studies in the department of informatics and Computer Technology, of the Faculty of Technological Applications of Lamia T.E.I., in May 2006, and is a qualified Informatics & Computer technology Engineer of Technological Education.

During his studies he took different IT certifications such as Cisco Certified Network Professional (CCNP) and Cisco Certified Design Professional (CCDP) and he worked as a Network Engineer at one of the biggest worldwide IT service providers, Atos Origin S.A., participating in the significant project of Olympic Games in Athens in 2004. Until the completion of his degree, he worked at three IT Companies and at the National Bank of Greece where he had the chance to serve on different project teams that focused on a variety of different projects.

Currently, he is working at Siemens Enterprise Communications, one of the world's leading providers of Open Communications solutions and he is enrolled at City University of Seattle as post-graduate student in the MS in Project Management (PM) Program.

In Greece, the last few years, Project Management has become more and more popular because of the need to complete projects on goal, on time, and on budget. This is fast becoming a key differentiator for competitive success. At a large percentage of Greek companies and organizations, the position of the Project Manager is held by experienced technical experts and not by qualified Project Managers. As a result, projects rarely meet time, performance or scope goals. This is one of the reasons why the author of this study has enrolled in the MS PM program. Upon completion, he will be able to combine his technical knowledge with the Project Manager's principles.

In his final thesis, the author has decided to study the motivation of employees and how this influences the performance of the project team. This research will recognize the

importance of motivation and the theory which states that happy employees make happy customers. The research is going to focus on a Greek R&D Telecommunications company which has a number of different departments and project teams. In addition, this thesis will point out the main motivation factors that can affect the project team's performance and how a project manager can use these methods and techniques in order to achieve optimal team performance.

Relation to the Program of Study

While studying for the Master's Degree in Project Management, the author has had several opportunities to review the topics of motivation, team performance and Project Manager's skills.

The MS PM program has introduced the theories of how to control a project team.

The introductory course, PM 501 (Introduction to Project Management), covered information focused on building a positive team environment and stressed the relationship between job satisfaction and a team's ability to meet it's project scope. In PM503 (Project Communications Management) he learned about the team motivation and its theories, the motivational mistakes, and how to avoid pitfalls that arise in working with people and their accompanying problems. In PM504 (Project Planning and Control) he found *How to Motivate Almost Anyone* where Maslow's and Herzberg's theories of motivation were described.

Finally in PM506 (Managing Projects with People and Teams) he was introduced to the topics of Teamwork and Project Management and how they could affect the performance of a project team.

As a result, the author realized that, you cannot only rely on building an effective team but knowing how to effectively manage it. Understanding the needs of employees is a key

factor for increasing the project team's performance. A way of making this come true is to adopt motivation methods and techniques.

Chapter 2 - Problem Statement

Problem Statement

Project managers cannot easily identify the key factors of motivation in order to optimize the performance of their project team.

Rationale

Management of projects is typically defined as the process of planning, organizing, directing and controlling a company's resources for a relatively short term objective that has been established to meet specific goals and objectives (Kerzner, 2003). Since the management of projects is a very vital activity within an organization, project outcomes and objectives are very important for the project team, and to project managers and their superiors.

Traditionally, the success of a project is assessed using internal measures such as technical and operational goals, meeting schedule and budget. Nowadays it is recognized that another methods of measuring the project's success must be take into consideration. One of those is the development of the effectiveness of the project team which can make the differences between the project success and failure. One way to improve effectiveness and performance is the motivation of the team.

Frederick Herzberg, who studied what motivates employees, contents that recognition achievement, the work its self, responsibility, advancement, and the chance to learn more skills are motivators. He also developed a theory in 1950 were he theorized that satisfaction on the job depends on two issues: hygiene issues (disatisfaries) and motivators (satisfiers). According to Herzberg's theory, "Hygiene issues cannot motivate employees but can minimize dissatisfaction, if handled properly".

If we increase performance, we achieve part of the project scope. One major factor is motivation, so if we find the key factors of motivation then we will increase the customer driven project team performance.

Hypothesis / Objectives

Effective application of motivation methods and theories will help project teams to increase their performance so that they will properly achieve the objectives of the projects and meet the final scope. It is expected that this research will agree that project teams perform poor because of lack of motivation and reveal best methods that will increase their performance.

Chapter 3 - Review of Literature

Introduction

All organizations, whether they produce services or products, are involving people in the process. Work is an important aspect in the lives of individuals (Hall, 1994) due to several reasons. First, Steers and Porters (1991) stated that employees receive some kind of reward, extrinsic or intrinsic, in exchange for their performance. Second, Hall (1994) points that workplace presents opportunities for socialization with other people. Third, the job is by itself a point of social status in the society (Steers, 1991). Forth, Steers and Porters (1991) pointed out that work has an individual meaning for each person. For some people work could be a source of great satisfaction but for many others it could be the reason for dissatisfaction.

Over the last two decades, the relationship between people and their work has attracted a lot of various scientists and especially psychologists. As a result a new subcategory of psychology was developed, the industrial and organizational psychology, which its primary scope is to make organizations more productive. Related topics of industrial and organizational psychology include personnel psychology, motivation and leadership, employee selection, training and development, organization development, and work and family issues ("Industrial and organizational psychology", 2008). The study of motivation now forms an essential part of industrial and organizational psychology and according to Vroom (1995) concepts like need, motive, and goal are appearing with greater frequency than other concepts like capability, ability and skill.

Organizations ability to have motivated employees could determine the success or failure of that organization (Bergmann & Scarpello, 2001). In other words, it is very important for an organization to know exactly what motivates its employees, if all are motivated by the same factor or if there are differences between people, in order to stimulate them to perform their job as possible. Finally, knowledge about the motivation factors is of

great value and may serve as a starting point of work re-design, in order to increase employees' satisfaction and organization's productivity (Wiley, 1997).

Motivation

In order to describe how important is motivation for a modern organization and how affects the performance of the employees, first it is imperative to describe what the term motivation means. The word "motivation" finds its root in Latin "movere", which means "to move". Because this explanation is not enough to describe the exact meaning of motivation, the last five decades many scientists and researchers have tried to give a more representative meaning of this terminology.

The origin of the concept of human motivation is hard to find. Franken (1994) states that Greek philosophers were the first who studied what caused human willingness to act and what evokes this reaction. Moreover, Franken explains that Greek philosopher Epicurus believed that man had a desire to avoid pain and unpleasantness, and therefore instead felt encouraged to find happiness. This encouragement seems to be one of the first attempts to explain what motivation is.

Moreover, the fundamental interests of how to motivate employees have been of concern for scientists and researchers since the birth of the modern organization. Over the 20th century and into the 21st, theories regarding employee and general human motivation, and how these motives are measured, have continued to diversity and broaden (Deci and Ryan, 2000). During the latest century however, the concept of work motivation has grown and numerous theories have tried to explain the determinants and outcomes of work motivation (Leonard, Beauvais, & Scholl, 1999).

Taylor (1947) explains that during the industrial evolution in 1930, motivation theories started to be widely extended on a great range and forecast stimulated, prompt

behaviour in organizational settings. Another formulation of work motivation is Lewin's (1938) who proposes that subjective perceptions are the unique factor which affects a person's degree of motivation. Managers were convinced that the only way of achieving productivity was to reward employees for their work (Taylor, 1947).

During 1927, the Hawthorne Works experiment was held by Harvard University professor Elton Mayo and his associates, and it had tremendous impact on scientific society and especially those researchers that believed that money was the instrument of motivation ("Hawthorne effect", 2008). Regarding this experiment, Mayo (1949) commented that there were numerous factors that influence the work ambition of employees, and that motivation not solely could be explain by extrinsic motivation.

Unlike Lewin's thesis, few years later Pinder (1998) stated that this sole factor has proven to be not enough, and motivation can consist of a widely different set of energetic forces. Those forces determine the employee's behavior and therefore, influence his/her productivity (Jackson, 1995).

Mullins (1999) proposed a very general model of human behavior (see Figure 1). This model assumes that individuals have a number of needs, desires, and expectations, and people act or behave in a certain way that they believe will lead to the desired goal.

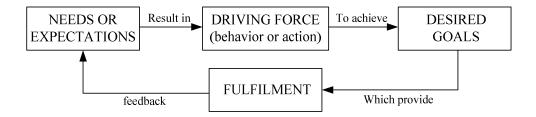


Figure 1: A simplified illustration of the basic motivational model. Note. From Management and Organisational Behaviour (p.407), by L. J. Mullins, 1999, London: Pitman Publishing.

Another, and maybe less complex, explanation can be found in Timm's and Peterson's (2000) description, which indicates that motivation should be the need, or the driving force, that incites a human being to some action or behavior. Flannes and Levin (2001) define motivation as "a process, action, or intervention that serves as an incentive for a project team member to take the necessary action to complete a task within the appropriate confines and scope of performance, time, and cost"(2001, p.134). Greenberg and Baron (2003) adopted a simple and more realistic definition of motivation which is "the set of processes that arouse, direct, and maintain human behavior towards attaining some goal" (2003, p190). Halepota (2005) defines motivation as "a person's active participation and commitment to achieve the prescribed results" (2005, p.29). Similar to Halepota's explanation is Muchinsky's (1993) where he defines motivation as "the individual's desire to demonstrate the behavior and reflects willingness to expend effort" (1993, p.323).

Moreover, Westerman and Donoghue (1989) refer to motivation as "a set of processes which energize a person's behavior and direct him or her towards attaining some goal" (1989, p.79). Latham and Ernst (2006) state that motivation is a psychological factor and is affected by the workers mental attitude and health. Employees' job satisfaction is an important indicator for the job performance. Kerzner (2003) describes team motivation as a factor that has an important role in all phases of a project with strongest overall influence on project success.

Finally, motivation can be divided in two different types, extrinsic and intrinsic motivation. Aronson, Wilson and Akert (2002) point out that extrinsic motivation refers to external factors such as salary and benefits. Intrinsic motivation refers to internal factors such as job satisfaction. These two types of motivation are connected to each other and cannot be seen isolated (Frey & Osterloh, 2002).

Needs and expectations at work

Individuals are different and therefore have different needs and expectations at work.

These needs and expectations can be classified in several ways. Two of these ways are

Intrinsic and Extrinsic motivation.

Intrinsic and extrinsic motivation. There are different types of motivation that are based on the different goals or reasons that give rise to an action (Ryan & Deci, 2000). The most basic distinction among these types is between intrinsic and extrinsic motivation.

Motivation is often described as being "intrinsic" or "extrinsic" in nature (Sansone & Harackiewicz, 2000). Intrinsic and extrinsic types of motivation have been widely studied, and the distinction between them has shed important improvement on motivation and how affects the performance of employees.

Pintrich and Schunk (2002) state that individuals who are extrinsically motivated, work on tasks because they believe that participation will result in desirable outcomes (rewards, avoid of punishment, etc). Deci and Ryan (2000) define intrinsic motivation as motivation that originates from individuals and has as a result the enjoyment of process of increasing one's competency. Mak and Sockel (2001) simply define that internal motivators concerned with intrinsic needs that satisfy a person, whereas external motivators are considered as organization's environmental factors that affect individuals. According to Flannes and Levin (2001), "In reality, highly functioning individuals tend to be motivated by both intrinsic and extrinsic sources" (2001, p.134). Intrinsic motivation is often associated with involvement in complex tasks, whereas extrinsic motivation is claimed to be related with simply tasks (Gagné and Deci, 2005). Hence, both types are indeed very essential for every organization and are not merely additives. There is a lot of research that points out that these two types of motivation can interact. Cameron and Pierce (2002) state that extrinsic rewards

can have negative effects on intrinsic motivation. This interaction enhances the understanding of the importance and complex nature of motivation. Figure 2 illustrates the difference between intrinsic and extrinsic motivation:

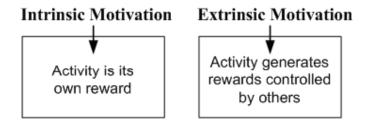


Figure 2: Differences between Intrinsic and Extrinsic Motivation. Note. From *Management:* A Total Quality Perspective, by G. M. Bounds, G. H. Dobbins, & O. L. Fowler, 1995, Ohio: South-Western College Publishing.

Much importance has been placed on intrinsic motivation. Intrinsic motivation is the desire of an individual to perform better on his/her work, in order to achieve the satisfaction from intrinsic needs (Hui and Lee, 2000). The satisfaction of accomplishing a task is the main source of motivation, and it provides opportunities for personal growth and achievement (Mullins, 1999). Many researches recognize intrinsic motivation as a type of motivation that leads to high employee creativity and performance (Deci, 1971). Deci (1971) describes this type of motivation as an individual performing an activity without receiving any reward except the recognition from the execution of this action. In a more recent article, Gagné and Deci (2005) state that individuals are intrinsically motivated when they are working in activities where they find them interesting.

Frey and Osterloh (2002) state that organizations are heavily depend on the intrinsic motivation within employees, and outline the following five features as factors that contribute to this action:

- a. Firm-Specific Pool Resources
- b. Multi-Tasking
- c. Fuzzy Tasking
- d. The Transfer of Tacit Knowledge
- e. Creativity and Innovation

Lindenberg (2001) divides intrinsic motivation into two sub categories; enjoyment-based and obligation-based intrinsic motivation. Enjoyment based intrinsic motivation refers to a satisfying flow of activity such as fulfilling a difficult task, while obligation-based intrinsic motivation refers as the obligation of an individual or a social group of achieving self-defined goals. Finally, Barkley and Saylor (2001) point out those intrinsic rewards are sufficient at the phase of creating and starting a team, and "Once a team is established, team members covet higher-level of intrinsic rewards" (2001, p.273).

Taking into account that all individuals are different and hence act in different ways, it is easy to assume that not all employees are intrinsically motivated. Extrinsic motivation refers to more physical rewards such as pay, work environment, work conditions, and job security (Mullins, 1999). Weinberg and Gould (2003) sate that extrinsic motivation refers to the behaviour that is motivated by external rewards. According to Frey and Osterloh (2002) extrinsic motivation function to satisfy these needs that are not direct related to work ("instrumental needs"). Deci and Ryan (2000) distinguish four types of extrinsic motivation; external regulation, introjection, identification, and integration. Deci and Ryan (2000) support that behaviours regulated by introjects are quite controlled and stand for the slightest independent figure of inside retrospection. Behaviours regulated by identifications are more self-directed than are those synchronized by introjections. People generally acknowledge that with their fundamental principles are therefore wilful when performing the conducts. Finally, behaviours regulated by integrations are the most autonomous type of extrinsic motivation.

the two kinds of inspiration vary in that fundamental incentive is found on the significance in the conduct itself, while incorporated extraneous impetus stands on the individual having fully incorporated the worth of the deeds.

Job satisfaction

There is a wide variety of theoretical frameworks that have been used in order to explain the issue of motivation and job satisfaction, and what drives motivation and leads towards employees' performance (Locke, 1991).

Locke (1969) defines job satisfaction as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values" (1969, p.316). Schultz and Schultz (1998) define job satisfaction as the positive or negative feeling which an individual holds about his or her work. When we enjoy and offer to our job it will also offer and compensate us. If we are mean towards it, it will also be mean towards us.

Job satisfaction is one of the main employees' motivation factors (Mak and Sockel, 2001) and according to Blankertz and Robinson (1996) employees that are satisfied with their job are very motivated and do not prefer to leave their jobs. Luthan (1998) point out that there are three important dimensions to job satisfaction:

- is an emotional response to a job situation
- is often determined by how well outcomes met expectations, and
- represents several related attitudes

Locke (1991) developed a model (see Figure 3) in which he tries to illustrate motivation and satisfaction within an organization. This model has acted as an organizing framework to the different theories of work motivation.

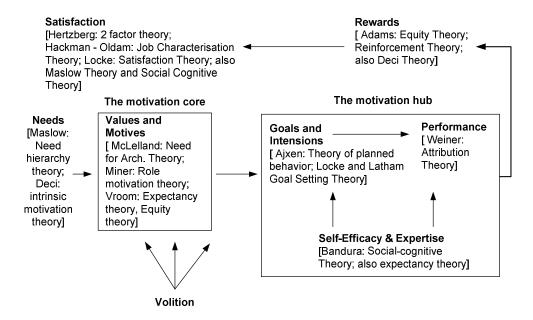


Figure 3: Locke's motivation sequence model. Note. From "The motivation sequence, the motivation hub and the motivation core", by E.A. Locke, 1991, Organisational Behaviour and Human Decision Processes, 50, p.288.

Herzberg (1959) conducted studies of job satisfaction and he found that there are elements within the job which can lead to satisfaction or dissatisfaction of an employee. He concluded that intrinsic motivation factors lead to worker satisfaction and, extrinsic factors detract from satisfaction. Herzberg (1966) identified the following five most satisfier factors:

- 1. achievement
- 2. recognition
- 3. work itself
- 4. responsibility and
- 5. opportunity for advancement

Herzberg (1966) also listed five top dissatisfiers:

- 1. company policies
- 2. supervision
- 3. salary
- 4. interpersonal relationships and
- 5. working conditions

In addition to Lawler's (1986) thesis that motivation and performance are strongly associated with job satisfaction, there are some researchers that have a different opinion and suggest a weak correlation between job satisfaction and performance (Molander, 1996).

Molander's thesis is similar to Vroom (1964) where he pointed out that there exists no simple relationship between job satisfaction and performance. Moreover, Lawler and Porter (1967) state that performance leads to satisfaction with the help of a third variable which is often is reward.

Finally, job satisfaction also depends on individuals personal factors (Schultz and Schultz, 1998). Personal factors could be age, gender, growth needs, job experience, and feedback. Lawler and Porter (1967) state that individual's personal characteristics can be used for predictions of satisfaction among different groups of employees.

Job performance

Over the past 50 years there are a lot of researches and surveys that have been conducting regarding whether greater job satisfaction leads to improved performance. Babin and Boles (1998) define performance as "the level of productivity of an individual employee, relative to his or her peers, on several job-related behaviors and outcomes" (1998, p.82). The

importance of job satisfaction is also pointed out by Parker and Kleemeir (1951) which they state that a company which is able to satisfy its employees improves its own productivity.

Herzberg (2003) suggests that high levels of employee job satisfaction link to increased employee motivation, and high levels of motivation linked to increased organization performance (Jurkiewicz and Brown, 1998). Griffin (1990) states that in most instances, employee performance is determined by three things:

- 1. ability
- 2. the work environment and,
- 3. motivation (1990, p.437)

Moreover, Griffin (1990) states that if an employee lacks ability then appropriate training is the best solution. If there is a work environmental problem, the solution is to change and customize the work environment so as to promote higher performance. Finally if motivation is the problem, the solution is more complex. Employees are the key of information in order to determine how the motivation strategy is going to be applied (Wiley, 1997).

In order to understand the effect of motivation on employees performance, McGregor (1960) suggested the following steps of management:

- Delegation: give employees a sense of freedom to assume responsible in helping organization to achieve its goals.
- Job enlargement and participation: encourage employees from different levels
 of the organization to assume responsibility and to participate in proposing and
 developing solutions to problems.

Goal setting and performance appraisal: encourage employees in setting goals
of their own and to take responsibility for planning and appraising their
contribution to the organization's mission.

Finally, Rabey (2001) after studying various researches of motivational theories he come to conclusion that motivation:

- Influences performance;
- Reduces absenteeism and turnover;
- Influences commitment to the organization;
- Leads to job satisfaction; and
- Attracts people to the organization.

Work motivation theories

Much research have been conducted on the field of employees motivation, and many theories regarding motivation and its role in enhancing employee's performance have been proposed in the literature. Different theories of motivation can be grouped and classified into drive theories, incentive theories, evolutionary and biologic theories, achievement need theories, and fear of failure theories (Rad and Levin, 2003). A common point among the aforementioned motivation theories is that individuals display a wide range of different motives at different times of their careers and their lives (Flannes and Levin, 2001).

In this thesis, discussion on some basic and well-known motivation theories will include Maslow (Hierarchy of needs theory), Herzberg (Two factor theory), McGregor (Theory X and Y), McClelland (Theory of needs), Adams (Equity theory), Vroom (Expectancy theory), Alderfer (ERG theory), and Skinner (Reinforcement theory). Among these theories, one of the more relevant to project management environment is McClelland's

(1961) theory of needs which categorize team member's behavior into three categories that address the need for achievement, affiliation, and power.

McClelland's theory of needs and the premise of Rad and Levin (2003) that "motivation involves goal-directed behavior and that with an understanding of one's primary motivational approach, one can ascertain those project roles, and team responsibilities, that each team member should pursue to make the greatest contribution to the project deliverable" (2003, Chap.4.3.4) will be the driving principles for this research.

Abraham Maslow: Hierarchy of Needs Theory. Abraham Harold Maslow was an American psychologist who is "noted for his conceptualization of a hierarchy of human needs" ("Abraham Maslow", 2008, para. 1). Maslow was born in 1908 in Brooklyn, New York, and he received his BA in 1930, his MA in 1931, and his PhD in 1934, all in psychology, all from the University of Wisconsin ("Abraham Maslow", 2008).

Abraham Maslow proposed in 1943 one of the most commonly used and widely recognized theories in Human Resources Management, the Hierarchy of Needs Theory. This theory was regarded as an improvement over previous theories of personality and motivation. Maslow (1954) pointed out that human motivation has a hierarchical structure, which he called a hierarchy of needs. The main idea of his theory is that every human being has wants and desires that will affect this person's behaviour. Maslow stated that if people grew in an environment in which their needs are not met, they will be unlikely to function as healthy individuals or well adjusted individuals. When the needs of one level are satisfied, other and higher needs will instead be in the focus of the individual (Maslow, 1987).

The Hierarchy of Needs Theory is frequently demonstrated as a pyramid, where the needs are sorted based on their level of importance. When a person is climbing up towards the peak of the pyramid, he or she gets closer to the self-actualisation needs. More specifically,

Maslow theorised that people have five types of needs. These are physiological, safety, belonging-love, esteem, and self-actualising. As shown in Figure 4, these needs are classified in a specific order from lowest to highest so as the lowest order need must be fulfilled before the next order need is started. Robbins (2005) states that according to Maslow's theory you need to know where a person is on the hierarchical pyramid in order to motivate him or her. Then you need to focus on meeting that person's needs at that level.



Figure 4: Maslow's Hierarchy of Needs motivation theory. Note. Retrieved March 29, 2008, from http://www.trumpuniversity.com/learn/images/maslow_hierarchy.gif

Physiological needs represent the starting point for the Hierarchy of Needs Theory at the bottom of the pyramid and are the most basic needs, needed for survival of human organism. Examples of these needs are food, water, shelter, sex, medicine, sleep, clothes etc. The theory state that if a group of needs are not satisfied, then the needs in the above section of the pyramid will be neglected to a larger or smaller extent depending on how much in need of a certain variable the person is (Maslow, 2000). When physiological needs are satisfied, higher needs such as safety needs will emerge the individual.

Maslow (2000) states that safety needs can decide all of a person's behaviour. This level of needs has to do with the protection from physical as well as emotional harm. This category of needs also includes stability, property, fear of losing job, and secure working environment. Maslow (2000) goes on and states that also meaning of life is something that is well related to safety needs. Organizations can provide these needs by providing employees with a safety work environment. Moreover, according to Maslow (2000), if a company can offer an employee a permanent job with tenure and security, this will contribute to the likeness of this person feeling satisfied.

Belonging and love needs are in the third step of the hierarchy pyramid. They are also called social needs and have to do with the relations with people like family and friends. This category of needs also includes the need to belong and be accepted by a group of people.

People in general will be motivated to find social relationships and to maintain them. An organization in order to satisfy their employees' social needs must encourage them to participate in social events.

After the previous three steps have been satisfied, esteem needs becomes important. Esteem needs includes the need for self-respect and approval from others. Satisfaction of these needs can help individuals to produce feelings of self-confidence, prestige, power, and control. If these needs are not fulfilled the person will feel discouragement (Maslow, 2000).

The final category of Maslow's basic needs is the self-actualization needs. These needs are about fulfilling all your needs, to reach your full potential (Atkinson, Smith, Bem & Nolen–Hoeksema, 2000). For example a musician must play music, a poet must write, and a

professor must teach. As Maslow (2000) expressed "what a man can be, he must be" (2000, p.337). Moreover, he states that only few percent of the worlds population reach the point were they satisfy these needs (Maslow, 2000).

Figure 5 illustrates some examples of how companies can motivate employees at the different levels of the need hierarchy.

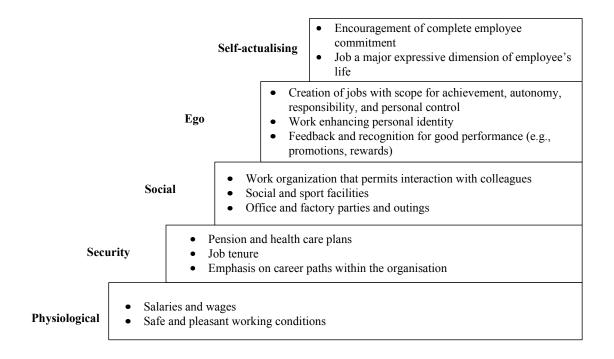


Figure 5: Examples of how organisations can satisfy needs at different levels of Maslow's hierarchy. Note. From *Images of Organization* (p.37), by G. Morgan, 1997, Thousand Oaks, CA: Sage Publications.

The greatest value of Maslow's Hierarchy of Needs theory lies in the practical appliance it has for every organization (Greenberg & Baron, 2003). Using this theory, suggests to managers how they can make their employees become self-actualized. Even though this theory is a well established theory within motivation theories, there is a lot of criticism from various researchers. But despite the fact that Maslow's theory has been criticized, and even though the original theory was presented 65 years ago, some of its factors remain of significant importance to employees today.

Frederick Herzberg: Motivation-Hygiene (Two Factor Theory). Frederick Irving Herzberg, a researcher with PhD in psychology, was one of the most influential names in business management due to his numerous respected and often mentioned theories. His most well known theory is the Motivation-Hygiene Theory, which is also called the Two Factor Theory ("Two factor theory", 2008).

In 1959 Herzberg proposed the Motivation-Hygiene Theory. In this theory he proposed that two factors influencing motivation at work – hygiene factors that demotivate when they are inappropriate, and motivators that sustain effort (Herzberg, Mausner, & Snyderman, 1959). According to Herzberg, if the motivational factors are met, the employee becomes motivated and hence performs higher. Robbins (2003) explains that according to Herzberg an individual's relation and attitude towards work can determine success or failure. As shown in Figure 6, a job that does not get satisfying by removing dissatisfying factors and therefore dissatisfaction is not the opposite of job satisfaction. In other words, not being unhappy does not mean that you are happy.



Figure 6: Frederick Herzberg's Two Factor Theory. Note. From *Organizational Behavior* (p.160), by S.P. Robbins, 2003, Upper Saddle River, NJ: Prentice Hall.

According to Di Cesare & Sadri (2003), Herzberg led to the development of extrinsic and intrinsic motivation factors by investigating the extremes where workers felt good about their work or bad. The extrinsic factors are called hygiene and are responsible for job dissatisfaction, while intrinsic factors are linked to job satisfaction when are fulfilled through challenge.

Hygiene factors do not motivate employees; however, they may reduce the level of dissatisfaction experienced by employees. That means if these factors are not present, or are mismanaged, they may cause dissatisfaction on the job. Kressler (2003) states that bad and/or inadequately structured working conditions may lead to dissatisfaction. Proper quality of work, success, recognition, career development and responsibility are some examples of intrinsic factors that will lead individuals to satisfaction. Herzberg (1966) and Herzberg *et al.* (1999) identified company policy and administration, supervision, interpersonal relations, working conditions, and salary as hygiene factors. However, studies have shown that needs for salary, recognition and responsibility can be both extrinsic and intrinsic motivators (Maidani, 1991).

The other set of factors, called motivators, satisfies an individual's need for self-actualisation in his/her job and leads to positive feelings towards the work. Some of these factors are achievement, recognition, work itself, responsibility, advancement and possibility of growth (Herzberg, *et al.*, 1959).

To sum up, the hygiene factors are extrinsic and contribute only to a minor level to positive feelings toward the job. Motivators, on the other hand, are intrinsic elements of the job which encourage personal growth and development, and contribute very little to job dissatisfaction. Both the hygiene factors and the motivators serve an employee's needs. The following figure illustrates the two aforementioned set of factors.

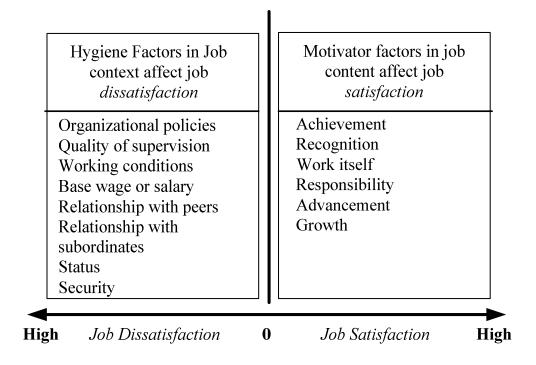


Figure 7: Herzberg's dual-factor theory. Note. From *Organizational Behavior* (p.125), by J. R. Schermerhorn, J. G. Hunt, & R. N. Osborn, 2005, New York: John Wiley & Sons, Inc.

According to Herzberg (2003) the following nine factors are the most famous in motivating the employees; reducing time spent at work, spiralling wages, fringe benefits, human relations training, sensitivity training, communications, two-way communication, job participation, and employee counselling. Bassett-Jones & Lloyd (2005) explain that Herzberg compares motivation as an internal self-charging battery. In order employees to become motivated the energy has to come from within. Herzberg's findings are relevant for companies with clearly defined tasks and hierarchical structures, where people need others to motivate them (Kressler, 2003).

The following figure represents a comparison between Herzberg's two-factor theory and Maslow's need hierarchy theory. Hygiene factors can be considered as lower level needs, whereas the motivators can be seen as higher level needs.

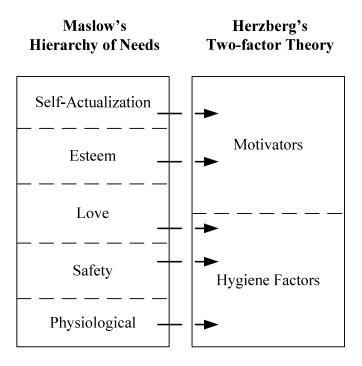


Figure 8: Linking Maslow's and Herzberg's theories of motivation.

Douglas McGregor: Theory X / Theory Y. Douglas McGregor was another well-known management researcher-professor at the MIT Sloan School of Management. In 1960, in his book *The Human Side of Enterprise*, he examined theories on behaviour of individuals at work, and he formulated two models which he calls Theory X and Theory Y. McGregor's work was based on Maslow's hierarchy of needs. He grouped Maslow's hierarchy into lower order (Theory X) needs and higher order (Theory Y) needs ("Theory X and theory Y", 2008).

McGregor's theory X is based on the assumption that the average human being has an inherent dislike of work and because this individual feels reluctant to work he/she will avoid it if he/she can. According to McGregor (1960), people must be controlled and sometimes threatened with punishment in order to get them to put additional effort toward the achievement of the organizational goals. People do not just want to avoid work but they also prefer to be guided (Kressler, 2003). Moreover, McGregor states that the dislike of work is so strong that even their manager's promises of a reward is not enough to overcome the problem. Only the threat of punishment can be effective. Woodward (1965) stated that X people need X managers and this type of leadership that motivates employees by fear is suitable to organizations with strong routine operations.

In theory Y, the situation is totally opposite from the previous one, because it explains that the average human being does not inherently dislike work. This theory gives its weight in believing that employees enjoy their mental and physical work duties. In addition it states that there is a chance for greater productivity by giving employees the freedom to perform at the best of their abilities without being bogged down by rules. Being forced to work can delay the progress of meeting organizational goals and objectives. According to McGregor (1960), people are fundamentally moral and if they treated as such, will strive to commit for the good of their organization.

Nowadays, McGregor's theories are seldom used because during the past decades they have been influenced by many new ideas and modern theories (Lagrosen, 2001). However, Theory X and Theory Y are still important in the field of organization management and more specifically these two theories can provide a useful tool for the motivation and management research ("DefineThis", 2008). In addition these theories remain guiding tools to improve organization culture ("Theory X and theory Y", 2008).

David McClelland: Theory of Needs. David McClelland was an American behavioral and social psychologist with a PhD in experimental psychology at Yale University in 1941. McClelland stated in 1961 that the motivation of an individual can result from three main needs: the Need for Achievement (N-Ach), Power (N-Pow), and Affiliation (N-Aff) ("David McClelland", 2008). Motivation and effectiveness at work are influenced by one of these three needs Robbins (2003). This theory is known as Theory of Needs and was based on Murray's (1938) Theory of Personality. According to Robbins (2003) McClelland's trichotomy of needs is one of the most famous motivation theories. Theory of Needs sometimes is referred to as the three need theory or as the learned needs theory.

Highly achievement-motivated people are people who seek to excel and tend to avoid both low-risk and high-risk situations. These individuals avoid low-risk situations because they think that easily attained success is not an authentic achievement, and in high-risk situations they see the outcome as one of chance rather than one's own effort. ("N-Ach", 2008). McClelland (1961) states that high achievers prefer the challenge of working at a problem and accepting the responsibility for success or failure rather than leaving the outcomes to chance. Achievement-motivated individuals need regular and periodical feedback in order to monitor the progress of their achievements and they prefer to work alone or with others witch are also highly achievement-motivated. Summarizing, a person with need for

achievement likes to perform tasks where one has personal responsibility, moreover tasks should be neither easy nor difficult, and they prefer work that has ideally 50% probability of success.

The Need for Affiliation means that people seek good interpersonal relationships with others. High N-Aff individuals need to feel accepted by other people, and they prefer work that provides high personal interaction. Moreover, they enjoy working in groups and they can perform very well in jobs with cooperative environment, where they can belong to something larger than themselves. In general, individuals with high affiliation motive strive for friendship, prefer cooperative situations, and desire relationships with mutual understanding ("N-Affil", 2008).

The Need for Power is the desire to have impact, to be influential, and to control others. A person's need of power can be one of two types; personal or institutional. Individuals who need personal power seek to control and direct others. Individuals who need institutional or social power seek to organize others effort in order to further the goals of the organization. In general, people with high N-Pow enjoy being in charge, strive for influence over others, and tend to be more concerned with prestige than with effective performance ("N-Pow", 2008).

Wiley (1997) states that the strength of McClelland's needs vary due to the situation. Moreover, Robbins (2005) states that according to McClelland's theory managers and entrepreneurs often have a high need for achievement, due to the fact that they are goal - oriented and take reasonable risks which are the characteristics of the need for achievement. Additionally, the need for power is significant in managerial and leading positions. On the other hand, affiliation is more common in worker positions, because they are more friendship oriented and want to get along with co-workers.

Finally Stuart-Kotze (2007) criticized that the increasing popularity of switching jobs and the ability of change organizations oppose with McClelland's theory that success will come if the employees are dedicated and committed to their company and work.

J. Stacey Adams: Equity Theory. John Stacy Adams, a workplace and behavioral psychologist, developed in 1963 the Equity Theory, also known as Adams' Equity Theory. In this theory he attempts to explain the fact that workers want to be treated fairly. "Employees seek to maintain equity between the inputs that they bring to a job and the outcomes that they receive from it against the perceived inputs and outcomes of others ("Equity theory", 2008, para.1).

Adams (1963) argued that an individual's motivation to perform derives from his/her will, or demands to be equally managed in relations to the treatment received by others in the organization. He stated that workers have the tendency to compare their rewards against their colleagues and when they find differences (under-rewarded), they decrease the performance of their work or even seek to find another organization where they could be treated better. On the other hand, when workers understand that they being treated better (over-rewarded) than their colleagues, they feel motivated to perform better.

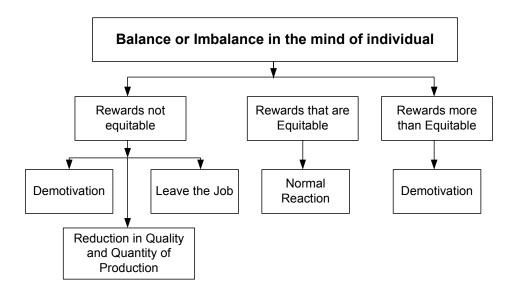


Figure 9: Equity Theory - Balancing the outcomes and inputs in the relationship for comparisons between different individuals. Note. From F. T. Abiodun and O. A. Oluwatosin (2007). Effects of the external consequences of organizational activities on employee motivation. Unpublished master's thesis, Blekinge Institute of Technology (BTH), Sweden.

According to "Equity theory" (2008), "equity is measured by comparing the ratios of contributions and benefits of each person with the relationship" (2008, "Background", para.1). "An individual will consider that he/she is treated fairly if he/she notices the ration of his inputs to his outcomes to be equivalent to those around him" ("Equity theory", 2008, "Definition of Equity", para.1). Figure 10 illustrates this thesis.

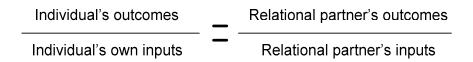


Figure 10: Equity measurement.

The Equity Theory states that equity is attained when inputs and outputs for an individual and his/her source of reference are equal (Adams, 1965). Inputs are defined as the individual's contribution to the relational exchange and can be either assets or liabilities. Inputs typically include some of the following: "Time, effort, loyalty, hard work, commitment, ability, adaptability, flexibility, tolerance, determination, enthusiasm, and/or personal sacrifice" ("Equity theory", 2008, "Inputs and Outcomes", para.1). According to "Equity theory" (2008), "Outcomes are defined as the positive and/or negative results that incurred because of the interaction of an individual with another one" ("Equity theory", 2008. "Inputs and Outcomes", para.2). Outcomes can be both tangible and intangible and typically include some of the following: Love, sex, intimacy, security, esteem, salary, employee benefit, expenses, recognition, reputation, responsibility, sense of achievement, praise, and/or thanks ("Equity theory", 2008). If an individual feels that inputs are fairly rewarded by outputs, then he/she is happier in his/her work and more motivated to continue inputting at the same level. On the other hand, if an individuals feels that his/her personal ration of inputs to outputs is less beneficial than the ratio of others, then it is possible to become demotivated in relation to his/her job (Chapman, 2007). Dubrin (2004) explains that when an individual feels that he/she is treated unfairly then his/her most probably action is one of the following:

- Alter the outcome: ask for a better salary, bonus, promotion, etc.
- Alter the inputs: decrease his/her performance, time devoted to work, etc.
- Distort the perception: distort his/her perception of his/her own or other's inputs and outputs
- Change the reference source: try to find a reference source with similar ration to his/her own
- Leave the situation: quit the job

Figure 11 presents this attitude of motivated or demotivated individuals as a balance which measures their inputs and outcomes.

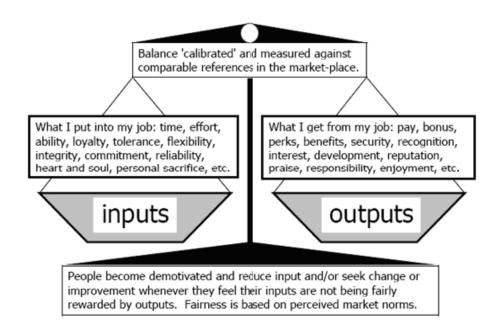


Figure 11: Adams Equity Theory diagram – Job motivation. Note. Retrieved April 28, 2008, from http://www.businessballs.com/adamsequitytheory.pdf

Finally, Equity theory reminds managers that employees see themselves and the way they are treated in terms of their surrounding environment, and they need to be treated and managed accordingly (Chapman, 2007).

Victor Vroom: Expectancy Theory. Victor Vroom was another well-known scientist, PhD from University of Michigan. His major contributions include work on motivation in the workplace, illustrated by his expectancy model which is a cognitive model that focuses upon motivation to work ("Expectancy theory", 2008), and his precious research into leadership styles and decision-making .Vroom (1964) has founded the theory called Expectancy Theory

in which he tries to explain why individuals choose to follow certain courses of action in organizations. Robbins (2003) defines Expectancy Theory as "the strength of a tendency to act in a certain way depends on the strength of an expectation that the act will be followed by a given outcome and on the attractiveness of that outcome to the individual" (2003, p.173).

Furthermore, Vroom (1964) stated that people become motivated when they feel that they managers or colleagues acknowledge their work. Vroom's Expectancy Theory is based on the belief that employee effort will lead to performance and performance will lead to rewards (Vroom, 1964). The Expectancy Theory is an easy understood model. Figure 12 shows this model and describes that people cannot be motivated by things they do not want, and that people will be motivated by things they are excited for.

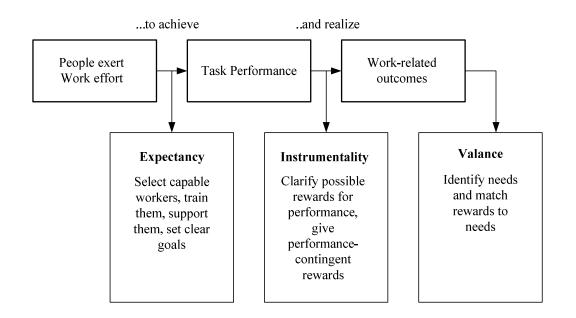


Figure 12: Vroom's expectancy theory. Note. From *Organizational Behavior* (p.128), by J. R. Schermerhorn, J. G. Hunt, & R. N. Osborn, 2005, New York: John Wiley & Sons, Inc.

Vroom (1964) uses the following formula in order to calculate the level of motivation: $M = (E) \times (I) \times (V)$. E is the abbreviation of expectancy, I stands for instrumentality, and V is the shortening for valance. These three variables are multiplied together to determine motivation (Vroom, 1995).

Expectancy is the perceived relation between effort and performance and refers to the strength of a person's belief about whether or not a particular job performance is attainable.

Bergman and Scarpello (2001) state that an individual usually only focuses on one expectancy value. The best way to establish expectancy is throughout feedback (Muchinsky, 1993).

Instrumentality is defined as the relationship between the perceived degree of performance and the outcome attained. Vroom (1964) defines instrumentality as a probability belief linking one outcome to another outcome. Vroom refers to instrumentality as outcome-outcome association. For example if a person thinks that an increased pay are analogous to his performance, the instrumentality would be very high. Vice versa, the instrumentality would be very low if the outcome is seen as not related to the performance. The varieties of instrumentalities are as many as there are outcomes (Muchinsky, 1993).

Valance is the strength of an individual's preference for a specific outcome, in other words is the feeling that employees have about the outcomes of their actions. Outcomes have different values depending on the individuals. An employee generates as many valences as there are outcomes (Muchinsky, 1993).

Finally, many scientist and researchers over the years have criticized Vroom's Expectancy Theory. Bennett and Cummings (1991) state that the theory does not work when the outcomes have negative valence. According to Bennett and Cummings (1991), Vroom's model behavior is better when adding the components rather than multiplying them. Di Cesare and Sadri (2003) further explain that the theory works best in countries and organizations where pay is the highest motivator factor.

Clayton Paul Alderfer: ERG Theory. Clayton Paul Alderfer, an American psychologist, is another well-known scientist and researcher because in 1969 he expanded Maslow's Hierarchy of Needs theory and he developed his own ERG theory ("Clayton Alderfer", 2008). According to Robbins (2003) the ERG theory is a renewed version of Maslow's theory of needs, but Alderfer states three basic group of needs rather than Maslow's five. The ERG theory states that every human being might consider a category of needs more important than another. People have a subjective view of the hierarchical arrangement of needs, and they experience of what they consider more vital to them at the moment ("Self Help", 2007).

The ERG name comes from the tree definitions of needs: Existence, Relatedness, and Growth (Muchinsky, 1993). Alderfer categorized the two Maslow's lower level of needs, Physiological and Safety, into the Existence category. Moreover, he categorized Maslow's Interpersonal Love and Esteem needs into the Relatedness category, and finally the Self Esteem needs and Self Actualization into the Growth. Like Maslow's model, the ERG theory is hierarchical. Existence needs have bigger priority than relatedness needs, which have priority over growth needs.

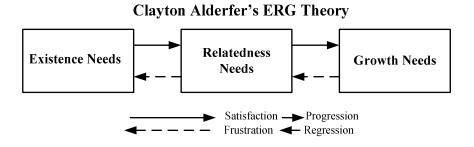


Figure 13: Clayton Alderfer's ERG Theory. Note. Retrieved April 28, 2008, from http://www.envisionsoftware.com/es_img/Alderfer_ERG_Theory.gif

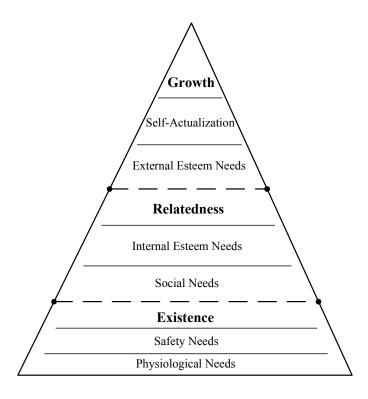


Figure 14: Linking Maslow's and Alderfer's theories of motivation.

The ERG theory although it is quite similar with Maslow's theory of needs (see Figure 14), it has also some differences. Unlike Maslow's theory, the ERG theory allows different needs, from different level-categories of needs to be pursued simultaneously. Moreover, ERG theory acknowledges that if a higher level of needs remains unfulfilled, an individual may regress to lower needs that are easier to be satisfied. By contrast to Maslow's theory which states that only if the needs of one level are satisfied people can move to the upper level. This is a proposed theory by Alderfer which is known as frustration-regression principle. An example of this principle is that if growth opportunities are not offered to an employee, he/she may regress towards relatedness needs, and socialize more with his/her colleagues ("12manage", 2008).

Finally, ERG theory allows order of the needs to be different from different people. In other words, ERG theory acknowledges that people have different needs on different occasions of their life, while Maslow state that that people needs follow a single similar pattern.

B. F. Skinner: Reinforcement Theory. Burrhus Frederic Skinner was an American psychologist and Edgar Pierce Professor of Psychology at Harvard University for sixteen years (1958 to 1974). In a survey that took place in 2002, Skinner was listed as the most influential psychologist of the 20th century ("Reinforcement", 2008).

Skinner accidentally developed the Reinforcement Theory while he was working with lab rats in devices he called "Skinner Boxes". However, the theory was implemented in organizational psychology in 1970. Reinforcement theory is one of the most well known theories regarding employees' motivation, because it provides a tool for how to create motivation by reducing the satisfaction of a need. Skinner believed that behavior is function of its consequences. In other words, employee's behavior that leads to positive outcomes will be repeated and vise versa (Skinner, 1953). People do things because they know other things will follow. Thus, knowing the consequence that follows, individuals will produce some behavior and avoid others (Swenson, 1999).

According to Skinner (1953) there are three types of reinforcers. The first is the positive reinforcer which is a reward after a desired behavior. The positive reinforcer increases the behavior's chance of reoccurring. The second reinforcer is the negative reinforcer which includes steps that lead to an action in order to avoid an unwanted consequence. The last reinforcer is punishment. An action is viewed as punishment if it is followed by a consequence that decreases the behavior over time. Punishment is one of the more commonly used reinforcers, but it should be used only if positive and negative

reinforcement cannot be used or have previously failed, because of its potentially negative effects.

Skinner's theory has the following three basic principles which called the Rules of Consequences.

- 1. Rewards increase a behavior
- 2. Punishment decrease a behavior
- 3. Neither rewards nor Punishment extinguish a behavior (Swenson, 1999).

Reinforcement theory acts on the basis of the need theories. Bergmann and Scarpello (2001) state that by punishing an individual can create motivation. They also give an example that if someone has an undesired behavior and you will take his money in order to punish him, then that person is going to stop that specific behavior.

Finally, although Reinforcement theory is a great tool for organizations in the field of motivation and an important explanation of how people learn behavior, it has some serious limitations such as that it is difficult to identify rewards and punishments. Another limitation is that employees may come to be disappointed by the punishment. So, in order to use the theory effectively, managers must be aware of these difficulties in application (Swenson, 1999).

Motivation Factors

Motivation depends on satisfying the needs of individuals. Individuals are different so they attempt to fulfill their needs and expectations in many different ways. Mullins (1999) categorized needs and expectations in three categories. The first is economic rewards which includes pays, extra benefits, and material goods. The second is intrinsic satisfaction and can

be derived from the work itself. The third is social relationships which includes friendships, teamwork, and need for affiliation.

Abraham Maslow and Frederick Hertzberg while researching the relationship between individual's motivation factor and job satisfaction, claim that in order for an organization to understand what motivates its employees they should understand both psychological and physical human needs.

Maslow identified five levels of needs. The first level contains physiological needs, the second level concerns safety and job security. Social needs are in the third level and relate to factors such as friendship and workplace relationships. The forth level concerns esteem needs received by employees when they are recognizing for their actions. The final level of Maslow's model is the need for self actualisation. The logic of Maslow's theory of hierarchy of needs is that an individual must hierarchically satisfy each of his/her needs in turn, starting with the lower level needs, and then satisfying higher level needs.

Frederick Hertzberg developed the well known Motivation-Hygiene theory. Hertzberg provides a framework for understanding motivational factors divided into two categories, external and internal factors. External factors are called hygiene factors and they described as the basic factors that must be met in order not to create dissatisfaction. The internal factors are called motivators and they described as the factors that motivate individuals to be satisfied through personal growth. Figure 15 illustrates Hertzberg's motivation and hygiene factors.

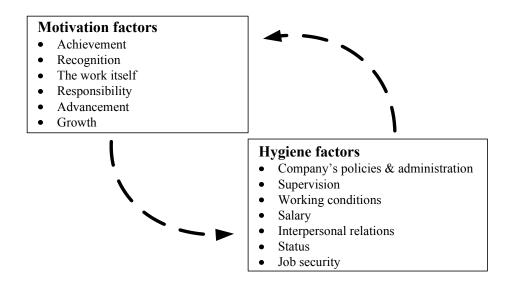


Figure 15: Hertzberg's motivation and hygiene factors. Note. Retrieved April 26, 2008, from http://www.provenmodels.com/files/1e32874bce917e1675a62f04ca026232/motivation_hygie ne theory.gif

Barkley and Saylor (2001) state that "traditionally motivation was equated with extrinsic rewards such as compensation, promotion, and additional benefits" (2001, p.273). Hence individuals wanted to satisfy their basic needs for housing, food, and clothing. On the contrary, "today, people need to be motivated by a higher order of needs, such as belonging, a feeling of accomplishment, improved self-esteem, and opportunities for personal growth"(2001, p.273).

Nelson and Economy (2005) state that "the most powerful motivators tend to also be the simplest ones with the least cost, starting with praise" (2005, p.66). They also developed the ASAP-cube method, which is a simply approach of praising and motivating employees. In this method they propose that praise should be given as soon, as sincere, as specific, as personal, as positive, and as proactive as possible (Nelson & Economy, 2005).

Moreover, Wiley (1997) after conducting a research regarding motivation factors, she stated that the most preferred motivator factors have changed over the last 40 years. The results from surveys that took place in 1946, 1980, 1986, and lastly in 1992 are illustrated in Table 1.

Table 1

Comparisons of employee responses in 1946, 1986 and 1992

Motivational Factors	1946	1980	1986	1992
Job Security	4	4	4	3
Promotion and growth in the organization	7	6	6	4
Interesting work	6	1	1	5
Full appreciation of work done	1	2	2	2
Good wages and Benefits	5	5	5	1
Good working conditions	9	7	7	7
Feeling of being in on thing	2	3	3	9
Sympathetic help with personal problems	3	9	10	10
Personal loyalty to employees	8	8	8	6
Tactful discipline	10	10	9	8

Note. From "What motivates employees according to over 40 years of motivation surveys", by C. Wiley, 1997, *International Journal of Manpower*, 18(3), p.268.

Table 1 indicates ten motivational factors that employees were asked to rank in terms of their personal preference. The top motivator factor in 1946 was appreciation of work done followed by feeling of being in on thing. Thirty five years later, in 1980 and 1986, employees'

top concern was interesting work, followed by full appreciation of work done with good wages and job security. In 1992, the respondents prefer good wages as the top motivator factor followed by full appreciation of work done and job security. The reason for these changes over the last years may be the change of economic conditions (organizational downsizing, outsourcing, etc.), change of working environment, industry competition, etc. a representative example is that of O'Dell's and Grayson's (1998) which explain that after the period of World War II, employees were concerned about intrinsic rewards. The motivational factor was the work itself rather than good wages or promotions.

Rewarding

Reward is the benefit that arise from performing an action or task, providing a service or discharging a responsibility (Pitts, 1995). In general reward is pay (salary, wages), but besides the pay there are a lot of kinds of reward such as bonuses, health insurance, allocated cars, business mobile phones, profit sharing, share schemes, share options and so on.

According to Pitts et al. there are two kinds or rewards including intrinsic and extrinsic rewards. Intrinsic rewards are the satisfaction that an individual gets from the job. An individuals who likes challenging projects, opportunities to learn, and personal business growth is motivated with intrinsic rewards (Pitts, 1995). On the other hand, extrinsic rewards are rewards such as praise, money, promotion, etc. De Cenzo and Robbins (1996) divide extrinsic rewards at two groups: Financial and non-financial rewards. Financial rewards can be directly (wages, bonuses, profit sharing) or indirectly (pension plans, paid vacations, purchase discounts), while non-financial rewards can be non-monetary such as preferred working hours, selection of work assignments, preferred lunch hours, etc.

Robbins (2005) proposed a framework to show managers how to identify and select the appropriate action to motivate employees. This framework also links the motivational

actions to the proper motivation theory and vice versa. Table 2 illustrates this framework by dividing the motivational actions into two categories, intrinsic and extrinsic rewards, and each reward into three motivational programs.

Table 2

How to identify and select the appropriate action to motivate employees

Type of rewards	Programs	Examples	Theories
	Employee recognition	Thank you notes, certificates of appreciations	Reinforcement theory
Intrinsic (Self- satisfaction)	Employee involvement	Participative management, quality circles, employee stock ownership	ERG theory
	Job redesign & scheduling	Job sharing, rotation, enlargement, & enrichment, flextime, telecommuting	Two-Factor theory
Extrinsic	Variable pay	Piece-rate pay plan, gain sharing & profit sharing plans, bonuses	Expectancy theory
(Rewards given by others)	Skill-Based pay	Skill, competence, knowledge based pay	ERG theory
	Flexible benefits	Modular plans, core-plus plans, flexible spending plans	Expectancy theory

Note. From *Managing and Organizing People: Organizational Behavior* (11th ed.), by S.P. Robbins, 2005, New Jersey: Pearson Education, Inc.

Recognition

Recognition is another strong motivator, Dubrin (2004) states that by giving recognition to individuals cab be considered a direct application of positive reinforcement. A similar opinion is that of Bowen's (2000) which states that recognizing an employee for his/her actions, is a good and positive practice for both parts. In general, recognition in the

project environment can be applied during all stages of team development and is according to Barkley and Saylor (2001) is "effective in reinforcing positive behaviors" (2001, p.273).

According to Bowen (2000) there are two kinds of recognition: Formal recognition and informal recognition. Informal recognition can be described as the recognition an individual receives from another individual. It could be from another colleague or from a manger to his/her subordinates. Some examples of informal recognition could be: Birthday cards, "thank you" notes, time off with pay, etc. On the other hand formal recognition derives from the organization to the employees. Employees are recognized when they achieve organizational objectives and goals.

Robbins (2005) linked employee recognition to reinforcement theory. He suggested that rewarding an employee's behavior with recognition can encourage its repetition. He also indicated that employee involvement is compatible with ERG theory. He moreover described that the improvement of jobs can also be traced to Herzberg's two-factor theory by increasing the intrinsic factors in a job employees are more likely to be satisfied with the job and motivated to perform it.

Chapter 4 - Methodologies and Procedures Used in the Study

Introduction

The purpose of this study is to assess the importance of motivation on a project team and how it is related to the team's performance. The process through which this research should be implemented is by allowing individuals to rank a given set of adapted motivational factors according to how important each factor is in motivating them to perform best at work.

As a result, a total of 284 questionnaires (see appendix for sample of administered questionnaire) were prepared and administered among the employees of an R&D Telecommunication company in Athens, Greece. The questionnaires were administered randomly in different departments of the organisation in order to ensure that the sample will include employees from different age groups, years of employment at the organization, educational level, marital status, and working areas.

Research process

According to Hussey and Hussey (1997), all research processes present some initial phases through which they must pass. The author use some of the following phases suggested by Hussey and Hussey in order to strengthen his research.

- Identify the research purpose and topic
- Define the research problem
- Determine the concept of the research
- Collecting the necessary data for the research
- Analyzing and interpreting the research data
- Stating the findings and recommendations

The first three phases have been covered by chapters one and two, where the thesis proposal was submitted for approval. The third and fourth phases will be covered by this chapter. The last two phases of the thesis will be covered by chapters five and six. However, to test the hypothesis developed in the chapters one, a quantitative research method is engaged in this study. When using a quantitative method, a literature review (chapter 3) helps one to get a proper understanding of the topic which is what we have done in chapter two.

Figure 18 provides a flow chart that can help readers to understand and facilitate an accurate view of the thesis structure and give a synopsis of the research processes such as the methodology that was used.

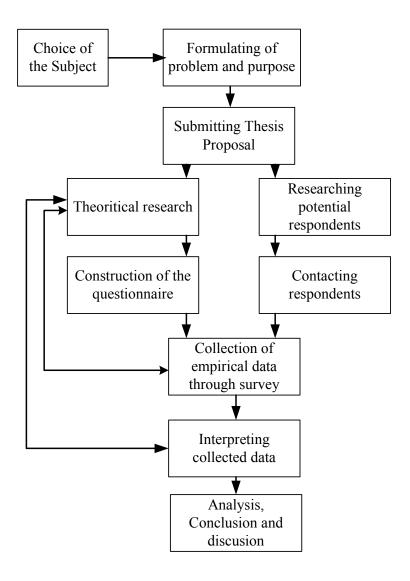


Figure 16: Master Thesis Workflow

Research method

The author in order to design his research firstly he had to take into consideration that the research should be created in a way that is suitable of one's personality, skills and knowledge (Merriam,1998). The author identified from literature that in similar researches there are two research methods that a researcher can use; quantitative and qualitative research methods.

A quantitative research method quantifies the respondent's answers towards certain variables to draw statistical conclusions and comparisons. The focus of this method is to explain cause and affect relationships, and the measurements, tests and questionnaires are controlled and the conclusion shows results from generalization of the population. The researcher in this method keeps a distance and an objective view of the research (Ghauri and Grönhaug 2005). According to Ghauri and Grönhaug (2005), the disadvantage of this method is the lack of the ability to understand the respondent's point of view. In contrast, the qualitative method is used when the researcher wants to investigate respondent's feelings, opinions and other subjective variables. According to Merriam (1998), in this method the researcher plays an active role to collect the necessary information.

After studying the benefits and the drawbacks, as well as the functionality of the previous aforementioned methods, the author decided that this thesis is an empirical research where only quantitative research will be used. A quantitative methodology will be used to compare different motivational factors towards data from previous researches and the author's stated hypothesis.

Collection of data

The collection of data represents a prerequisite for carrying out this research. There are two main procedures to collect data for such type of research. The first one is the Theoretical which refers to secondary data, collected by others and according to Ghauri and Gronhaug (2005) is used to "broaden the base from which scientific conclusion can be drawn" (2005, p.95). The second is Empirical data which is the primary mean of information for this thesis and was collected directly to investigate the specific problem (Ghauri & Gronhaug, 2005). According to Ghauri and Gronhaug (2005), the sources of primary data are illustrated in Figure 19.

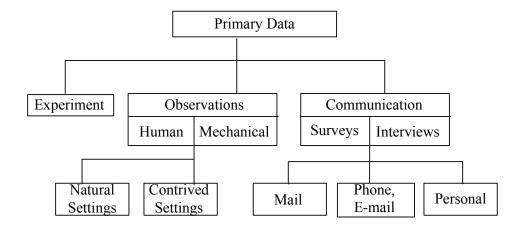


Figure 17: Sources of primary data. Note. From Research methods in business studies: A practical guide (p.102), by P. Ghauri and K. Gronhaug, 2005, Essex England: Pearson Education Limited.

Theoretical data is consists of books, historical studies, articles, and internet data that will be used in order the reader of the thesis to understand the subject and the questions of this research. The main source of theoretical data was eighty four articles taken from various databases such as Elsevier, Science Direct, Blackwell Synergy, and IEEE. Moreover, more than 60 books and 20 internet sites were used for this thesis and especially in Chapter 3 were the review of literature was presented. Using theoretical data the author gained a deeper understanding of the presented research problem.

There are different ways for gathering Empirical data. Those are questionnaires, interviews, and observations. The author collected this data through the use of questionnaires since he believes that it is the most appropriate type of research for this thesis. According to Leedy and Ormrod (2005), questionnaire as a way of research has many advantages such as it can be sent to a large number of participants, it can save the researcher from travel expenses

and telephone calls, and participants can respond with assurance that their responses will be anonymous. Moreover, questionnaires have their drawbacks as well. Leedy and Ormrod (2005) state that the majority of people who receive questionnaires do not return them back and people who respond are not typically representative of the originally selected sample. They also state that responses will reflect their reading and writing skills and their misinterpretation of one or more questions.

The primary question of the questionnaire used for this thesis was based on a questionnaire constructed by Wiley (1997) in her paper "What motivates employees according to over 40 years of motivation survey" that was published in 1997 at the International Journal of Manpower. The author acknowledges this paper as valuable information for every research regarding motivational factors.

Construction of the questionnaire

The questionnaire used in this thesis was based on Wiley's (1997) research and is addressed to every company that has as basic work unit, project teams. The questionnaire is comprising of two pages, and is divided into two parts. On the first page respondents can find information about the purpose of this research and the remark that the answers will be kept confidential. On the first page as well, respondents are asked to provide their demographical data such as their age, gender, years of employment, marital status, educational level, and their working area. On the second page, respondents are asked to rank according to their preference the top motivational factors.

The author after creating the questionnaire, he conducted the Human Resources manager of the R&D Telecommunication company, in order to discuss if the questionnaire is absolute applicable to the organisation, what changes should be done, and if there is something that need to be deleted or added. Thereafter, the questionnaire was sent by mail to

284 employees of the Athens site of the company. The body of the mail explained to employees the subject of the research, purpose of the study, information regarding how to complete the answers, the return date and the return procedure.

In order to ensure a large amount of returned questionnaires, the author distributed it to all employees of the company. From the total of 284 questionnaires, 116 were returned, having a response rate of 40.84 %.

Quality of the research

When conducting a research, the author is responsible the material used for the research to be valid and reliable. The reader must trust the hypothesis and the findings that are being presented. According to Easterby *et al.* (2002) expressions like validity and reliability are used to discuss the trustworthiness of the research that has be done, and can show a understanding of possible lacks and faults of a study.

Validity. Validity refers to how exactly an investigation is carried out and how accurate the tools and methods used for the research are, according to the purpose of the study. To prevent this, the author chose a questionnaire that has already been tested previously. Its validity was simultaneously studied by comparing the questionnaire with the answers from Willey's (1997) paper in which the studies are the motivational factors for over 40 years' researches.

Reliability. Reliability's meaning and purpose is to describe how accurate and trustworthy are the collected data, as well as the methods that used to collect this data. The author acknowledges that reliability is hard to define in this thesis though human behaviour is investigating.

Data analyses

Descriptive analysis includes principles, methods, and techniques to present and construe the collected data. The author used computer programmes to process the collected data from the questionnaires, and with the help of tables and diagrams, he illustrate the results of the research. Frequency tables were used to summarise categorical, nominal, and ordinal data. The frequency allocation was done using electronic spreadsheet in Microsoft Excel program, through first encoding the answers which does not have numeric values, such as gender, marital status, educational level, and work area.

Chapter 5 - Results

This research was designed to investigate the factors that influence the performance of employees in a project team. A list of ten factors developed in a 1949 survey was used as a primary data of this survey. Approximately 284 surveys were administered to persons employed in a R&D telecommunication company. Of that number, 116 were usable, including 98 men and 18 women from various departments of the company.

Table 3 shows the amount of questionnaires sent and received, such as the response rate from the R&D Telecommunication company. The author expected a response rate of 60% but unfortunately it was only 40.8%. Rogelberg and Luong (1998) state that the typical return rate for a mailed questionnaire is 50%.

Table 3

Administered questionnaires and the response rate based on gender

Total amount of	Questionnaires	Questionnaires	Response
employees	sent	received	rate
284	284	116	40.8%
Men: 176 (62%)		Men: 98 (84%)	
Women: 108 (38%)	Women: 18 (16%)		

Although the purpose of this research is to point out the top motivational factors and not to compare these factors with the demographical data of the respondents, the author believes that should report them in order to help readers understand the population of the

research and provide data for future researches. Table 4 illustrates the demographical information of the respondents that were studied in the survey.

Table 4

Demographical information of the respondents

Demographical Data					
Demographical Data Respondents Percentage (%)					
Gender					
Male	98	84.49 %			
Female	18	15.51 %			
Age					
18-25	11	9.48 %			
26-35	80	68.96 %			
36-45	17	14.65 %			
46-55	8	6.9 %			
56 +	0	0 %			
Educational Level					
High School	1	0.86 %			
University	0	0 %			
Master of Science	113	97.41 %			
Doctoral Diploma	2	1.72 %			
Other	0	0 %			
Years of Employment					
Up to 2 years	42	36.20 %			
2 to 4 years	58	50 %			
4 to 6 years	16	13.80 %			
Over 6 years	0	0 %			
Geographic Location					
Greece, Athens	116	100 %			

The demographical information reveals the following information. Regarding the gender of the respondents, 98 men and 18 women were responded to the questionnaire. The males represent the 84.4% of the respondents, while females represent the 15.6% of the respondents. Regarding the total employees of the organization, where there are 176 males (62%) and 108 females (38%), it is worth mentioned that males were more eager to respond to the questionnaire than females. 56% of the total male population respond, in contrast with 17% of the females.

In the aspect of age, the majority of the respondents (69%) were within the age range of 26-35 years where 80 employees correspond. Within the age range of 36-45 years, 17 employees were respond which corresponds to 14.7%. The minority of the respondents belongs to the age ranges of 18-25 (9.5%) and 46-55 (7%).

According to the educational level, the organization has a strict policy that all employees must have at least a Master of Science diploma in Telecommunication in order to be able to apply for the job. The research pointed out that 97% have a Master of Science diploma, and there two employees witch have a Doctoral diploma. There is also one employee who has been graduated from a private educational institute (IEK) with various telecommunication certifications.

The years of employment in the company shows that 50% of the responds are employed in the organization between two and four years. 36 % have an employment of up to two years, and 14% have an employment between four and six years. The 50% between two and four years is justified due to the fact that the company's product has the last four years been developed by the Athens site.

The respondents of this research represent employees from different departments of the R&D telecommunication company. The positions held by respondents constitutes of 3 managers, 42 developers, 45 system test engineers, 17 administrative stuff, and 9 from the IT

supporting team. A general conclusion is that the majority of the respondents were line engineers. Table 5 and Figure 18 illustrates the percentage of the different positions regarding the total population of the survey.

Table 5

Position held by employees of the R&D Telecommunication Company

Position	Respondents	Percentage of the total population
Manager	3 from 9	33 %
Developer	42 from 106	41.5 %
System Test Engineer	45 from 140	32 %
Administrative Stuff	17 from 17	100 %
IT Supporting Stuff	9 from 12	75 %

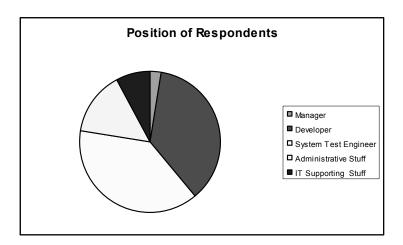


Figure 18: Respondents position pipe-chart.

Questions seven was the fundamental question of the questionnaire. Respondents were asked to rank the most important motivational factors for them, as employees, to do their best at work. The most important factor was to be ranked with 1 and the least important factor was to be assigned the number 10, while all items had to be ranked and no rank could be used

more than once. Table 6 and Figure 19 illustrate the frequency allocation from answers of question seven.

Table 6

Ranking of top motivational factors (Question 7)

Variables-Factors	Position	Total score of respondents
Job Security	5	652
Promotion and growth in the organization	2	428
Interesting work	4	480
Full appreciation of work done	6	652
Good wages and Benefits	1	312
Good working conditions	3	440
Feeling of being in on thing	7	688
Sympathetic help with personal problems	10	1060
Personal loyalty to employees	8	748
Tactful discipline	9	844

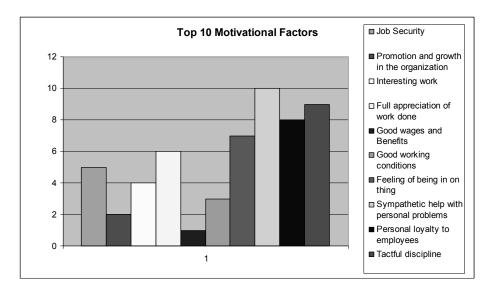


Figure 19: Frequency allocation of top motivational factors.

The survey pointed out that the top motivational factor in a R&D telecommunication company in Greece is "Good Wages and Benefits", followed by "Promotion and growth in the organization", and "Good working conditions". The last motivational factor is "Sympathetic help with personal problems".

These results are compared in Table 7 with that of the surveys that took place in 1946 (Hersey and Blanchard, 1969), in 1980 (Kovach, 1980), in 1986 (Kovach, 1987), and 1992 by Carolyn Wiley (Wiley, 1997). All results are cited in Wiley's (1997) paper "What motivates employees according to over 40 years of motivation surveys", and are particularly applicable to the content motivation theories discussed in Chapter 3.

Table 7

Comparison of motivational factors with that of previous researches

Motivational Factors	1946	1980	1986	1992	2008
Job Security	4	4	4	3	5
Promotion and growth in the organization	7	6	6	4	2
Interesting work	6	1	1	5	4
Full appreciation of work done	1	2	2	2	6
Good wages and Benefits	5	5	5	1	1
Good working conditions	9	7	7	7	3
Feeling of being in on thing	2	3	3	9	7
Sympathetic help with personal problems	3	9	10	10	10
Personal loyalty to employees	8	8	8	6	8
Tactful discipline	10	10	9	8	9

Note. Adapted from "What motivates employees according to over 40 years of motivation surveys", by C. Wiley, 1997, *International Journal of Manpower*, 18(3), p. 268.

Table 8

Differences of most important and least important motivational factors over the years

	Factors				
Years	Most Important	Least Important			
1946	Appreciation of Work done	Discipline			
1980	Interesting Work	Discipline			
1986	Interesting Work	Personal Problems			
1992	Good Wages	Personal Problems			
2008	Good Wages	Personal Problems			

Note. Adapted from "What motivates employees according to over 40 years of motivation surveys", by C. Wiley, 1997, *International Journal of Manpower*, 18(3), p. 267.

Table 7 and Table 8 make clear the difference of motivational factors over the passing of the time. In 1946 the top motivational factor selected by employees was the appreciation of work that they have done, whereas in 1980 and in 1986 the top motivational factor was the interesting of work itself. The importance and interest of work itself is supported by Herzberg's Motivation Hygiene Theory which states that employees are motivated by their need to succeed and accomplishing a difficult task. The second important motivational factor for employees over a decade was the appreciation and recognition of work done. Kovach (1987) states that organizations were primary concerned about employees basic needs, but they lack in satisfying their "ego or self-fulfilment needs" (1987, p.59), thus they rank interesting of work at the top of the list of motivation factors.

In 1992, the appearance of modern organization brought many changes to the behavior of employees. This can be sawn by the research of Wiley in 1992 in which it pointed out that

good wages and benefits that concern financial aspects are the first motivational factor of employees. Wiley (1997) states that one of the reasons for these results were "the labour cost-cutting strategies of the 1980s" (1997, p.272). The results of Wiley's research pointed out that employee consider financial benefits as a reward and recognition for their performance at work. Extrinsic rewards, such as a good salary, can increase intrinsic motivation which is linked to employee's performance.

This research points out that 16 years after professor's Wiley research employees have as a main motivational factor good wages and benefits. The second factor is that employees are motivated by the promotion and growth into the organisation, and followed by the good working environment. Herzberg (1968) states the importance of good wages and salaries by saying that "having spiralling wages motivates people" (1968, p.87) and categorizes them as hygiene factors. Regarding promotion and growth into organisation individuals ranked it in the second position, while on average, this factor was ranked 6th at Wiley's survey between 1946 and 1992. The second position of this factor also supports Herzberg's theory which consider this factor as a highly motivator factor. Furthermore, it was found that objective working conditions substantially correlated with subjective measures of work motivation. Herzberg's theory state that if working conditions are poor then they will lead to employee dissatisfaction and poor performance. An appropriate working environment provides workers with physiological, security and belonging needs, as explained in Maslow's theory of the Hierarchy of Needs. It provides basic needs, adequate security, and a sense of belonging.

Chapter 6 - Discussion, Conclusions, Recommendations

Discussion

This thesis provides a theoretical background regarding motivation as presented in the literature review. The author uses scientifically accepted methods of data collection and analysis that further strengthen this thesis. The author believes that the use of quantitative research method enabled him to increase both the quality of the research and the satisfaction of the Human Resources department and Technical Managers of the R&D Telecommunication company, because the results of this research are of great value for the company. Moreover, the author believes that this research is also contributed to the field of motivation and work. The results have many similarities and differences with past researches, and can be used from various organisations as a starting point to make available what their employees prefer in their job. The author acknowledges that designing or re-designing the work in order to make it more interesting for employees is not an easy task, but using the results of such researches may guide organisations in the right direction to make work better for both employees and employer.

The research has also led to some few limitations. The short study period, the judgement ranking of factors by respondents, a forthcoming merge with another organisation and the generalization that the results are based only on one of the four sites of the company are some of the weak points of this study. Regarding the short study period, the author had to finish the preparation of the questionnaire, find and come in contact with the right persons from the company within two months period of time. During this stage, the R&D Telecommunication company was at an auditing phase from prospective buyers in order to enter in a merge agreement. This was the research strongest restriction for two reasons. Firstly, it was very difficult for the author to arrange meetings with the HR Manager and the

Technical Managers due to their high activity in the company. Secondly, the employees were worried about the future of their company due to the forthcoming merge; therefore, many of them were not willing to take part in this survey.

Conclusion

Motivation presents an extensive area of research. There are varieties of theories on what motivates people as well as theories, which describe how individual's behaviour is initiated, directed, and sustained. This thesis is concentrated on what are the employees' needs that can increase their performance at work.

In order to attain high level of performance and improve productivity, employers must understand what motivates their employees. A good way to gain insight to employees' job motivation preferences is motivation surveys. If managers regularly administer such motivation surveys, and appropriately consider their results, companies and employees would come to a win-win situation in order to gain a great deal.

The respondents of this survey ranked as the top motivational factor "Good Wages and Benefits", followed by "Promotion and growth in the organization", and "Good working conditions". These factors reflect the needs of employees and indicate that a better reward system and job redesign strategies must be used to motivate employees in order to increase their performance. According to Maslow's Hierarchy of Needs theory, financial reward is very important because it can satisfy several needs from the different level of hierarchy. If employees are satisfied with the wages and benefits they take, they can easily achieve to satisfy their physiological and esteem needs. Regarding promotion and growth in the organization, according to Herzberg's Motivator-Hygiene Theory the most successful method of motivating is to build challenge and opportunity for achievement into the job itself: .

Individuals who have far above the ground accomplishment wishes can be well stimulated by

exigent responsibilities which can bring them to obviously achievable purpose, appropriate advice as well as additional duty for ground-breaking tasks. Thus, both factors (promotion and growth in the organization and interesting work) often are addressed through job redesign. The aim of job redesign focuses on enhancing a task so as the worker to be highly encouraged to implement the job.

Finally, the results of this research are supported by numerous other research studies that financial reimbursement, acknowledgment, work safety, personal development as well as a kind of completion all of them constitute significant aspects of an employee's investigation referring to the enthusiastic sides of a work. Moreover, the staff members' reactions to this current analysis match up with theories of substance such as Hierarchy of Needs Theory and the Reinforcement Theory both stated by Maslow. According to the content theories, have to take into serious consideration workers' requirements so as they offer them the most suitable inspiration policy. Along with Reinforcement Theory, managers are required to recognize the association which connects performance together with their effects so that they forecast and organize in advance emergencies which either strengthen or dishearten wanted or unwanted conducts, correspondingly.

The results additionally disclose the fact that the job-related factors that motivate employees change over time. Roughly 60 years' time from the moment that the initial analysis was held, workforce' reactions towards the identical ten features have been transformed.

Recommendations

Employee motivation is a broad, complex, and elusive subject that even after 60 years of its first research, continues to be one of the problems and challenges that a modern organisation faces.

The outcome of this research pointed out that good wages and benefits are valued more by today's employees. Today, the financial standing of employees in Greece is in jeopardy. Regardless their demographical information, employees needs seem to be of one accord. They have a strong feeling that with the pass of time, organisations request them to increase their performance but without giving them back the right rewards.

Cameron *et al.* (1991) state that in the early 1980s, organization downsizing brought great changes in employees needs and affected their work performance. Principles such as morale and trust suffered after downsizing and various surveys have pointed out that productivity deteriorated. It is clearly that employees needed reassurances about job security, salary raises, and other benefits in order to perform well. However, organisations also placed high value on another aspect such as appreciation of work done, in order to help employees to meet their needs of esteem, self-actualization, growth, and achievement (Lussier, 1997).

Due to the fact that the overall surveyed employees expressed the importance of good wages and benefits, the author is suggesting an effective compensation programme.

Moreover, organizational behaviour modification can be used, in which employee behaviours are identified, measured and analyzed in terms of their functional consequences and where an intervention is developed using principles of reinforcement.

Finally, it would be interesting if further research with larger sample size could be undertaken to confirm the results of this study. It would be very interesting a future research to study and compare other factors such as geographic location of the organization (different sites) in order to find out if there are cultural differences regarding what motivates employees.

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Appendix

CityUniversity

MOTIVATION FACTORS THAT CAN AFFECT THE PERFORMANCE OF A PROJECT TEAM

	Dear respondents,					
	As far as the Thesis is concerned which is held within the framework of the postgraduate studies implemented by the City University of Seattle in coopera with TEI PIRAEUS, the below mentioned questionnaire examines which are t motivating factors that may influence a project team's performance.					
	The author of this thesis would be very grateful if you could take a few minutes to fill these questionnaires. Your feedback is very important and your answers will be kept in confidence.					
	Thank you for your assistance.					
	Levakos Ch. Panagiotis					
Demographical Data: Place a check in the appropriate box						
1) A	Age: 18-29 □ 50-59□					
	30-39 □ 60 +□					
	40-49□					
2) S	Sex: Male□ Female□					
3) N	Marital status: Married Unmarried					
4) I	Educational level: High School					
	University graduate□					

5) Work a	area:	Manager		System Test		
		Developer		Other		
		Administrative Staff[
6) How long have you been working in this company?:						
		Up to 2 years		2 to 5 years□		
		Above 5 years]			
7) Motivational Factors: Arrange the following motivational factors in order of your preference from 1 to 10, where 1 represents the best type of motivational factor and 10 represent the least best type of motivational factor:						
(() Job Security					
(
(() Interesting work					
(() Full appreciation of work done					
(() Good wages and Benefits					
(() Good working conditions					
(() Feeling of being in on thing					
(() Sympathetic help with personal problems					
(() Personal loyalty to employees					
() Tactful di	iscipline				

1