



**Competency Based Recruitment and Selection in
Project Management Processes among United Arab
Emirates (UAE) Enterprises**

By

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A Thesis submitted in partial fulfillment of the
requirements of
British University of Dubai,
for the degree of Master of Science
Project Management

25 July 2012

Title

Competency based recruitment and selection in project management processes
among United Arab Emirates (UAE) enterprises

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Abstract

The purpose of this research project is to evaluate problems in the project management processes in Multi-National Corporations (MNCs), in this case **FedEx Corporation** and **Kraft Foods**, along with a particular focus on the problems related to the failure of using competency based approaches for the recruitment and selection of cross functional team members in projects has been made.

The theories in the literature are compared to the data collected from live projects of the two organisations. The different management approaches in two industries were evaluated to identify internal mismatches regarding management and to obtain a clearer picture of competency based selection handled at different levels inside and outside of the organisations.

Empirical data was derived through both qualitative and quantitative methods from the 40 projects teams, from which 203 questionnaires were collected. The study findings shows some discrepancies in the execution and recruitment processes at **Kraft Foods**, in particularly with regards to the dealing with mid and small sized projects, whereas in the case of **FedEx Corporation**, regulation or control processes were found to be faulty and caused problems in the course of the projects.

Based on the project study several recommendations are made including: adopting competency based recruitment at Kraft Foods; developing proper coordination and cooperation within and between teams by improving communication networks; creating appropriate clarity in the roles and responsibilities for individuals as well as teams; developing proper and highly applicable regulation mechanisms suiting company requirements and objectives; rectification made during the course of projects should be adopted and adapted with a long term perspective.

It is concluded that if these recommendations are implemented in the project management processes at Kraft Foods and FedEx Corporation the productivity will show maximum improvement.

Dedication

To my father,

Sheikh Dr Faisal bin Khaled bin Khaled Al-Qassemi and

my mother,

Sheikha Mahra bin Majid bin Saqer Al-Qassemi,

for being my candle in the cold dark night.

Acknowledgements

I would like to thank Professor Ashly Pinnington for his untiring guidance and support in developing my thesis, and Lorna Nairn for her support and help with my dissertation. My father, Sheik. Dr. Faisal for his encouragement and my mother, Sheika. Mahra for her stories that pushed to the finish line and Abdul Gafar, who helped clarify many a complicated situation for me.

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DEFINITIONS SPECIFIC TO THESIS

This Thesis has been prepared with full compliance to the APA requirement.

INTRODUCTION

1.1. Introduction

The success of a project is largely dependent upon the extent of productive strategic planning made in relation to the scope of the project, resource (human and capital) selection and allocation, costing, time planning and control, scheduling and the final execution of the various project management processes. The development and retainment of strong and correctly skilled teams become crucial to any project leader for successful real time execution of the project and for enhancing or maximizing the functional capability and applicability of the processes.

A project leader's success is judged by the team's performance, which involves key competencies in various combinations within many cross functional teams (Dalziel, 2003). Therefore, it is in their interest to hire only the best people to their team. Researchers highlight the fact that the environment of the organisation should encourage the people with talent to grow, and provide them with opportunities to do so (McCall, 1998). However, the prevalent method of recruitment and selection and related decision-making often depends on irrelevant details and is mostly based on gut feelings of the project recruitment board, rather than on hard empirical evidence and key strategies to predict future behaviour regarding their suitability for the job. – This approach can help to eliminate misunderstandings, prevent personal impressions and counter the candidate's ability to deceive in the selection process. Employing a person who is unsuitable for the desired job, especially in the area of project management can end up being a costly and time-consuming mistake. When a candidate with the key competencies, that is, the combination of attitude, education, work experience, and skills is selected it will help the project manager to increase the quality and stability of his workforce, furthermore, it will play a major role in increasing harmony among team members and reduce employee turnover and costs. Hence, the selection process influences considerably in running the project smoothly because a good team on board means good project planning, execution, monitoring and control.

This project aims to analyse the applicability of various project management related processes and then evaluate the competency based recruitment and selection processes at Kraft Foods and FedEx Corporation, particularly regarding managing mid and small sized projects.

1.2. Rationale for the research

As companies are faced with the challenge of running many ongoing projects at the same time, project management systems need to be perfected in order to maximize the success of projects and their applications. Therefore, analysis of the various processes involved in managing projects and their functional capability is relevant and the companies could benefit from such analysis for their future betterment and for finding solutions. To ensure the employees are an asset for projects as well as to the organisation, it is important to know the competency gap, which can best be achieved by applying the competency management approaches in cross-functional team recruitment and selection.

This research is intended to assess the effectiveness of the various project management processes with regard to their applicability to the aforementioned companies, the degree of success of cross-functional teams and how competency based approaches in recruitment and selection may help in retaining dissatisfied project management employees working in cross functional teams (CFT). Further, it should be useful to the companies (Kraft Foods and FedEx Corporation) for understanding the intensity of the problems with regard to project management and for implementing necessary techniques and methods. It is often found that CFTs are difficult to manage and may even disintegrate as quickly as they are brought together to form a team. This problem is largely attributed to the presence of incompatible team members from different functional areas; their incompetence to adapt to a new situation; their inefficient understanding how to perform their altered team responsibilities as well as new individual responsibilities and tasks; and their inability to prioritise and align their activities to the goals and objectives of the project. Hence this study concentrates on the planning, execution and regulation processes with special emphasis on the competency based recruitment and selection processes adopted in project management.

1.3. Problem statement

Without more advanced based recruitment strategies organisation risks stagnation, or making inductive decisions which have costly effects and prevent the CFTs from developing to their full project management potential. The traditional view of competency management is that the one who fits the criteria of the interview diagnostic will survive in the end and the “fittest” will in a natural way obtain the right

position; however, this view has changed into determining key competencies for all levels in the organisation which some assert, endeavour to meet this need as quickly as possible and using the best methods. To be able to retain valuable people in the organisation, it is necessary to provide members of the CFT with opportunities to upgrade and developmental challenges.

The research problem is to identify the project management employed and to identify the key competencies and to ascertain whether they are verifiable and useful or just an application of a management trend. Both FedEx and Kraft Foods are involved in the assessment of higher executives and managers within CFTs. The task was to identify if there are existing gaps in their current methods, and find solutions to improve their key competencies strategies and methodologies within the field of recruitment processes for identification and assimilation of candidates for leadership positions.

It is important for the companies to be able to retain those employees who have the necessary key qualities and also their teams to prevent loss of capabilities and experience to other companies. It is a challenge to develop employees and facilitate the relevant work experiences for identifying their competencies. However, there are different obstacles to consider here as well. Morgan McCall describes in his book, *“Who are the high flyers?”*, that

“some talented people somehow, may not want to take a given chance for development when they are offered, some may want it but can’t get it, and some don’t know that they need it. This makes organizations overlook people with potential to develop, but also mislead the people they have identified as the high flyers, teaching them to behave in ineffective ways instead of finding the right positions for them.” (McCall, 1998)

1.4. Aims and objectives of the study

1.4.1. Aims of the study

This dissertation aims to answer two primary research questions. Firstly, How efficiently are the project management processes applied? Secondly, Is the competency based approach towards recruitment and selection of project employees crucial to managing conflict among Cross-Functional Teams?

1.4.2. Objectives of the study

The objective of this dissertation is to analyse the various processes involved in project management with a special focus on the critical factors involved in the functioning of cross-functional teams in project management and its relation to competency based recruitment and selection strategy for project management employees.

The planning, execution and regulation stages of projects need to be organised and conducted in a systematic and pragmatic manner in order to provide timely delivery of quality and competitive outputs. The project teams that include cross functional members need to be skillfully managed in order to ensure proper implementation of all the different stages of project management. CFTs are difficult to manage especially when involved with a complex project. Hence, it is important to find out what makes the team members behave the way they do in a project. This can be best studied by emphasising competency management for each project. The dissertation considers competency management as one of the latest management innovations which can be effectively used in recruitment and selection decisions. Consequently, the thesis creates a relationship between competency management and CFT in the Project Management field. Competency involves a study of many skill sets and gaps created by the deficiency of such skills, mainly acquired skills and a person's own inherent abilities. A proper understanding of these two types of skill will help to apply the right recruitment practices to different types of project management activities and contribute to the successful implementation of the various project management processes.

1.5. Research Questions

While seeking to find the answer to the research problem of competency based recruitment and selection in UAE project management processes, the dissertation also aims to answer the following:

1. How effective are the project management related processes and the strategies (with special reference to recruitment and selection) adopted?
2. Analyse the concept of competency, identifying what deficiencies and resultant gap in project management occurs, in recruitment and selection and the functioning of CFTs?
3. Assess the extent that resource allocation was in line with the project goals?

1.6. Research Limitations

The main limitations of the research study include:

1. Constraints with regard to time were one major factor that affected mainly the data collection stages of the project. Hence only the questionnaire method was used for primary data collection.
2. Financial constraints also hindered the research.
3. Some of the respondents were not sufficiently cooperative and were not willing to provide honest and accurate data.
4. As the projects were based at different geographic locations, the data collection was onerous.

This research was originally intended to have a wider focus on the services provide by both companies; however, during the study it became apparent that the field of project management was so extensive in these businesses in the two industries, that it was necessary to narrow down the field investigated. If they were to have been included, the thesis would have lost its focus on the project management processes themselves and no final conclusions could have been made on the comparison with the theories in the literature.

The study has focused only on the employees in the internal organisation, not on attracting new personnel from outside the company. To focus on two US based businesses limits the breadth of the data findings; however, they are generalisable to companies facing similar circumstances.

1.7. Thesis outline

Chapter 1 – Introduction:

In the Introduction the researcher provides a brief description of the background of the subject matter. The research problem statement, issues, goals and objectives are outlined. The scope and limitations together with the deliverables are specified and elaborated. The organisation of this study is also described in this chapter. The overall content of this thesis is systematically presented.

Chapter 2 – Literature Review:

This chapter starts with the Project Management background. Details of Project Management are provided as the starting point to define and elaborate on the research problem. The chapter focuses on a literature review of Project Management.

Chapter 3 –Research Methodology:

Discusses the methodology followed during this study. The design and implementation of the questionnaire survey is explained and the details discussed. The analytical methodology that is adopted is also briefly described and clarified.

Chapter 4 – Data Analysis and Results:

The outcome of the data analysis and main results from the survey are presented and discussed in this chapter. The factors studied are described and analysed in detail.

Chapter 5 – Discussion:

In this chapter the findings of the research are discussed in detail. The Research questions are answered in light of the earlier studies and the results found from the survey in the two companies.

Chapter 6 - Conclusions and Recommendation:

The researcher provides a summary of the findings and conclusions drawn from this research. In the final part of this chapter the recommendations for future research are presented.

LITERATURE REVIEW

2.1. Introduction

The aim of this chapter is to delineate and review the literatures on Project Management in general and the issues and relationships between the influential factors in projects. Furthermore, it will examine the contribution of the factors, and identify how the factors affect the industries respectively in managing their projects.

2.2. Project defined

A one-time endeavour which is temporarily undertaken in order to create a unique product or service, which brings about beneficial change or added value, is called a project. On the other hand, there are processes or operations of a company that are mostly permanent or semi-permanent and ongoing functional work to create the same product or service over and over again. These two systems are often different and therefore require varying technical skills and philosophies for their management. This crucial concept is the backbone for the development of the concept of project management (Project Management, 2007).

“Project management is the discipline of organizing and managing resources in such a way that these resources deliver all the work required to complete a project within defined scope, time, and cost constraints.”

(Project Management, 2006: 1).

The practice of project management has evolved over half a century and permeates all industries, institutions and governments throughout the world. Project management and its practice in organisations either in public or private sector need to be radically improved because of its major contribution to supporting the organisation’s goals and objectives (P3M3, 2003). This study is intended to provide insights in to the applicability and effectiveness of the various techniques used at FedEx and Kraft Foods for achieving the goals and objectives of the projects as well as elucidating the problems and issues faced when managing small and mid sized projects.

2.3. Project management Models and theories

Wideman (1999) opines that the goal of managing a project is undoubtedly to produce successful products. Successful products can be made only with the help of

efficient project management team containing many cross-functional members. According to Tanaka (2003: 4) project management has evolved gradually over the years arising from different models and theories. A total of seven influential models can be considered to be related to project management during the last four decades. They are the ‘Classical’ model, which was quite “robust and rigid” and was modified and developed in to a more flexible ‘Modern’ Model, which in turn has been subdivided into three models. Then there is the ‘Neo-classical” Model which is considered as the global operational adaptation of the Classical Model. The Strategic Model which is supposed to be related to the present century and The ‘Versatile’ Model, considered to be the model for the future generation (Figure 2.1 Development of project management models.).

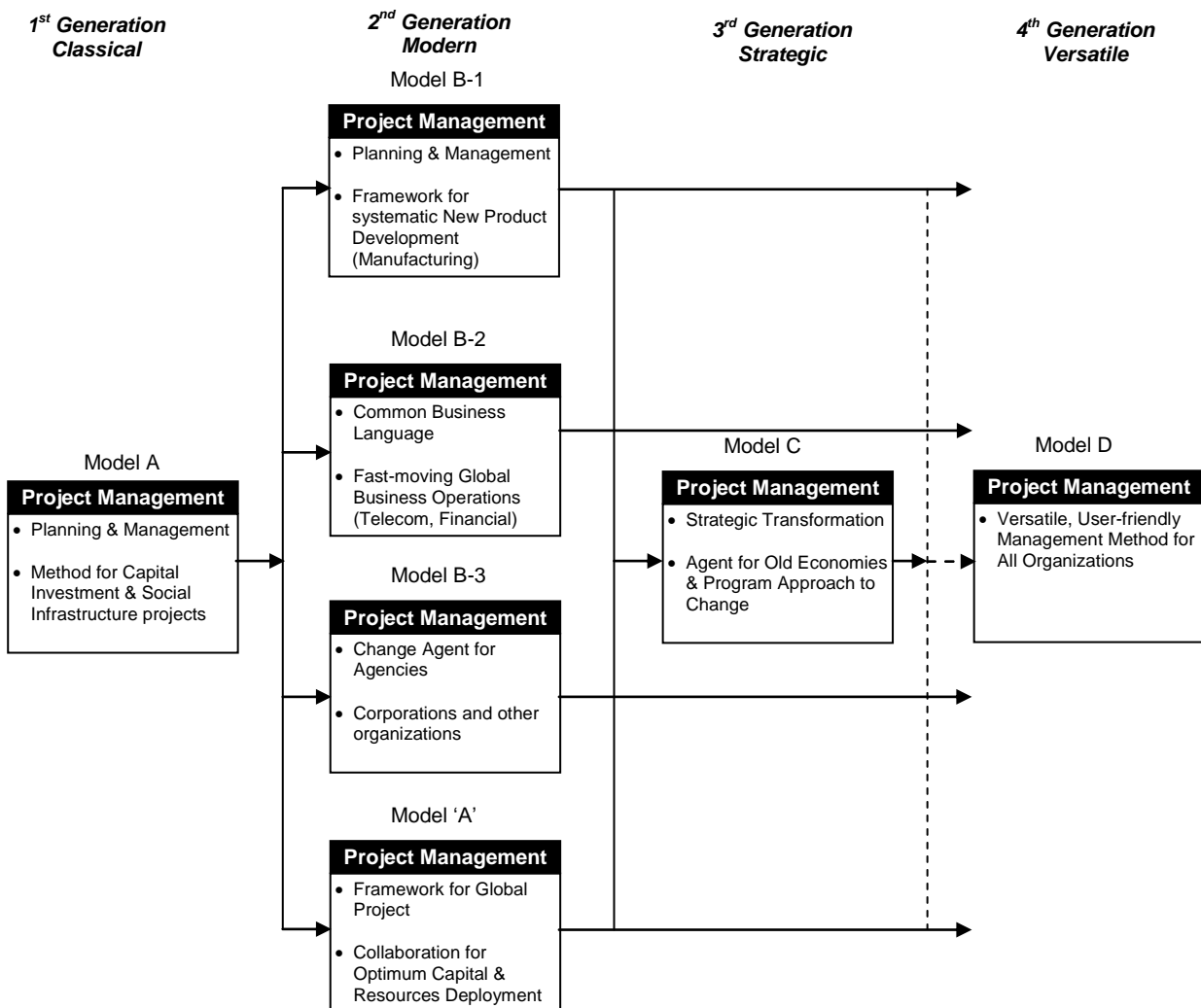


Figure 2.1 Development of project management models.

Source: (Tanaka, 2003: 3).

The modern model has the capability to amalgamate both the “hard (quality, resource, costs, time, procurement) and soft (scope, risk, communications, human resources, organization and integration)” project management processes and has got greater “applicability due to its soft structure and easy project management process description” (Tanaka, 2003: 5). As a result of the high integration of the various processes this can be used in almost all industries and across sectors.

There is a strong interdependence of the various factors like culture, tools, human resources and methodology in a project and the extent of interdependence is presented in Figure 2-2.

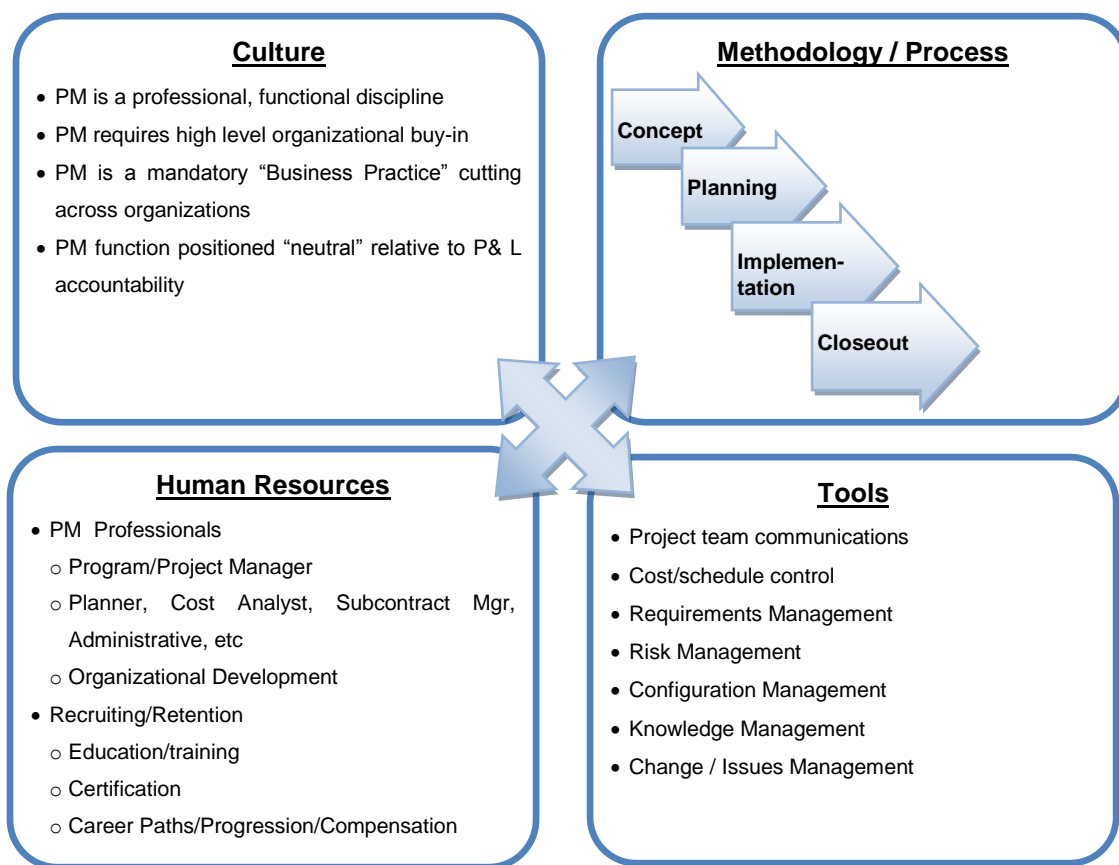


Figure 2.2 Interdependent aspects of project management capability.

Source: (Tanaka, 2003: 9).

2.4. Different concepts in Project Management

According to Koskela and Howell (2002: 4), project management involves the theory of the project and the theory of management and the different processes involved are explained in Table 2-1. The theory of the project takes into consideration the steps

involved in the conversion of input to output; the time factor and variations based on customer preferences and demands. The efficacy of the project management activities at FedEx and Kraft Foods would be evaluated based on these concepts. A questionnaire has been specifically designed in order to understand the management of different phases in these multinational companies.

Table 2.1 Theoretical foundation of project management.

(Source: Koskela and Howell, 2002: 4).

Subject of theory		Relevant theories
Project		Transformation
		Flow
		Value generation
Management	Planning	Management-as-planning
		Management-as-organizing
	Execution	Classical communication theory
		Language/action perspective
	Control	Thermostat model
		Scientific experimentation model

The major phases in project management include “initiation, planning and closure” (Williams, 2007: 3) Fig 2-3. The planning phase involves devising strategies for action; their execution is based on the specifications and these steps are controlled and regulated by the performance of each of the processes (time dependent and results dependent) and remedies and alterations are made when necessary.

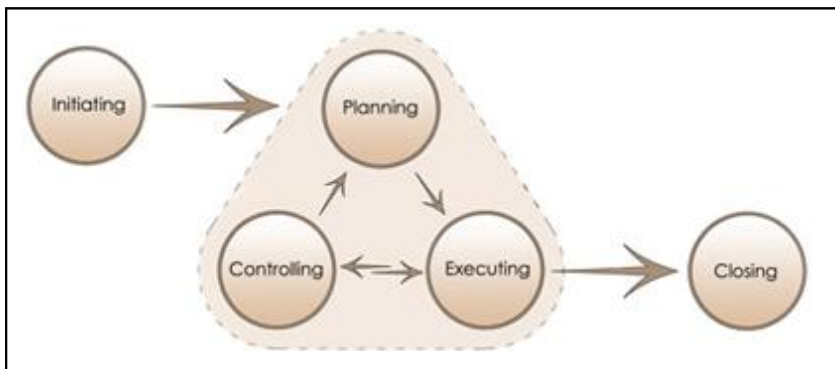


Figure 2.3 Project Life cycle.

(Source: Williams, 2007: 3).

For ensuring the success of projects with regard to maximising the functional capability there needs to be a proper balance between the various factors like the time, cost, quality and scope (Fig 2-4). When these factors remain in perfect equilibrium, it can be assured that the project aim has been fulfilled. Therefore, in order to regulate the various project processes there is an increased need for constantly analysing these variables and maintaining the balance. Any change in one

function will automatically impact on the other. In order to understand the actual project management situations, the survey questionnaire has been framed in such a way as to provide deeper insight in to the mechanisms employed at FedEx and Kraft Foods to bring about an equilibrium of time, cost, quality and scope.

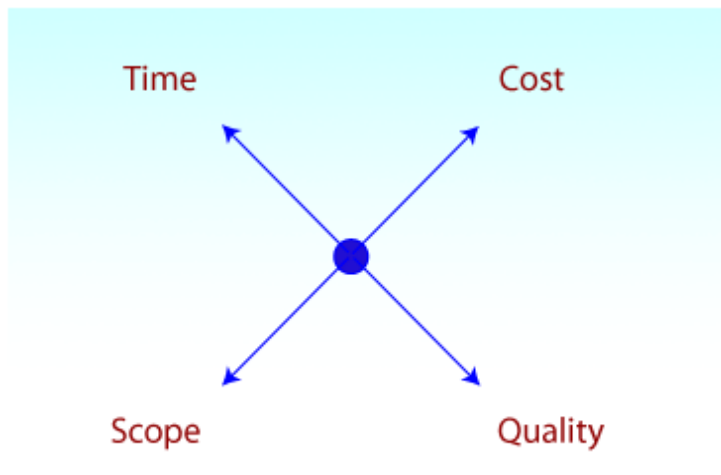


Figure 2.4 Balanced Quadrant.

Source: (William, 2007: 6).

According to Koskela and Glenn (2006), there is increasing need for incorporating the economics of production and related factors in to the concept of project management in order to make the project functionally possible and viable. These considerations play a vital role in ensuring the practical success of projects and for ensuring the functional capability and maximum applicability. The real time implication of this factor needs to be considered and evaluated along with the other three factors discussed above. Projects especially construction-related need to be carried out on the basis of both production and economics related theories in order to avoid wastage of resources and time.

According to Portny and Austin (2002), project management is all about managing, controlling and regulating the core activities like outputs and inputs; determine the timing of the start and end processes and resource categorisation and allocation. If these three activities are planned and applied effectively, all projects large and small can be successfully completed and are likely to deliver good results. They also emphasise the need for perfect HRM as an effective and most important tool for project success, which can be facilitated through providing a favourable environment

for human resources to be motivated and thereby excel individually as well as emerge as parts within highly functional collective entities.

As organisations are engaged in diverse projects spread across the globe, each organisation needs to develop and format the project management tools to specifically suit their industry needs and demands. As each project involves diverse activities there is a need for developing multi-task management skills for the top management responsible for project implementation and control. Organisations like FedEx and Kraft Foods that have many and diverse ongoing projects, need to focus more on the proper allocation of resources and their management in order to ensure high success rates. According to Patrick (2000), organisations tend to fail in carrying out multiple projects due to faulty allocation of resources and faulty prioritization of the activities. “True progress in a project happens only at the handoffs between resources, when the work completed by one resource allows another resource to start its work” (Patrick, 2000: 1). He has illustrated (Fig 2-5) that the “multi-tasking” in fact may provide inaccurate forecasts with regard to time and it interferes with the progress of the project in real time.

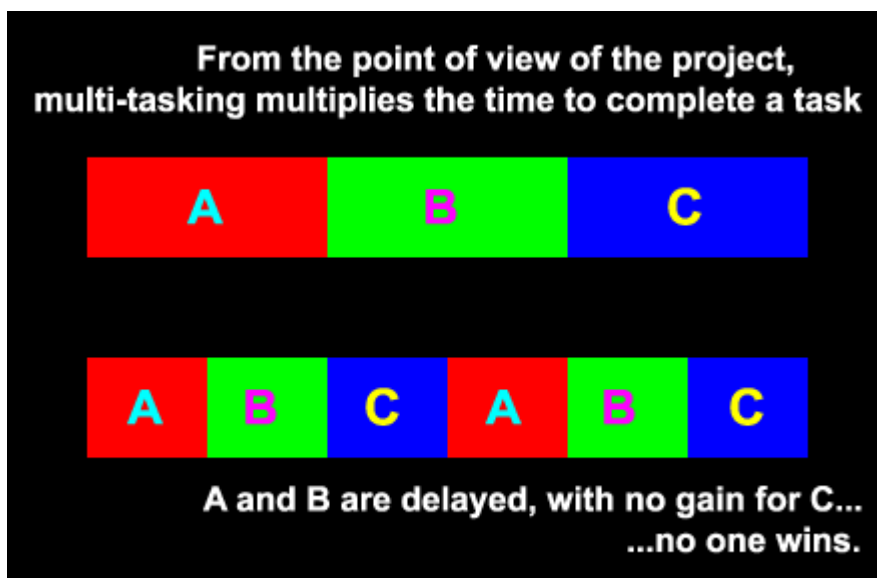


Figure 2.5 Multitasking problems.

Source: (Patrick, 2000: 1).

In order to avoid such conflicts in resource sharing there is need for effective planning regarding the task allocations and their timings and clear cut knowledge on their responsibilities; both individual and team related resources should be conveyed to the required people at the right time. There is an increased need for prioritisation of

individual and team activities and its total alignment to project requirements; “Critical chain scheduling” and “buffer management” can be considered as effective mechanisms for dealing with such delays in project management. Figure 2-6 illustrates the effectiveness and swiftness of critical chain scheduling and buffer management in estimating the project progress and the ease of regulating the activities in line with the project objectives. Such considerations need to be taken seriously and resolved with the utmost care for achieving success in project implementation at FedEx and Kraft Foods.

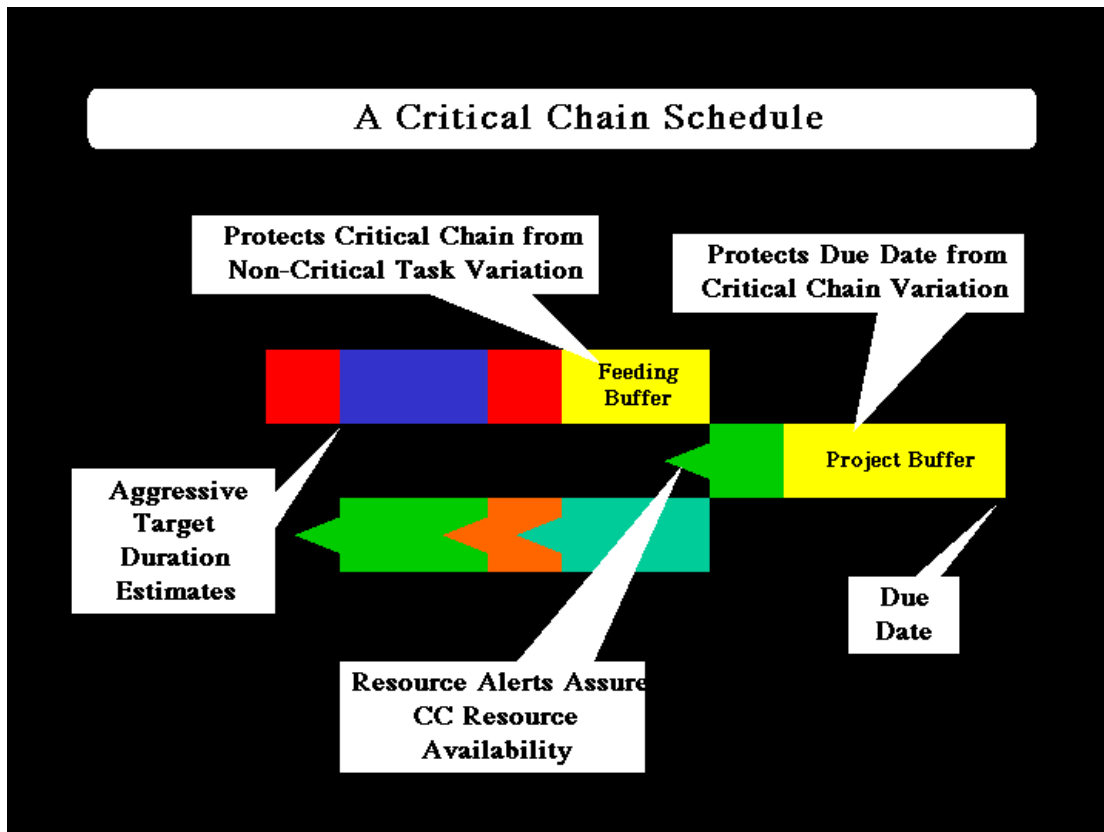


Figure 2.6 Critical chain schedule.

Source: (Patrick, 1999: 9).

According to Eugene (2002: 1) “critical chain project management” involves the regulation and control and the timely implementation of projects, which is done mostly through assessing and verifying the project “buffers”. This differs from the traditional method of focusing on individual task completion and its correctness. This type of management style relies on the few core areas that are important for the completion of the project in time and its functional success. In this way of managing projects, the identification of the buffer is important, which is bound to vary from project to project. Identification of the buffer occurs during the planning stage, and various techniques for assessing the developments as well as techniques for

controlling and regulating buffers need to be in place so that the progress of the project can be determined from the way the buffer acts and reacts (Fig 2-7).

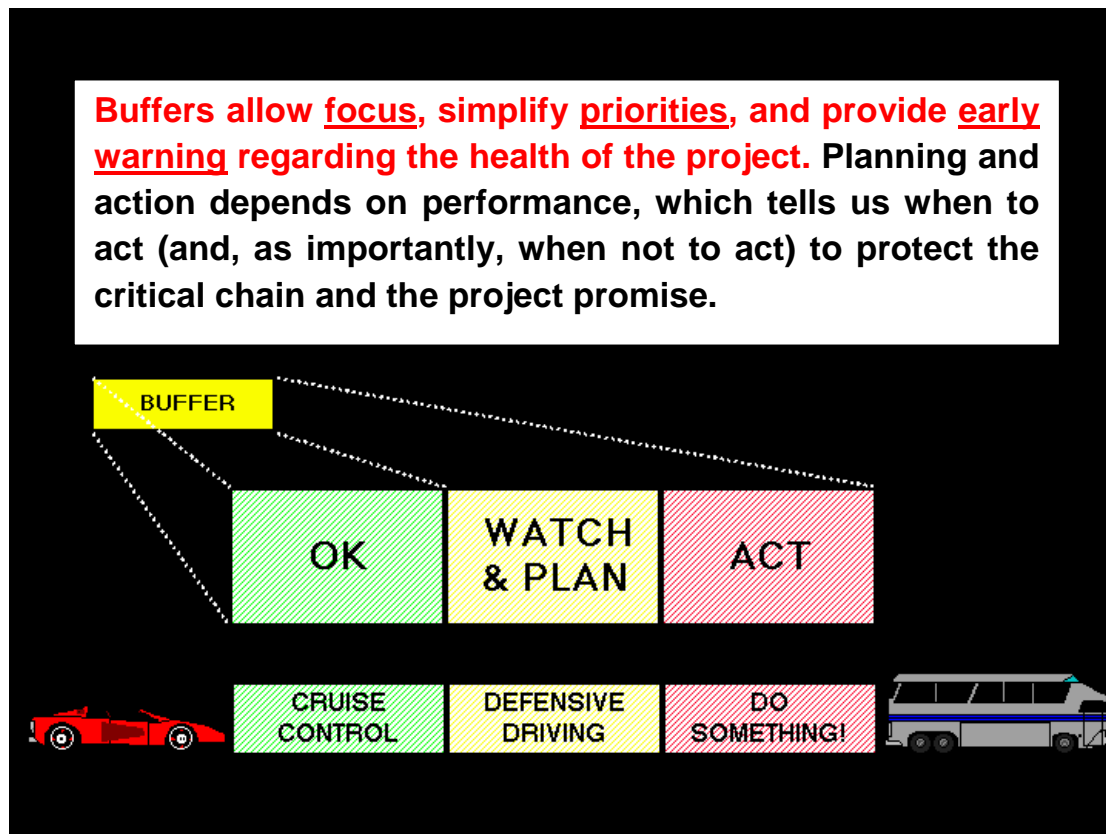


Figure 2.7 Buffers in project management.

Source: (Patrick, 1999: 14).

In order to improve the identified defective processes in the project life cycle certain industry specific steps and methods are required to be adopted and adapted for gaining success. The function of maturity models starts in such situations and ensures improved performance and consistent growth with regard to project implementation and its applications. The maturity models have the capability to manage projects effectively by using appropriate techniques and standards. This would provide the organisation with insights in to the functioning of projects in relation to its applicability and profitability for the company. These models would in fact pump in information regarding the maturity of the project management functions and even recommends ways to attain higher levels. There exist different maturity models in managing projects and the most important ones that have wider application are Organisational Project Management Maturity Model (OPM3) and Project Management Maturity Model (PMMM).

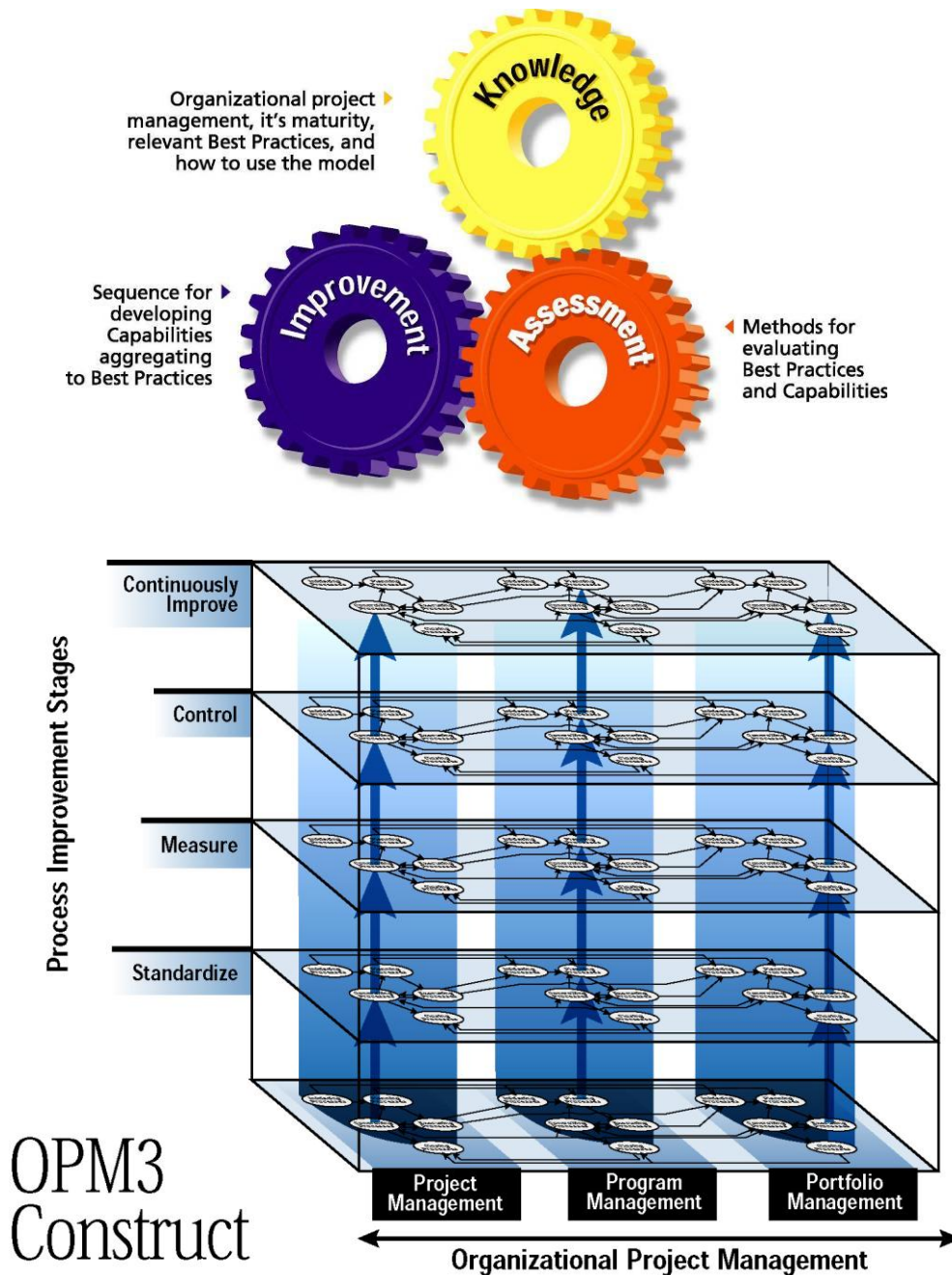


Figure 2.8 The Essence and Construct of OPM3 (Source: PMI, 2003)

According to Tanaka (2003:17) the OPM3 (Figure 2.8)

“is a means to understand and access the ability of an organization to implement its high level strategic planning by managing its portfolio or portfolios and then delivering at the tactical level by successfully, consistently, and predictably managing programs and individual projects; is also a tool that can help business drive improvement in an organization; and is also a merging of Best Practices from the constituent domains of organizational project management, including portfolio management, program management, and project management”.

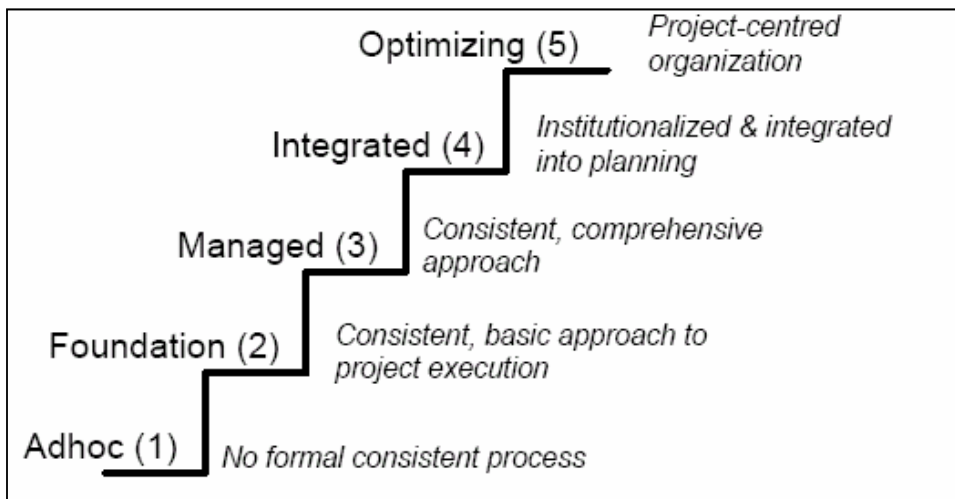


Figure 2.9 Project management maturity model.

Source: (Robertson, 2006: 1).

According to Robertson (2006: 1) the first level is largely reliant on the project leader as the approaches are unfinished and unofficial; the second level is more supportive and the “outcomes are mostly predictable and repetitive processes” are added to project management; the third level they have more opportunity to bring about effectiveness to the project processes; in the fourth level perfect integration of human resource and information or knowledge occurs; the fifth level is “highly flexible” and provides opportunities for improvement and growth (Fig 2-9). The need for the establishment of a systematic project office has been proposed by Johnson (2001).

2.5. Project management – standards and techniques

The techniques and standards used by organisations are aimed at delivering maximum capability to the project processes and to improve the applicability of the procedures adopted. The various measures or standards adopted differ from industry to industry and each organisation needs to adapt the techniques to its specific situations in order to maximize the benefits of utilising specialised paths. The various techniques are principally aimed at controlling and regulating the project’s processes and its progress. The most common and widely applicable of these techniques are the SDLC (Systems Developing Life Cycle) and PRINCE 2 (Projects in Controlled Environment). Use of Gantt charts are common as it gives up-to-date information on the progress of the project; the information thus generated can be used for controlling

the specific variables in ways that ensure the timely completion of projects. Timely completion is a major factor that determines the use of capital resources as well as its availability for future projects.

The life cycle approach is rather conventional and provides effective steps for managing the whole project right from its initiation and is illustrated in Fig 2-10. “PRINCE2 (Fig 11) is powerful and completely clarifies people's roles in projects, ensures that lines of communication are clear, makes sure that project risk is actively managed, sets up appropriate controls, establishes baseline costs, schedule and scope, etc and it symbolizes all the best practices” (Wideman, 2006: 4).

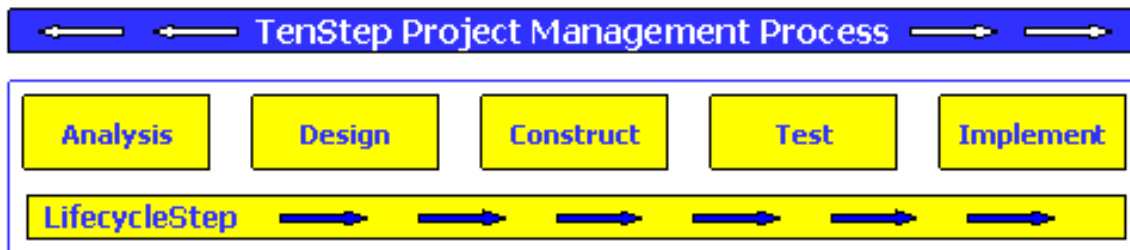


Figure 2.10 Life cycle technique.

Source: (Ten step management process, 2007: 1).

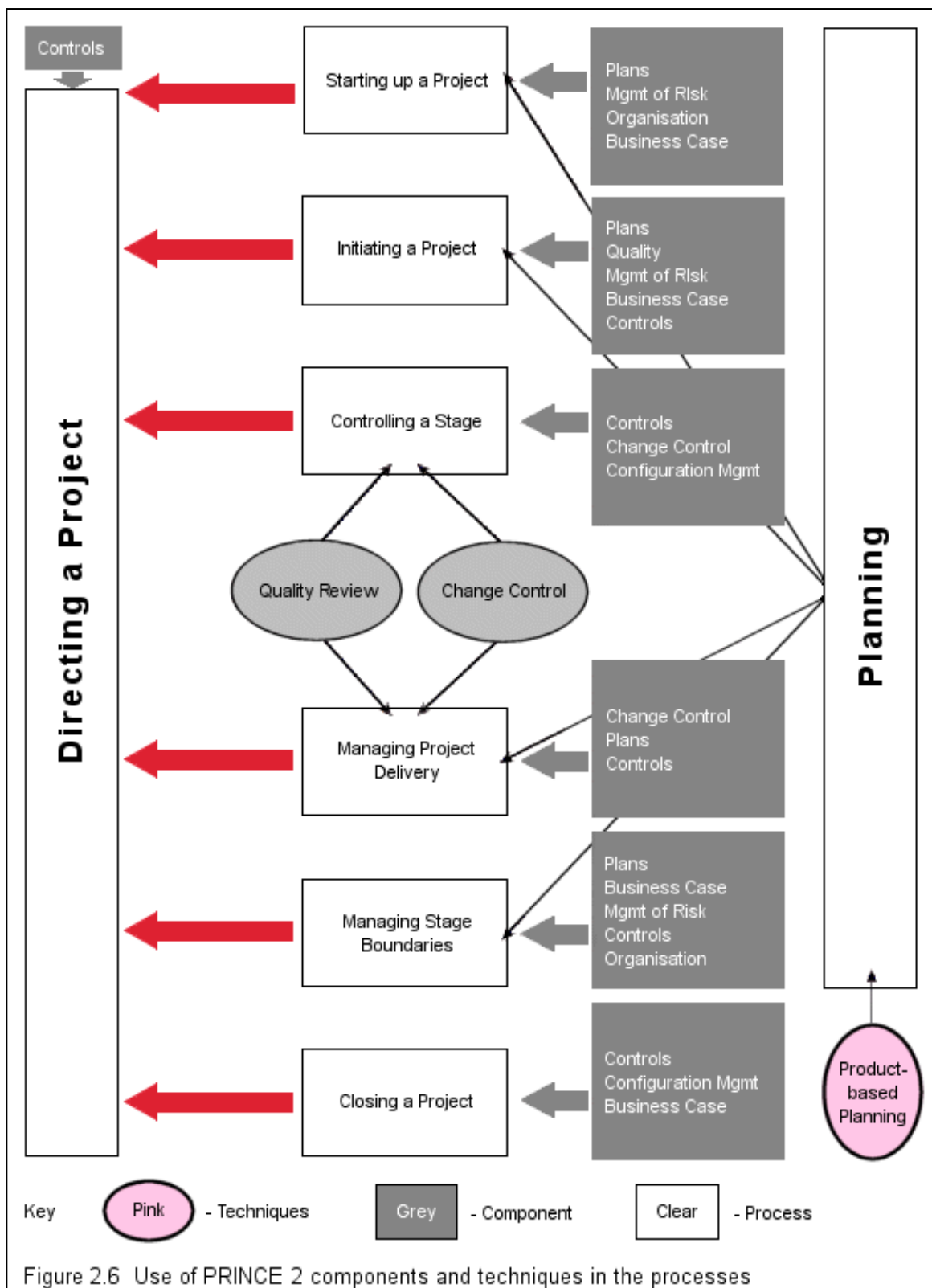


Figure 2.11 PRINCE 2 Content and usage.

Source: (Wideman, 2006: 4).

2.6. Projects and human resource management

Project Management involves organising and managing resources mostly people in such a way that the project gets completed within a defined scope, quality, time and

cost constraints. According to Reh (2006: 4) “Managing the people resources means having the right people, with the right skills and the proper tools, in the right quantity at the right time”. This can be done through effective allocation of the available resources in the most suitable functional areas and coordinating their activities, which can be considered an important function of the project leader. The project manager rarely participates directly in the activities that give the end result, rather his duty is to maintain the progress and interaction with various team members in such a way that overall risk of failure is reduced. The notable features of the project manager and his team members are generally the following (Project Management, 2007):

- Represent the client and to determine the client needs to the best of his knowledge
- Adapt to various internal procedures of the contracting party, and to form close links with the nominated representatives
- To envision the entire project from start to finish and to have the ability to ensure that this vision is realized.
- Accept challenges in the project
- Clear vision and communicates these visions clearly
- Team building skills
- Strong interpersonal skills
- Discipline
- Innovative
- Accountability
- Communication skills

A successful project manager often strikes a balance between his leadership and managerial roles. The leadership style requires him to have good communication skills, vision and interpersonal skills. On the other hand the managerial style would require him to have detailed knowledge of the methodology and tools, strong analytical and problem solving skills. Since the success of the project depends largely on the vision of the project leader and his alignment to the project objectives, special emphasis will be made in the study to analyze the skills and capabilities of CFTs and other project teams in FedEx and Kraft Foods. This information is valuable for raising the capability of organisations to carry out different projects.

The above listed traits are common to members working in the project management field; hence it is vital that the human resource department act as the key differentiator for financially successful organisations. A strong human resource strategy capable of aligning and orienting the value system of the employees with that of the company will succeed, in the long run. The first and foremost step in aligning the project members with the goals and objectives of the project and informing them of their added responsibility is through training and education as well as familiarizing them with the new technologies. One such strategy is the competency based human resource management approach. Competency management today plays a vital role but is a more complex and time-consuming function of the Human Resources Department.

Competency includes those observable characteristics in the form of knowledge, skills, behavior and values that are needed for performing certain activities in an organisation. There are broadly three types of competencies:

- Value Competencies – Related to organisation
- Occupational Competencies – which involves job competencies like skill set or behavior, task competencies which involve knowledge
- Personal competencies (VDAB, 2006).

Competency management in simple terms is to understand where one's company will be in the near future and not where it hopes to be in the distant future assessing where it can be and also where it wants to be. Competency Management utilises a competency framework so as to align the strategic objectives of any project with the competencies of its team members. By applying a systematic approach for measuring the competencies of employees in dealing with different projects, ongoing snapshots of the overall stock of knowledge capital can be built up within the project. Each project manager can utilise this information to do individual and project related analysis, reduce training costs, advance hiring practices, improve retention, improve the team's performance and developmental planning processes, deploy his human capital more effectively, and help top management make strategic decisions regarding readiness to take on more or new projects (Competency Management, 2004). In recent times the study and usage of competencies has become an important management topic. Many companies around the world have implemented competency management systems based within their human resources departments

and the use of these systems has brought about many advantages. Competencies are used as the building blocks for recruitment and selection, for performance management and for several other human resource purposes. FedEx and Kraft Foods also need to prioritize their selection and recruitment functions in such a way as to maximise their resource capability and activities.

Most projects require a wide variety of skills from its team members to complete the work involved. Therefore, a project manager is most likely to work with a group of people from different functional backgrounds and capabilities. These groups with different categories of people from a wide spectrum of fields form the CFT (BNet, 2007).

It is the project manager's job to bring the team members together and mould them into an effective group that functions to achieve the overall goals of the project. But bringing and managing CFTs can often be time-consuming and difficult. In order to maximise the functional capability as a team, the project manager needs to understand the common and varied traits of his team members (BNet, 2007).

2.7. Building a Cross Functional Team

The first and foremost step is to identify the people with the right skills and attitudes and to develop them in to the project team based on the project requirements. The needs and specifications vary enormously as it depends on the size and nature of the project. Thus it is imperative to assert that the team has to come from different parts of the company so as to obtain the best mix of skills and talents (BNet, 2007). The impacts of the CFT in managing the projects at FedEx and Kraft Foods may be critically estimated based on responses from key persons. For increasing the success rates of projects at FedEx and Kraft Foods, specific methods need to be adapted to manage and coordinate the project teams more or less on a continuous basis.

Meredith Belbin, the famous business writer and academician has identified around a dozen common team roles as part of his research in the 1970s, they are:

Role and characteristic	Function
Leader -aims to get the best out of everyone	Forms the team; sets objectives; monitors performance; provides structure. Adopts unconventional approaches;
Challenger -rocks the boat	Challenges the accepted order; comes up with ideas.
Expert -provides specialist advice	Provides a professional viewpoint, often from an external source (for example IT, accounting).
Ambassador -makes friends easily	Develops external relationships; understands external environment; sells the team.
Judge -down to earth, logical, careful	Listens; evaluates; ponders before deciding; avoids arguments; seeks truth and the best way.
Innovator -provides source of vision, ingenuity, and creativity	Uses imagination; motivates others; evaluates and builds on ideas; deals with complex issues.
Diplomat -steers team to successful outcome	Influential; builds alliances in and out of the team; good negotiator; aids agreement; often becomes leader in difficult times.
Conformer -helpful, reliable, co-operative	Fills gaps; jack of all trades; seldom challenges authority.
Out putter -chases progress	Self-motivated; focuses on tasks and results; imposes timescales; checks progress; intolerant of other people.
Supporter/mediator -focuses on team relationships	Builds morale; resolves conflict; gives advice; supports and encourages.
Quality controller -ensures tasks done well	Checks output; preoccupied with high standards; focuses on quality.
Reviewer -monitors Performance	Observes; reviews performance; promotes feedback; looks for pitfalls

Source: (BNet, 2007)

Once skills and competencies are identified by the project manager, invariably the next step is to create the team. Every team goes through a number of stages and each stage can be responsible for different types of problems and issues that arise during the project life cycle. By assessing the stage of his team, a project manager can solve the team's problems. As FedEx and Kraft Foods are engaged in diverse projects that require high quality cross functional performances from their project members, a thorough review on the various roles and functions becomes imperative to project success and their timely completion. The four popular stages of team formation are:

- **“Forming-** In this stage excitement is high; everything is new and fun; no-one knows what they're doing yet.
- **Storming-** Here roles get assigned; personalities begin to show; uncertainty of others and their abilities can lead to conflict, which can smolder unless tackled promptly; people don't yet feel safe to be open and honest.
- **Norming-** The confidence level starts to improve; relationships strengthen; differences of opinion are respected; solutions begin to develop; goals become manageable, and everyone starts to work together to achieve them.
- **Performing-** The team becomes fluid, with people taking it in turns to lead; delegation occurs so team members grow and flourish; goals and targets are reached regularly and effectively.
- **Adjourning** – The duties are ended and the team gets disassembled”

(Tuckman, 1965: 3)

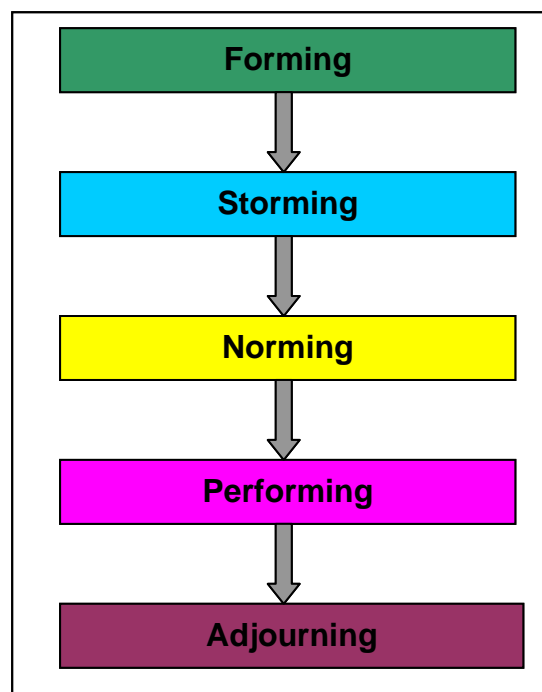


Figure 2.12 Different stages in team development (Source: Tuckman, 1965: 1)

Out of all of the four stages, it is the norming stage which a project manager needs to focus most on. This can be described in terms of vectors, which is a force that pulls in a certain direction. The same rule applies for all project team members who have their own vectors which are created by their individual thoughts, beliefs and desires. For a team it will be dangerous if all vectors point in different directions. Hence it is the responsibility of the project manager to pull each member in the direction of the

project goals. This process is often termed as Vector ship in relation to Project Management and HR (BNet, 2007). To make sure that all vectors align in the same direction it is necessary to create a working climate where team member's mistakes and failures are taken as learning experiences and every member feels that he is also a part in the whole process. The management at FedEx and Kraft Foods needs to deal with the project management initiative by utilizing these basic steps in order to complete the projects in a systematic manner as well as in the required time. This paper intends to find out how well these steps are followed at FedEx and Kraft Foods.

2.8. Importance of project management across industries

The importance of project management has been rightly recognized across industries and sectors, which in fact led to the increased dependence on project management techniques in managing the majority of their activities in order to remain competitive in the global markets. According to Fanning (2006: 1), 'effective project management lies at the core of any challenging policy development; the project manager is the lynchpin for successful project delivery'.

It is observed that project management supplies are needed for the structure and support of industries across the globe to achieve their goals and objectives, which enable them to survive effectively, even in times of increased competition and need. Since the positive outcome of the project management principles and practices are spread across different industries like the transportation, food and beverage, construction, pharmaceutical, automotive, healthcare *et cetera*, it can be inferred that the customers appear as the ultimate beneficiaries of project management initiatives employed at different organisations, either directly or indirectly. These techniques and models promote innovation and development at all stages and the success rates of these endeavours influence the economic activity of the region as well.

As the project management initiatives have become so widespread and common, the Project Management Institute (PMI), that has international recognition, has devised various techniques, standards and practices for supporting organisations of different functional capability and strengths to adopt and adapt practices for increasing the success rates of projects across industries. With such intentions in mind the PMI has developed a basic guide for meeting the industry needs and standards, which is

known as the "A Guide to the Project Management Body of Knowledge, (PMBOK guide)" (Microsoft project and project management domain, 2007: 15) and can be considered as a guide for initiating projects, and "methodology and life cycle" selection for the long processes and activities in managing projects.

The five process groups as identified by PMBOK guide includes the "initiating process group, planning process group, execution process group, monitoring and controlling process group and closing process groups" (Microsoft project and project management domain, 2007: 15). The different functions of the various process groups as recommended by the PMBOK guide is given in Figure 2-13. This can be considered as the basis for developing project management initiatives in different organisations across sectors where they need to adapt the planning and scheduling stages in line with the project objectives and goals as well as suiting their organisation's structure and function.

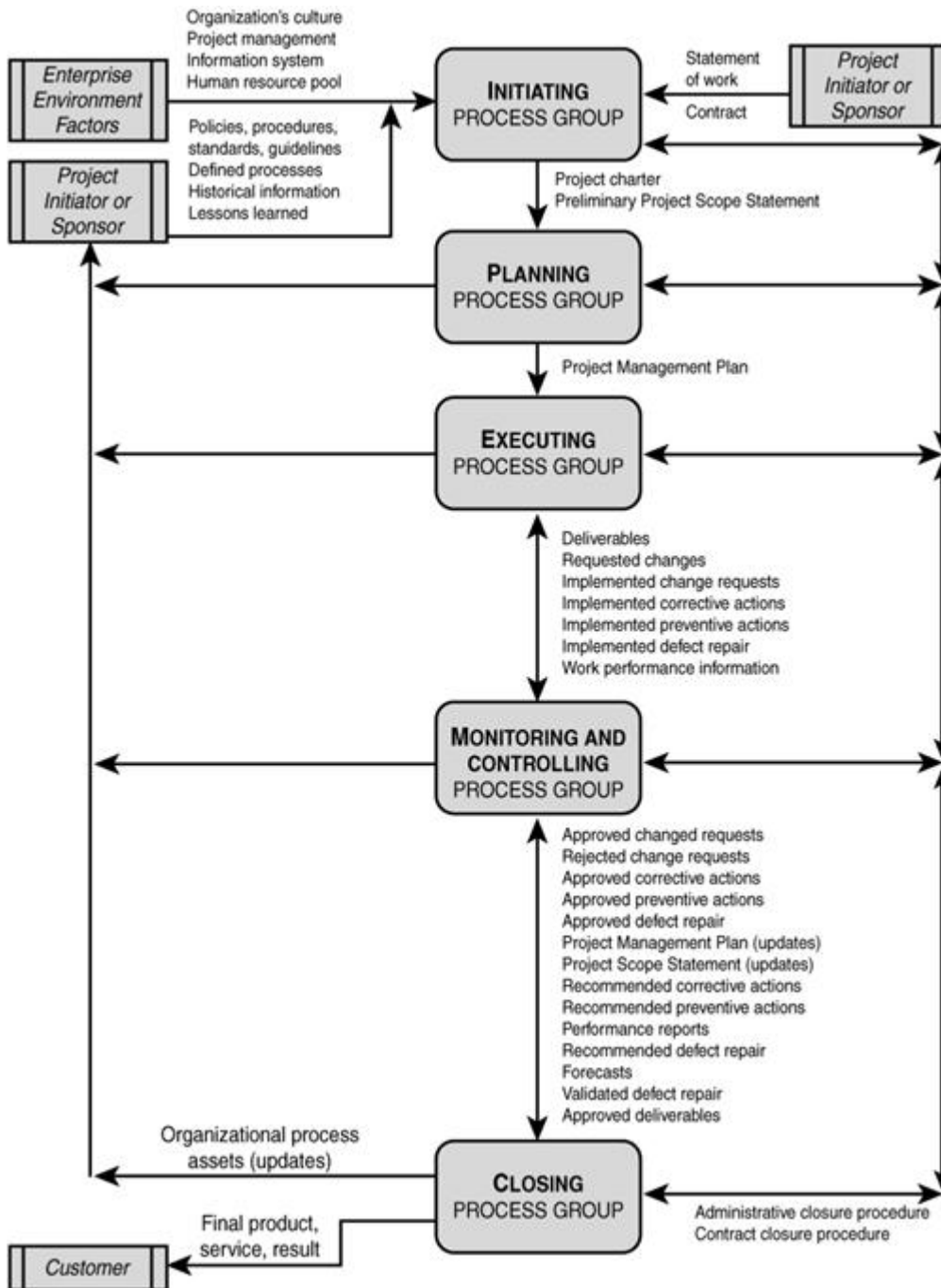


Figure 2.13 Relation between process groups and its functions.

Source: (Microsoft project and project management domain, 2007: 15).

Companies in different sectors use different methodologies for optimizing their project plans so as to reduce the project cost and increase the value of projects. An example for one such activity model that is used in the Information Technology (IT) sector is shown in Figure 2-14. Managing multiple projects involves a lot of integration activities through proper and efficient allocation and prioritisation of both the tasks and resources. This can be done effectively by utilising project management related software, for example, Microsoft Project.

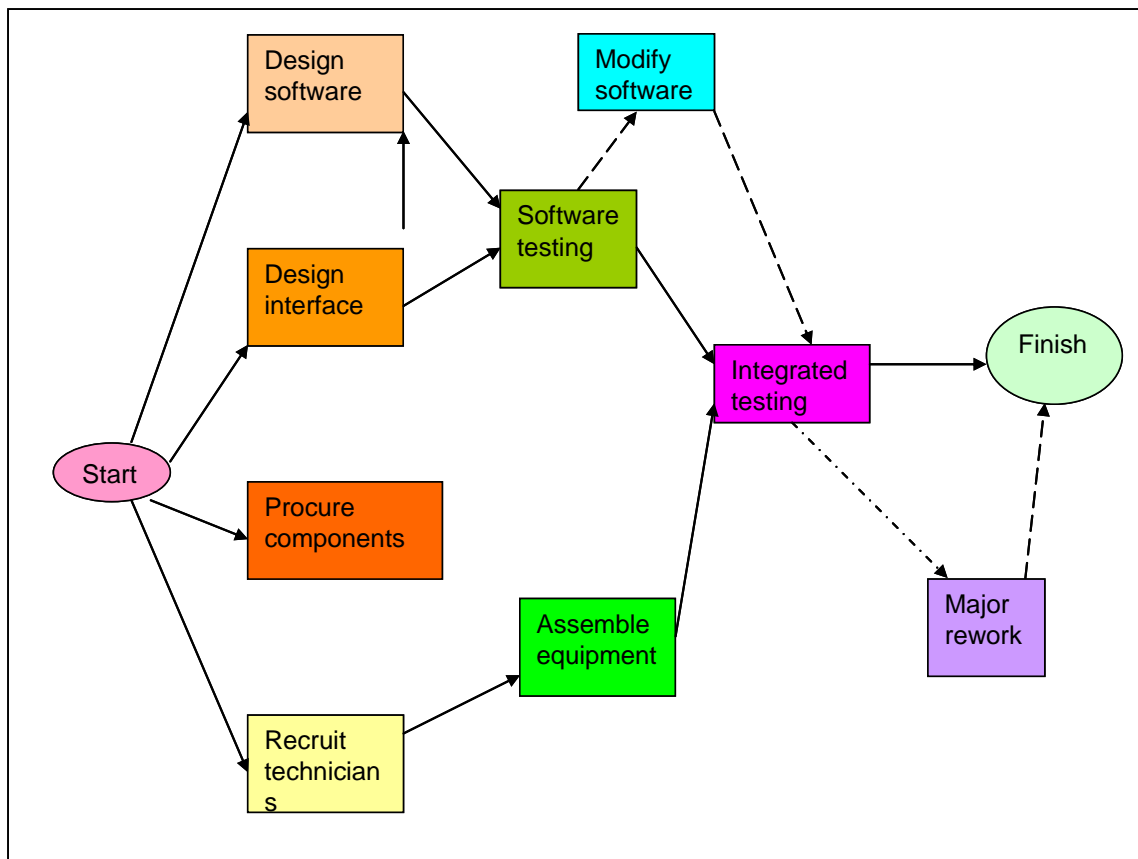


Figure 2.14 Activity network diagram.

Source: (Schluyler, 2002: 9)

Project management initiatives by both the public sector as well as the private sector are capable of generating huge economic activity in organisations, which in turn affects the productivity and economy of the region as a whole. These endeavours promote innovation in the economy and emphasise Research and Development (R&D) activity in industries that will lead to increased performance and the development of a more enterprising society in the long run. Project management activities are capable of converting ideas into profitable discoveries beneficial to the community. In short, project management activities of different industries underpin greater economic activity in the form of diversifying and advancing their businesses. According to Wheatley (2007: 3), “in industries as diverse as pharmaceuticals, software and aerospace, projects drive business. And in the public sector, it is effective project management that translates politicians' promises of new roads, schools and hospitals into gleaming new constructions that improve everyday life”. Hence it can be inferred that large scale project management activities across industries can even stimulate and contribute to progressive increases in the Gross Domestic Product (GDP) of the region.

According to Wheatley (2007), some industries like aerospace, construction, automotive, pharmaceutical, defense, are more project intensive and are engaged in long-term projects for advancing their technology as well as for developing new innovative products and increasing their diversification. On the other hand industries like, food, retailing, logistics and textiles are less project intensive as they are engaged in different projects with lesser dimensions.

It is common that in the automotive industry, product development, data validation, product categorisation and “cross company project management is done through using SAP projects system”. This system ensures perfect “product validation and the integrated product capability of the system and process engineering are supportive in documenting complex products with many variants” (Kohlhoff, 2007: 1). This type of system enabled projects provides swift and easy delivery of products and services, which in fact adds considerable value to the projects overall. Some of the different project management related models that are identified in the transportation sector include “Partner’s for Advanced Transit and Highway’s mission (PATH)”, which was intended to develop advanced technology for ensuring increased safety and reduce congestion and other related activities; and “Advanced Highway Maintenance and Construction Technology (AHMCT)” projects that are aimed at utilising the latest technologies for increasing performance (Project Management Industry Standards, 2007: 2).

Pharmaceutical industries are faced with major challenges and threats both externally and internally, which have in fact intensified the use of project management in the sector particularly for the purpose of “restructuring companies resulted in mergers and acquisitions; cost reduction; culture change; quality assurance, contingency planning and new drug development” (Brown and Grundy, 2004: 5). In recent times most industries utilize web enabled project management services as well as software solutions for project management related issues and the development of a “project office” model (Fig 2-15) as observed in the translation industry for managing diverse projects. According to Waters (2000: 7) “web based project management tools” have become more of a necessity for managing the type of projects undertaken across industries.

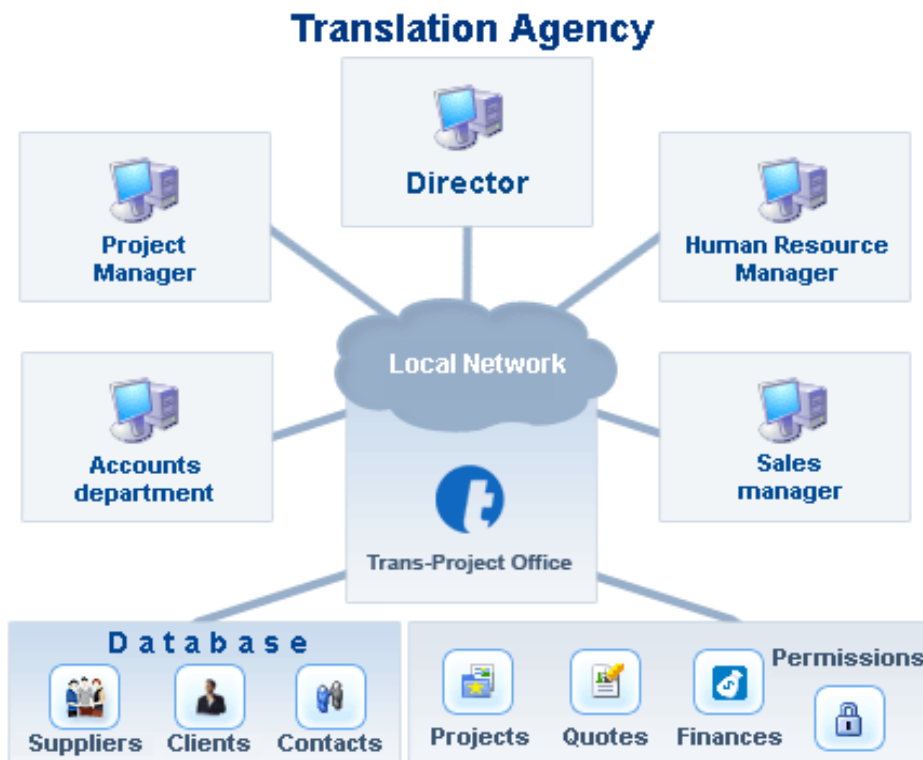


Figure 2.15 Project Office model of the translation agency.

Source: (Fedotov, 2007: 15).

Financial modeling in the Boeing Company has been done using the “Real Options” model which helps to “extend standard net present value (NPV) to evaluate risk-adjusted return on investment and cost-versus-risk issues and optimise R&D and strategic project portfolios” (Fig 2-16). The adoption of this model brought about noteworthy changes and success for the company in many functional areas that yielded high growth potential. According to Mathews (2000: 1) the model is emerging as an effective engineering tool for managing projects particularly in decisions related to investment. “Uncertainty modeling, Real Option valuation, and other sophisticated modeling techniques are being applied on a number of important Boeing projects where strategic project investment decisions must be made” (Mathews, 2000: 1).

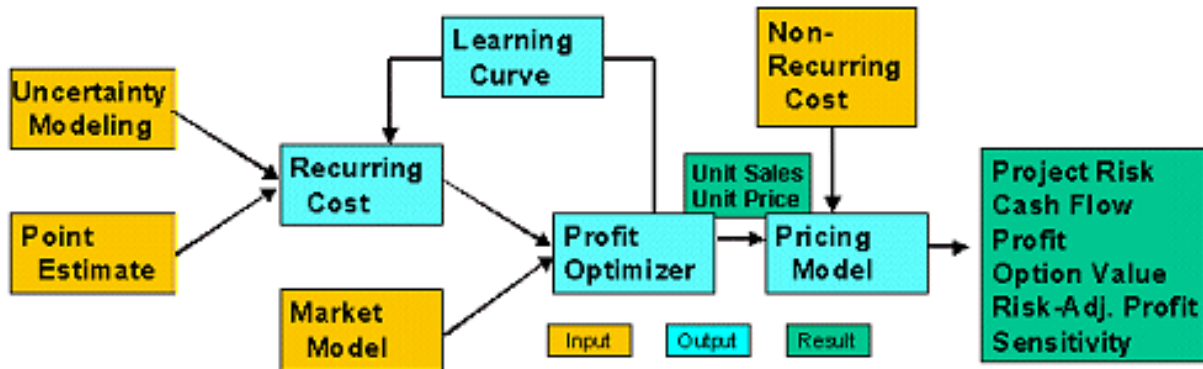


Figure 2.16 Real options model.

Source: (Mathews, 2000: 7).

Hewlett Packard Company utilised a “Construction Cost Model (COCOMO)” to bring about remarkable changes in the production cycle and was successful in increasing the efficiency of the systems and ensuring the delivery of products to markets on time (Brown, 2000: 2). The construction industry is a project intensive industry and deals with different projects of varying dimensions and the most frequently used technique is the use of “partnering processes” for improving the project management initiatives in order to “improve delivery in non adversarial environments” (Peter, 1992: 17).

The public sector has witnessed an increase in the use of project management techniques and models for managing the diverse range of projects in different sectors. Most of these projects related activities are outsourced and are managed by experts in their class engaged to attain efficient delivery of products and services and to maximise the cost effectiveness of the processes.

2.9. Project management in the food industry

The food industry while being a non-project intensive industry, does undertake many small and mid sized projects particularly aimed at improving the activities related to quality control, processing, packaging, product categorisation, product development, diversification, and adopting new technologies, for remaining competitive and profitable in the domestic as well as international markets. Hence, the initialisation of projects needs to be made with the utmost care and expertise in order to undertake projects based on their relevance and application particularly with regard to time and scope. There is an increased need to prioritise project planning and scheduling, so as to ensure that the projects yield maximum progressive returns and benefits to the

organisation in all aspects. After delineating the objectives and needs of the industry and the organisation, the major task is “to manage the change processes within the context of that particular organization” and the various steps involved in the change process management is given in the Figure 2-17 (Crump, 2006: 5). For successful project implementation, concrete analysis on the need for a change in the organisation and ways by which the objective can be achieved should be explored before engaging in a project of any magnitude.

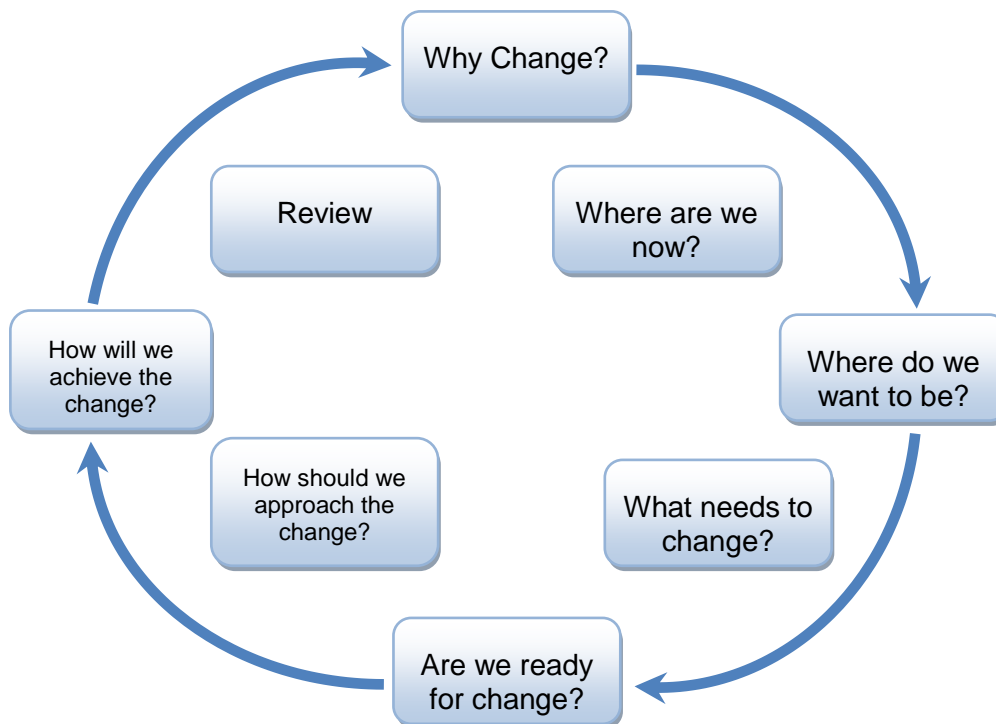


Figure 2.17 Change process schematic representation.

Source: (Crump, 2006: 6).

Increased competition, pricing strategies, safety specifications and regulations, intense sourcing and sales pressures can be considered as the main challenges in the food and beverage sector and hence different projects are devised by the food industries for handling these issues in the right amount of time and in the needed proportion. Certain companies in the food sector like Nestlé, Cargills, Pizza Hut, and Nugan foods, *et cetera* employ full-time consultants to lead specialised project management organisations responsible for developing and managing their projects so as to consistently succeed in achieving positive results (ICN, 2006).

According to Frost and Sullivan Research Service (2005: 1), “the regulations imposed by the European Union (EU) and the U.S. Food and Drug Administration” (USFDA) to

increase the traceability of food products along the supply chain are in fact demanding the sector to increase spending on “automation and control solutions”. These approaches can ensure better quality and standards for the product and “provide better efficiency resulting in higher profit margins”. Hence many projects will be accountable to meeting their logistics and distribution related requirements in order to maintain international product quality and value, in order to benefit the end user. As it is the prime responsibility of the food industry to ensure safe and nutritious standards and specifications as well as maintaining the required quality, projects executed in this sector are intended to deliver on this ultimate aim.

The “Unscrambler” (Fig 2-18) is one such software that is widely used in the food and beverage industry to acquire “demand-driven formulations, process optimisation, cost-savings and increased ROI in product development, process control, quality control and R&D” (CAMO, 2007: 1). As some of these perishables have shorter life cycles, one of the major needs of the industry is to ensure its safe delivery and many ERP based software solutions are implemented at different organisations (e.g. Pepsi) (Process Industries, 2006) for this purpose.

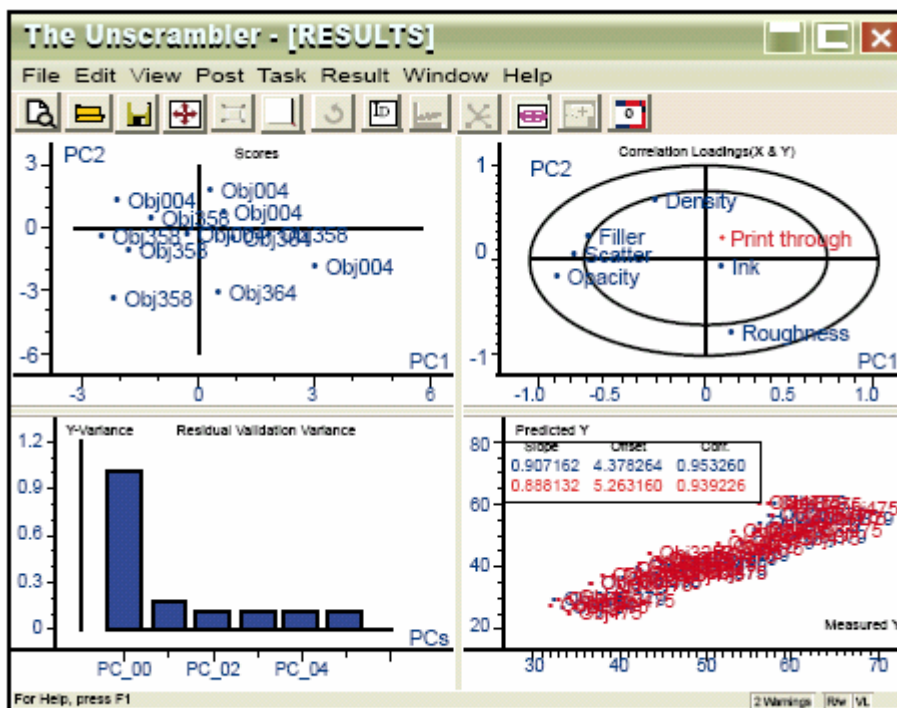


Figure 2.18 Unscrambler results page.

Source: (CAMO, 2007: 1).

Projects aimed at implementing Hazard Analysis Critical Control Point (HACCP) standards constitute a major challenge for the food industry (Taylor and Kane, 2005). A common example of a long term project in the food and beverage industry is water treatment and waste water treatment plants, most commonly the projects are outsourced to experts in the field. This type of project ensures that the industry is operating under the specified safety conditions and promotes sustainable environmental development. These projects are usually led by the project team in close coordination within and across other departments, who also have members on the team (Fig 2-19).

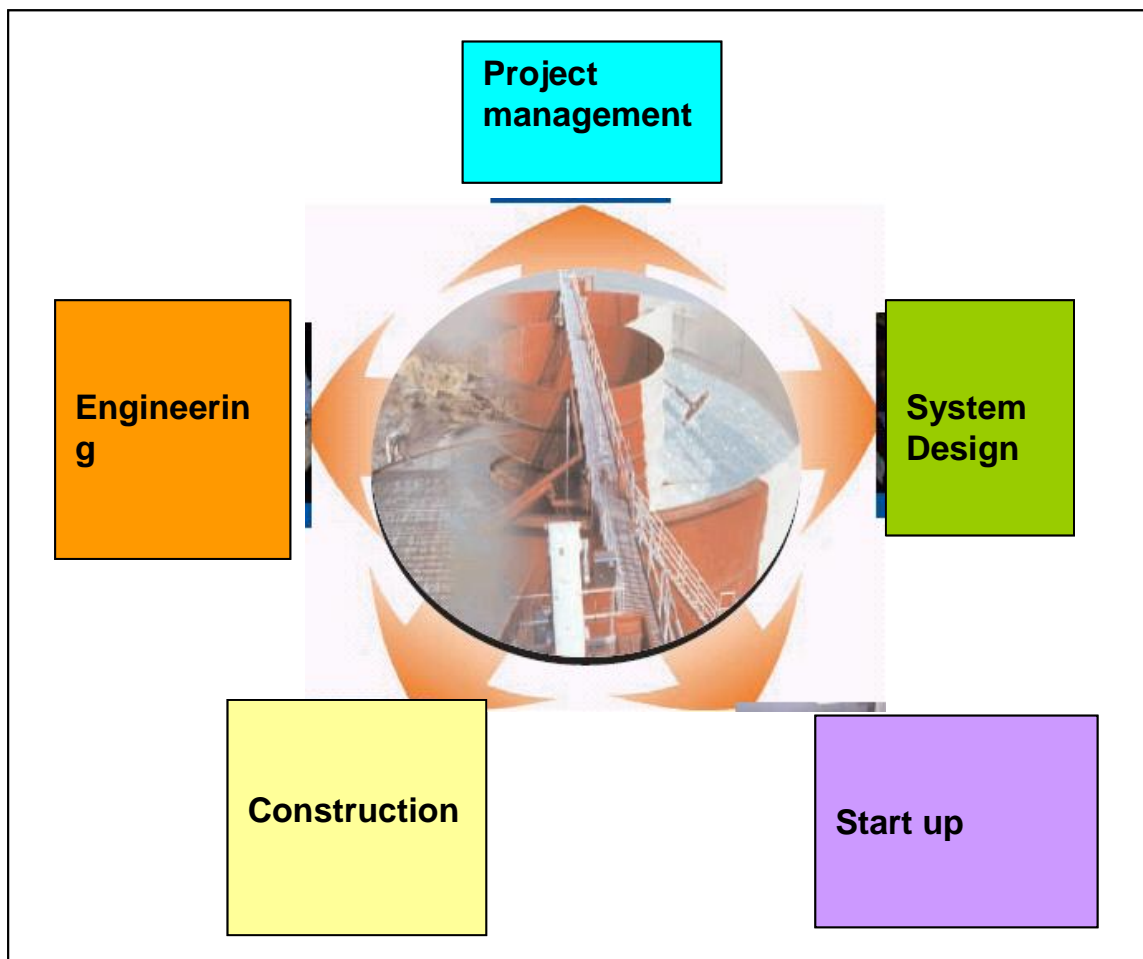


Figure 2.19 The project team.

Source: (Water Technologies, 2007: 4).

Software or IT related solutions are becoming common in the food industry for dealing with major challenges in the sector. According to the paper Findus, (2005), Findus group, a leading frozen food brand that has strong international presence, has completed the project of implementing IT solutions for dealing with the problem of lack of coordination between multiple work sites across the globe. The main goal of

the team was to integrate the operations as well as business activities in different production centres spread across countries and to establish proper communication networks within and between different departments.

Nestlé, one of the largest food companies has developed huge product categories and ranges through the help of efficient and large project teams. The large amount of information and data flow; resource management; work flow allocation, *et cetera* is coordinated and managed through adopting software solutions in the form of mySAP Product Lifecycle Management (mySAP PLM). This in fact provides the company “with an automated system for accessing, distributing and storing information and work flows, which helped the company to hasten their development process thereby boosting productivity” (Nestlé, 2006: 1).

Intense competition will in fact often force companies to get engaged in regular projects for promoting product innovations to attract the customers. For example, the rivalry between Pepsi and Coke lead to the initiation of many knowledge intensive and time dependent projects aimed at product diversification and product innovation. The success of these types of projects largely depends on the timing of the innovation and its delivery.

Research and Development in the food sector should be aggressive and always be on the look out for making the food safer and more nutritious for the end user. Hence R&D related projects are time consuming and require many innovative strategies and technologies for maintaining the nutrient value of food items and maximising consumer satisfaction levels. As the food industry need to remain highly responsible in maintaining safety standards, increased awareness of the issue has lead to more projects for reducing the “allergenicity” of food particularly in the food prepared from animal sources as more people are prone to allergies in this category and the different steps followed by the team are shown in Figure 2-20 (Paschke, 2002: 1).

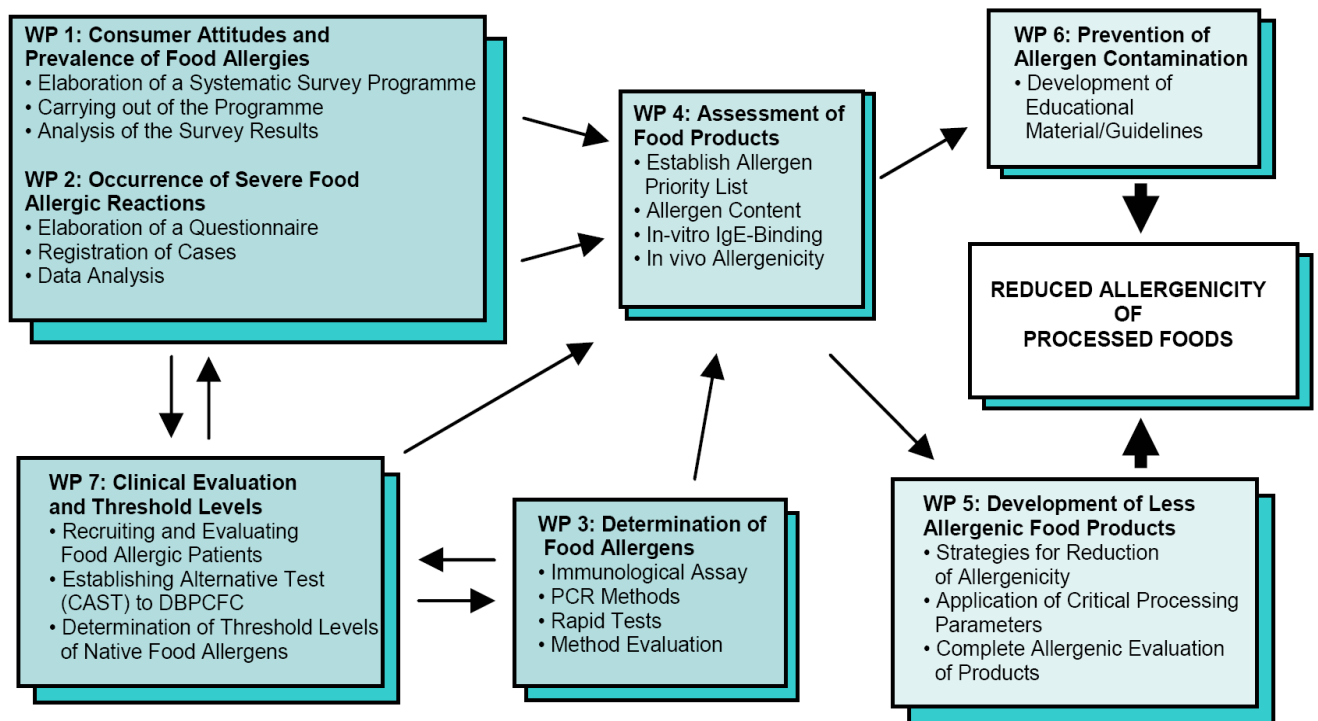


Figure 2.20 Work plan for reducing the allergenicity.

Source: (Paschke, 2002: 1).

Life cycle assessment has become a serious issue in the food industry and hence projects for optimising resource usage have been initiated at different organisations across the world to minimise the waste of energy and resources. In recent times conscious efforts in this direction are made by most of the food companies.

2.10. Project management in logistics companies

Project management techniques, standards and principles have been utilised by logistics companies across the world to cope with increased competition; for maintaining their leading edge in global markets; to provide quality services and for ensuring on time delivery of products and services based on the demands of end users. Since the major customers of the logistics companies include top class industries across many sectors that rely on carrying out the diverse needs and demands of their supply chain functions, the need for logistics companies to complete projects successfully and effectively within the scope, time, cost and quality is relatively high. Consequently, these logistics companies need to introduce innovative ideas and techniques and adopt the latest technologies and scientific advances for increasing their reliability and product traceability as well as to increase their precision in handling products.

Quality Management (QM) is one aspect of project management whereby companies embark on a project focused on monitoring their quality of services and products, which is in fact aimed at continuous improvement and development (American Society for Quality, 2007). The various QM processes may include auditing and monitoring their compliance with the industry as well as company-set standards, and the quality may ultimately be achieved through effective feedback reporting and management that is capable of improving services or bringing about quality improvements through continuous involvement in the network for shared knowledge and best practices (Ideascope Best Practices and Customer Feedback Management, 2006).

QM is the focal point of companies in the service industries and courier or logistics companies as the subject of interest, fall within this industry. Global or multinational logistics providers like TNT, FedEx, UPS and DHL offer a wide range of services which in effect are identical in purpose – delivering goods to and from one destination to the other. Embarking on project management that focuses on QM may be a one-time project, single or multiple projects or a series of continuous projects. All these initiatives aim to improve efficiency in delivering service to their customers. The application of the various processes of project management are helpful in establishing the desired standards, auditing the current level of quality service of the operation, finding out about the customer's perception and feedback management to improve services (Nelson and Shaw, 2002). Application of the life cycle management model (Fig 2-21) can be considered as very productive in its applicability, particularly in logistics companies as this model provides integrated solutions as well as makes the operations more focused on the goals and objectives of the projects as well as the organisation's.

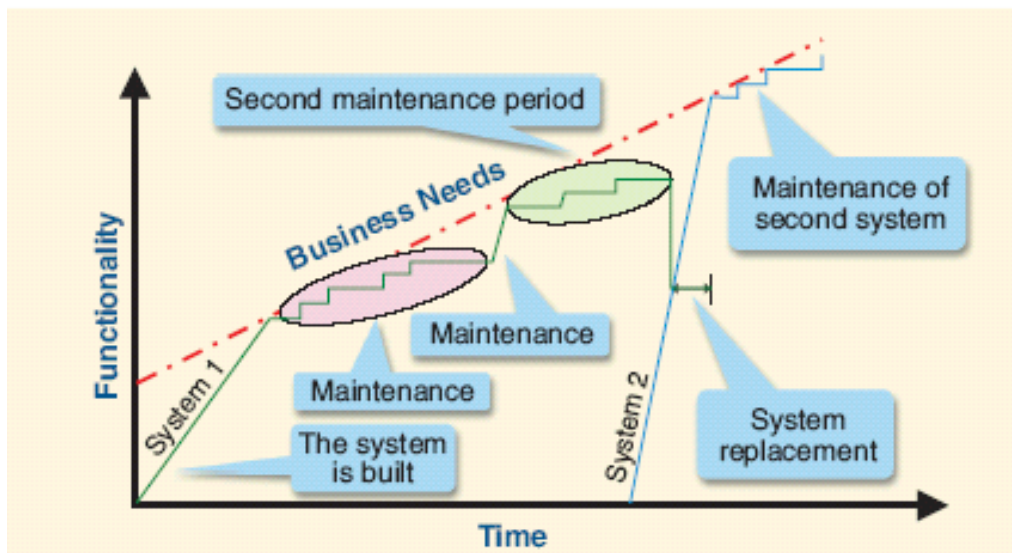


Figure 2.21 Application Lifecycle management model.

Source: (MphasiS, 2006: 3).

The logistics companies rely a lot on software and IT related solutions for ensuring the sourcing, distribution and delivery of products and services on time, in the right proportions and at the right location, and that are based specifically on the standards demanded by the end user. According to Nansi (2004: 2) for effective management of projects at logistics companies they need to “optimize their operations and consolidate as well as ensure optimal use and allocation of resources” and tasks in order to enhance higher customer satisfaction levels “at moderate or reasonable costs”. For example, Cardinal logistics uses Microsoft based systems for integration and NetApp for storage related needs (NetApp, 2006).

Janssens (2004: 2) proposes that the Core Recursive Objective Analysis Model (CROAM) can be considered as the perfect tool for logistics companies for managing their business processes and can be effectively used for “analyzing the work flow; refining the objectives; map business processes, create project plans, etc” (Fig 2-22). “The model gets recursed by refining the objectives”, and hence is very useful in the planning of projects.

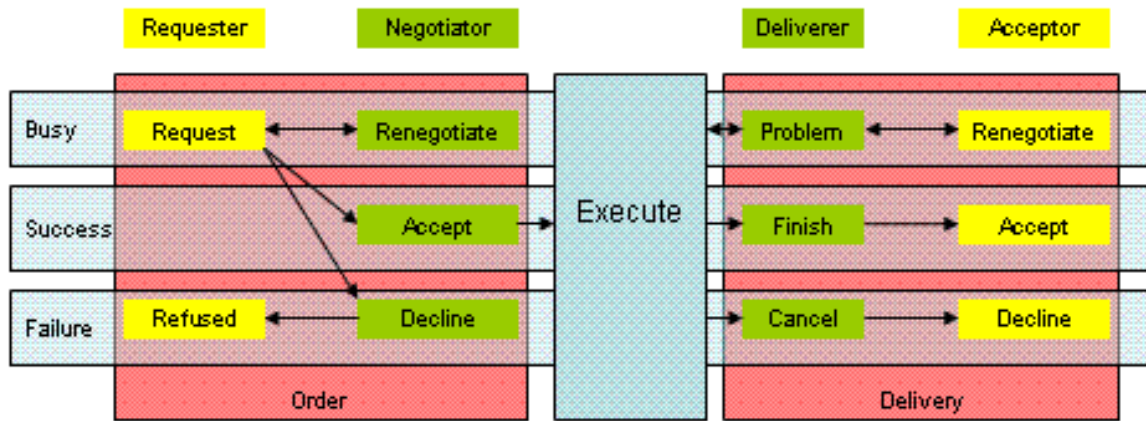


Figure 2.22 CROAM approach

Source: (Janssens, 2004: 2).

Bowman (2003: 2) contends that logistics companies need to initiate projects that are intended to bring about drastic improvements in their activities for adding value to the supply chain of the end users rather than remain “internally focused”. These companies rely a lot on IT tools for managing projects that are aimed at reducing costs as well as increasing their efficiency in delivering all of their functions. Bowman (2003: 3) asserts that “information technology has streamlined business processes and allowed for data sharing across the enterprise”. As more and more companies from different sectors are looking to logistics companies for perfecting their supply chain and distribution systems, logistics providers need to constantly upgrade their systems and capabilities for meeting this increasing market demand for their services. According to Seth (2002: 8) “Global Logistics Solutions Network (GLSN) developed by Descartes connects manufacturers, distributors, retailers, Third Party Logistics providers (3PLs) and transportation service providers and the inter-enterprise logistics network incorporates robust applications to connect partners and provide advanced connectivity solutions for buyers and sellers of transportation services”, which can be utilized for effectively managing logistics projects more or less on a regular basis.

Major logistics providers like DHL and UPS have initiated or successfully completed major projects aimed at optimising and modernising their storage and transportation systems and facilities and this includes the implementation of Warehouse Management Systems (WMS), Transportation Management Systems (TMS) and the integration of activities using Enterprise Resource Planning (ERP) and other

specialised supply chain related systems installed for combating the major challenges of the sector (Trunick, 2003).

As the logistics companies act as major facilitators for managing smooth delivery of products and services specifically based on the standards and interests of the end user, there is an increased need for optimising the various project teams with regard to performance, skills and costs of activity. The Global Resource Model (Fig 2-23) developed by MphasiS can be used for meeting such needs.



Figure 2.23 Global Resource Model

Source: (MphasiS, 2006: 6).

Microsoft Dynamics GP is a common software solution employed by different logistics providers for improving the effectiveness of the supply chain functions of the organisation as well as to decrease the cost of operations. There is also the need to perfect the communication networks in order to transfer the information to the required individuals and teams, on which the success rate of projects depends. Project teams need to maintain a centralised communication system to update the management and team members on the status of the project. Measurement of the effectiveness of the QM may be done through the effective use of the information gathered and results obtained through process completion. Continuous improvement is the key to sharing best practices with companies and networks within the industry (Maitland, 1998).

2.11. Background of United Arab Emirates

The United Arab Emirates (UAE) is a federation of seven emirates situated in the southeast of the Arabian Peninsula in Southwest Asia on the Persian Gulf. UAE borders with Oman and Saudi Arabia. The UAE consists of seven states, termed emirates, which are Abu Dhabi, Dubai, Sharjah, Ajman, Umm al-Quwain, Ras al-Khaimah and Fujairah. The capital and second largest city of the United Arab

Emirates is Abu Dhabi. It is also the country's center of political, industrial and cultural activities.

The estimated population of UAE is about 4.8 million people with a GDP of USD54,000. http://en.wikipedia.org/wiki/United_Arab_Emirates



Figure 2.24 The Geographical map of United Arab Emirates (UAE).

Source: http://en.wikipedia.org/wiki/United_Arab_Emirates

2.12. Chapter Summary

In this chapter the researcher has discussed at length the theories, frameworks and IT tools relevant and related to the Project Management topic investigated. The different concepts related to Project Management are highlighted and assessed in preparation for embarking on the discussion and development of the research methodology to further the investigation envisaged by the researcher in this dissertation.

RESEARCH METHODOLOGY

3.1. Introduction

The various methodologies adopted for conducting research on the different aspects of project management at FedEx and Kraft Foods are discussed in this chapter alongside with details on the:

- research model
- research design
- data types and sources
- techniques for data collection (questionnaires and interview)
- sampling mechanisms
- determining sample size and population
- data analysis
- data interpretation methods.

As this research is intended to find out how projects are initiated, planned, executed and controlled with regard to their application to the company (FedEx and Kraft Foods) and to assess the degree of success of CFT and their performance, the selection of different research techniques and methods are decisive in arriving at reliable and sound results and conclusions.

3.2. Participating Organisation

FedEx and Kraft Foods operate in different industry sectors and have been chosen for this study particularly for comparing project related processes utilised in different industries as well as for getting a better understanding on the increased need for project management activities across sectors. As these organisations are diverse in functional capabilities as well as in output categories and operate in different international areas, they are likely to develop techniques, models and standards for managing projects, which vary from department and are region-specific as well as based on the intensity and the type of activity.

3.3. Model for research

The current dissertation analyses the efficiency of various project management processes and strategies – including due consideration of their application in different industries.

The specific focus of attention in the empirical research is the collection of data and analysis of the importance of competency based approaches in recruitment and selection particularly applicable in Project Management, assessed by understanding the gap between current and desired competencies for the employee as well as the project team.

3.4. Groups studied

The following five factors were studied:

- **Project objective:** Statements that describe what is to be achieved at the end of a given project. This can be measured through understanding the following elements: is there proper clarity on the project details; are individual roles regarding project responsibilities clearly defined; are team objectives in line with the project objectives; are team responsibilities clearly defined; are financial allocations correctly aligned with the objectives; and are the project objectives clearly and strictly applicable to the context.
- **Project planning:** Breaking down of a task into smaller and manageable task to ensure successful completion of the project objective. This can be quantified through understanding the following elements: were project plans simple; were project plans rightly applicable to the context of the company; was planning done with a clear vision; was proper planning committee constituted; was time planning appropriate; were project schedules clear; were project schedules easy to understand; were estimations on the scope of the project appropriate; were cost estimations appropriate; was task allotment planning perfect; were prioritization of the issues perfect; was resource allocation appropriate; and was the planning aligned to the aims and objectives of the project.
- **Recruitment and selection:** Includes employment and hiring policies and procedures usually involving the human resources management. This can be measured through understanding the following elements: were top project managers selected based on competencies; were top management selected based on merit expertise and experience; was competency given top priority in selection processes; was proper information provided on giving responsibilities and tasks; were team activities promoted; were there no problems in team functioning; were CFT conflicts managed effectively; was proper training

provided for equipping the teams to perform well as a unit; were the selected individuals possessed the required skills; was the team selection highly organized and in a systematic way; did project leader possess the required managerial and leadership qualities; did the top management possessed risk handling skills; and was the selection criteria good.

- **Execution:** The act of doing something as per intention to achieve something successfully. This can be quantified through understanding the following elements: right allocation of jobs and responsibilities; proper communication within the team; coordination between teams is adequate; cooperation within teams is adequate; individual performance is in line with the project; contains growth centric team performance; project progress rightly conveyed to the team; desired quality was acquired throughout the project; rectifications made were adequate; were the teams highly productive; was due priority given for training in the project agenda; top management helped members to perform their responsibilities at ease; and perfect execution of the project processes was conducted
- **Regulation:** A rule, law or an order prescribed by the state to regulate certain activities and conduct. This can be measure through the following elements: were the issues encountered rightly controlled; were structural and organizational problems controlled effectively; were no hurdles or blocks in the project execution left unattended; was team effective in controlling and regulating risks; was team effective in controlling all problems that occur in the course of the project; did the team rightly responded to unexpected outcomes; were valid techniques employed for solving problems; was the team effective in managing crisis situations; were needed changes implemented in the right time; were proper efforts deployed for managing the human resource; and are perfect control mechanisms in place.

3.5. Research Philosophy and Design

The philosophy adopted for this research was a combination of quantitative (positivism) and qualitative (post-positivism) approaches since the format selected for this study includes both open ended (interviews) and closed (questionnaires) questions. According to Crossan (2003: 21) “though quantitative research methods (or positivist philosophies) and qualitative methods (or post-positivist philosophies)

are often seen as opposing and polarised views they are frequently used in conjunction” particularly in academic work and these multiple approaches basically aim to substantiate the research findings and main results. This approach provides more accuracy and clarity to the solutions and conclusions, even with smaller amounts of data as there is a combination of complimentary approaches adopted in the data collection and their synthesis. This type of research approach is more pragmatic in many academic programs of study. Multiple research methods can be employed for increasing the validity of the data findings, analysis, and interpretation. As we are analysing the details of running small and mid sized projects, a small sample size will be sufficient to provide relevant and interpretable data and hence other time consuming methods like focus groups, panel discussions, *et cetera* were not utilised in this dissertation.

3.5.1. Categorization of the procedures used

- Exploratory research
- Descriptive research
- Causal or explanatory research

Multiple research methods were utilised for the research studies based on project management in FedEx and Kraft Foods, such amalgamation of different approaches offers greater and more comprehensive knowledge on the phenomenon studied. Multiple research methods in fact can add more strength to the data generated and increases the validity of the results (Fig 3-2). Hence for this study, exploratory as well as descriptive approaches were utilized in order to get a better understanding on the various project management processes employed at FedEx and Kraft Foods. According to Terri and Ethlyn (2000:1), “the use of a variety of methods to examine a topic might result in a more robust and generalizable set of findings (higher external and internal validity)” (Fig 3-1).

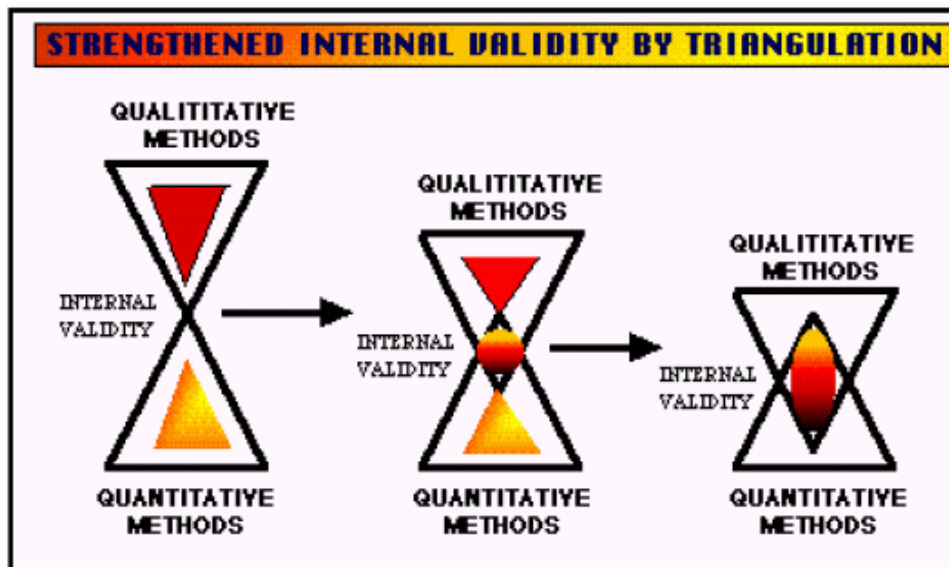


Figure 3.1 Strengthening validity by using multiple methods.

Source: (Research methods, 2005: 11).

3.5.1.1. Exploratory Research

Initial research studies on the topic were done using this research approach as exploratory surveys are useful in providing better insights on the selected topic as well as for familiarising researchers with the subject matter, identifying and exploring the different aspects and for delineating the initial concepts to be addressed. This type of research provides base line data and concepts for more detailed approaches like the descriptive or explanatory research methods. This type of research in fact provides greater flexibility, and does not require any representative sample when conducting surveys (Mittman, 2001).

3.5.1.2. Descriptive Research

Descriptive research approaches were employed during the main investigation in this present study. The main intention of this type of research is to understand the processes, circumstances, occurrences and events that are happening in the real time surveying of a sample from a known population. This approach is rather rigid as it requires clarity regarding the sample characteristics, prior to the main application. "Analysis stimulated by descriptive questions is meant to ascertain facts, not to test theory and the hypothesis generated cannot be causal, but simply that common perceptions of the facts are or are not at odds with reality" (Pinsonneault and Kraemer, 1992: 8).

A cross-sectional data collection mode was utilized for this study as it was easier to collect data at a single specific point of time than conduct data collection at different time intervals as observed in longitudinal design. Generalising the data collected from the sample for interpreting the behaviour of the population would provide accurate results in a cross-sectional type of design. Longitudinal design was beyond the scope of the current study and hence not used.

3.5.1.3. Casual or explanatory research

Explanatory forms of research study are utilised mostly for determining the relationship between different variables as well as for testing theory. The ways that the variables are related need also to be identified in order to obtain accurate results. Owing to constraints with regard to time, complexity in conducting this type of research and the highly uncertain nature of the outcome, this type of research approach was not pursued in the dissertation.

3.5.2. Study Sample

The methods adopted for sample selection depends on the objectives, research model and research design and the success of any research project will rely on the representativeness of the selected sample population. In this study, convenience sampling methods were employed in order to reduce the data errors that may occur when dealing with sample sizes. Hence, sample sizes of 20 projects' teams were selected from each organisation.

A questionnaire was designed exclusively for understanding the project management related issues from individual project team members and was tailored in such a way as to suit the organisational culture and structure at FedEx and Kraft Foods.

The questions prepared were in closed format and were directed specifically towards the project management related employees at FedEx and Kraft Foods. The questions were divided into different phases and were aimed at understanding project management in relation to objectives, planning, recruitment, execution and regulation processes.

3.6. Design of the questionnaire

A framework of the questionnaire was designed prior to its development. The researcher revised the questionnaire at the design stage. Once the questionnaire design was optimised, the detailed question types were established based on the overall research design. It was ensured that all the data collection work and analysis strongly contributes to the research aim and objectives. The design of questionnaire is presented in Figure 3.2 below.

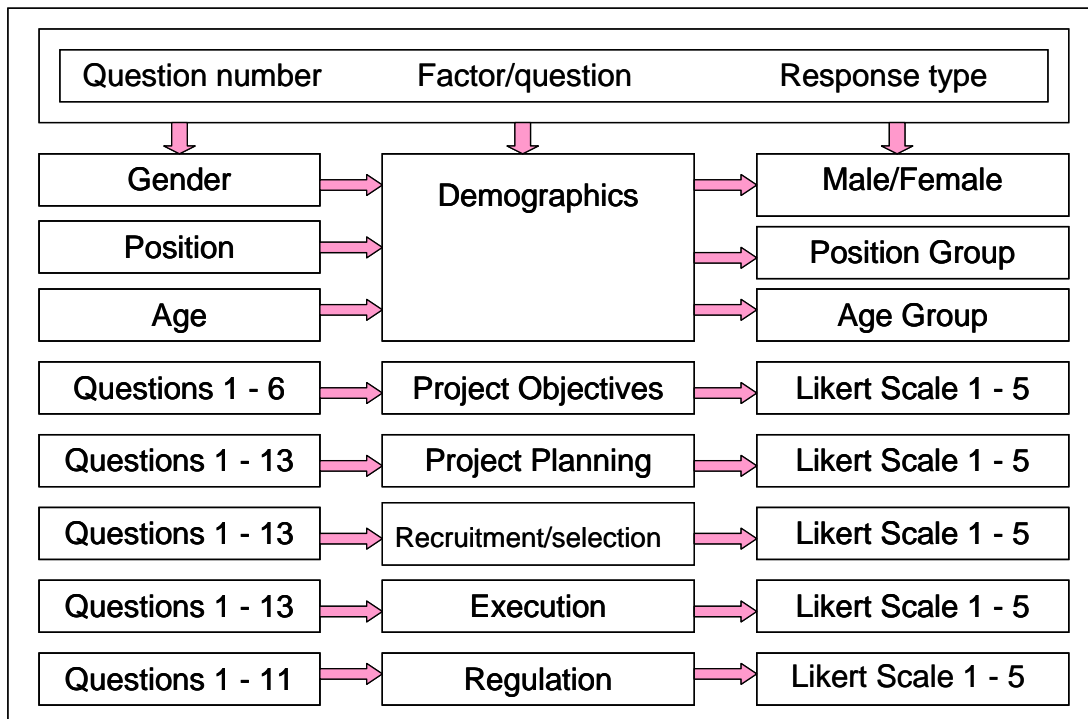


Figure 3.2 Design of questionnaire.

3.7. Data Sources

The following data sources have been identified for the purpose of the research.

3.7.1. Primary data

- **Questionnaire surveys:** The research's primary data source is through the designed questionnaire aimed at member of the selected 20 projects teams.
- **Project team workshops:** Then group workshops were held with each project team to understand their opinion on the project management processes and Cross-Functional Teams (CFT) in the company.

3.7.2. Secondary data

Secondary sources of data are both from internal (data prepared for other purposes, company records, order forms, project proposals, reports, Information from HR department, *et cetera*) and external (commercially available, information gathered from published works).

3.8. Data Analysis and Interpretation

The interpretation of the findings and data analysis are considered as the most decisive part of the research and hence need to be conducted systematically, accurately and with expertise. Although the research was descriptive in nature and basic statistics were used to analyse the data but SPSS software was also used to understand correlation between CFTs and project management processes.

3.9. Chapter Summary

The different research approaches and techniques have been explored in this chapter. The methods which were found most suitable for the present study were verified and discussed in depth. It can be considered that the results of the research if properly conducted and analysed would provide better insight into the various project management related issues and applications.

DATA ANALYSIS AND RESULTS

4.1. Introduction

Project Management is well accepted in enterprises worldwide as a disciplined means of managing projects in a systematic and structured manner. This study examined enterprises in UAE. The general and specific empirical findings of this study are discussed extensively in this chapter.

4.2. Demographics

At Kraft Foods Company 20 projects teams were surveyed and group workshops were conducted with each project team. Similarly at FedEx 20 projects teams were surveyed and group workshops were conducted with each project team. In order to focus more on inter-relationships between project stages and CFTs only gender of respondents were studied in demographics.

Table 4.1: Demographics of the respondents

	Kraft Foods		FedEx		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Male	70	67%	58	59%	128	63%
Female	35	33%	40	41%	75	37%
Total	105	100%	98	100%	203	100%

4.3. Kraft Foods

Figure 4.1 & 4.2 presents the aggregated responses of each project team (defined as 'PT' and then team number) for the five project management elements analysed. However, for the research purposes, the collective responses of project teams are analysed and presented in this chapter.

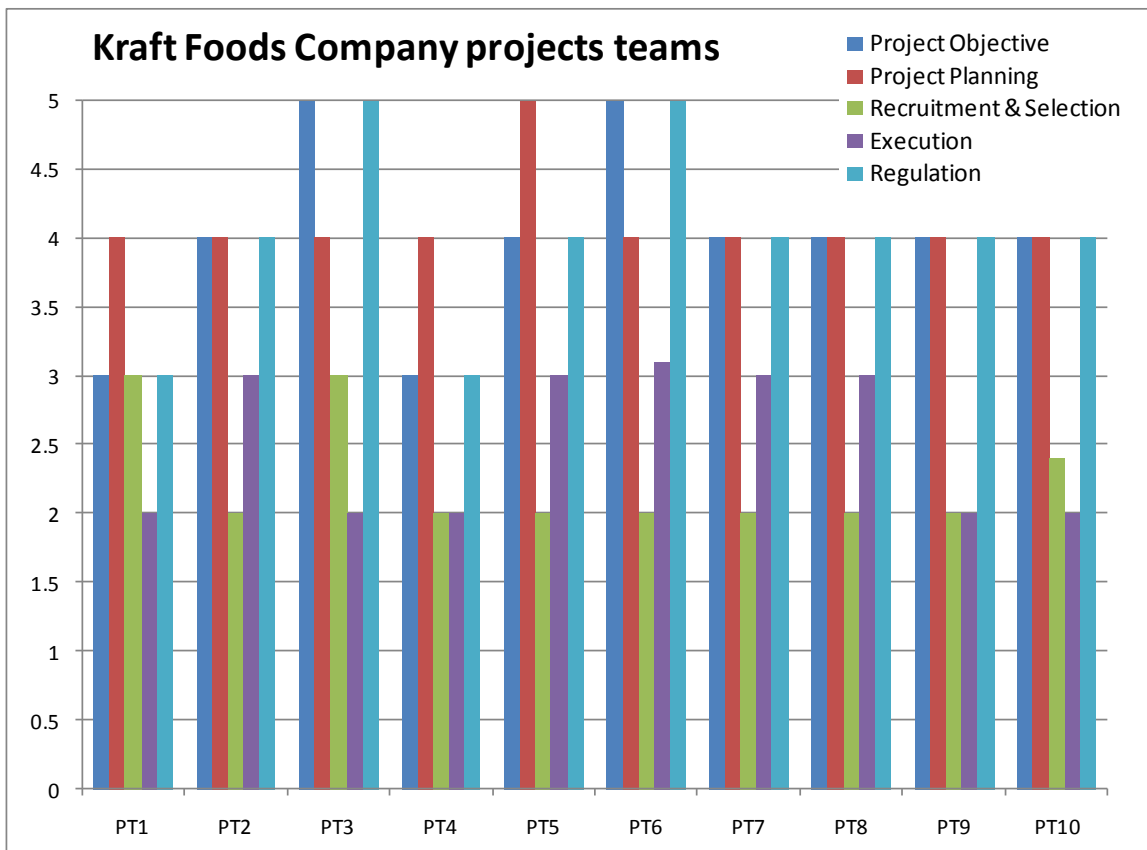


Figure 4.1 Responses of Kraft Foods projects teams (1-10) for Project Management factors

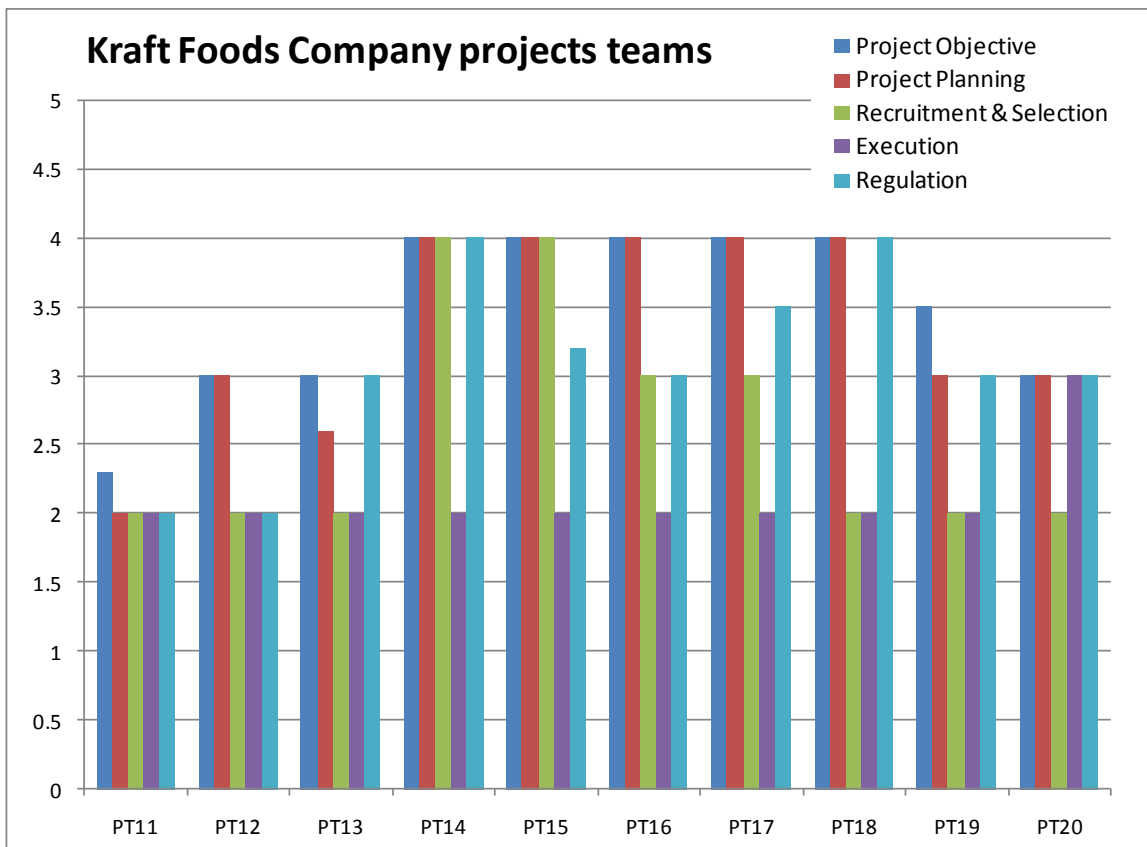


Figure 4.2 Responses of Kraft Foods projects teams (11-20) for Project Management factors

4.3.1. Project Management

In this and the following sections aggregated responses of projects teams are analysed. The results show that '*Project Objective*' had a mean of 3.74, '*Project Planning*' obtained 3.73, and '*Recruitment and Selection*' with a value of 2.42 and '*Execution*' 2.31 were relatively lower mean scores and '*Regulation*' had an average of 3.54. The details are shown in Figure 4.3 below.

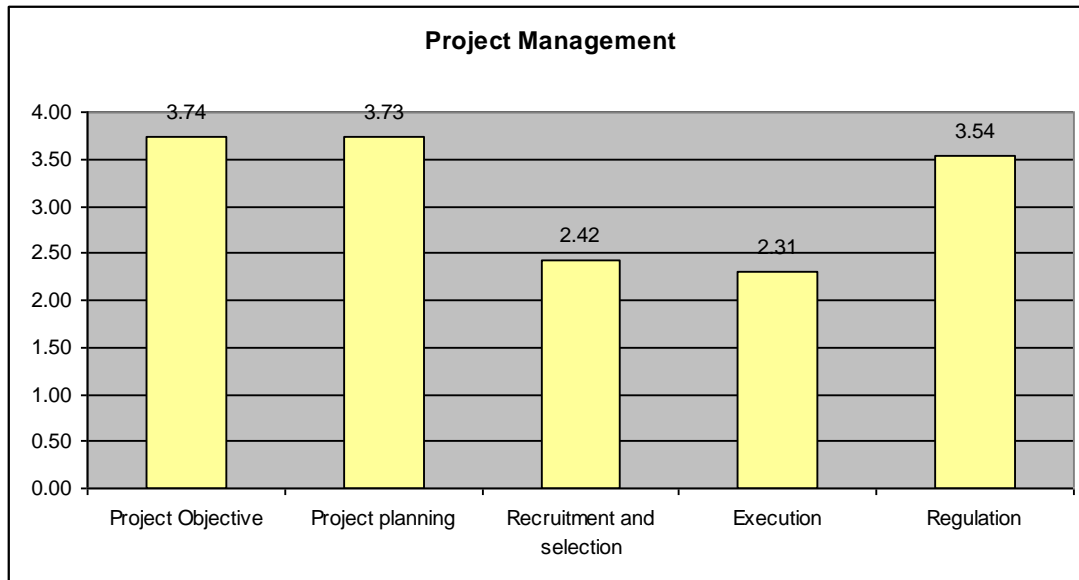


Figure 4.3 Aggregated responses of projects teams on Project Management.

4.3.2. Analysis on Project Objective

There are 6 items studied in this group: '*Team objectives in line with the project objectives*' obtained 4.55 and was the highest mean score and '*Proper clarity on the project details*' secured a mean value of 4.5 was the second highest. '*Individual roles regarding project responsibilities clearly defined*' attracted 3.8 while '*Team responsibilities clearly defined*' obtained the lowest mean value of 1.85. '*The objectives clearly and strictly applicable to the context*' accumulated a mean of 3.95 and '*Financial allocations correctly aligned with the objectives*' received 3.80. The details are shown in Figure 4.4 below.

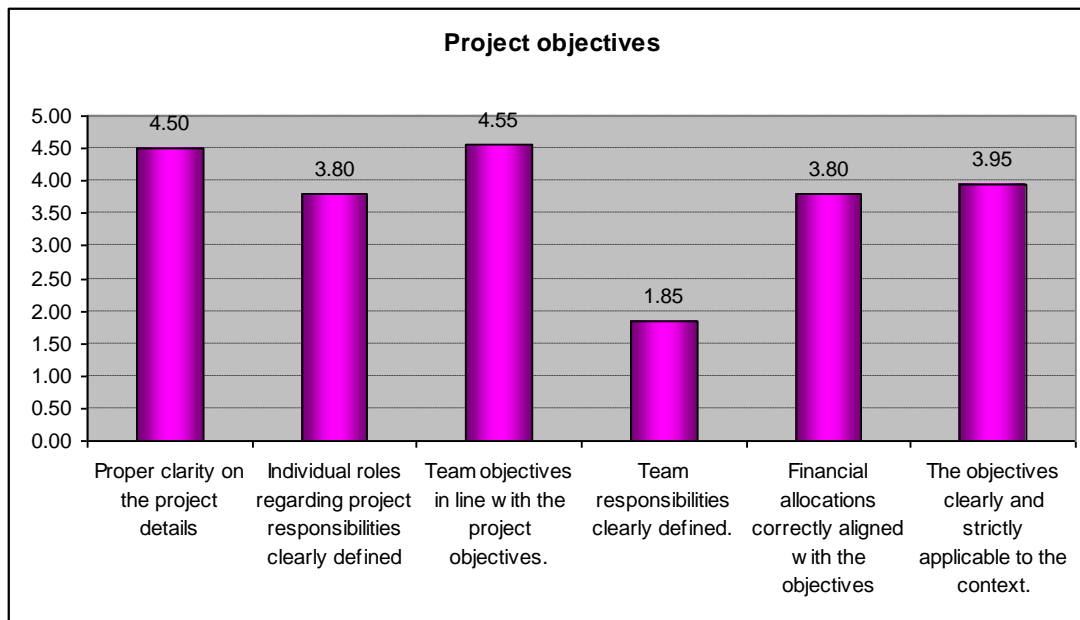


Figure 4.4 Aggregated responses of projects teams on Project Objectives

4.3.3. Analysis on Project Planning

This Project Planning group had thirteen different items under it.

'Proper planning committee' constituted the highest mean value of 4.90 and *'Project schedules were easy'* scored the lowest mean of 2.0. Another low mean of 2.3 was assigned to *'Task allotment planning was perfect'*.

'Planning was done with vision secured a value' of 4.2 and so did *'Estimations on the scope of the project appropriate'* (4.2) and *'Project schedules were clear'* (4.2). Next, *'Resource allocation was appropriate'* secured a mean of 4.10, as did *'Project plans were rightly applicable to the context of the company'* (4.10). *'Cost estimations were appropriate'* 3.9, and then yet lower scores for, *'Planning's were aligned to the aims and objectives of the project'* (3.85) and *'Project plans that were simple'* received a mean of 3.75. Going further down the list, *'Prioritization of the issues were perfect'* attracted a mean of 3.55 and *'Time planning'* got 3.4. '

These results may be interpreted as indicating that the *'Project Planning committee'* is properly constituted in Kraft Foods while the *'Project Schedules'* were not easy. The details are as shown in Figure 4.5 below.

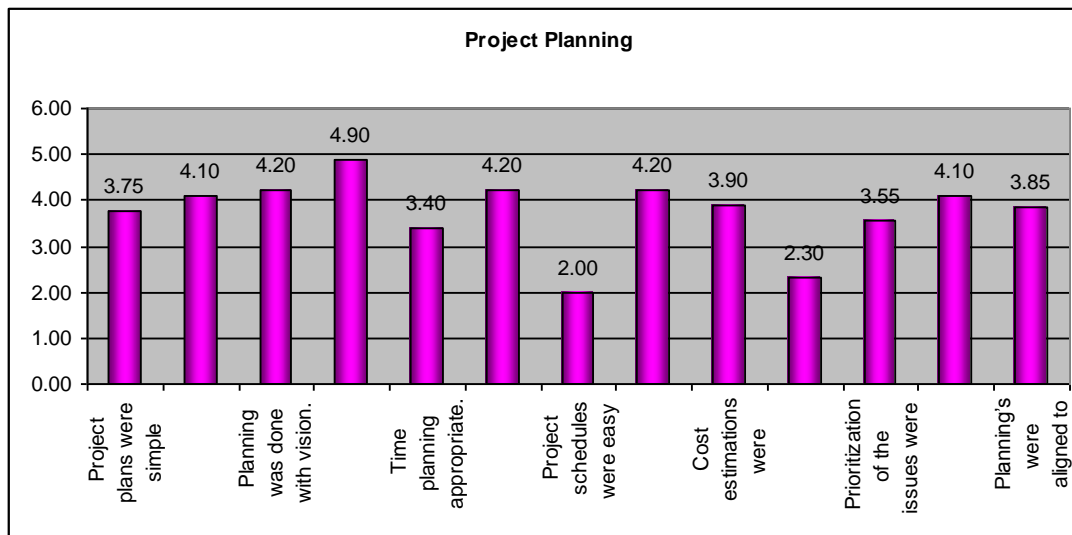


Figure 4.5 Aggregated responses of projects teams on Project planning

4.3.4. Analysis on Recruitment and Selection

This Recruitment and Selection group contained thirteen items.

The two highest items were *'Top management selected that was based on merit, expertise and experience'* which secured a mean of 4.00 and *'Top management with risk handling skills'* a mean of 3.75. *'Proper training for equipping the teams to perform well as a unit'* resulted in the lowest mean value in the group with 1.70.

'Proper information on the responsibilities and tasks were given' obtained an average response of 2.90 and next was *'CFT conflicts were managed effectively'* which attained 2.60, closely followed by *'Top Project managers selected based'* that received an average of 2.50. *'There were no problems in team functioning'* received an average of 2.45 and *'Team activities were promoted'* attained 2.10 as the mean response.

Other items with comparatively low mean values were and *'Competency was given top priority in selection processes'* that managed a mean of 2.00. *'Selected individuals possessed the required managed'* (1.95), *'Project leader possess the required managerial and leadership skills'* derived 1.90, *'Criteria for selection was good'* scored a mean of 1.85, and *'Highly organized and systematic way of team selection Skill'* afforded a low mean of 1.80.

The details are as shown in Figure 4.6 below.

In this item group, the researcher proposes that the 'Top management was selected based on merit expertise and experience' in the opinion of the respondents while at the same time it was felt that 'Proper training was not given for equipping the teams to perform well as a unit.'

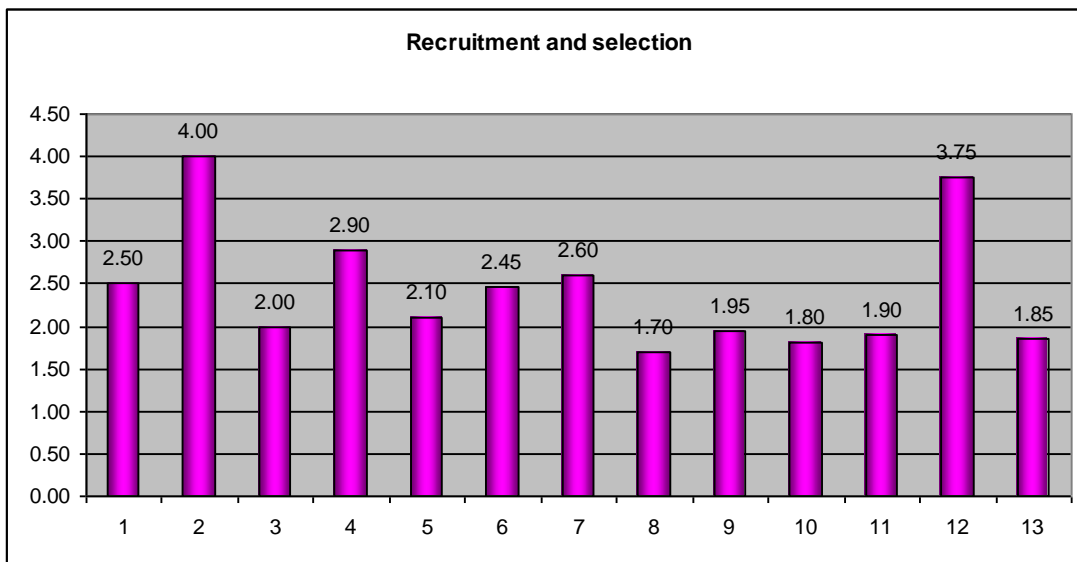


Figure 4.6 Aggregated responses of projects teams on Recruitment and Selection

4.3.5. Analysis on Execution

This Execution group consisted of thirteen items.

'Desired quality was acquired throughout the project' was attributed the highest mean value of 4.00 followed by two items that were second equal, 'Individual performance in line with the project' (3.85) and 'Rectifications made were adequate managed' also a mean score of 3.85. In contrast, 'Project progress rightly conveyed to the team' received the lowest mean of 1.5, also low was 'The teams were highly productive' that only managed a mean of 1.65.

'Coordination between teams adequate' secured 2.10 and 'Cooperation within teams adequate' attracted a mean score 2.05. Then, three items all scored the same. 'Right allocation of jobs and responsibilities' equated to a mean of 1.90 as did 'Growth centric team performance' (1.90) and 'Top management helped members to perform

their responsibilities at ease’ also attained a low average of 1.90. *‘Proper communication within the team’* attracted a mean score of 1.85 and then *‘Due priority given for training in the project agenda’* secured a low mean of 1.80 and *‘Perfect execution of the project processes’* also had a low mean of 1.70.

The details are as shown in the Figure 4.7 below.

Based on the results obtained the researcher interprets the situation to have been that overall in the Project Execution group, *‘Desired quality was acquired throughout the project’*, but the respondents also indicated that the *‘Project progress was’* not *‘rightly conveyed to the team members’*.

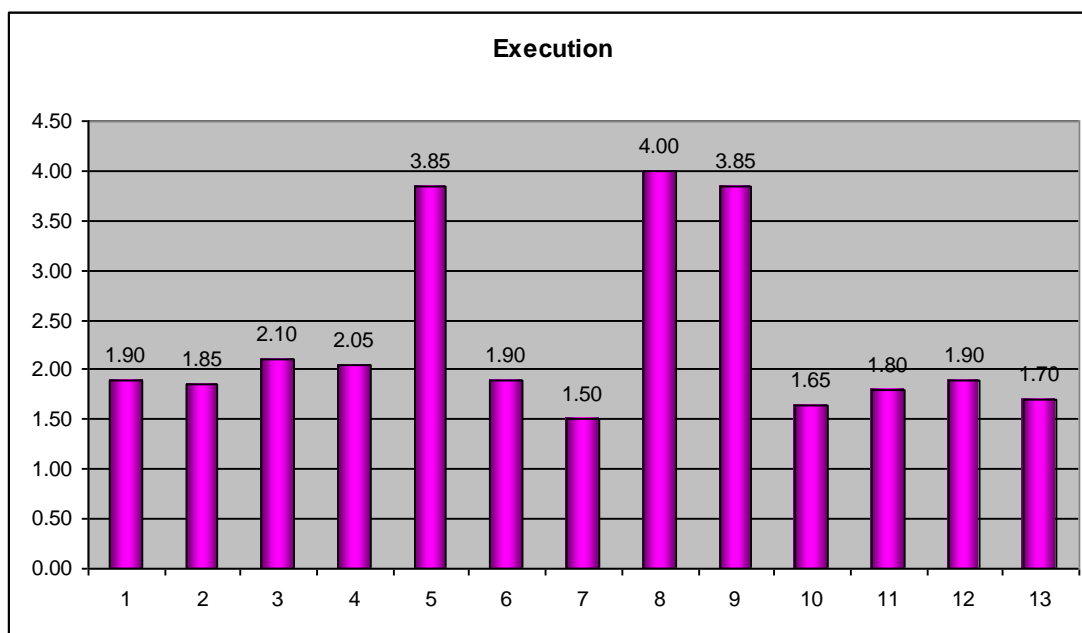


Figure 4.7 Aggregated responses of projects teams on Execution

4.3.6. Analysis on Regulation

This Regulation item group contained eleven items.

‘Effective in managing crisis situations’ got the highest mean in this item group with a value of 4.50 and *‘Perfect control mechanisms are in place’* received the second highest mean of 4.40, followed by a third item which was rated with a mean of above 4, *‘Effective in controlling and regulating risks’* (4.35). Items rated nearest to the bottom of the scale were *‘Structural and organizational problems were controlled*

effectively' that attained the lowest mean value of 1.65 and '*Proper efforts for managing the human resource*' secured a similar low mean score rating of 1.85.

No item was rated 2 and six of them were rated with mean scores between 3 and 4. In order of descending values they were: '*Rightly responded to unexpected outcomes*' (3.95), '*Needed changes were implemented in the right time*' (3.90), '*Valid techniques were employed for solving problems secured*' (3.80), '*No hurdles or blocks in the project execution were left unattended*' (3.75), '*The issues encountered were rightly controlled*' (3.56) and '*Effective in controlling all problems that occur in the course of the project*' secured a mean rating score of 3.20. The details are as shown in Figure 4.8 below.

The researcher proposes that in this item group, the Regulations of project management are '*Effective in managing crisis situations*'. However, with reference to the lowest mean score low rating possibly indicates that '*Structural and organizational problems*' were not '*controlled effectively*'.

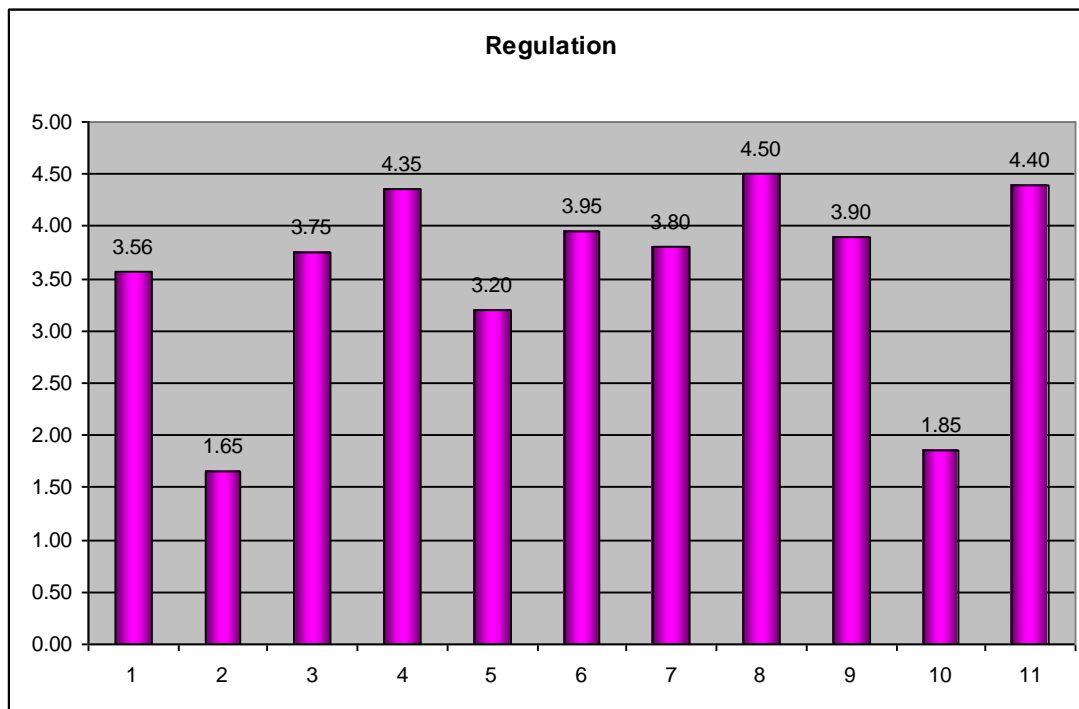


Figure 4.8 Aggregated responses of projects teams on Regulation

4.4. FedEx Corporation

Figures 4.9 & 4.10 presents the aggregated responses from each of FedEx project team (defined as 'PT' and then team number) for the five project management elements analysed.

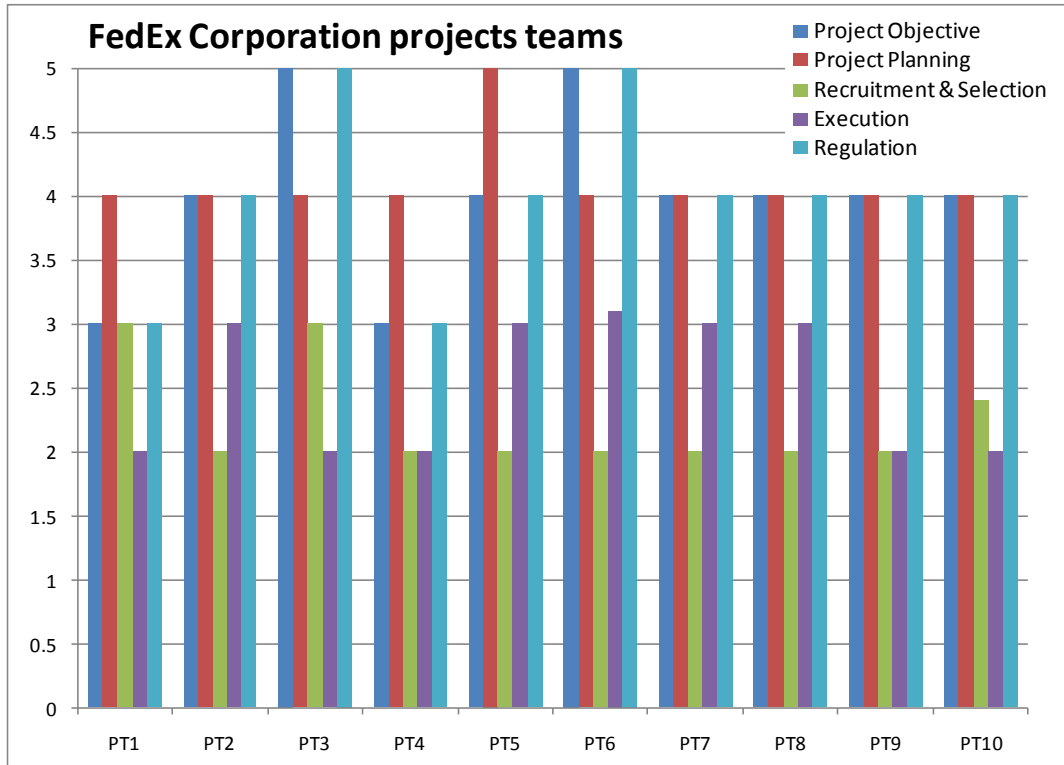


Figure 4.9 Responses of FedEx projects teams (1-10) for Project Management factors

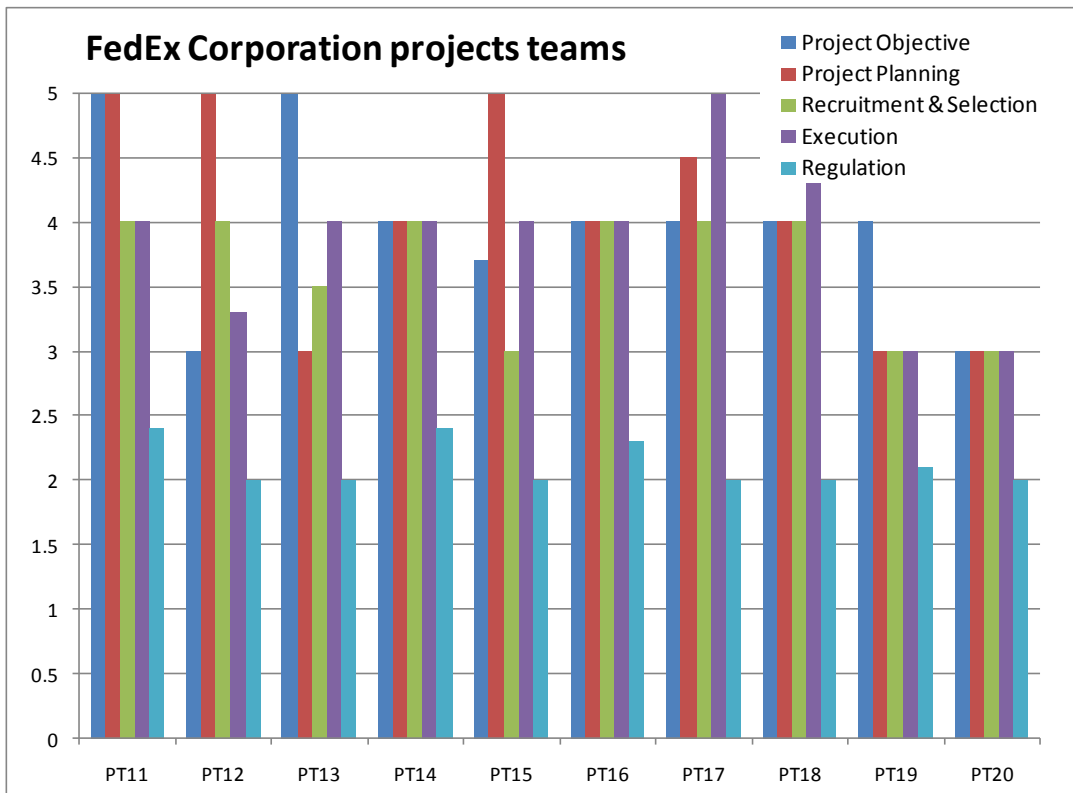


Figure 4.10 Responses of FedEx projects teams (11-20) for Project Management factors

4.4.1. Project Management

In this study the researcher chose five different item groups to investigate. The results show that '*Project Objective*' obtained the highest mean rating of 4.24 and '*Regulation*' received the lowest (2.12). '*Project Planning*' was second highest and obtained 4.18, followed closely by '*Recruitment and selection*' with a mean value of 4.03 and '*Execution*' 4.02. The details are shown in Figure 4.11 below.

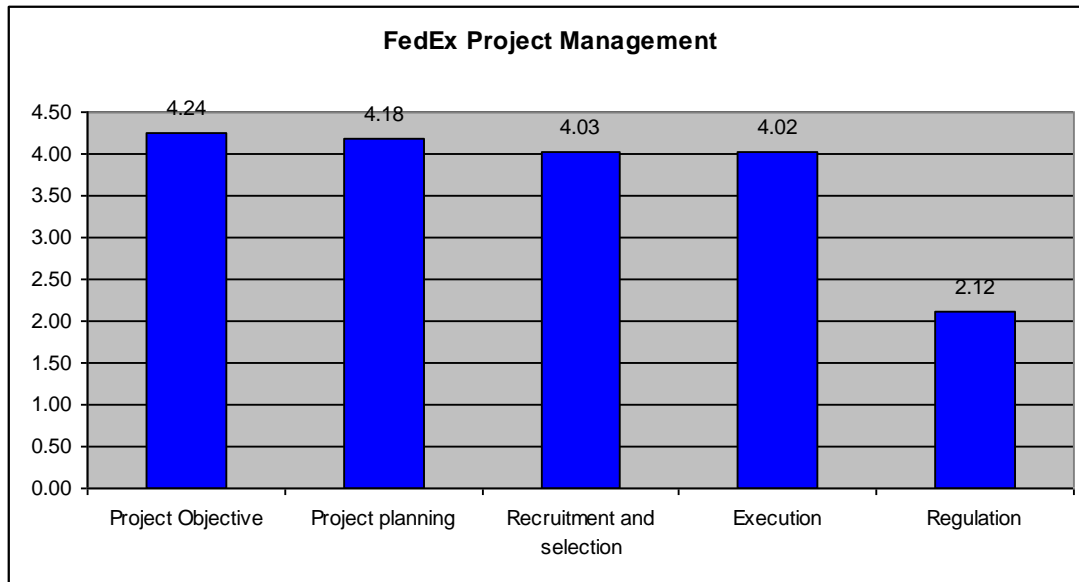


Figure 4.11 Aggregated responses of projects teams on FedEx Project Management

4.4.2. Analysis on Project Objective

There were 6 items studied in this Project Objective group. '*The objectives clearly and strictly applicable to the context accumulated*' the highest mean in this group (4.65). Next was '*Team responsibilities clearly defined*' with a mean value of 4.55, in fact, all of the other items were also rated in the 4s except for '*Financial allocations correctly aligned with the objectives*' which received the lowest mean score of 3.80. '*Proper clarity on the project details*' secured a mean value of 4.15, while '*Team objectives in line with the project objectives*' got 4.20 and '*Individual roles regarding project responsibilities clearly defined*' attracted 4.10. The details are shown in Figure 4.12 below.

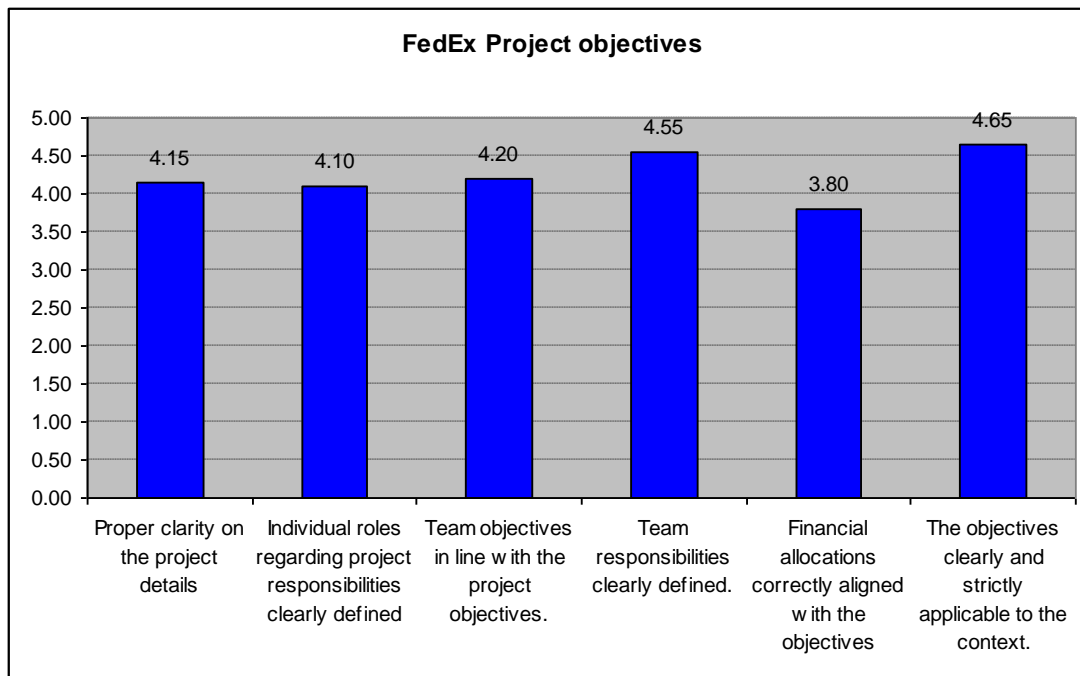


Figure 4.12 FedEx Project objectives.

4.4.3. Analysis on Project Planning

The Project Planning group had thirteen items.

'Planning's were aligned to the aims and objectives of the project' scored the highest mean value of 4.75 in the group. *'Estimations on the scope of the project appropriate'* attained a similarly high score with the second highest mean of 4.70. All thirteen of the items were rated above 3 and only the lowest three scored under 4. In ascending order they were: *'Resource allocation was appropriate'* secured a mean of 3.50, *'Project plans were simple'* which got a mean of 3.80 and *'Project schedules were clear'* accumulated a mean of 3.85.

Conversely, in descending order, the third highest mean score onwards was: *'Planning was done with vision'* (4.45), fourth equal was *'Task allotment planning was perfect'* (4.35) and *'Cost estimations were appropriate'* (4.35), followed by *'Proper planning committee was constituted'* (4.30) in sixth place, and then, *'Project plans were rightly applicable to the context of the company'* (4.15), *'Project schedules were easy'* (4.10), *'Time planning appropriate'* (4.05) and *'Prioritization of the issues were perfect attracted'* a mean of 4.00.

This shows that rated most highly was the 'Planning's were aligned to the aims and objectives of the project' in FedEx and it may mean that the 'Resource allocation' was not 'appropriate' according to the views of the respondents. The details are as shown in Figure 4.13 FedEx Project Planning. below.

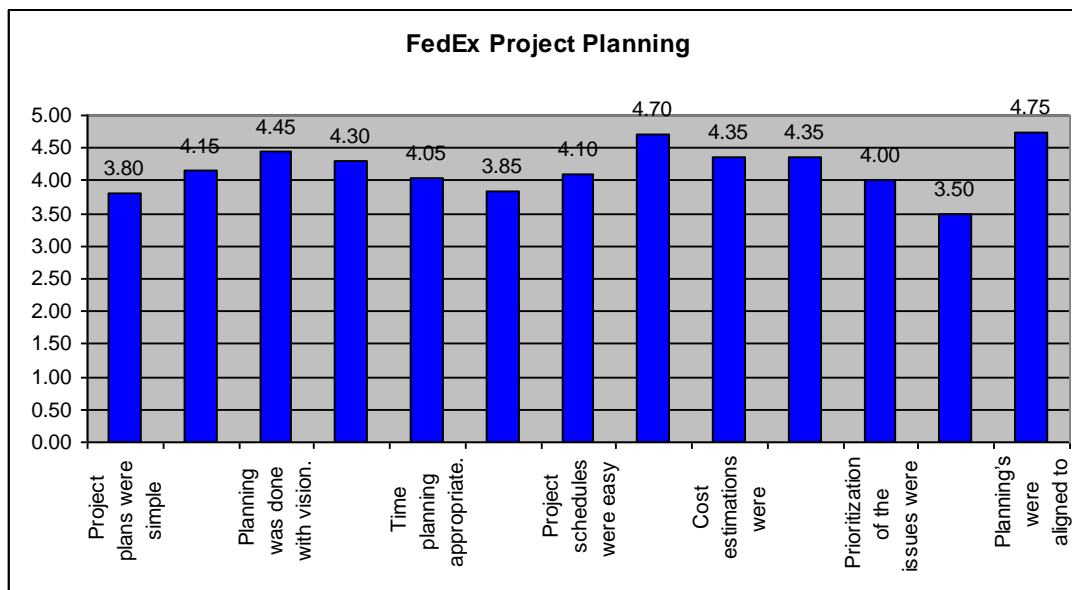


Figure 4.13 FedEx Project Planning.

4.4.4. Analysis on Recruitment and Selection

This Recruitment and Selection group had thirteen items.

Competency was given top priority in selection processes' managed to secure the highest mean rating score of 4.70 and *'Top management with risk handling skills'* got the lowest mean in this group with a mean of 2.20. It was the only item with a mean score of 2 and there was a disparity of 2.5 points between the highest and lowest items on the five point scale. Three items were rated greater than 3 and less than 4. *'Top management was selected based on merit of expertise and experience'* secured a mean of 3.90 and *'Highly organized and systematic way of team selection Skill'* got a mean score of 3.70 equal to *'CFT conflicts were managed effectively'* which also attained 3.70.

Seven of the items all scored between 4.00 and 4.50. *'There were no problems in team functioning'* had a mean of 4.45 equal to *'Criteria for selection was good'* which also was 4.45. *'Team activities were promoted'* attained 4.40 as the mean response from the respondents, *'Selected individuals possessed the required skills'* attained a

mean value of 4.35, followed by *'Top Project managers were selected'* (4.30), *'Proper training for equipping the teams to perform well as a unit'* (4.15), *'Project leader possess the required managerial and leadership skills'* (4.05) and *'Proper information on the responsibilities and tasks were given'* which secured a mean response of 4.10. The details are as shown in Figure 4.14 below.

In this group, the researcher notes that highest rated was the item stating, *'Competency was given top priority in selection processes'* while respondents rated *'Top management'* relatively low by contrast on their *'risk handling skills'*.

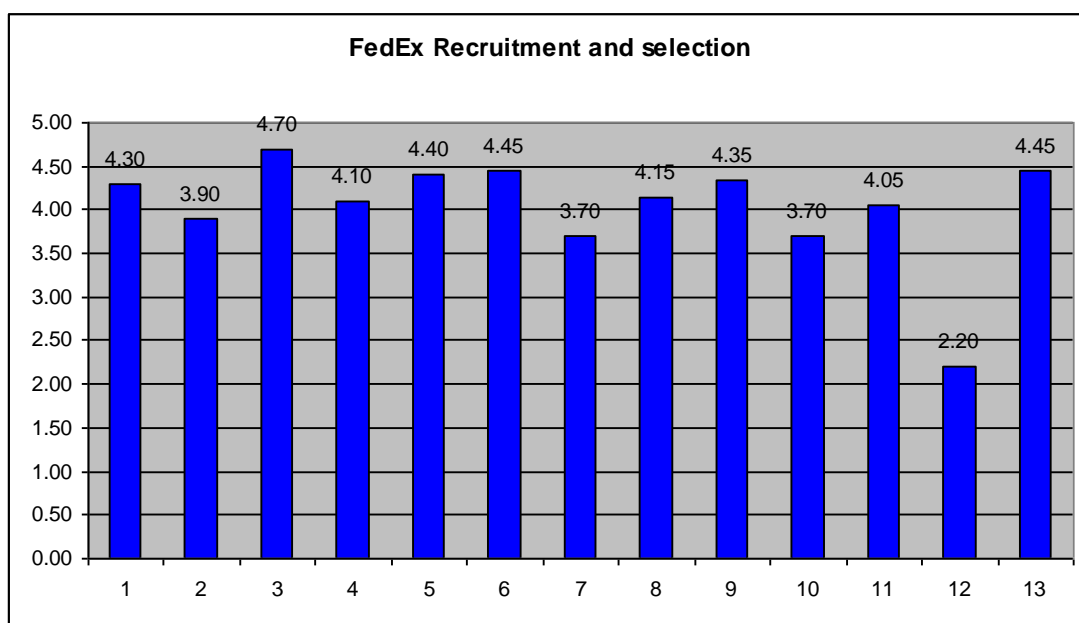


Figure 4.14 FedEx Recruitment and selection.

4.4.5. Analysis on Execution

The Execution group had thirteen items.

'Due priority given for training in the project agenda' secured the highest mean of 4.70. Also, above 4.5, were two items with equal mean scores: *'Desired quality was acquired throughout the project'* (4.60) and *'Cooperation within teams adequate'* (4.60). *'Rectifications made were adequate managed'* achieved the lowest mean value of 1.95. It is noticeable that the next lowest mean score was 1.5 points higher than the lowest value. Close to the mid-point on the scale, *'Top management helped members to perform their responsibilities at ease'* obtained a mean score of 3.45.

In fourth place, in descending order of mean score value, *'Perfect execution of the project processes'* was 4.50, next was *'Growth centric team performance'* with a mean of 4.45 and then *'Individual performance in line with the project'* obtained 4.20. *'Proper communication within the team'* attracted 4.05 which was equal score to *'The teams were highly productive'* (4.05). Three remaining items came close to 4 all being in the high 3s: *'Project progress rightly conveyed to the team'* (3.95), *'Right allocation of jobs and responsibilities'* got a mean of 3.90 as did *'Coordination between teams adequate'* (3.90).

The details are as shown in the Figure 4.15 below.

In the Project Execution group, *'Due priority given for training in the project agenda'* was rated the highest mean score and at the same time the respondents indicated by a mean rating 1.5 points lower on the 5-point scale that the *'Rectifications made'* were possibly not *'adequately managed'*.

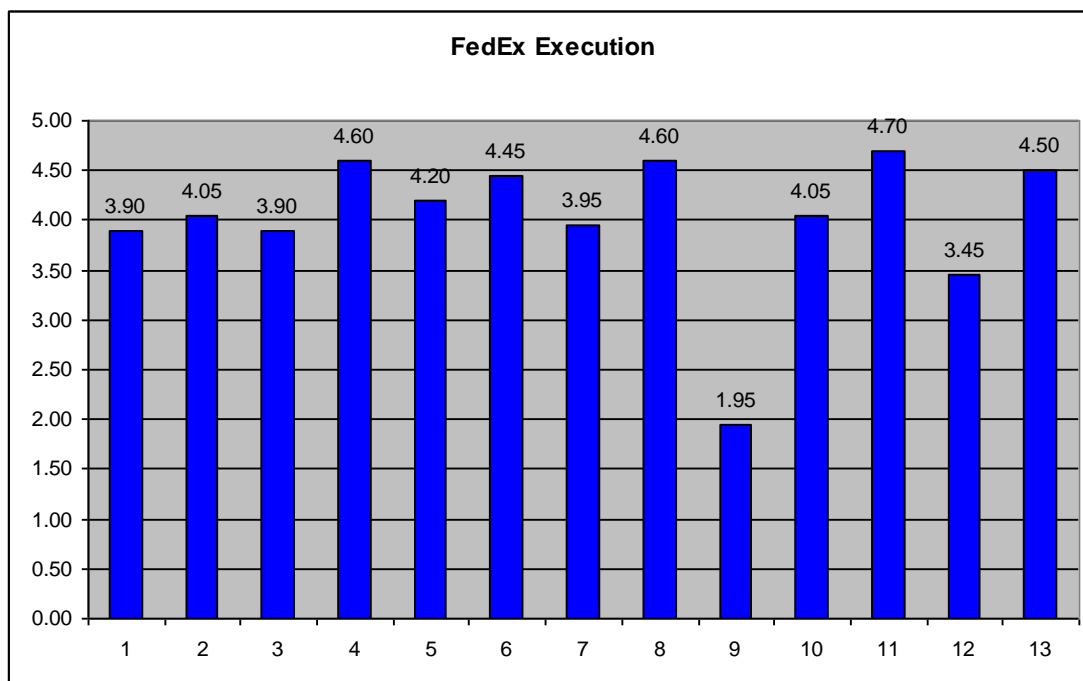


Figure 4.15 FedEx execution.

4.4.6. Analysis on Regulation

The Regulation item group consisted of eleven items.

'Proper efforts for managing the human resource' secured the highest mean score of 4.55 whereas *'Perfect control mechanisms are in place'* got the lowest mean of 1.35.

Except for one item all of the others were low rated with a mean score under 3. Out of these items rated under 3, only three were means of 2 and above. *'Effective in controlling and regulating risks'* got a mean of 2.40, *'Valid techniques were employed for solving problems'* secured a mean of 2.05 and *'Effective in controlling all problems that occur in the course of the project'* secured a mean score of 2.00.

Six items scored means between 1.5 and 2. In descending order from the highest first, they were as follows: *'The issues encountered were rightly controlled'* obtained a mean of 1.96. *'Structural and organizational problems were controlled effectively'* attained a low mean value of 1.90 *'No hurdles or blocks in the project execution were left unattended'* attracted a mean of 1.85 from the respondents. Then, *'Effective in managing crisis situations'* received 1.90, *'Rightly responded to unexpected outcomes'* a mean of 1.70 and *'Needed changes were implemented in the right time'* attained a mean of 1.65. The details are as shown in Figure 4.16 below.

In the Regulations item group, *'Proper efforts for managing the human resource'* is top rated. However, the FedEx respondents rated control comparatively low (*'Perfect control mechanisms are in place'*).

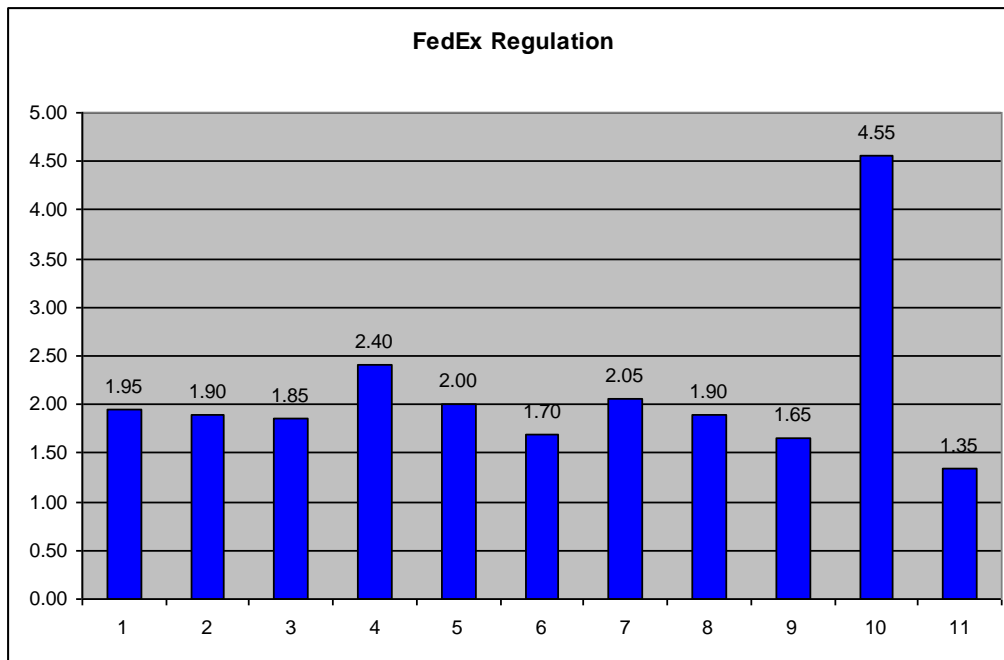


Figure 4.16 FedEx Regulation.

4.5. Comparison between Kraft and FedEx

In this section the researcher attempts to make a fair comparison between the two enterprises. A limitation of the results is that one company ranked most items consistently higher meaning it is less clear how far one can make statistical inferences and draw comparisons between the two companies.

4.5.1. Project Management comparison

Kraft Foods groups' mean item scores were all below the value of 4. FedEx on the other had all the groups with a mean item score value greater than 4 except for the Regulation group. In Regulation, FedEx obtained a very low mean of 2.12 compared to Kraft Foods which scored 3.54. This can be interpreted as indicating that the Regulations in FedEx are not as strong as are the other item groups. The details are as shown in Figure 4.17 below.

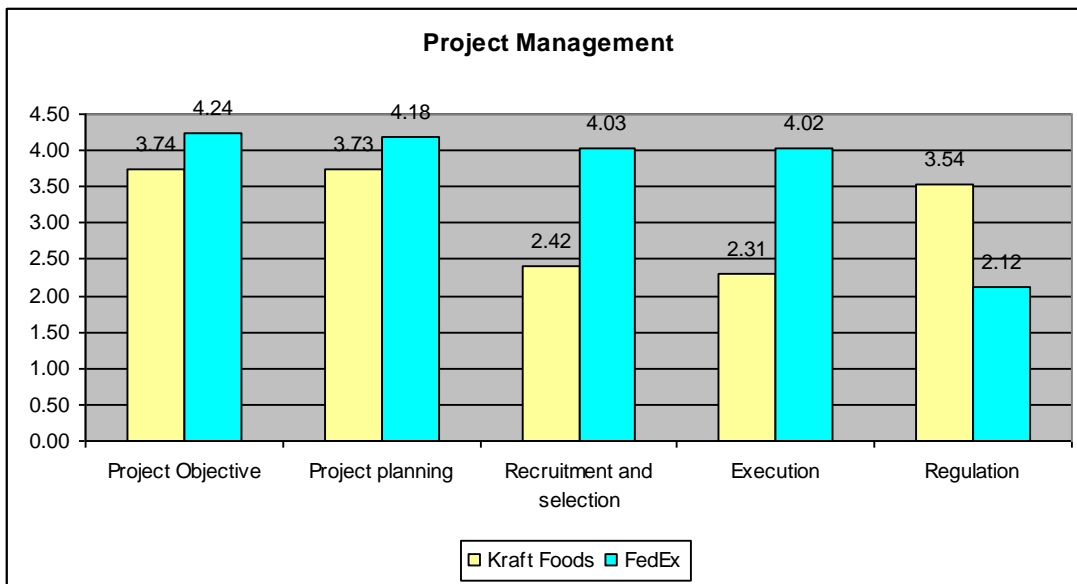


Figure 4.17 Project Management comparison.

4.5.2. Analysis on Project Objective comparison

Comparison of the Project Objective group reveals that both enterprises are similar.

Kraft Foods had higher scores in two items. These items are:

1. Proper clarity on the project details and
2. Team objectives in line with the project objectives.

FedEx had higher scores in three items. These items are as follows:

1. Individual roles regarding project responsibilities clearly defined,
2. The objectives clearly and strictly applicable to the context and
3. Team responsibilities clearly defined.

In the 'team responsibilities' item Kraft Foods was only rated at 1.85 whereas FedEx got 4.55. This constitutes a difference of 2.7 points on the five point scale. The details are shown in below.

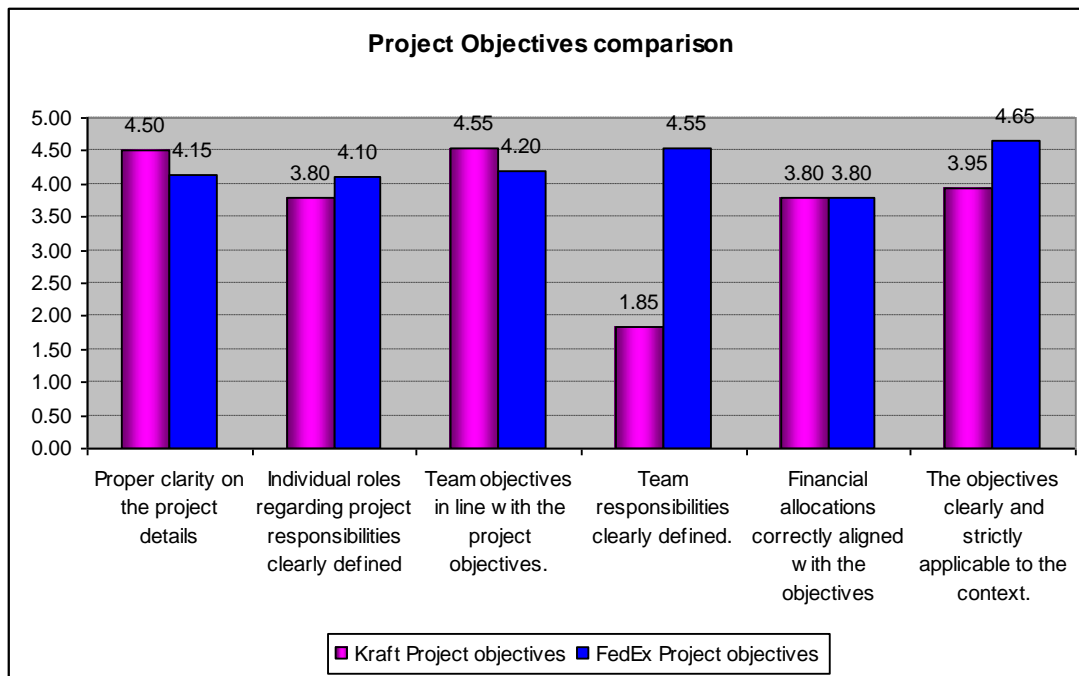


Figure 4.18 Project Objective comparison.

4.5.3. Analysis on Project Planning comparison

There are few differences between the two enterprises across most of the items, therefore it may be fair to assert they are similar in their project planning; however, there is a major contrast between the two enterprises on two of the items. These items are as follows:

1. *'Project schedules were easy'*
2. *'Task allotment planning was perfect'*

In *'Project schedules were easy'* Kraft Foods had a mean of 2.00 while FedEx was 4.10. In *'Task allotment planning was perfect'* Kraft Foods received 2.30 and FedEx respondents 4.35. This gives just over a 2 point difference of 2.10 and 2.05 respectively. The details can be seen in Figure 4.19 below.

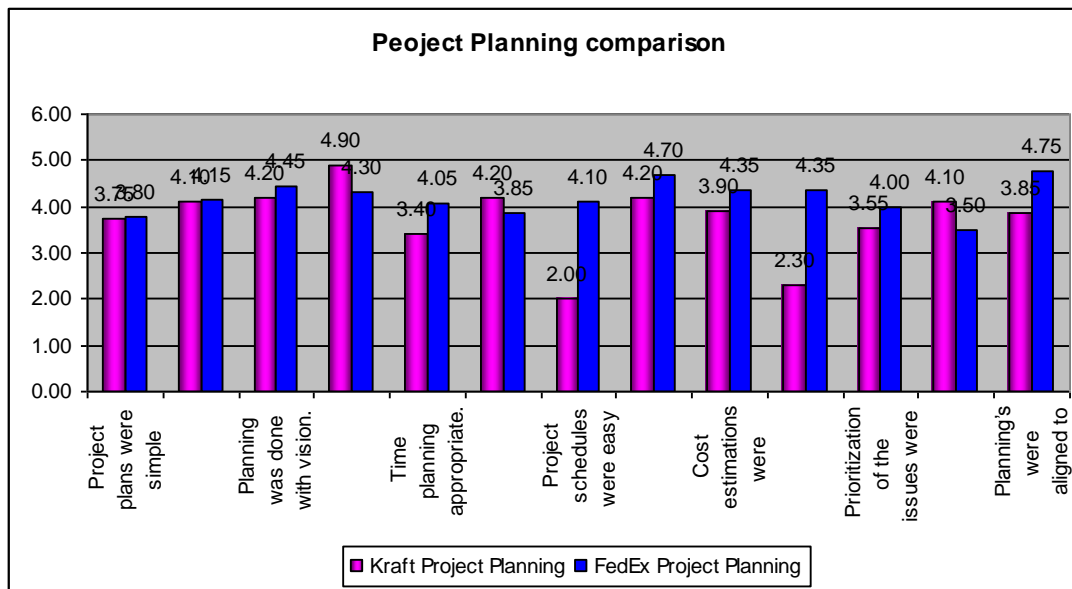


Figure 4.19 Project Planning comparison.

4.5.4. Analysis on Recruitment and Selection comparison

This group shows a large gap between the two enterprises. In almost all of the items FedEx has much higher mean values compared to Kraft Foods. There are exceptions in just two of the items. These are as follows:

1. *'Top management was selected based on merit expertise and experience,'*
2. *'Top management with risk handling skills.'*

In these items Kraft Foods had a higher mean value. In *'Top management was selected based on merit expertise and experience'* Kraft Foods got an average of 4.00 while FedEx received 3.90. *'In Top management with risk handling skills'* Kraft Foods had 3.75 as the mean value while FedEx got 2.20 only. The differences are slight in the first instance (0.10) but are larger for the second item (1.25). The details of this are as shown in Figure 4.20 below.

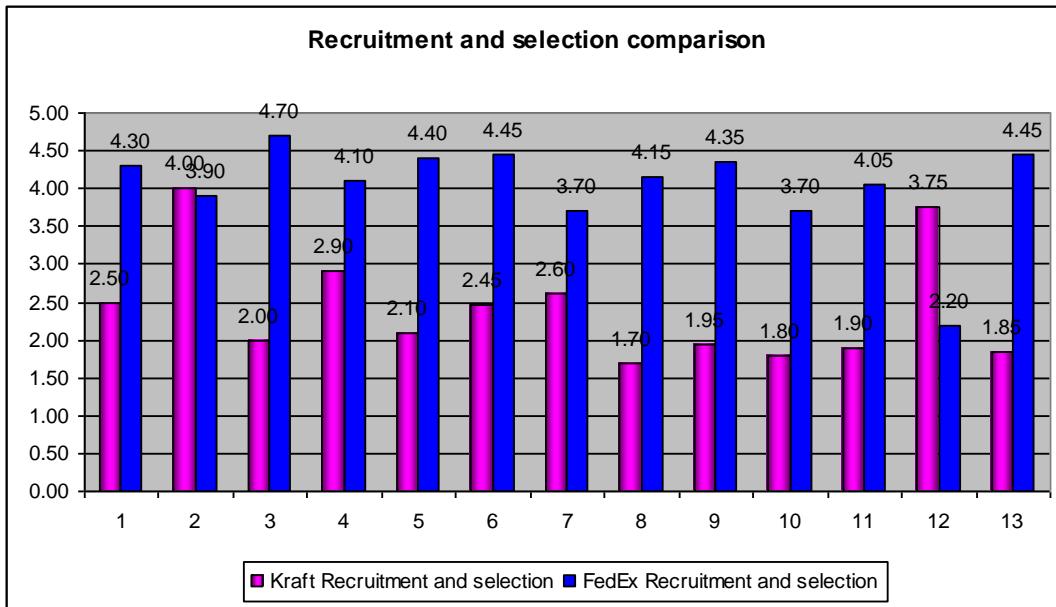


Figure 4.20 Recruitment and Selection comparison.

4.5.5. Analysis on Execution comparison

The researcher investigated 13 items in this group. FedEx did much better than Kraft in almost all the items except for one item.

In the item *Rectifications made were adequate* Kraft got 3.85 while FedEx secured 1.95. Other details are as shown in Figure 4.21 below.

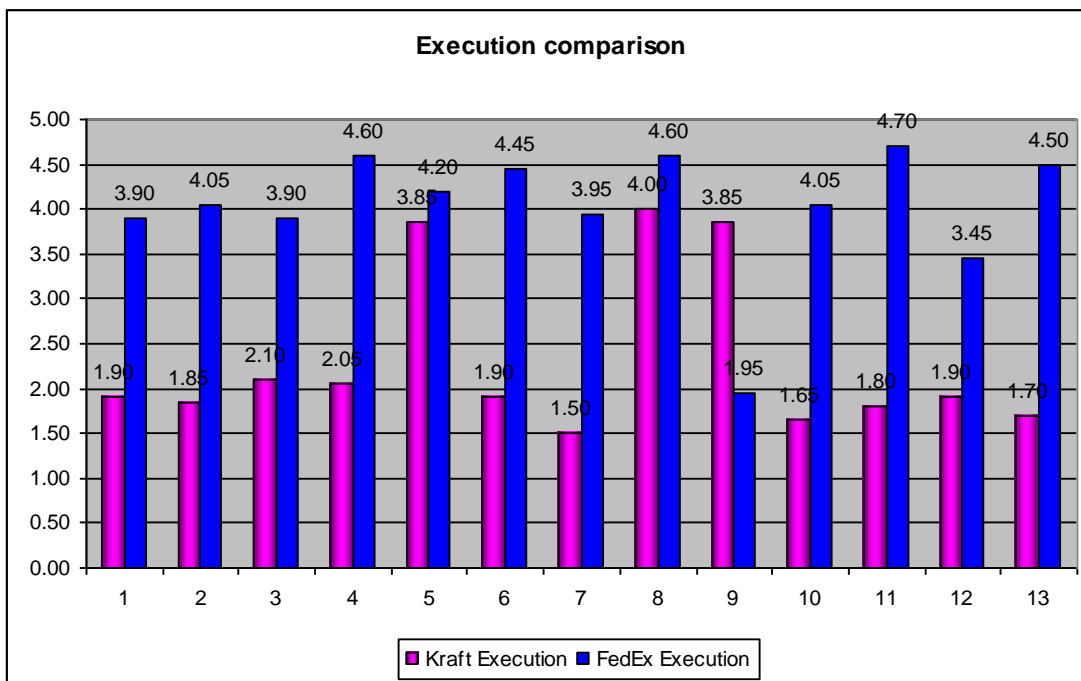


Figure 4.21 Execution comparison.

4.5.6. Analysis on Regulation comparison

There were eleven items investigated in this group. In this group Kraft out performed FedEx in ten items. The one item which FedEx did better than Kraft is *Needed changes were implemented in the right time* where Kraft got 1.85 whereas FedEx got 4.55. This is reflected in Figure 4.22 below.

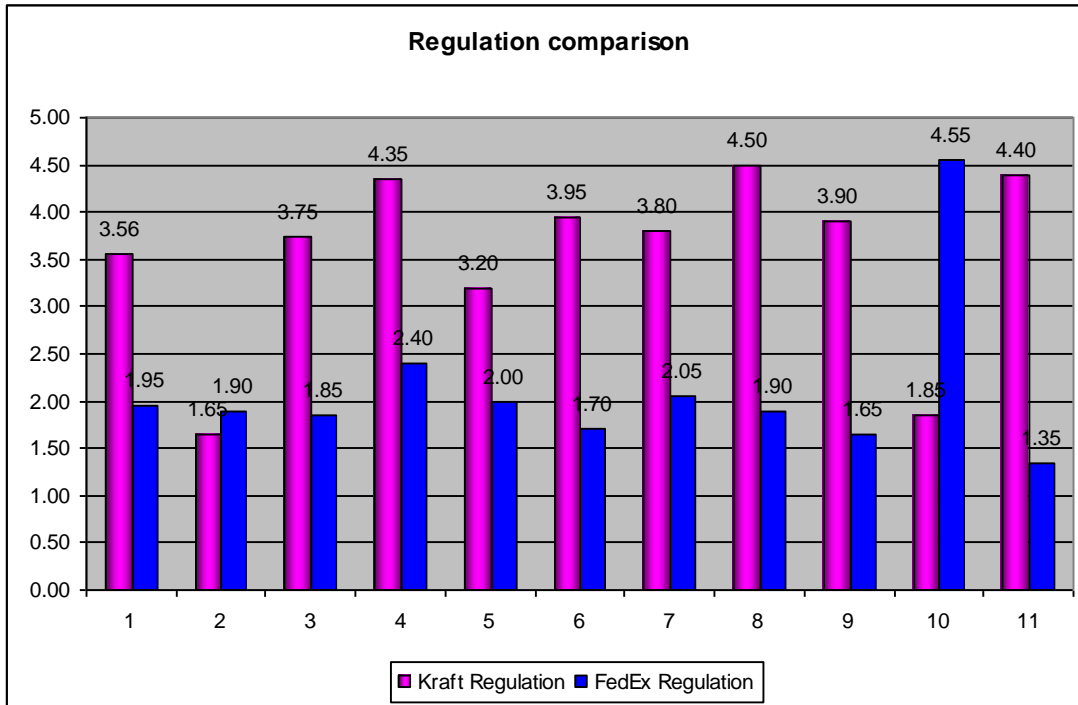


Figure 4.22 Regulation comparison.

4.6. In-depth Analysis of Recruitment and Selection

There were 13 items studied in this group. The items with top most mean values are selected for discussion here.

The highest was *Top management was selected based on merit expertise and experience* which got 3.95. Next was *Proper information on the responsibilities and tasks were given* which attracted 3.50. After these items two items shared the same mean value of 3.40. These items are *Top Project managers were selected based on merit* and *There were no problems in team functioning*. The details are as shown in Figure 4.23 below.

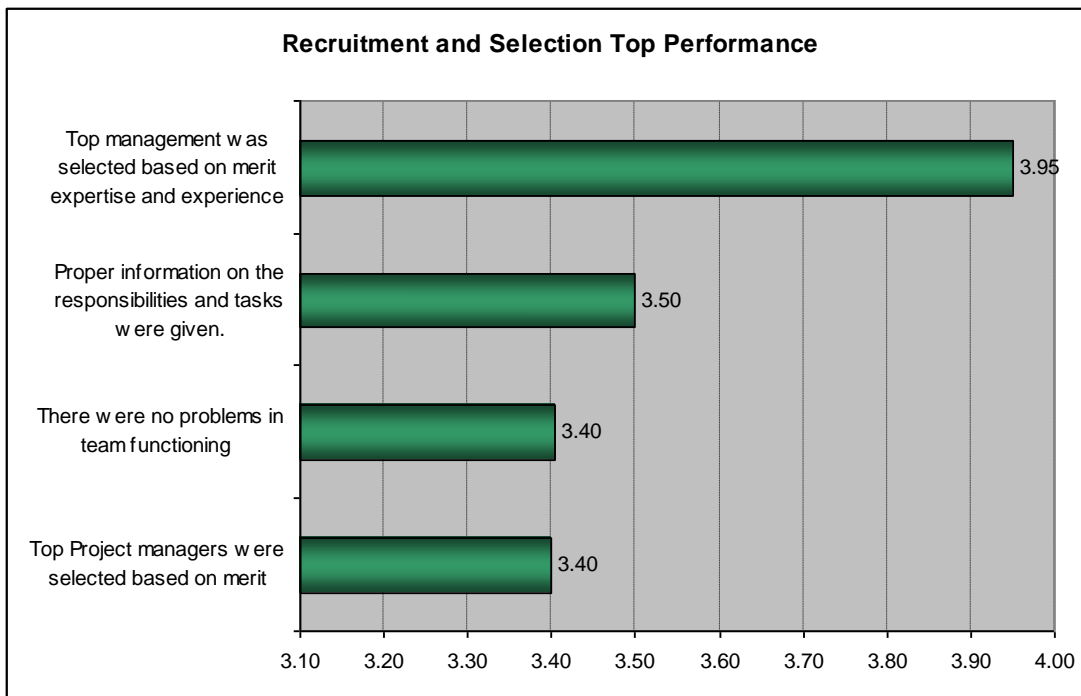


Figure 4.23 Recruitment and Selection Top Performance.

Next, the researcher identified the items with the lowest mean values. Four items were selected for discussion out of the thirteen items in this group.

Highly organized and systematic way of team selection and skill sets obtained a mean value of 2.75. This is followed by *Proper training for equipping the teams to perform well as a unit* which attracted a mean value of 2.93. This is followed by two items which got the same mean value of 2.98. The items were *Project leader possess the required managerial and leadership skills* and *Top management with risk handling skills*. The details are highlighted in Figure 4.24 below.

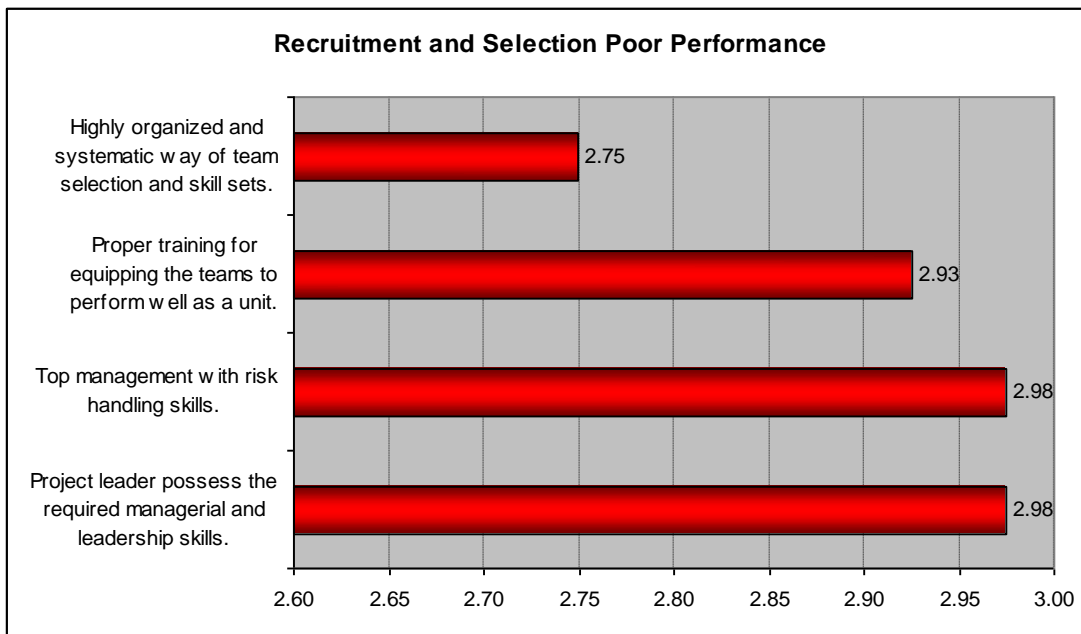


Figure 4.24 Recruitment and Selection poor performance

4.7. T-test

4.7.1. Kraft Foods Company data

The detailed results from the independent t-test on Kraft Foods Company data using the SPSS package shows that there is no variance score difference between the project managers and team members responses for significance at 1% level.

However, there are six variance score that are significant at 5% level.

- 1-5: Financial allocations correctly aligned with project objective
- 2-2: Project plans were rightly applicable to the context of the company.
- 2-3: Planning was done with vision
- 3-7: CFT conflicts were managed effectively
- 4-12: Top management helped members to perform their responsibilities at ease.
- 5-11: Perfect control mechanisms are in place.

The mean score differences for the above six elements are not significant at 5 % level, which indicates that responses of project managers and team members are almost same and it is worthy to consider results of the team members and project managers as one sample.

4.7.2. FedEx Corporation data

T-test analysis on FedEx Corporation data using the SPSS package shows that there is also no variance score difference between the project managers and team members' responses for significance at 1% level.

However, there are eight variance score that are significant at 5% level.

- 1-5: Financial allocations correctly aligned with project objective
- 2-1: Project plans were simple
- 2-12: Resource allocation was appropriate
- 3-7: CFT conflicts were managed effectively
- 3-12: Top management with risk handling skills.
- 4-9: Rectifications made were adequate.
- 5-1: The issues encountered were rightly controlled.
- 5-9: Needed changes were implemented in the right time.
- 5-11: Perfect control mechanisms are in place.

The mean score differences for the above eight elements are not significant at 5 % level, which indicates that responses of project managers and team members are almost same and it is worthy to consider results of the team members and project managers as one sample.

4.8. Cronbach-Alpha Reliability Test

Table 4.2 Cronbach-Alpha Values for Kraft Foods Company describes Cronbach-Alpha value of the 56 questions posed in five categories being investigated. Data from both Kraft Foods Company and FedEx Corporation indicates that data for question numbers 2-3, 3-2, and 3-3 are highly reliable test items as compared to other test items.

The test items through question numbers 1-1, 1-5, 2-1, 2-4 to 2-8, 2-12, 2-13, 3-4 to 3-13, 4-2, 4-3, 4-4, 4-8, 4-11, 4-12, 4-13, 5-6, and 5-10 have cronbach-alpha value between 0.6 and 0.8. This indicates that competencies have reasonable level of reliability and can be improved in future researches.

The remaining questions which have cronbach-alpha value of less than 0.6, it illustrates that in future researches the test items are to be redesigned based in order to achieve more reliable responses.

Table 4.2 Cronbach-Alpha Values for Kraft Foods Company & FedEx Corporation

Project Management factors		Kraft Foods Cronbach-Alpha Value	FedEx Cronbach-Alpha Value
Project Objective	1. Proper clarity on the project details	0.364	0.375
	2. Individual roles regarding project responsibilities clearly defined	0.255	0.263
	3. Team responsibilities in line with the project objectives.	0.626	0.601
	4. Team objectives clearly defined.	0.452	0.463
	5. Financial allocations correctly aligned with the objectives	0.746	0.732
	6. The objectives clearly and strictly fulfilled.	0.47	0.412
Project Planning	1. Project plans were simple	0.66	0.59
	2. Project plans were rightly applicable to the context of the company.	0.45	0.49
	3. Planning was done with vision.	0.81	0.815
	4. Proper planning committee was constituted.	0.67	0.685
	5. Time planning appropriate.	0.76	0.755
	6. Project schedules were clear	0.75	0.742
	7. Project schedules were easy to follow.	0.72	0.751
	8. Estimations on the scope of the project appropriate.	0.691	0.685
	9. Cost estimations were appropriate.	0.568	0.546
	10. Task allotment planning was perfect	0.564	0.561
	11. Prioritization of the issues were perfect	0.444	0.451
	12. Resource allocation was appropriate	0.634	0.629
	13. Planning's were aligned to the aims and objectives of the project	0.654	0.71
Recruitment & Selection	1. Top Project managers were selected based on merit	0.674	0.681
	2. Top management was selected based on expertise and experience	0.821	0.815
	3. Competency was given top priority in selection processes.	0.811	0.819
	4. Proper information on the responsibilities and tasks were given.	0.754	0.756
	5. Team activities were promoted.	0.653	0.712
	6. There were no problems in team functioning	0.623	0.631
	7. CFT conflicts were managed effectively	0.795	0.791
	8. Proper training for equipping the teams to perform well as a unit.	0.756	0.743
	9. Selected individuals possessed the required skill sets.	0.654	0.649
	10. Highly organized and systematic way of team selection.	0.667	0.661
	11. Project leader possess the required managerial and leadership skills.	0.601	0.61
	12. Top management with risk handling skills.	0.595	0.612
	13. Criteria for selection was good.	0.745	0.739
Execution	1. Right allocation of jobs and responsibilities.	0.545	0.546
	2. Proper communication within the team	0.774	0.772
	3. Coordination between teams adequate	0.675	0.671
	4. Cooperation within teams adequate.	0.654	0.651
	5. Individual performance in line with the project progress.	0.456	0.461
	6. Growth centric team performance.	0.344	0.351
	7. Project progress rightly conveyed to the team.	0.534	0.521
	8. Desired quality was acquired throughout the project.	0.753	0.746
	9. Rectifications made were adequate.	0.343	0.339

	10. The teams were highly productive	0.565	0.561
	11. Due priority given for training in the project agenda.	0.631	0.629
	12. Top management helped members to perform their responsibilities at ease.	0.622	0.617
	13. Perfect execution of the project processes	0.749	0.711
Regulation	1. The issues encountered were rightly controlled.	0.45	0.39
	2. Structural and organizational problems were controlled effectively.	0.389	0.45
	3. No hurdles or blocks in the project execution were left unattended.	0.367	0.399
	4. Effective in controlling and regulating risks	0.486	0.512
	5. Effective in controlling all problems that occur in the course of the project	0.567	0.589
	6. Rightly responded to unexpected outcomes.	0.645	0.677
	7. Valid techniques were employed for solving problems.	0.562	0.545
	8. Effective in managing crisis situations	0.348	0.412
	9. Needed changes were implemented in the right time.	0.49	0.413
	10. Proper efforts for managing the human resource	0.657	0.634
	11. Perfect control mechanisms are in place.	0.423	0.411

The following figures graphically compare the Cronbach-Alpha values of Kraft Foods Company and FedEx data.

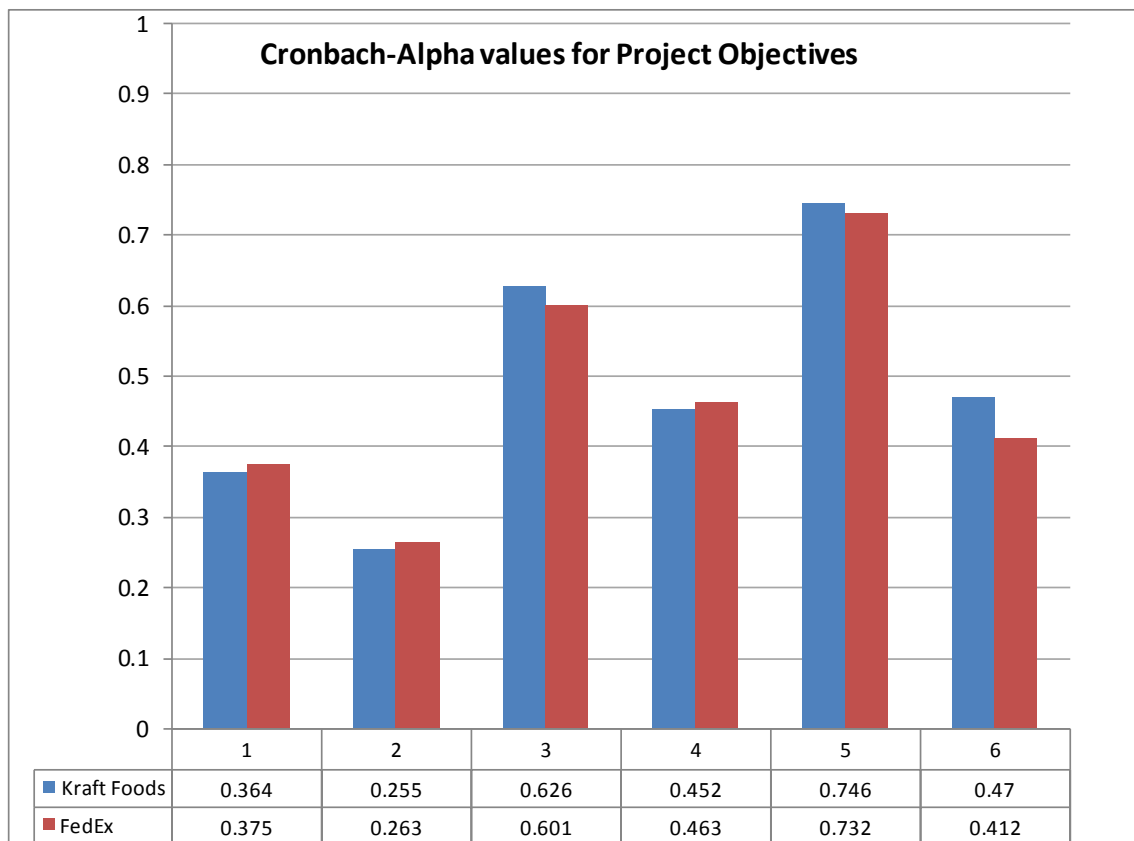


Figure 4.25 Cronbach-Alpha values for Project Objectives

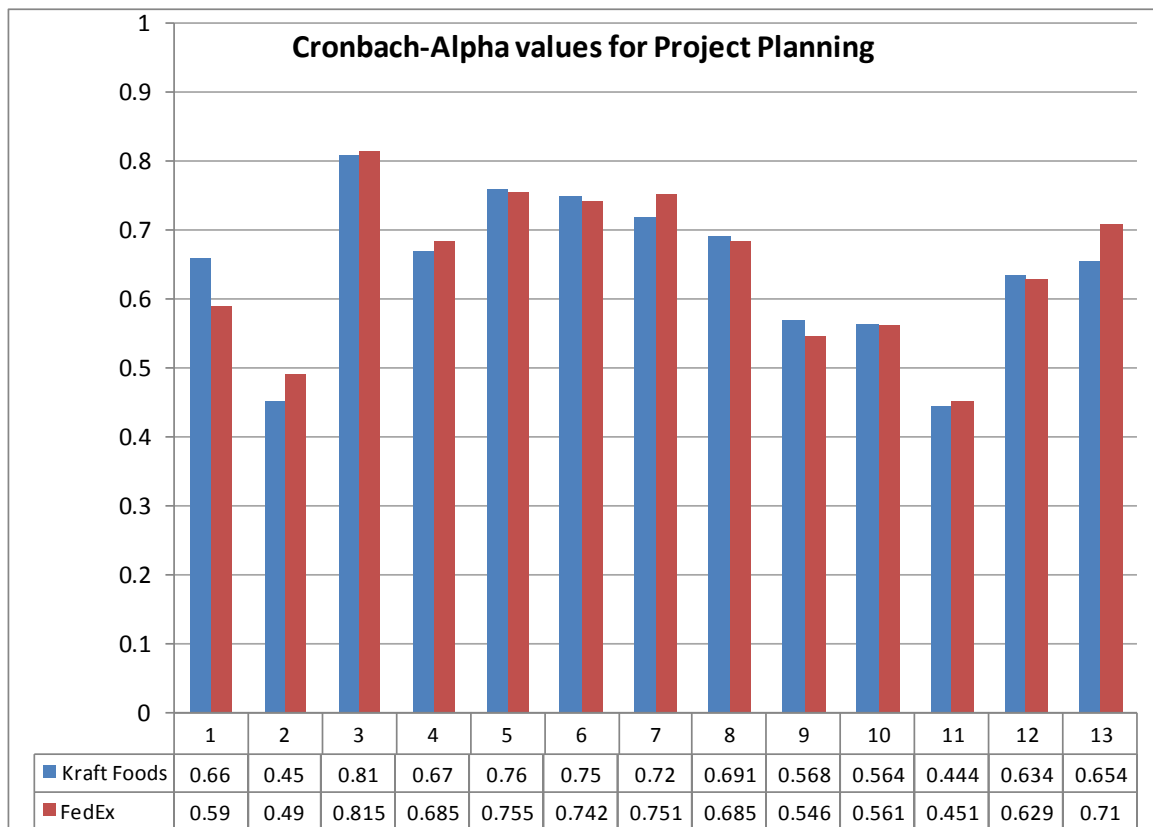


Figure 4.26 Cronbach-Alpha values for Project Planning

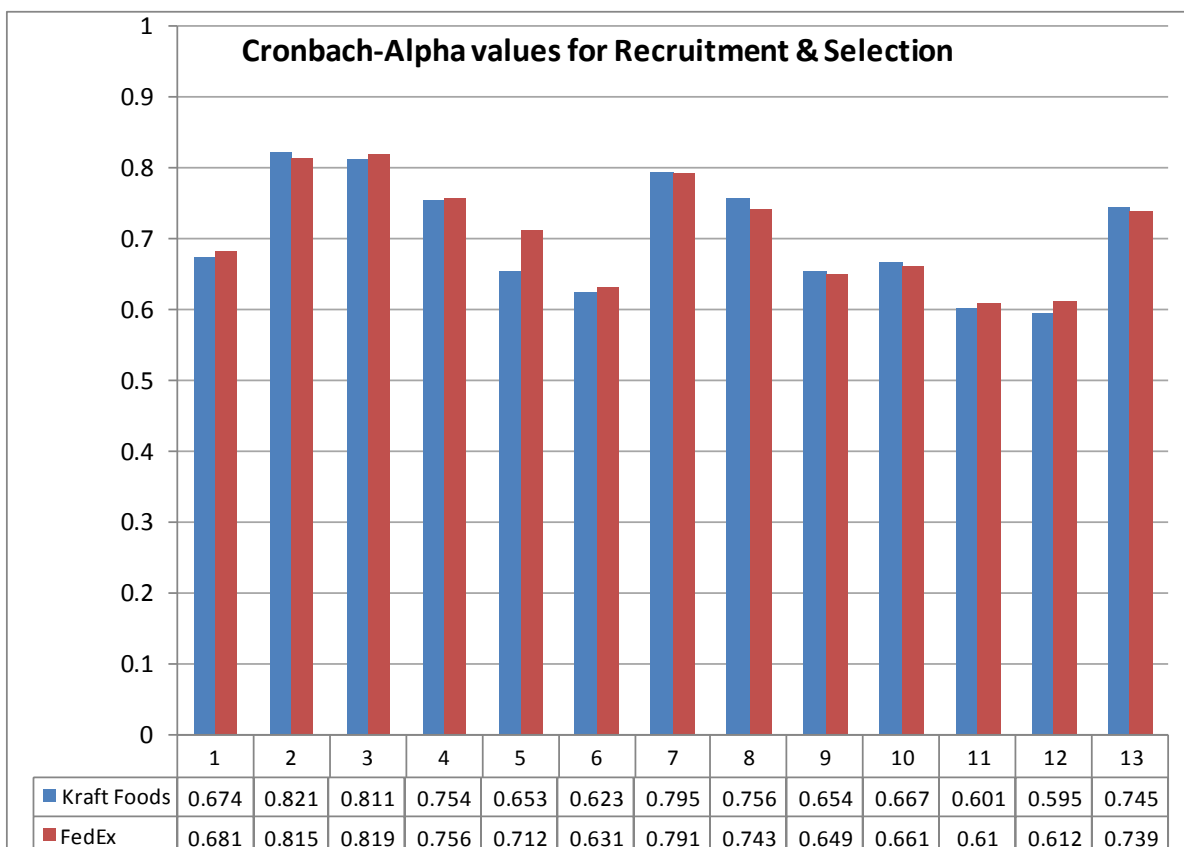


Figure 4.27 Cronbach-Alpha values for Recruitment & Selection

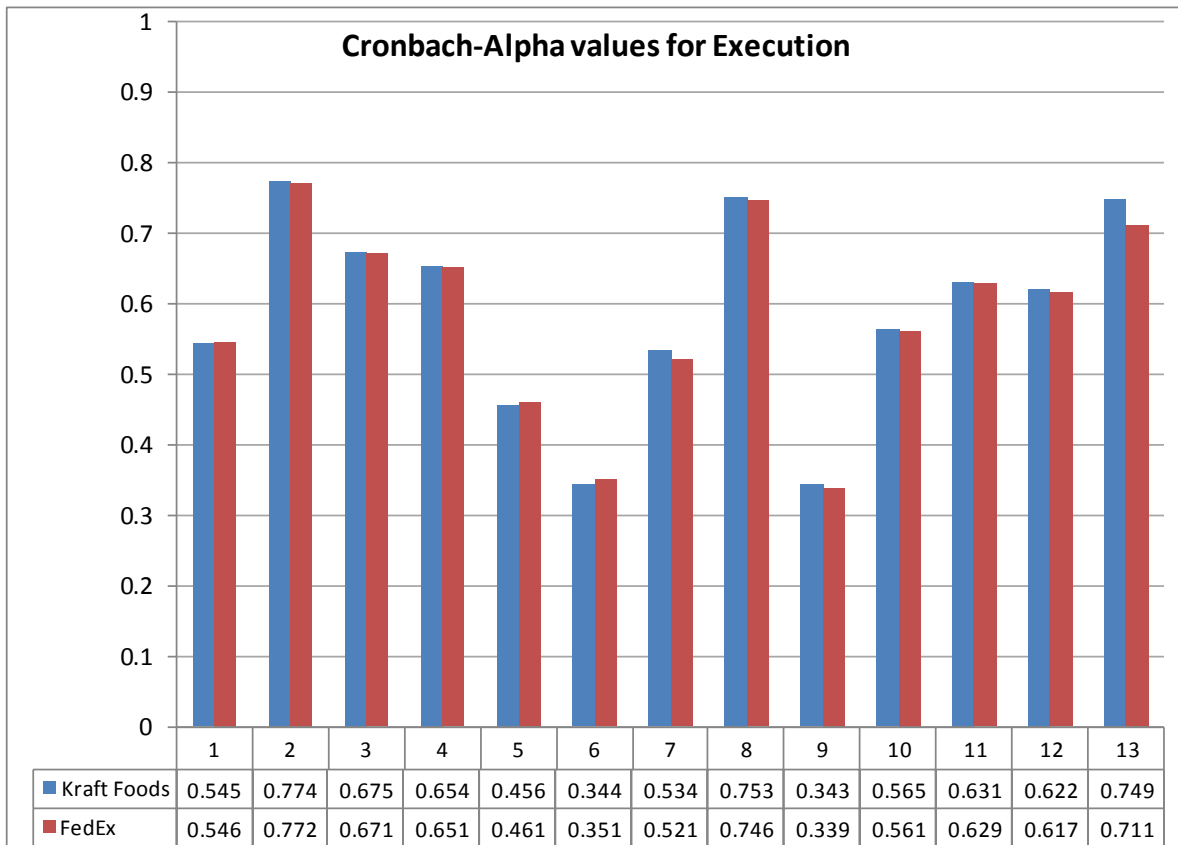


Figure 4.28 Cronbach-Alpha values for Execution

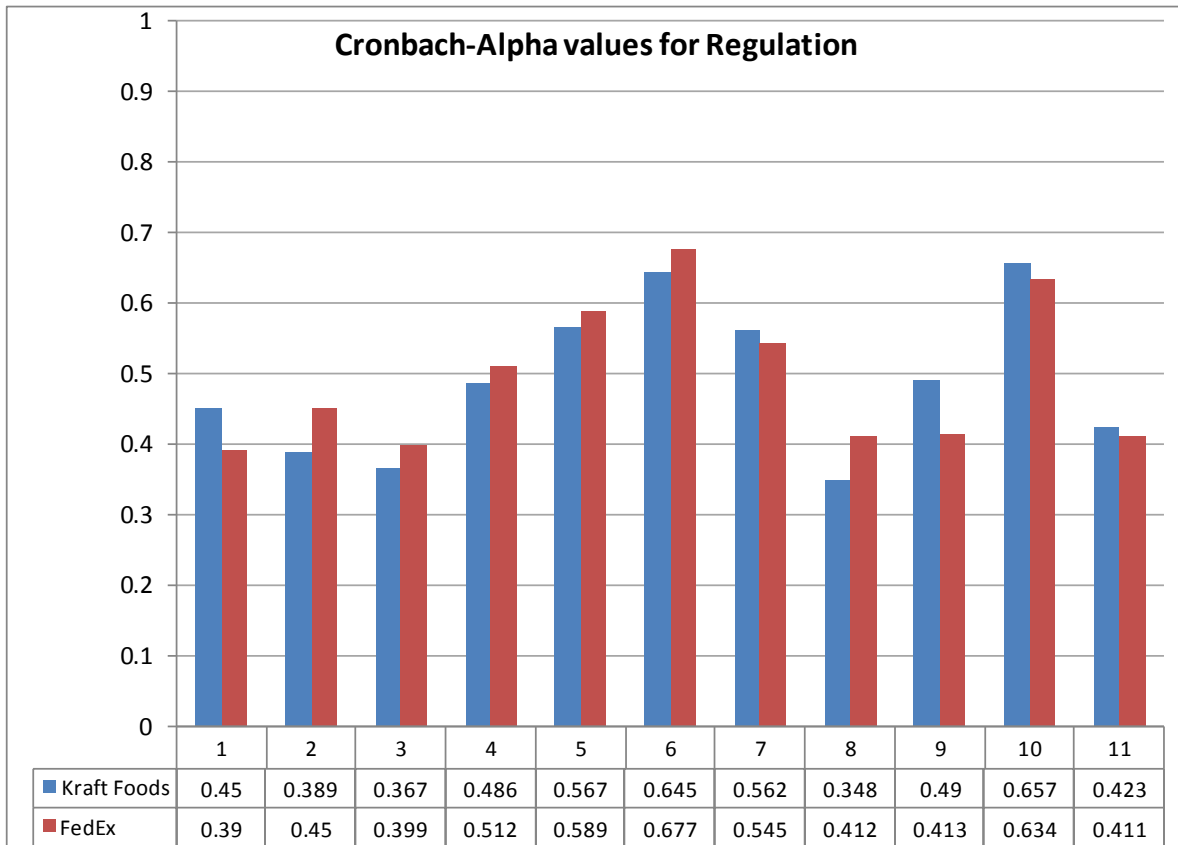


Figure 4.29 Cronbach-Alpha values for Regulation

4.9. Chapter Summary

In summary, the results indicated that in Kraft Foods Company following items needs improvement,

- Project progress rightly conveyed to the team.
- Perfect execution of the project processes
- Proper communication within the team
- The teams were highly productive
- Team responsibilities clearly defined.
- Highly organised and systematic way of team selection skill
- Due priority given for training in the project agenda.
- Proper training for equipping the teams to perform well as a unit.
- Criteria for selection were good.
- Proper efforts for managing the human resource
- Structural and organisational problems were controlled effectively.

Analysis of data collected from FedEx indicates that FedEx Corporation will require improvements in the following items.

- Perfect control mechanisms are in place.
- The issues encountered were rightly controlled.
- Needed changes were implemented in the right time.
- Effective in controlling all problems that occur in the course of the project
- Rightly responded to unexpected outcomes.
- Valid techniques were employed for solving problems.
- Rectifications made were adequate.
- Effective in managing crisis situations
- No hurdles or blocks in the project execution were left unattended.
- Structural and organisational problems were controlled effectively.

DISCUSSION

5.1. Introduction

Based on the research categories that have been developed, the researcher has studied this phenomenon in both FedEx and Kraft Foods and sought to understand how they are seen from different perspectives in the company. The findings also should be discussed and compared to the theories in literature. The empirical results support the identified propositions developed based on the literature and both companies have well developed mechanisms for talent management and identification of potential. The findings from the empirical data provide an overview of the project management processes in FedEx and Kraft Foods and in this chapter the researcher discusses how FedEx and Kraft Foods handles project management in relation to the key competency recruitment and then will offer recommendations to solve the problems identified in the companies and likewise contribute to knowledge of problems based in the existing literature.

5.2. Groups investigated

The study is divided into five different groups in relation to project management among the enterprises in the UAE. The five groups of investigation in this study are as follows:

1. Project Objective
2. Project Planning
3. Recruitment and Selection
4. Execution
5. Regulation

The following subtitles describe the themes discussed during the interviews. The most visible opinions of the respondents have been explained in the text and will be compared to the findings in the literature.

5.3. Research Questions

At the beginning of this study the researcher raised three research questions to be considered. Now at the completion of this study the researcher is able to provide some answers to the questions as follows.

5.3.1. Research Question 1

How effective are the project management related processes and the strategies (with special reference to recruitment and selection) adopted?

The major phases in project management include “initiation, planning and closure” (Williams, 2007: 3). The planning phase involves devising strategies for action; their execution is based on the specifications and these steps are controlled and regulated by the performance of each of the processes (time dependent and results dependent) and remedies and alterations are made when necessary. Therefore, in order to regulate the various project processes there is an increased need for constantly analysing these variables and maintaining the balance. Any change in one function will automatically impact on the other.

The success of projects depends a lot on sticking to the proposed steps for implementation and progress and the team need to make a conscious effort to correct each step in the process before proceeding forwards. For the successful running of projects the key components are the team members who are involved in the actual processes.

Although the management at Kraft has developed specific human resource management strategies based on motivating the employee to improved performances especially with regard to their project responsibilities. But based on Figure 4.17 of this study, the research study demonstrates that Kraft Foods is not effectively using Recruitment and Selection in their project management. The mean value is only a low 2.42 or 48.4% (on a scale of 0-100%) which is below average

By contrast, in FedEx this recruitment and selection group is used more effectively in project management as the mean score of 4.03 indicates. This is equivalent to 80.6%. As a general guide the overall mean for recruitment and selection indicates a low 2.99 mean value, which translates to 59.8%. Based on these figures it can be concluded that these two and possibly other enterprises operating within the UAE are not effectively using the recruitment and selection group items in their project management.

5.3.2. Research Question 2

Analyze the concept of competency, identifying what deficiencies and resultant gap in project management occurs, in recruitment and selection and the functioning of CFTs?

Most projects require a wide variety of skills from its team members to complete the work involved. Therefore, a project manager is most likely to work with a group of people from different functional backgrounds and capabilities. These groups with different categories of people from a wide spectrum of fields form the CFT (BNet, 2007).

It is the project manager's job to bring the team members together and mould them into an effective group that functions to achieve the overall goals of the project. But bringing and managing CFTs can often be time-consuming and difficult. However, in order to maximise the functional capability as a team, the project manager can capitalize based on understanding the common and varied traits of his team members (BNet, 2007).

Figure 4.20 in this dissertation indicates that Kraft Foods has a mean value of 2.0 while FedEx has a mean value of 4.7 for the 'Recruitment and Selection' item. This can be represented as 40% and 94% respectively. The high score in FedEx Corporation results can be because FedEx have formulated highly specialised teams for managing the projects and have developed a highly functional and flexible organisational structure in order to ensure smooth flow of information, resources and knowledge along the system. However, some of the exclusive technology related projects were outsourced to experts in the field in order to maximise the efficiency of the adopted technology and its application in the company's context.

The overall mean value for competency in this study is 3.35 which translate to 67%. This indicates that competency in recruitment and selection is not highly emphasised in the case organisations and possibly other UAE enterprises as well.

5.3.3. Research Question 3

Assess the extent that resource allocation was in line with the project goals?

For ensuring the success of projects with regard to maximising the functional capability there needs to be a proper balance between the various factors like the time, cost, quality and scope. These factors remain in perfect equilibrium, when proper resource allocation is maintained in projects (Williams, 2007).

Resources allocations plays a vital role in projects, because they need to be handled by experienced and expert managers for developing as well as maintaining the necessary skill sets in the team. Specialised and highly focused training sessions need to be introduced for equipping the team with the necessary abilities for performing in their new groups as well as with different individual responsibilities. Introducing flawless and fruitful reward systems are necessary for motivating the employees to perform their best and be highly productive individuals so that they are assets to the projects and contribute to their success.

The analysis conducted in earlier chapter indicates that Kraft Foods had a mean of score 4.1 while FedEx had a mean value of 3.5 in terms of allocation of resources, which is in line the project goals. This indicates that the resource allocation was in line with the project goals for 82% in Kraft Foods and 70% in FedEx.

This good score for Kraft Foods is because product improvements and product developments in the Company are implemented through a series of consultations with experts or “worldwide councils” in the category and the company have specialised and competent “category engineers” specifically recruited for carrying out this type of complex and knowledge intensive functions (Burja, 2007: 1)

The overall mean value for resource allocation that is consistent with the project goals in this study is 3.80 which translate to 76%. This shows that resource allocation is just within the three quarter mark among these two UAE enterprises.

5.4. Discussion of Main Findings

5.4.1. Project Objective

Overall organisations in the UAE have a 3.99 average mean value for their project objective which translates to 79.8%. The details for the two organisations studied are as follows:

5.4.1.1. Kraft Foods

Kraft Foods scored the highest mean for a single group in project objective out of the 5 groups studied in this investigation. The mean value was 3.74 which can be represented as constituting 74.8%.

5.4.1.2. FedEx

FedEx scored the highest mean value in this group. The mean was 4.24 which translates to 84.8%.

5.4.2. Project Planning

The UAE organisations scored a mean of 3.96, which in relation to the percentage scale works out to be 79.2 %.

5.4.2.1. Kraft Foods

The mean for this group was 3.73 which can be represented as 74.6%

5.4.2.2. FedEx

The mean for this group was 4.18 which represents 83.6%.

5.4.3. Recruitment and Selection

Recruitment and Selection for the organisations in UAE transpires to be a mean of 2.99 or 59.8% only. The detail of the study is presented below:

5.4.3.1. Kraft Foods

This group attracted a low mean of 2.42. This in terms of percentage is equivalent to 48.4%.

5.4.3.2. FedEx

This group of items obtained a 4.03 mean value; equivalent to 80.6% in terms of the percentage scale.

5.4.4. Execution

5.4.4.1. Kraft Foods

This group produced the lowest mean value for Kraft Foods with a mean of 2.31, which when translated to percentage it amounts to 46.2%.

5.4.4.2. FedEx

This group attracted 4.02 mean value which is equivalent to 80.4%.

5.4.5. Regulation

The two UAE case organisations do not seem to have a high regard for the regulation items as indicated by a mean result of 2.82 or 56% in overall.

5.4.5.1. Kraft Foods

The mean value for this group is 3.54% which amounts to 70.8%.

5.4.5.2. FedEx

This was the group with the lowest mean value with a mean of 2.12. This is equivalent to 42.4% in terms of representation on the percentage scale.

5.5. Implications

5.5.1.1. Kraft Foods

Kraft Foods has three groups with an average of around 75%. For these three groups the average ranges from 70.8% to 74.8%.

Two groups have an average of less than 50%. The Recruitment and Selection and Execution groups attracted an average of 2.42 and 2.31 respectively. This is translated to 48.4% and 46.2%.

It is clear that recruitment and selection has a very low performance indicator. This suggests that the organisation has insufficient optimisation in project management when it comes to recruitment and selection.

5.5.1.2. FedEx

The overall findings indicate that FedEx in general has a high mean in four of the groups. The average mean ranges from 4.02 to 4.24. In other words the percentage ranges from 80.4% to 84.8%.

Regulation seems to be creating a concern for FedEx as the mean obtained for this group is very low with an average of 2.12 or equivalent to 42.4%.

This might be interpreted as saying that while some of the aspects of project management are well managed by the organisational management, regulation is not well managed and there is a possibility that the organisation is not paying high regard to the issues in relation to regulation.

5.6. Chapter Summary

The researcher discussed in depth all of the relevant findings and major points based on the responses obtained through the questionnaire survey distributed in this study. At the end of the twin case study the researcher is able to summarise the position that the findings of this study establishes that Recruitment and Selection in project management processes are not optimised and that there is considerable room for improvement in this area of project management.

CONCLUSION AND RECOMMENDATIONS

6.1. Introduction

The chapter reflects on and evaluates the essential findings of this study and includes conclusions, research contributions and limitations, suggestions for future research, and recommendations.

6.2. Conclusion

In this chapter, the conclusion is drawn from the empirical findings arising from the study and analysis of data in the previous chapter in order to answer the research questions. Finally, some recommendations for the enterprises for improvement are presented.

This Master's thesis has introduced an approach to project management in relation to competency based recruitment in two specific businesses: Fed Ex and Kraft Foods. They have been assessed and discussed in line with the underlying research topic:

Competency based recruitment and selection in project management processes among United Arab Emirates (UAE) enterprises

The presentation of the empirical findings in the previous chapter were obtained from forty questionnaire survey returns and have provided information about the Competence-based Recruitment and Selection and project management processes in the aforementioned specific businesses and industries. The most important tools have been described and investigated and differences among the various levels in the organisation have been discussed. These results have further implications for how to manage and adjust project management and competency based recruitment selection in the future. Also, project management services have been evaluated as one mechanism used for competency based recruitment.

Based on the empirical findings discussed in the previous chapters the researcher is able to conclude that in Kraft Foods Company two groups are below average or 50% mark, which are 'Recruitment and Selection' and 'Execution'. In FedEx Corporation the 'Regulation' group is found to be the weakest of the five project management groups.

6.3. Contribution

Towards the end of this investigation the researcher is able to systematically identify the weakness of both of the organisations in terms of competency based recruitment and selection in project management among the two United Arab Emirates based case study divisional enterprises.

The analyses conducted on the different groups of topics investigated allow a means for the researcher to rank the groups in an order. The groups with low mean scores are identified and the researcher recommends that Improvements in the selected groups should be made. Their suggested implementation is specified in more detail in the recommendation section at the end of this dissertation.

6.4. Limitations

This investigation was part of a Masters thesis for the MSc in Project Management, and as such there were limitations as to time and resources. The researcher believes that with more time and resources the researcher would have been able to conduct a more detailed study.

6.4.1. Data collection

The overall objective of this study could have been better represented with feedback from many different organisations obtained. In fact the responses are obtained from two organisations only. This case study approach has some compensating qualities such as it enables more in-depth comparison across a range of organisational operations and activities. Hence, Data sources can be more diversified and gathered from many other enterprise resources including all industry sectors in the UAE.

6.4.2. Methodology

The research has conducted a comparison among two locally operating enterprises only. A better analysis could have ensued if the researcher had conducted the investigation among a larger number of enterprises in UAE. An advantage of the approach on the other hand is that the case study companies are well-known multinational enterprises, and the ways that they adapt and adjust to the UAE political conditions, business infrastructure and economic markets are of interest.

The results obtained from the two enterprises are deemed to be to some extent a potential reflection of common trends in all enterprises in the UAE. However, the extent that these results can meaningfully be generalised to other organisations is a matter for future research.

The researcher did not have much access to the general private enterprises. A wider access to the private enterprises would have enabled the researcher to have secured a better result which may lead to a more accurate reflection of the general enterprises in overall.

6.5. Suggestions for future research

It nevertheless may be interesting to make a comparison between the empirical findings of this thesis and future research results in order to determine differences in the respondents' evaluation after they have been questioned using several research instruments.

A suggestion for future study is concerned with taking a broader range of perspectives other than solely those of HR managers and line managers.

Another suggestion is to do a similar research investigation within the same field but in other companies or within other lines of business and then compare the project management processes and mechanisms within the different supply chains.

An evaluation conducted on the right amount of talent management required in a company and investigation as to whether there is an optimal level are interesting questions to pose for future research. How much can be focused on talent management before it takes over too much time and non-leads to productive work force activity?

Other studies could include an investigation of the topics of this dissertation assessing whether or not they are really a task for line management and asking what would be the consequences of having a separate functional management responsibility for strategy and talent management?

A future research study could analyse the tools and services of an enterprise and try to develop the tools and services for keeping up-to-date with the pace of the changing business environment.

Taking it further one interesting task would be to develop a Human Resources Due Diligence Team, to obtain a fair view of the Target Company (company to be acquired) as a service to their client before an acquisition. This means, analysing human capital, organisational culture and the integration in the company that their client is about to buy. This is necessary to understand so that the buyer can decide if he wants to continue with the transaction, assess the likely costs to manage the risks and gather information to best determine how the target company should be headed when the purchase is completed. After the acquisition has gone through, there will also be a need to appoint new services. In this stage the company should analyse the possible gaps that could be in skills and work to fill them as soon as possible

Another research study applicable for the services sector could be to analyse whether it is likely that managers will leave their clients' enterprises. If this is the case, an analysis should be made on the labour market opportunities to hire new managers, the cost of it and how quickly such a process can proceed.

Due to the current world economic recession, it would be interesting to see how the importance of HR Management services are affected by the global, regional and local situations as companies must make cuts in human capital to see how sustainable these reduced investments in talent management become over the short, mid, and long term.

6.6. Recommendations

The researcher will present recommendations for both Kraft Foods and FedEx in separate sections to facilitate making specific recommendations to each enterprise. This it is hoped by the researcher will also encourage a step-by-step implementation by both the enterprises. The implementation of the proposed recommendations can lead to better project management as a whole among enterprises in the UAE.

The items selected for recommendations are simply the items with the lowest mean value taken as a whole from all of the groups studied. In some instances most of the

items selected may be from one single group. Likewise there are instances where there is not even a single item in a particular group.

6.6.1. Kraft Foods

Based on the problem items identified through the analysis, the researcher has developed a summary list of recommendations for the enterprise.

Table 6.1 List of recommendations made to Kraft Foods.

Improvement Items	Recommendations
Project progress rightly conveyed to the team.	Introduce effective and regular communication
Perfect execution of the project processes	
Proper communication within the team	
The teams were highly productive	Implement team work concepts
Team responsibilities clearly defined.	
Highly organised and systematic way of team selection skill	
Due priority given for training in the project agenda.	Introduce Training Needs Analysis
Proper training for equipping the teams to perform well as a unit.	
Criteria for selection were good.	Introduce Human Resources Management concepts
Proper efforts for managing the human resource	
Structural and organisational problems were controlled effectively.	Introduce PDCA cycle and systems

6.6.1.1. Introduce effective and regular communication

Multilevel communications are important to improve the communications among the team members and to ensure that they occur in a timely manner. This enables team members to be aware of the project processes and also to know the project's progress.

6.6.1.2. Implement team work concepts

Implementation of team work among the workforce is necessary so that the teams' productivity can be improved. The team members' responsibility must also be clearly defined and ascertained from the beginning of the project. An appropriate selection of team members based on the project requirement too enhances the team efficiency level.

6.6.1.3. Introduce Training Needs Analysis

Conducting a Training Needs Analysis among the project team members ensures the relevant training for a given job code and job responsibilities. By conducting a TNA

one is able to ascertain the skills needed for a given job description. A good job performance among the team members facilitates better team efficiency and productivity.

6.6.1.4. Introduce Human Resource Management concepts

Introduction and enhancement of Human Resource Management allows the enterprise to manage the human resources required for a given project. Once the projects are well managed through assignment and execution of the optimal level of human resources, the project completion in terms of cost, time and resources can be more effectively monitored and managed leading to higher overall gains in terms of efficiency and productivity.

6.6.1.5. Introduce PDCA

PDCA is basically an effective problem solving tool developed to help enterprises to break away from the loop of lack of adequate planning, appropriate action, monitoring, formative and summative evaluation. This is a viable model designed to enable quality personnel to Plan, Do, Check and Act on every activities.

6.6.2. FedEx Corporation

Based on the problem items identified through the analysis, the researcher has developed a summary list of recommendations made to the enterprise.

Table 6.2 List of recommendation to FedEx.

Improvement Items	Recommendations
Perfect control mechanisms are in place.	Implement Control Plan Methodology
The issues encountered were rightly controlled.	
Needed changes were implemented in the right time.	Empower changes at floor level reducing red tapes
Effective in controlling all problems that occur in the course of the project	Introduce Problem solving tools and techniques
Rightly responded to unexpected outcomes.	
Valid techniques were employed for solving problems.	
Rectifications made were adequate.	Introduce Innovative and Creative Circles
Effective in managing crisis situations	
No hurdles or blocks in the project execution were left unattended.	Conduct timely project review
Structural and organisational problems were controlled effectively.	Encourage multilevel effective and regular communication

6.6.2.1. Implement Control Plan Methodology

Project progress can be monitored and managed well with Control Plan Methodology (CPM). Suitable toll gates can be fixed to ensuring that the progress is timely and that the entire check list is adhered to. All issues arising can be monitored and managed with a CPM put in place at the beginning of the company's projects.

6.6.2.2. Empower changes at shop floor level reducing red tapes

In most instances the shop floor level personnel do not have much authority to make changes. However with empowerment for changes, the enterprise should see better result as the shop floor level personnel are allowed to make necessary changes on a timely basis.

6.6.2.3. Introduce Problem solving tools and techniques

The enterprise seems to have a lot of issues in relation to its procedures and processes of problem solving. In order to overcome these quality problems, the researcher recommends that problem solving tools and techniques are introduced to the entire project workforce. This will enable the personnel to overcome shop floor level problems of motivation and insufficient competence. The implementation of tools and techniques will enable the team members to develop clearer collective ideas and share individual viewpoints more productively. These tools and techniques can help them as individuals and as a group to search for solutions as a team using some of the established tools and techniques.

6.6.2.4. Introduce Innovative and Creative Circles

Implementation of Innovative and Creative Circles (ICC) is most desirable for enabling crisis management and also for the implementation of timely rectification of things that have gone wrong. ICC can be implemented at all level of employment whereby continuous improvement can be practiced by the project workforce on an on-going basis.

6.6.2.5. Conduct timely project review

Project review through the milestone review process will enable all hurdles or blocks in the project execution to be attended in a timely manner. Project reviews present an opportunity for errors, delays, cost increment and all related issues to be shared and acknowledged by all of the personnel concerned.

6.6.2.6. Encourage regular multilevel communication

One of the major general and principal problems in project management is communication. Usually a good line of communication can prevent a lot of last minute surprises. A multi-level communication system whereby everyone in the enterprise is looped into the system would greatly enhance existing communication within the enterprise. The researcher believes that with improved communication, a lot of surprises can be prevented and matters arising can be attended in a timely manner. Decision making too will improve when good lines of communication have been established as information is readily available to the decision makers as much as to all of the team members.

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APPENDIX 1:

QUESTIONNAIRE

Questionnaire

Personal Data				
Age group	20 – 24	25 – 30	31 – 40	41+
Gender	Male	Female		
Designation				
Nationality				
Project team number (1-20)				

Please select the appropriate answer from the five probable

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I. Project Objectives					
1. Proper clarity on the project details					
2. Individual roles regarding project responsibilities clearly defined					
3. Team responsibilities in line with the project objectives.					
4. Team objectives clearly defined.					
5. Financial allocations correctly aligned with the objectives					
6. The objectives clearly and strictly fulfilled.					
II. Project Planning					
1. Project plans were simple					
2. Project plans were rightly applicable to the context of the company.					
3. Planning was done with vision.					
4. Proper planning committee was constituted.					
5. Time planning appropriate.					
6. Project schedules were clear					
7. Project schedules were easy to follow.					
8. Estimations on the scope of the project appropriate.					
9. Cost estimations were appropriate.					
10. Task allotment planning was perfect					
11. Prioritization of the issues were perfect					
12. Resource allocation was appropriate					
13. Planning's were aligned to the aims and objectives of the project					

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
III. Recruitment and selection					
1. Top Project managers were selected based on merit					
2. Top management was selected based on expertise and experience					
3. Competency was given top priority in selection processes.					
4. Proper information on the responsibilities and tasks were given.					
5. Team activities were promoted.					
6. There were no problems in team functioning					
7. CFT conflicts were managed effectively					
8. Proper training for equipping the teams to perform well as a unit.					
9. Selected individuals possessed the required skill sets.					
10. Highly organized and systematic way of team selection.					
11. Project leader possess the required managerial and leadership skills.					
12. Top management with risk handling skills.					
13. Criteria for selection was good.					
IV. Execution					
1. Right allocation of jobs and responsibilities.					
2. Proper communication within the team					
3. Coordination between teams adequate					
4. Cooperation within teams adequate.					
5. Individual performance in line with the project progress.					
6. Growth centric team performance.					
7. Project progress rightly conveyed to the team.					
8. Desired quality was acquired throughout the project.					
9. Rectifications made were adequate.					
10. The teams were highly productive					
11. Due priority given for training in the project agenda.					
12. Top management helped members to perform their responsibilities at ease.					
13. Perfect execution of the project processes					

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
V. Regulation					
1. The issues encountered were rightly controlled.					
2. Structural and organizational problems were controlled effectively.					
3. No hurdles or blocks in the project execution were left unattended.					
4. Effective in controlling and regulating risks					
5. Effective in controlling all problems that occur in the course of the project					
6. Rightly responded to unexpected outcomes.					
7. Valid techniques were employed for solving problems.					
8. Effective in managing crisis situations					
9. Needed changes were implemented in the right time.					
10. Proper efforts for managing the human resource					
11. Perfect control mechanisms are in place.					

Thank you for your time and Cooperation

APPENDIX 2:

PARTICIPATING ORGANISATIONS

1. Kraft Foods

Kraft Foods Inc. is a leading MNC in the food and beverages industry with a strong international presence and is consistently on the look out for fresh opportunities in the sector. They have developed quite a few leading brands that have achieved stable market share and reputation as well as consolidated their position in global and domestic markets. They were successful in building “superior consumer brand value” in most of their product categories and are engaged in many national as well as international projects for bettering their capabilities as well as for enhancing their product reach and diversity (Kraft Foods, 2007: 1). Kraft Foods are prominent mostly in the product segment that includes “snacks, beverages, cheese, grocery, and convenient meal”. In addition to revenue generation Kraft authorities do stand for some noble causes like “hunger relief and promoting healthy life style” (Kraft Foods, 2007: 5).

Project management initiatives at Kraft Foods

In order to maintain their global competitiveness the authorities at Kraft foods are constantly engaged in projects of a diverse nature and capacity. These projects are aimed at improving their position in the global food sector, which is very demanding and expects many innovative activities for meeting the quality standards and other safety and nutrition related specifications. Project Management at Kraft Foods has been partially outsourced owing to the complexity of the projects and these activities are initiated and mostly planned with the help of specialists in project management in order to consistently increase the success rate, functional capability and applicability of different projects. “Some implementation and development engineering is also done by firms that have established healthy business relationship with Kraft Foods and these firms have in fact demonstrated their ability to maintain necessary confidentialities” (Burja, 2007: 1). Though the management of projects has been partially undertaken by external sources, the project leader and project managers are selected from the permanent Kraft employees in order to increase the reliability and company ownership of the projects. All major decisions and approvals are done in consultation with the Kraft’s internal team and project activities are regulated through their supervision.

Projects within Kraft Foods are initiated after the strong R&D and market analyses particularly in relation to customer demands and current trends as well as on the

product category and ranges. The time to initiate the commercialisation of the product is decided by the pilot project team. The infrastructural modification and specifications for the project are proposed by the core committee and construction activities then commenced alongside with planning regarding cost, completion time and quality.

The objectives that drive and regulate the project management initiatives include:

- Increased customer satisfaction and value
- Maintain a superior brand image
- “Transform the portfolio
- Expand the global scale and drive out costs and assets” (Inglat et al, 2006: 3).
- Promote employee as well as the company’s growth and development at all levels.
- Establish corporate responsibility related activities.

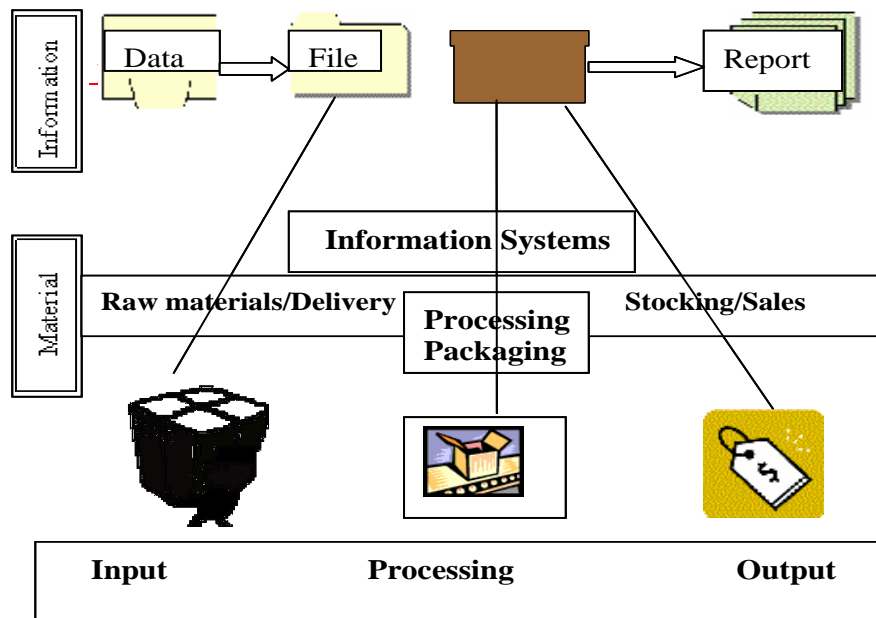


Figure 9.1 Business and information system components Source: (Inglat et al, 2006 1).

Projects can be designed based on the business and information system components (as in Figure 9.1) of the organisation and the objectives can be satisfactorily fulfilled if the project planning is in accordance with the components and its function. An example of a successful project at Kraft Foods participating with the help of external sources is the implementation of “WebSAP console, which was basically aimed at reducing the data errors; reduce manual based processes as well as for increasing the traceability of the products” (Kraft and Intermec, 2007: 1). They

also introduced radio frequency scanners with the help of Intermec and Kraft Foods have in fact succeeded in updating their technologies as well as in introducing many needed innovative changes (Table 4-1).

Table 9.1 SAP project details of Kraft foods.

Source: (Kraft Foods international, 2007: 4).

AT A GLANCE	
The company	Kraft Foods International
Industry	Food and beverage
Key challenge	Automate warehouse processes to eliminate errors, minimize paperwork, increase productivity, and reduce manual effort
Implementation partners	Intermec, SAP, SAP Labs, and Praceus and Jaeger
Solution	WebSAPConsole (in conjunction with Intermec Color 750 handheld computers and SAP® R/3®)
Key benefits	<ul style="list-style-type: none"> - Higher productivity - Fewer errors - Minimized paperwork - Reduced manual effort
Hardware	Compaq Proliant
Operating system	Microsoft Windows 2000

Project Management in Kraft Foods

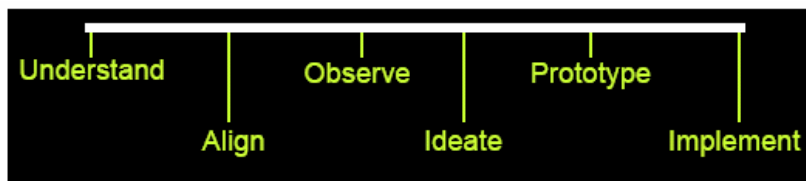


Figure 9.2 Supply chain project management at Kraft foods

Source: (Kraft foods and IDEO, 2007: 6).

The different processes followed by Kraft Foods to “holistically optimize the order to cash process; create a new culture dynamic that would enhance collaboration, focus on innovation, and in turn drive step change in supply chain” activities are given in the Figure 4-1 (Kraft foods and IDEO, 2007: 2). These have been developed through working in close association with IDEO, a leading design provider. The success of projects depends a lot on sticking to the proposed steps for implementation and progress and the team need to make a conscious effort to correct each step in the process before proceeding forwards.

For the successful running of projects the key components are the team members who are involved in the actual processes. The management at Kraft has developed specific human resource management strategies based on motivating the employee to improved performances especially with regard to their project responsibilities. The different steps involved are presented in the Table 4-2.

Table 9.2 Human resource based business system.

(Source: Inglat et al, 2006: 6).

Workers Needs	Motivation	Productivity	Improvements
Creating a sense of belonging.	Reward workers with incentives to create higher motivation.	When motivation increases so does productivity.	With increased productivity there is greater room for improvement.

The projects at Kraft with regard to product improvements and product developments are implemented through a series of consultations with experts or “worldwide councils” in the category and the company have specialised and competent “category engineers” specifically recruited for carrying out this type of complex and knowledge intensive functions (Burja, 2007: 1). Kraft authorities have also developed certain strategic associations with other experts in the food processing industry in order to get knowledge on the recent technological advances as well as for upgrading their facilities in times of need. Kraft Foods benefit a lot from the world wide councils and strategic associations with regard to knowledge sharing and developing better insights on projects.

The merger of Kraft Foods with General Foods and Oscar Mayer in fact increased their documentation with regard to project proposals, objectives and plans. The procedures in project management became more elaborate in order to bring about efficient allocation of knowledge and resources. According to Burja (2007: 1), “there will also be investment in flexibility improvements. Overall, about two-thirds of capital are to be utilized for projects that have financial returns, while the remainder would be invested in the infrastructure, quality improvements, safety programs, *et cetera*. While projects need justification for approval, not all require direct financial returns”.

2. FedEx Corporation

FedEx Corporation is a strong player in the global transportation sector and has emerged as a leading logistics provider that has high and diverse transportation capabilities to meet the changing and increasing customer and market demands. In addition to logistics, distribution and transportation, FedEx deals with total “supply chain management solutions, customs brokerage, trade facilitation, e-commerce solutions”, etc (FedEx, 2007: 6). As the activities at FedEx demand superior quality and timely delivery of products and services, they are constantly engaged in different projects for updating their technology as well as for meeting the customer demands and specifications.

Project management initiatives at FedEx Corporation

FedEx Corporation has emerged as a “one-stop source for time-specific express shipping, global shipping and logistics solutions” and is engaged with different projects to cater for the needs of the sector, which is highly competitive and expects superior quality service to remain consistently in the industry (FedEx Corporation, 2007: 1). In this sector, there is always a need for developing and adopting innovative ideas and for progressively upgrading the technology to facilitate swift and easy movement of goods and services to the end users and to capitalise on the proliferation of electronic commerce and trade related activities and the increased dependence of global corporates on world markets for their sourcing and marketing related needs.

Retooling the Software Engineering Service’s testing department of FedEx was initiated for the purpose of preparing the team for effectively managing and implementing project management techniques and standards in their organisation. “As the department routinely missed deadlines; had no standardized testing methodology; had numerous software defects loaded into production, and user confidence was at an all time low” (Vastrick, 2002: 6). These initiatives were needed to equip the project teams and deliver quality work on time. Since diverse and complex projects were undertaken by the corporation for upgrading their infrastructure and enhancing their functional capabilities more or less on a constant basis, the endeavours at FedEx could be considered a conscious effort to acquire a competitive edge in the sector.

Project Management Team

Through the various initiatives taken by the management, FedEx have formulated highly specialised teams for managing the projects and have developed a highly functional and flexible organisational structure in order to ensure smooth flow of information, resources and knowledge along the system (Fig 4-2). However, some of the exclusive technology related projects were outsourced to experts in the field in order to maximise the efficiency of the adopted technology and its application in the company's context. An example of an outsourcing project at FedEx includes the adoption of an "enterprise project management system called Object PMPro", which was developed, designed and implemented by 4 Sight Technologies, a reputed project management company. The implemented system was designed to provide the users with increased capability in planning, scheduling and regulating the project related activities and the "Java enabled browser would provide world-wide interactive access to the project data" (FedEx, 2007: 1).

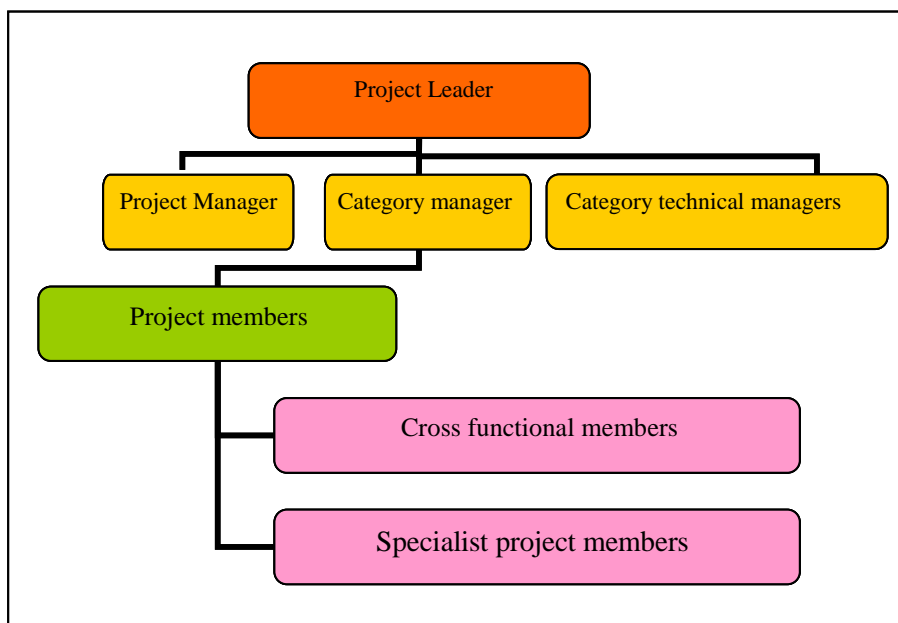


Figure 9.3 Organisational structure in managing projects.

Spearheading most of the project management functions at FedEx is the software engineering services division, which is equipped with the latest technologies for meeting the challenges of the sector as well as for completing the projects on time and within budget (Fig 4-3). There exists a perfect integration of the diverse functions within the division as well as with other divisions for ensuring smooth delivery of the necessary services.

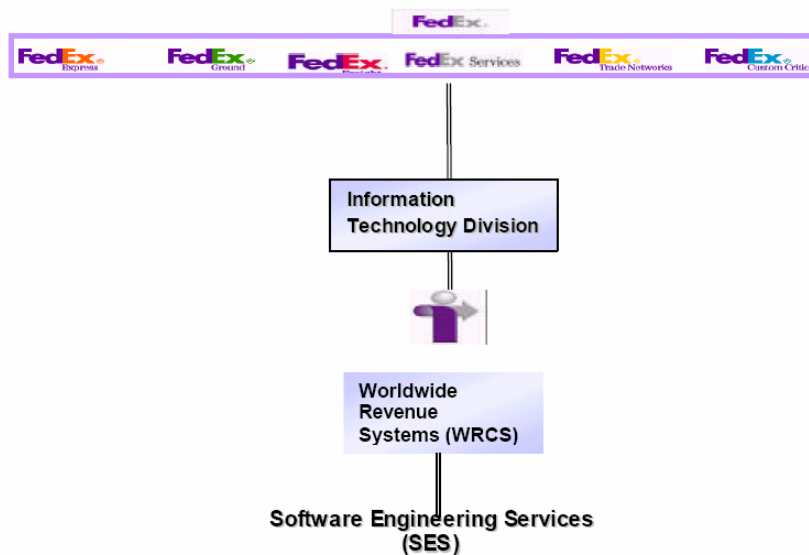


Figure 9.4 Corporate structure of the IT division at FedEx.
(Source: Vastrick, 2002:3).

Collaborative Project Management

With the help of Autodesk expert team, FedEx management has developed collaborative project management for maximising the communication networks and information flow along the project network, which is imperative for successful and prompt completion of projects and also for managing and regulating all day-to-day operations (Fig 4-4). The FedEx management has recognised the increased need for perfect communication networks to bring about the equilibrium of the four most important project factors of cost, quality, time and scope and hence the initiative for introducing collaborative approaches.



Figure 9.5 Collaborative project management

(Source: Collaborative project management, 2007: 3).

FedEx project management team decided to introduce a “management-driven organisational strategy to incorporate a leadership-focused culture, and to use competencies as a primary means” for selection of project team for all their core projects (FedEx, 2007: 2). Thus Fedex developed special management tools for inculcating the necessary skill sets for managing, controlling and regulating the different project processes and stages. The FedEx management utilised different project management techniques and principles to optimise their resource utilisation and allocation so as to ensure maximum advantage for the whole company.

The different activities related to managing projects of various sizes at FedEx include:

- Detailed discussion with the project team on the issues that might occur in the long run.

- Defining the roles and responsibilities (both individual and team related) to the entire team.
- Develop specific and personalised project management tools and techniques and its perfect documentation (Carter, 2004).
- Creating proper communication networks and easy accessibility to the team leaders and superiors.
- “Break large projects into several smaller steps, with deadlines for each step and get regular feedback regarding the adequacy of your project plan” (FedEx, 2007: 20).
- Conduct project reviews more or less on a continual basis and understand the issues and problems encountered during the course of the project.
- Develop and provide valid solutions to the problems as well as eliminate unproductive and time consuming project activities.
- Understand the difficulties faced by the team and provide solutions.
- Conduct training sessions for the members and make them proficient in the tasks.
- Update the whole team with project status and help the members in acquiring the project objectives and goals (FedEx, 2007).

FedEx Corporation is engaged in vigorous activities for transforming their company's reach; “maximize shareholder value; upgrade their technology; transforming the business processes” for conquering untapped potential in the sector globally and to remain as the market leader in the years to come (Carter, 2004: 2). These changes are based on the six stage strategy devised by the FedEx team (Table 4-3) and many projects are initiated for achieving these objectives. At FedEx most of the improvement projects are driven by the demands and needs of the customer as it operates in a customer centric sector. Hence at FedEx all initiatives need to be prioritised based on this perspective.

Table 9.3 Six part transformation initiatives at FedEx. (Source: Carter, 2004: 7).

1. Satisfy the FedEx customer
2. Work as trusted partners within the business
3. Create greater opportunities for every IT employee
4. Improve our abilities to deliver through bandwidth
5. Unify through a consistent environment
6. Simplify information access through fusion

In order to achieve these objectives there is an increased need for strong cooperation and coordination between and within various departments as well as greater support from the top executives of FedEx. All the major projects need to be handled by experienced and expert managers for developing as well as maintaining the necessary skill sets in the team. Specialised and highly focused training sessions need to be introduced for equipping the team with the necessary abilities for performing in their new groups as well as with different individual responsibilities. Introducing flawless and fruitful reward systems are necessary for motivating the employees to perform their best and be highly productive individuals so that they are assets to the projects and contribute to their success. Communication systems and networks need to be perfected for positive and consistent results.