



ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE

**IT PROJECT MANAGEMENT PRACTICE COMPARATIVE CASE STUDY OF ERP
AND NETWORK PROJECTS IN LION INSURANCE COMPANY (S.C)**

BY

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DECLARATION

I, the undersigned, declare that the study entitled “IT Project Management Practice Comparative Case Study of ERP and, Network Projects in Lion Insurance Company (S.C)” is the result of my own effort and study that all sources of materials used for the study have been acknowledged. I have conducted the study independently with the guidance and comments of the research advisor.

This study has not been submitted for any degree in any university. It is conducted for the partial fulfillment of the Master of Arts Degree in Project Management.

By Simon Weldegebriel

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Acknowledgment

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Abstract

The topic of the study was “IT Project Management Practice Comparative Case Study of ERP and Network Projects at Lion Insurance Company (S.c)”. And that was conducted at the company's head office at Addis Ababa. The research method used was descriptive and data was collected through interviewing all the people who involved in the projects. Both qualitative and quantitative methods were used for data analysis. The findings of the research were the ERP project faced time overrun but Network project was completed on time. It is good that future studies to assess ways of increasing the availability of experienced ERP professionals in the market.

Key words: ERP, Network, Premia, Datacenter, System Development

Acronyms and Abbreviations

BI Business Intelligence

ERP Enterprise Resource Planning

PMLC Model Project Management Lifecycle Model

RFP Request for Proposal

LIC Lion Insurance Company

RFP Request for Proposal

S.C Share Company

TP Third Party

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

A project is a temporary endeavor undertaken to create a unique product, service, or result. The temporary nature of projects indicates that a project has a definite beginning and end. The end is reached when the project's objectives have been achieved or when the project is terminated because its objectives will not or cannot be met, or when the need for the project no longer exists. A project may also be terminated if the client (customer, sponsor, or champion) wishes to terminate the project. Temporary does not necessarily mean the duration of the project is short. It refers to the project's engagement and its longevity. Temporary does not typically apply to the product, service, or result created by the project; most projects are undertaken to create a lasting outcome. (PMI, 2013).

Despite the progress made in the education and the PM competence development, the interest in practical aspects of project management remains high and the subject attracts both theoreticians and practitioners (Kurzydłowska, 2015).

Another similar study made on the importance of the Project Management for IT systems described as:

Many software projects are faced with a common situation: they fail in developing the required functionality within their schedule and planned budget; the results often lack the required quality. Thus, during the last years several companies have started initiatives to improve their software development. These initiatives mostly focus on improving the software processes and the technology used during software development. One area often underestimated but crucial for every software development project is project management. Project management is one of the key factors influencing the project success or failure (Mandl-Striegnitz and Lichter, 2015).

Enterprise Resource Planning (ERP) systems are business software tools that allow companies to automate business processes, share data and practices across the enterprise, and produce and access real-time information (Sumner, 2005: 3). The main objective of ERP systems is to integrate all

departments and functional information flows across an enterprise onto a single computer system that serves all of the company's needs. ERP systems are widely used by organizations of all sizes and functions because their potential benefits are too significant to disregard (Jaakko Kotiranta, 2012).

By integrating all the information flows, ERP systems help organizations manage the supply chain, inventory, customer orders, production planning, receiving, shipping, accounting, human resources and other business functions (Sumner, 2005: 3). An information system that enhances the planning and implementation of business processes can save costs and time improves resource allocation and enhances customer service. Therefore ERP systems can have a significant impact on the profitability and competitiveness of companies. (Jaakko Kotiranta, 2012). Different studies have been done on the network and datacenter projects. A case study conducted on datacenter setup and networking devices explained as the biggest challenge facing Automated Facility Solutions was to integrate all the data center systems and equipment into a single, cohesive control and monitoring system (Qualcomm Data center, 2009).

Today's tech-hungry and tech-reliant planet elevates data centers to a status of ultra-critical infrastructures. This is particularly true for government agencies, e-commerce providers, educational institutions and other settings where real-time data analysis and constant uptime are a must. Data center operational costs are raising due to increased computing demand and fluctuating electricity prices. Add to this increased government pressure to improve efficiency and reduce environmental impact. And data centers are increasingly ripe for state-of-the art operational management strategies. Coordinating data in one universal platform allows facility managers to prioritize and monetize every vital aspect of their data center operations (OSI soft, CSDCEEN-041713).

The purpose of this research work was therefore to assess the project management practice of Lion Insurance Company (S.c) or LIC in carrying out its Projects, Network installation & Datacenter setup, and turnkey Integrated Insurance & Finance System (ERP) Implementation. Those two projects were awarded to two different consultants; the network installation & Datacenter setup project was done by Copycat and the turnkey ERP Implementation Project was done by 3i-infotech. Here, the project management practice of Lion Insurance Company (LIC) as the owner of these two projects will be assessed.

1.2 Statement of the problem

As a financial institution, the insurance company was established for profit. Managing projects in an effective way plays its share in profit maximization. And there was a delay in the completion time of the ERP project in the company but network project was completed on time. The researcher was interested to assess the causes of the delay in the ERP project and to assess the success criteria in the network project so that the insurance company could learn the gaps in its ERP project management practice and improve its ERP project management in its future ERP projects. Similarly, other insurance companies could refer the research document to improve their ERP projects management practices.

In IT projects like in any other projects, schedule slippage, quality defects and budget overruns are the symptoms of project in trouble and are common in such projects. The causes for such project troubles could be poor client's requirement documentation, poor project planning (underestimating project budget, underestimating project time, underestimating project resources), poor top management involvement and decision making (less committed management, delays on decision making for key issues), poor stakeholder participation, inexperienced project manager and / or project staff members, less motivated and less committed project manager and project staff members (Aamir Ijaz and Malik, 2014).

Project failure occurs when the success criteria set on the specification and agreed on amendments are not met. This definition applies for both software and, network and datacenter projects. Therefore, the ERP, and Network and Datacenter implementations need proper project management to minimize the damages during project failures and/ or cost and schedule overruns. Researchers have been made to assess ERP Project management practices, and Network and Datacenter project management practices of organizations. The main thing here is how to manage the ERP, and Network and Datacenter projects for them to align with the visions and goals of organizations (Aamir Ijaz and Malik, 2014).

A case study done on the Critical Success factors of an ERP system in relation to the goals and visions of business organizations concluded that:

Most of the ERP implementations are over budget or late in completion. An effective IT infrastructure can support a business vision and strategy; a poor, decentralized one can break a company. People are very critical in successful implementation of ERP system (Aamir Ijaz and Malik, 2014).

Another research done on software (ERP) projects found out that business organizations have been taking different measures to minimize cost and time overruns in the ERP implementation process but they usually fail to spot one most crucial factor that greatly contributes for the schedule and cost overruns if not well treated is the project management for the intended project. That study concluded as follows:

Many software projects are faced with a common situation: they fail in developing the required functionality within their schedule and planned budget; the results often lack the required quality. Thus, during the last years several companies have started initiatives to improve their software development. These initiatives mostly focus on improving the software processes and the technology used during software development. One area often underestimated but crucial for every software development project is project management. Project management is one of the key factors influencing the project success or failure (Mandl-Striegnitz, et al., 2015)

Another study conducted on datacenter presented its study as follows:

Data center operational costs are raising due to increased computing demand and fluctuating electricity prices. Add to this increased government pressure to improve efficiency and reduce environmental impact. And data centers are increasingly ripe for state-of-the art operational management strategies. Coordinating data in one universal platform allows facility managers to prioritize and monetize every vital aspect of their data center operations. (OSI soft, CSDCEEN-041713)

The above study implies that the need for effective project management in order to use state-of the art technology while at the same time minimizing the cost. The question here is how Lion insurance company (S.c.) managed its two projects? In this paper, the experience of the insurance company in those two IT projects was assessed in relation to the competencies and literatures of project management. The researcher become interested to work on the topic because the researcher has

experience on system development lifecycle and usually observes many IT projects face cost and time overruns.

1.3 Basic research Questions

The thesis work addressed the following main question and sub questions

1.3.1 Main questions

- How was project management practice in the two projects?

1.3.2 Sub questions

- What was the practice of project planning and execution?
- What was the practice of project Monitoring & Controlling?

1.4 Objective of the study

In this research, the project management practice of the insurance company in planning, executing, monitoring and controlling of the ERP and Network projects implemented at the head office in Addis Ababa was assessed.

1.4.1 Main objective

- ❖ To assess the project management practice of the insurance Company in ERP and Network projects

1.4.2 Specific objective

- ❖ To assess the project planning practice in the two projects.
- ❖ To assess the project Executing practice in the two projects.
- ❖ To assess the project Monitoring and Controlling practice in the two projects.

1.5 Significance of this study

This study has practical importance both for the insurance company and as a reference for project management students that need to know the comparative analysis in project management practice of the two categories of IT projects (ERP Project and, Network and Datacenter project).

The study first explained theoretical standards, methods and best practices in project management; case studies of selected projects and finally discussed the experiences of the insurance company in those two IT projects. And finally analysis has been made on the projects to show the good sides and gaps in managing the projects.

Generally speaking, this research work will help the insurance company to identify its gaps in the current project management practice which would be the first step for the solution. After identifying its gaps, the insurance company could make necessary amendments to its current management practice and do better in its next similar IT projects.

Similarly, further comparative case studies on ERP, and Network and Datacenter could use this research paper as one of their references for their study. Furthermore, students studying project management for their undergraduate or graduate studies could use this research paper as a reference material while attending courses related to research.

1.6 Scope of the study

The scope of the research was delimited to the comparative case study of ERP and Network projects in the planning, executing, monitoring and controlling practices. The research was conducted at the head office of the company at Addis Ababa.

And the research type used was a descriptive research type. The limitation in the scope is due to the short allotted time period for the research work.

1.7 Organization of the Paper

This research paper has five chapters. Chapter one consists of background of the study, statements of the problem, general and specific objective of the study, research question, scope of the study and significances of the study. Chapter two assesses different theories and concepts from literatures. Chapter three describes the methodology and instrument used to answer the research question. Chapter four analyzes the data and extract important findings. Finally, chapter five gives Summarization of the finding, conclusion and recommendation.

1.8 Definition of terms

Project: the word project is described in different ways by different sources, one definition is provided here: Project is defined as a temporary endeavor undertaken to create a unique product or service. Temporary means the project has a definite ending point and unique means that the product or service differs in some distinguishing way from all similar products or services. (PMI, 1996, p.4)

Enterprise Resource Planning (ERP): the term is used to describe to the software package implemented in the insurance company (it refers to the Integrated Financial and Insurance System).

Business Intelligence (BI): is an intelligent system that takes information from the integrated system, analyses it using different criteria and generates different reports that could help the company to compare current performances to previous similar period performances, forecast future performances based on current and past trends, presents current performance using end user preferred criteria combinations

Insurance Company: Lion Insurance Company (S.c)

LIC: Lion Insurance Company (S.c)

Datacenter: a room that mainly contains Server farm, Rack, Switches, Ups, Router, Security devices, AC Controllers and Backup device(s)

Claims Department: an organ of the insurance company whose is responsible for handling claim payments to customers (insurance policy holders)

Underwriting Department: an organ of the insurance company responsible for issuing policies to customers that need cover to their properties, employees and /or themselves on collecting premiums from them.

Premia: an integrated ERP system or a name given to an integrated insurance and finance system

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this literature review chapter, the general concepts of project management including its lifecycle, landscapes and methods are discussed. Furthermore, previous similar studies on project management are provided to serve as bench marks for this research.

2.2 LIC Project Information Historical Review

According the responses from the interviews, the ERP and the network projects are the first projects that were implemented by the insurance company. That is, the company had no previous similar IT projects.

2.3 Premia (ERP) Project in LIC

According to the responses from the interviewees, ERP in LIC includes three main systems and one another auxiliary system. The system for the Underwriting Department, the system for the Claims department, the system for the Finance department and Business Intelligence system (auxiliary system).

The main function of the Underwriting system is to handle customer information and customer policy details. That is, keeps policy buyer (customer) information and the policy details (list of risks in the policy, cover for the risks, validity of the policy, mandates of the client, amount covered, premium paid and extra details).

The main function of the Claims system is to handle claims from the policy holders (clients). It handles all the process from Claims notification to payment settlements (claims notification, claims registration, loss estimation and settlements of payments).

The Finance system handles and processes all payments both from the Underwriting department (premium), Claims department (claims) and other financial transactions.

All those systems act as one system to process the key functions of the company. The ERP system is installed at the head office of the company and accessed by all the branch offices of the company country-wide. The mode of data processing for all the branches is online and internet connection is a must for all branch offices to access the ERP system. ERP system would be inaccessible for all branches irrespective of the internet connectivity of branch offices if there is no internet connection in the head office.

The Business intelligence system is integrated with the ERP system and automatically fetches data from the ERP system at some defined intervals but it is also possible to make the BI system to fetch data at any time using manual processing. The BI system analyses the fetched data based on end user managed criteria combinations and presents different reports. The output of the BI system would be used to present current performances, compare the current performance of the company with the performances of similar previous periods and help to forecast future performances based on previous and current performance trends (source: own case study).

2.4 Premia Project Management by LIC

Based on the data collected from the interviewees, after the contract agreement with the winner company (3i-infotech), there was a delay for three months until the project kick-off. The delay was created on the side of the insurance company in preparing resources for the project since the insurance company had no experience on similar projects. The insurance company began its Premia implementation project management by assigning a project manager and selecting a project management committee. The committee members were the project manager, underwriting department manager, reinsurance division manager, claims department manager, finance manager and a branch manager that represents branch offices. And the head of the project committee was the project manager.

The project manager was the IT Service Manager of the company who was in the highest managerial hierarchy in the IT managerial structure of the insurance company. The project manager had no project management experience on similar project types and scales. Furthermore, no project management training was given to him.

The other committee members were selected because they were members of the insurance company's top management. They made decisions about the project and forward key issues to the

CEO for issues that need CEO's involvement and decision. Those committee members also played a role in mobilizing and assigning resources in their respective departments in consultation with the project manager. Those committee members had neither had project management experiences of similar nature nor training had been given for them.

There was other category of project participants that played most of the donkey work for the project. Those were the project staff members who were mobilized by the decision of the project committee and directed by the project manager. Those project staff members were from the IT Service, the reinsurance division, the underwriting department, the claims department and the finance department.

The project staff members from the IT Service were coordinating the assigned other project staff members from the other non-IT departments and providing information needed for the consultant (3i-infotech) in a way that was understood by the consultant. In addition to that, the project manager and /or the IT Project staff members were responsible for checking the functional and non-functional requirements of the Premia system based on the contract agreement and agreed on amendments. Furthermore, the IT project staff was responsible for the timely delivery of resources/information requested by the consultant.

The project manger's main duties and responsibilities were work package completion and schedule tracking, mobilizing project staff members, facilitating milestone payments to the consultant based on the contract agreement, inviting project committee members for a discussion, organizing discussion sessions and presentations between the insurance company and the consultant.

The responsibilities of non-IT project staff members (representatives from the functional departments) were providing information to the consultant according to the business rules of their respective departments and confirming that all the basic functionalities of their respective departments were included in the system in order to carry out their duties.

2.5 ERP Project Management Practice of the Project Manager

Planning: The plan used for the project throughout its lifecycle was the project plan provided by the consultant (bid winner). That plan was provided to LIC during the contract agreement and the

project manager used it as the base reference without updating it with the major functional amendments incorporated in the system as the project progressed.

Execution: During the execution of the project, there was a delay in organizing resources for the project and especially organizing project staff from functional departments took considerable time. Similarly, project staffs were not clear about what was expected from them, which also contributed to delays in the completion of the project.

Monitoring and Controlling: Project requirements were not well documented on the request for proposal document which contributed to the ambiguity in the scope of the project. Since the plan was not detail enough to indicate work packages and the resources needed for each work package, the project manager was not able to monitor the project as per the set plan. Furthermore, the project manager was not experienced on ERP automation projects and in the management of human resource for such projects so that the project manager was also poor in the management of project human resources. In addition to that, the project manager was not able to motivate project staff, was not able track the timely delivery of assignments from project staff, project staff represented from functional departments were prioritizing the assignments from their respective functional departments and they had the thought that project work was an auxiliary assignment for them and there was not any punishments even if they missed in the critical times of the project lifecycle. Therefore, the project manager was not able to accomplish project deliverables as per the plan (source own case study).

2.6 Challenges for Managing the Premia Project

According the information from the interviewees, there were challenges in the lifecycle of the Premia project. According to them, the main challenges were the following:

The client's requirement was not well documented in the Request for Proposal (RFP) and amendments to the RFP were made during the contract agreement to enhance the poor requirement documentation on the RFP. Though amendments were made to RFP, as the project progressed, the insurance company repeatedly requested major amendments in functionality to the Premia system. The consultant on the other hand responded by stating those requested functional amendments during the lifecycle of the Premia system were out of scope and only could be accepted by making amendments on the agreed project budget.

The second challenge in the project was lack of well-organized coordination by the project manager and the absence of harmony in the IT Project staff (lack of harmony between the project manager and the IT project staff members). According to the information from the respondents, there was somewhat lack of transparency about the project from the side of the project manager and IT project staff members were not as such helpful until the resignation of the project manager.

The third challenge in the Premia project as stated by respondents was, project staff members represented from different functional departments were prioritizing their works at their respective departments and were considering the project as their auxiliary work. Even the functional department managers who were also the committee members for the project were not considering the project as a top priority and were not willing to send their staff to the project especially during stress times in their department and were observed asking the release of their staff members from the project as soon as possible. Furthermore, the project manager had no contribution in the performance evaluations of the project staff members represented the functional departments.

The fourth challenge according to respondents was lack of skill gap identification for the IT project staff (project manager and IT project staff members) and capacitating the staff. Most of the IT project staffs had no project management experience of similar type and neither project management training was given nor were discussion sessions held on how to manage the project.

The fifth challenge was the resignation of the project manager in the middle of the project lifecycle. The project manager had all the details about the project and when he resigned, there was a frustration about the project. It was challenging for the new project manager to lead the project according the plan.

And finally, top management used the project manager as their sole and most trusted person for information source about the progress of the project by letting aside the possible positive effects on the project from the other IT project staff members (Source: own case study).

2.7 Network Installation and Datacenter Setup Project in LIC

The network and datacenter project is infrastructure project which was done to serve the ERP project. The datacenter which includes Servers, AC Controllers, Switches, RACK, Backup Devices, Security Devices, UPS devices, Fire Alarm devices, etc is situated at the head office of

the company. In the head office, LAN connectivity is enough to access the ERP system. However, branch offices need internet connection to access the ERP system (source: own case study).

The WAN connectivity in the head offices is via fiber technology whereas the connectivity in the branches is via ADSL technology. Branch offices are out of the scope of the project and were setup by the Network experts of the company. Each branch office has its own LAN which uses a distribution switch and Router (source: own case study).

2.8 Network Installation and Datacenter Setup Project Management in LIC

The Network and Datacenter setup project was awarded to a company called Copy Cat. For managing the network and datacenter project, only the IT staff and a consultant (working for the insurance company) were enough. The project manager was the new IT Service manager who also led the premia project after the resignation of the previous IT manager. The other IT staff members were also helping the project manager in managing and facilitating resources needed for the project (source: own case study).

The top management participated in key issues that need the involvement of top management like approving the budget for the project and similar key decisions.

Copycat divided the project into two categories, the network devices configuration (switches and security devices configuration) and the datacenter devices setup (power, AC controller, RACKS, Servers, Backup Device, and UPS). The network devices configuration was sub-contracted to an Ethiopian company and the datacenter setup was done by the company itself. Therefore, the project manager incorporation with its staff members and the consult managed the project without much challenges (source: own case study).

2.9 Network Project Management Practice of the Project Manager

Planning: For the network project, no complicated planning was needed. There was a plan used by the consultant and the project manager to track the progress of the project, and the project was completed ahead of the planned project time.

Execution: Before the execution of the project, there was a delay in the procurement process which was due to the license related issues on the side of the consultant (project contractor). That is, the consultant had no permission to import goods to the project site (Ethiopia).

Monitoring and Controlling: There was a consultant for the project working for the client that insured the proper implementation of the project and according to the specifications set in the request for proposal document. And since both the project plan and the specifications for the project were clear, the consultant and the project manager were able to track the progress of the project without much challenge (source: own case study).

2.10 Challenges for Managing the Network and Datacenter Project

The Network and Datacenter setup project had clear specification and hence there was no complication in managing it. Furthermore, since there was no involvement from functional departments in the project lifecycle, mobilizing resources was easy. The project took not more than three weeks after the import of required equipment.

The challenges in the network and datacenter setup project were delay in the import of the network equipment which in turn created a delay the premia system implementation. The insurance company was forced to find another contractor to build the network for the head office to make premia testing (source: own case study).

2.11 Empirical Literature Review

Different researches have been made regarding software development project management, practices, and Network and Datacenter Setup project management practices. The following researches are some of the researches done by different practitioners at different times.

2.11.1 ERP Literature Review

According to the Standish Group (1994) conducted on ERP projects, 31,1% of projects are cancelled, only 16,2% of software projects are completed on time and on budget. Further results shows that 52,7% of projects will costs 189% of their original estimates and 78.4% of software projects delivers only 74% of the specified functions (Kurzydłowska, 2015)

A study by Dynamic Markets Ltd. (2007) of 800 IT managers across eight countries shows that 62% of organizations experienced IT projects that failed to meet their schedules; 49% suffered budget overruns; 47% had higher-than-expected maintenance costs; 41% failed to deliver the expected business value and ROI.

It seems that there had been experience crisis of software development projects. According to Gartner Report (2014) the failure rate of ERP projects is appalling. IT projects failure (missing deadlines, cost overruns and products missing or poor quality delivery) happens disregarding IT methodology applied (waterfall or agile). One of key findings in this report is that on average 59% of application development projects are completed on-time and 68% are completed within budgeted. It seems that software project failure start to be rather standard then exception (Kurzydłowska, 2015).

Another research conducted in Jordan on ERP Project is presented as follows: The case study focused on the ERP project failure in Jordan which is a developing nation. The client finds sizeable gaps between the assumptions and requirements built into the ERP system design, and the actual realities of the client organization. It is these gaps and the failure to close them during implementation that underlies project failure. ERP systems are failing in developing countries. ERP (Enterprise resource planning) system integrates financial systems, HR, logistics, data systems across the organizations to save money and improve decision making and customer retention. Success and Failure Factors: There are few outcome elements which decide if ERP implementation is success or failure for example-System & Information Quality, Use & user satisfaction, Individual impact which relates to the extent to which information produced by system influences or affects the management decisions and Organization impact which measures the effect of the information produced by the system on organizational performance (Sandeep Dalal and Dr. Rajender Singh Chhillar, 2012).

Most frequent failures include non-functional issues with the application which adds uneasiness and embarrassment. Such failure parameters include slow response from application server, pages are not downloading properly, application is not compatible with the browser, performance issues like slow access time, load time, run time (Sandeep (Sandeep et al., 2012).

Table 1: List of some most common and severe types of software system failures

	Software	Failure Description	Casualties
1.	ERP project failure in Jordan	It finds sizeable gaps between the assumptions and requirements built into the ERP system design, and the actual realities of the client organisation	Huge loss of capital and unsatisfied clients
2.	Ariane 5	Ariane 5, Europe's newest unmanned rocket, was intentionally destroyed seconds after launch on its maiden flight. Also destroyed was its cargo of four scientific satellites to study how the Earth's magnetic field interacts with solar winds.	10 years hardwork and \$100 million loss. Reputation of ESA(Europian Space Agency) deteriorated
3.	Therac-25	Canada's Therac-25 radiation therapy machine malfunctioned and delivered lethal radiation doses to patients	Many people dead, Many people critically injured
4.	STS-126	A software change had inadvertently shifted data in the shuttle's flight software code	"In-flight" software anomalies occurred and several automated functions failed.
5.	Automated airport baggage handling(DIA)	Failure to anticipate the number of carts correctly resulted in delays in picking up bags that would undermine the system's performance goal.	Monthly Maintenance cost exceeded the monthly manual investment

Source: (Sandeep et al., 2012)

2.11.2 Network and Datacenter Literature Review

Today's tech-hungry and tech-reliant planet elevates data centers to a status of ultra-critical infrastructures. This is particularly true for government agencies, e-commerce providers, educational institutions and other settings where real-time data analysis and constant uptime are a must. Data center operational costs are raising due to increased computing demand and fluctuating electricity prices. Add to this increased government pressure to improve efficiency and reduce environmental impact. And data centers are increasingly ripe for state-of-the art operational management strategies. Coordinating data in one universal platform allows facility managers to prioritize and monetize every vital aspect of their data center operations (OSIsoft, CSDCEEN-041713).

The above study implies that the need for effective project management in order to use state-of the art technology while at the same time minimizing the cost.

2.12 Conceptual Framework

First, the Request for proposal Document was prepared. After that, the bidding and contract agreement process continued. Then after, the project was executed and implemented. However, refining the client requirement was done throughout the lifecycle of the projects.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Research Design

The specific type of research adapted to this study was descriptive research method. Because, the researcher's purpose was to explain or examine the project management practice in the company which is called Lion Insurance Company (LIC).

3.2 Instrument of data collection

The method used for the selection of interviewees for the assessment of this research was purposive, in which only people who had been project staffs, management bodies who had involvement in the projects and the consultant were selected. The reason for that targeted selection was because other staff members of the insurance company had no information about the details of the two projects when the assessment was conducted.

The selected interviews were all technical staff members represented from functional departments, all IT technical staff members, the project managers, the consultant and top management bodies who had participated in discussion sessions and decision making.

The research strategy used was a descriptive case study in which it used the responses from the interviewees to describe the management practices of the insurance company in those two projects.

3.3 Procedures of data collection

The researcher identified the individuals to be interviewed and necessary arrangement was made to meet the respondents. At first the respondents were given highlights in order to be informed about the topic to be discussed. The researcher then met the respondents and interrogated them with the research questions that were used to collect primary data from the company. The researcher then wrote down the response and also used voice recorder for some of them too. The data was then coded and then analyzed qualitatively.

3.4 Target Population

The target population for the research was those people who worked as project staff and top management bodies who were involving in discussion sessions and key decisions for the project. In total, twenty five interviewees were selected from all departments, divisions and services which were intended to use the ERP system. The interviewees were five from underwriting department, five from finance department, four from claims department, one from marketing department and four from IT Service. The detailed description of the interviewees is shown in the following table.

Table 2: Interviewees for ERP Project

No. of Interviewees	Business Unit	Description	Total	
			Project Staff	Top Management
5	Underwriting dept	2 supervisors, 1 risk management division head, 1 reinsurance division head, 1 underwriting dept manager	19	6
4	Claims dept	3 division heads, 1 Claims dept manager		
5	Finance dept	2 supervisors, 2 division heads, 1 finance dept manager		
1	Marketing dept	1 marketing and development division head		
4	ITS	3 project staff, 1 project manager (IT Service manager)		
6	Top Management	2 Branch representatives, 1 Deputy CEO, 1 Procurement Head, 1 HR head, 1 board member		

Table 3: Interviewees for Network Project

No. of Interviewees	Business Unit	Description
5	ITS	4 project staff, 1 project manager (IT Service head)
1	Consultant	Network Specialist
2	Top Management	1 Deputy CEO, Procurement head

3.5 Data analysis

In this research, both quantitative and qualitative methods were used in the data analysis. Percentages were used to quantitatively analysis the response from the interviews and qualitative analysis was used to explain the results of the analysis.

3.6 Ethical considerations

This research is subjected to all ethical issues regarding ethical considerations and keeping in line with the ethical conduct of researches. Moreover, as being a researcher, I should also be subjected to the ethical considerations put forward by Addis Ababa University and Lion Insurance Company (S.c) to the confidentiality and intellectual property as well as use of the insurance's materials and business information aspect.

Personal matters are by nature considered confidential and are not to be disclosed to the company or outside parties without the express written permission of the respondent. I obey to the ethical rule that "No employee shall, directly or indirectly, use or allow the use of official information obtained through or in connection with the insurance's employment that has not been available to the general public". The study is in line with the insurance's policy in relation to any intellectual property rights of the organization.

CHAPTER 4

DATA COLLECTION, DATA ANALYSIS

4.1 Introduction

As discussed in the procedures of data collection, under the research methodology section, data was collected from the intended respondents. The analysis for the data collected and results of the research are presented in the following subsequent sections.

4.2 Data Collection

The data for this research was collected through interview. Furthermore, discussions were held with intended experts to extract the required data for this research. As secondary data, Request for proposal documents, Contract agreement documents, Schedule and other amendment documents and /or letters were used as references.

4.3 Data Analysis

The main inputs for this thesis work are the data collected from the project staff members and other people who made their observation on the project. The project management method used in the ERP project was by selecting and assigning technical staff members who have good understanding about the working practices in their respective departments and giving directions to work for the fulfillment of the requirements for the project. The IT staff was given the coordination role in addition to working for the fulfillment of the requirements for the project.

However, the project management style used for the Network and Datacenter project was slightly different. There was a consultant working for the insurance company that insured the proper implementation of project and there was no need to include technical employees from the functional departments. The IT staff in cooperation with the consultant was able to manage the project without many challenges.

The detailed analysis for the study is explained in the following subtopics and in the next chapter.

4.4 Data Analysis for Premia (ERP) Project Management

The total population in the head office was 200 and out of that population, only selected representatives from the functional departments were involved in the premia project. The target population for the study was those people who involved in the project. In that premia project, 19 people were involved throughout the project. Those participants in that project were 5 from the underwriting department (two supervisors, one from the risk management division, one from reinsurance division and the underwriting manager), 5 from the finance department(two supervisors, two division managers and the finance manager), 4 from the claims department (three division managers and the department manager), 1 from the marketing and business development division and 4 from the IT Service (one senior, two officers and the service manager). In addition to the above mentioned project staffs, there were project committee members and the top management who were giving directions and decisions on key project issues.

To get the inputs for this thesis work, the plan was to interview 30 people but only 25 people were interviewed (83.3 percent of the plan) and out of which 19 interviewees were the project staff members and the rest 6 were other technical employees and top management staff who were expected to have good understanding about the project.

Based on the responses from the interviewees, the follow generalizations were made:

The project plan for the ERP was not detail since there was no clarity in the scope of the Request for Proposal Document and there was considerable delay between the contract agreement and project kick-off. Respondents said that detailed discussion about the plan had not been made among project staff members and Client requirements were amended throughout the lifecycle of the project by discussion with the consultant. The project manager had no experience in similar business automation projects and had not been given project management training. Furthermore, his educational qualification was not in project management. Similarly, except one project staff member, other project staff members had no experience in similar ERP automation projects and training had not been given to them. Hence, the project manager had no clear method to track the progress of the project against the project schedule, budget and quality requirements. Respondents pointed out that the project manager was not able to motivate and harmonized project staff members to extract their maximum efforts in the lifecycle of the project.

For the ERP (Premia) project, there was no problem in the number and skill mix of technical project staff members from the functional departments but they had no clear direction and understanding about the expectation from them.

The project committee which comprised the project manager and managers from functional departments were the key decision makers in the project. And the committee had been inviting for discussion for the CEO of the insurance for key issues that needed the involvement of the CEO. The CEO had been receiving progress reports from the project manager and other project committee members had been informing the CEO about the progress, challenges and had been close advisors for the CEO. The CEO had been also discussing about the progress and challenges of the project board of the insurance company which is the highest hierarchical structure in the insurance company.

The project manager resigned in the middle of the project lifecycle since the progress of the project was not as expected and another project manager who had no previous project management experience had been given the management role. The later project manager had slightly better project staff coordination for the functional project staff members. The allotted time for the ERP project was eight months but the project took more than twenty seven months for its completion.

Regarding the success criteria and quality assurance for the project, in the first hand, the RFP document and other amended documents in the contract agreement were far from completing the client's requirement and the consultant took more than sixteen months to understand the requirements of the client. The consultant used discussions with project manager, functional department managers and project staffs to extract the requirements of the client in addition to the agreed on documents. Following the discussions with project staffs, the consultant started designing and implementing the ERP system without first documenting client requirements and getting approval from the client on the requirement. During the implementation, consultant was inviting further discussions with project staff members and facing challenges of redesigning previous works due new major requirements and misunderstood requirements of the client.

As a result of the new major client requirements and misunderstood client requirements, there had been arguments between the client and the consultant (3i-infotech). The insurance company was informing the consultant, the requirement were to be incorporated into the system and the

consultant was repeatedly saying those requirements were out of scope and could be incorporated with the amendments in the project budget. During such discussions delays had been created that contributed to the slippage in the project schedule. And therefore, the project had no predefined clear success criteria.

Regarding the commitment of the project staff members, project staff members had been working for the project more than their normal office working hours but since they were less motivated, the coordination system of the project manager was poor, there was poor project staff development mechanism, less participative method followed by the project manager and project staff members had not been encouraged to contribute their innovations in the project, they had contributed their share in the project's schedule slippage.

Regarding the commitment of the top management, the top management had shown good commitment for the project and had been giving immediate supportive decisions during the lifecycle of the project. However, the top management used the project manager as their sole source of information for the progress of the project and they were too late to understand that the project was far from the schedule and the project manager was underperforming.

Regarding the risk identification and mitigation techniques, the project manager had no clear risk identification and risk mitigation plans. The project manager and the top management used reactive methods as remedies for risks that challenged the project.

And finally regarding the procurement method for the project, since the network infrastructure needed for the premia project was handled by another separate project, Network and Datacenter project, there was no such huge procurement except simple computers used for temporarily setting up the premia system for unit testing, integration testing and user acceptance testing.

4.5 Data Analysis for Network and Datacenter Project Management

The targeted group for interview about the Network and Datacenter were the IT staff, the consultant and top management. The plan was to interview ten people, 2 from the consultant, 3 from top management and 5 from the IT staff (all). However, only 8 people were interviewed which is 80 percent of the plan. The interviewees were one from the consultant, two from top management and five from the IT staff (all).

According to the data collected from the respondents, the Network and Datacenter setup project had clear specification and clear project plan. The project manager for that project was the ERP project manager who had led the ERP project to completion following the resignation of the first ERP project manager. Both the project manager and project staff members were from the IT Service. The project manager had good knowledge on IT networking and had no challenge in leading the project. And most of the project staff members and especially one project staff had good experience on even big scaled networking and datacenter projects. Furthermore, there was a consultant on the side of the client (working for the insurance company) throughout the lifecycle of the project to assure project was done according the specifications.

The involvement of technical staff from the functional departments was not necessary and establishing project committee members was not also necessary as the project staff and project consultant had the capacity to handle the project in manageable way.

The only noticeable delay observed in the project was delay in importing the equipment for the network and the datacenter setup due to license related issues on the side of the contractor company (copy cat) which forced the insurance company to another expenses on hiring another contractor for the head office LAN work. The success criteria for the project were Success criteria, experience of the project manager, and experience of the project staff, clear understanding of the requirements of the client by the consultant, easy project staff mobilization and the presence of the consultant working for the insurance company

4.6 ERP and Network Projects Management Comparative Analysis

As can be inferred from the above analysis between the ERP, and Network projects, there were major differences in the project management practices of the insurance company.

For the ERP (premia) project, the responses of the interviewees were summarized as follows. Out of the 25 interviewees: 6 (24%) said the slippage in the project schedule was due to poor Client Requirement Documentation and project scope ambiguity; 3 (12%) said the slippage in the project schedule was due to poor project management practice used; and 16 (64%) said the slippage in the project schedule was due to both unclear client requirement and poor project management practice used. For the Network project, the responses of the interviewees were summarized as follows. Out of the 8 interviewees: 2 (25%) said the success criteria for the project were experience of the

project staff members and the project manager; 2 (25%) said the success criteria for the project were the presence of the consultant; and 4 (50%) said the success criteria for the project were clear specification, the presence of the consultant and the experience of the project staff.

The detailed comparative analysis for those projects is explained in the table below.

Table 4: ERP and Network Projects Comparative Analysis

Construct	ERP Project	Network Project
Project Management Qualification/ Experience/ Training	All project staff had no project management qualification, training and experience..	Most of the project staffs had project management experience but no project management qualification and training.
Project (Requirement, Orientation) Clarity Plan,	Client requirement was not clear and thereby there was ambiguity in the scope of the project. No detailed orientation about the project given to project staff.	Specification for the project was clear and no detailed orientation was needed
Project Organization	Technical Supervisors from the functional departments were the main actors on ensuring the fulfillment of the requirements of the client. The project manager and IT staff members mainly played the coordination role.	The Project manager, the IT staff members and the consultant were the main actors in ensuring the proper implementation of the project and according the specification.
Project Management Process	The project needed highly experienced project manager in business automation projects. The project management process practiced was poor and the project was challenging for the project manager.	Project needed project staff with network project experience. Good project management practice used.

(Source: own case study, 2018)

Table 5: ERP and Network Projects Comparative Analysis ... continued

Construct	ERP Project	Network Project
Project Integration Management	The project needed harmonization among project staff but that practice was missing among them. The integration between the project manager and the contractor was good.	There was better integration and coordination in the project among project staff and the consultant.
Project Scope Management	Since the scope of the project was not clear, it was challenging for the project manager to manage the scope. Amendments on the scope were possible only by negotiating with the project contractor.	The specification was clear and scope management was not difficult for the consultant and project staff.
Project Time management	The project schedule was 8 months but it was completed in 27 months. So the project suffered 237.5% slippage in schedule. Calculations based the project time after project kick-off	Project was completed ahead of schedule and no complicated time management was needed (project time was assumed the time after the project kick-off). Planned one month and complete in 3 weeks.
Project Cost Management	There was no clear cost management practice by the project manager since the RFP document was not clear. The schedule slippage also influenced the project budget.	Cost milestone payments were clear (on network equipment delivery and on project completion), so its management was also clear.
Project Quality Management	Quality requirements became clear as the project progressed and especially during testing phase.	Quality requirements were documented and planned ahead since the experiences of the project staff and the consultant on similar previous projects

(Source: own case study, 2018)

Table 6: ERP and Network Projects Comparative Analysis ... continued

Construct	ERP Project	Network Project
Project Human Resource Management	Human resource mobilization was challenging for the project manager and was one of the major contributors to the slippage of the project schedule.	Since project staff members were from IT service, human resource mobilization was not difficult for the project manager.
Project Communications Management	The project manager had also communication problems with both top management and project staff since he had no experience in similar projects	The communication and convincing power of the project manager was better
Project Risk Management	No planned risk handling mechanism was used. Reactive solutions were taken when risks occur but such risks contributed their share to the poor performance of the project. For example, resignation of project manager	No planned risk handling mechanism was used
Project Procurement Management	No procurement needed except simple computers that were easily available on the nearby market	There was considerable delay in the procurement process for the project due to the license related issues of the contractor. It was handled by hiring another contractor for importing the network equipment.
Project Stakeholder Management	Project stakeholder handling was not easy	Stakeholder management was not difficult

(Source: own case study, 2018)

From the above comparative analysis, one can concluded that managing ERP project is very difficult and needs very good experience in business automation projects, project management experience, good project staff coordination and mobilization skill, creativity in risk and conflict handling, creativity in project monitoring and controlling in addition to the IT expertise. However,

Network project is easier for management since it needs mainly the knowledge and experience of IT.

Furthermore, it can be deducted that finding Network experts with experiences on network project is not difficult but for the ERP project, finding experts with ERP project experience is difficult.

4.7 Analysis of the Findings

As can be understood and extracted from the data analysis section of this thesis work, the following analysis has been made.

Premia (ERP) Project

The Request for Proposal document for ERP and contractually amended document had been lacking even some major functional requirements. ERP requirements had been becoming clearer and clearer as the project progressed and especially during the first phase of system end user unit testing. As a result of that, repetitive letters had been sent from the insurance company to 3i-infotech asking for the amendments of the requirements. Furthermore, discussions between the two companies (Lion Insurance and 3i-infotech) had been held on the possibilities of the inclusions of the missed requirements without creating much financial damages on the contracting company. Requirements that have been most critical for ERP had been amended and requirements that had been considered as auxiliary requirements had been made out of scope. Budget module, payroll module and claim case tracking module were among the modules that were made out of the scope of the ERP system.

Apart from the incompleteness of the requirements for the ERP system, both the project managers and technical project staff members had been inexperienced. Hence, ERP project monitoring and controlling was challenging for them. Furthermore, the sudden resignation of the project manager who was considered as key person for the project contributed to additional challenges in the management of the project.

Regarding the motivation and commitment of the project staff, it had been understood that most of the project staff members were not motivated and committed to the level required to run the project according to the schedule. In addition to that, most of the technical project staff members from the functional departments were prioritizing their functional work assignments and was

challenging for the project manager coordinating them and getting their consents throughout the lifecycle of the project.

To sum up, poor client requirement documentation and lack of project management experience of the project manager in business automation projects were the major contributors to the slippage of the project schedule.

Network and Datacenter Project

Managing the Network project was not out of the scope of the project manager and the technical IT staff members. Furthermore, there was a consultant working for the insurance company to assure the proper implementation of the project (source: own case study).

The project was completed ahead of the planned schedule since the LAN work for the head office which was planned to be part of the Network Project was done by another contractor and the project management process was not difficult for the project staff. Delay was experienced before the delivery of the project equipment due license related problems on the side of the contractor.

The success factors for the Network project were experience of the project manager, experience of the project staff members; clear understanding of the requirements of the client by the consultant, easy project staff mobilization and the presence of the consultant working for the insurance company.

CHAPTER 5

SUMMARIES, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study was entitled “IT Project Management Practice Comparative Case Study of ERP And, Network Projects in Lion Insurance Company (S.C) ” and aimed at assessing the practice of the insurance company in the two projects. Lion Insurance Company (S.c) is one the non-governmental insurance companies in Ethiopia and headquartered at Addis Ababa, the capital city of Ethiopia.

The insurance company had no previous project management experience and the Premia project management was challenging for the insurance company.

5.2 Summary of the findings

The documented requirement for the Premia system was not detailed documentation of the functions of the intended departments. In other terms, the functions of each department in the RFP document were described in general terms which contributed to the ambiguity in the scope of the system. Hence, that lack of clear requirement documentation in the RFP and other agreed on contractual agreements became the main causes for repeated arguments between the insurance company and the contracting company on the functionality of the system. In the same way, that poor requirement documentation and thereby ambiguity in the scope of the project, contributed to the underperformance of the project manager and project schedule slippage.

Regarding the project staff and project committee, monitoring and controlling the Premia system was challenging for both project managers mainly due to the lack of experience in similar business process automation projects. Similarly, the contribution of the other project staff members and project committee members was limited because they were inexperienced for such a project. In addition to that, the project staff members were less committed and less motivated for the project, and project staff members from functional departments were not readily available for the project when their presence was important for the project. Such also contributed for the project's schedule slippage.

The other factor that contributed its share to the schedule slippage for the Premia project was the management style of the project managers. Both project managers somehow shared some common characteristics though the later project manager (who was appointed after the resignation of the first project manager) was better in his management style. Both project managers somehow lacked transparency to their project staff members, less participative, did not encourage project staff members to innovate better ways of doing things and generally had the belief that, their ideas for the project were better than alternative ideas from other project staff members.

And finally the contracting company started the customization of its existing premia system to develop another premia system for the insurance company before the detailed documentation and approval for the requirement analysis document. That procedure also contributed to complications in monitoring and controlling the project for the project manager.

Regarding the Network infrastructure project, both the project manager and especially the project staff members had experience in such projects. Furthermore, there was a third party consultant working for the insurance company to assure the project was done according the specifications set. The delay in the procurement process of the network equipment was one of the challenges for the project.

5.3 Conclusions

From the above findings, the study concluded that the Premia (ERP) project faced schedule slippage due to poor client requirement documentation, inexperienced and less participative project managers (mistake in appointing the right project manager) and less motivated project staff members.

However, the Network infrastructure project was completed ahead of the schedule and its management for the project manager was not complicated like the Premia project. But the delivery of the network equipment for the network project was delayed because of contractor's license related issues.

5.4 Recommendations

Based on the findings from the study, the following recommendations were made:

- The insurance company should have prepared clear requirements
- The insurance company should have assigned an experienced project manager in ERP automation projects or else it should have hired a third party consultant
- Project management training must have been given to the project manager and selected technical IT staff;
- Detailed orientation about the scope of the project, the schedule and the responsibilities of functional departments or representatives of functional departments should have been given in the presence of top management and preferably including the CEO;
- Milestone accomplishments should have been celebrated among project staffs and concerned stakeholders;
- System Success criteria should have been clearly defined before the project has been started;
- Top management should have made discussion sessions with project staff members to get notifications of early warnings about the performance of the project (in case the project manager fails to notice the symptoms)
- The insurance company should have insured that each milestone deliverable was received from the contracting company and was to the level required

References and Bibliography

Ala'a, H. & Richard, H. (2010). Explaining ERP Failure in a Developing Country: A Jordanian Case Study, Centre for Development Informatics, University of Manchester, UK

Anna Kurzydłowska (2015). Practical aspects of project management: case study for IT systems, Cardinal Stefan Wyszyński University in Warsaw

Aamir, I., Malik, R. & Rab Nawaz, L. (2014). A Qualitative Study of the Critical Success Factors of ERP System - A Case Study Approach, *International Conference on Industrial Engineering and Operations Management, Indonesia*

Automated Facility Solutions, A Case Study: Qualcomm Data Center

Charlie, C. CIS Department, Global ERP Project Management: A Case Study, Appalachian State University, Boone, NC 28608

Charlie, C., Chuck, C., Law, & Samuel, C. (2009). Managing ERP Implementation Failure: A Project Management Perspective, IEEE TRANSACTIONS ON ENGINEERING MANAGEMENT, VOL. 56, NO

Duru, L. & Mohamed, A. (2013), Improving Project Management Performance, A Case Study of Mobile Telecom Site Rollout Project in MTN Syria

Exploratory findings from four case studies, USA

Fergal, C., Frederic, A. & David, S. (2007). Project management: a case study of a successful ERP implementation, University College Cork, Cork, Ireland

Fleisch, Oesterle, & Powell (2004). Journal of Organizational Computing and Electronic Commerce 14(2), Rapid Implementation of ERP

Gezinus, J. & John, M. (2014). Reducing I.T. Project Management Failures: Early Empirical Results, 47th Hawaii International Conference on System Science

Jaakko, K. (2012). Preparing for ERP Implementation Case: Enersize Oy, Helsinki Metropolia University of Applied Sciences

Jaideep, M. Ram, S., Pradeep, G. (2005). Critical factors for successful ERP implementation, Shrestha & Swostik (2014). Case: JIRA and Microsoft Project, Project Management Software and its utilities

Jered Scholl (2016). Project Management Best Practices for Projects that Introduce Innovative Processes, University of Oregon

Khaled, A. & Cristian, B. (2014). ERP Systems and their Effects on Organizations: A Proposed Scheme for ERP Success, University of Bridgeport, Bridgeport, CT, USA

Kerzner (2013). Project Management: A Systems Approach to Planning, Scheduling, and Controlling

Kerzner (2006), Project Management: A Systems Approach to Planning, Scheduling, and Controlling

Lion Insurance (2015), Project Documents: Contract agreement, letters, project schedule, RFP

Mandl-Striegnitz, P. & Lichter, H. A Case Study On Software Project Management In Industry – Experiences And Conclusions

Michael, F. (2012). A Project Approach to Enterprise Resource Planning Implementation, Ghana Institute of Management and Public Administration

Moutaz, H. and Ahmed E. ERP Lifecycle: When to Retire Your ERP System, Main Entrance El-Tagamoa El-Khames, New Cairo 11835, Egypt

OMNI-ID (2011), Case Study IT Asset Tracking Inventory and Control System Delivers Major

Savings

OSIsoft, CSDCEEN-041713, Case Study: Accelerating Data Center Efficiency

Potemans, J., Theunis, B. & Rodiers. Simulation of a Campus Backbone Network, a case-study, *Katholieke Universiteit Leuven (K.U.Leuven), Belgium*

Project Management Institute, Inc., A Guide to the Project MANAGeMent Body of Knowledge, Fifth Edition

Robert, K. & Wysocki (2014). Effective Project Management: Traditional, Agile, Extreme, Seventh Edition, John Wiley & Sons, Inc.

Slawomir, K. & Irene K. (2008). Continuous Optimization and Knowledge-Based Technologies, 20th EURO Mini Conference, International Conference

Soobia, S. & Majid, H. (2017). (*IJACSA*) *International Journal of Advanced Computer Science and Applications*, Vol. 8, No. 5, 2017, Implementation of Failure Enterprise Systems in Organizational Perspective Framework

Sandeep, D. & Dr. Rajender, S. (2012). Case Studies of Most Common and Severe Types of Software System Failure, Volume 2, Issue 8, International Journal of Advanced Research in Computer Science and Software Engineering

Treinen, J. & Miller- Frost, S. Following the sun: Case studies in global software development, IBM SJ 45-4, IBM Systems Journal

U.S Department of Energy, Federal Energy Management Program, Reducing Data Center Loads for a Large-Scale, Net Zero Office Building

Appendix A: Interview questions

Addis Ababa University School of Commerce Project Management Department

Dear Sir/Madam

I am Simon Weldegebriel, a MA graduate student in Project Management at Addis Ababa University School of Commerce. The following interview questions were prepared to help understand the IT project management practices of the Insurance company in the two projects (Premia project and Network project). The interview questions are one of input categories for this study entitled “IT Project Management Practice Comparative Case Study of ERP and Network Projects in Lion Insurance Company (S.C)” and the main objective of this study is to assess the IT project management practice of the Insurance Company. At the end of the study, recommendations for any gaps identified in the IT Project management process would be forwarded.

I thank you a head for being willing to share your time for me and for your genuine responses.

The interview questions were organized in the following categories based on the project management knowledge areas. The categories used were Project Management Qualification, Project Clarity, Project Organization, Project Management Process, Project Integration Management, Project Scope Management, and Project Time management, Project Cost Management, Project Quality Management, Project Human Resource Management, Project Communications Management, Project Risk Management, Project Procurement Management and Project Stakeholder Management.

I. Project Management Qualification

1. What is your Educational background?
2. Did you take any project management training (s) before the execution of the project? What about after the execution?

If yes:

- a) Please list the type of training taken, duration of the training and fiscal year.
- b) How helpful was that training in capacitating you to carry-out the project?
- c) What were the main gaps in the training as compared with your observation in the real project work?

If no:

- a) Did you have any challenges in the project lifecycle since you did not take project management training?
 - b) Did you use any mechanism either to close the gap due to the lack of training or at least to minimize the challenges?
 - c) Was there any support from someone else to minimize the gap?
 - d) What is your suggestion about the training?
3. Do you have previous project management experience of similar scale?

If yes:

- a) Can you list the project (s) related details and your role in the project (s)?
- b) How helpful was that experience for your contribution in this project?
- c) Was that project (were those projects) successful taking in to account the main constraints of any project (time, budget and quality requirements or meeting client requirements)?

If no:

- a) What was the consequence in this project?
- b) Were there any measures taken by you or someone else to close the gap or at least to minimize it?

II. Project Clarity

1. Was orientation about the project given to you and other project stakeholders (board members and top management)?

If yes:

- a) How important was that to you?
- b) Do you think that orientation was detail enough?
- c) How was the organization of the orientation?

If no:

- a) What was the real challenge you faced as the project progressed?
 - b) How was that resolved?
2. Do you have any suggestions about the project orientation?
 3. Was the project plan clear and detail enough for you?
 4. Do you have any suggestion about the project plan?
 5. How do you see the RFP document and contractual agreed on document in relation to the actual client requirements for the project?
 6. Have you seen considerable influences on project progress related to the fulfillment of client requirement?

III. Project Organization

1. How was the organizational structure of the project?
 - a) Were there any projects before that were implemented by LIC?
 - b) How do describe ERP in the case of LIC?
 - c) Who was the project staff?
 - d) Who were the project stakeholders?

IV. Project Management Process

1. How do you explain the organizational culture and styles or established organizational norms in the project management process (shared vision and expectations, rules and regulations, policies, procedures, motivation and rewards, work ethic, and operating environment) , and the effect on the project management process?
2. Does the company have previous similar scaled project management experience(s)? Do you think that had an effect on the project management process of the two projects?
3. Was the selection of the project manager based on predefined written criteria? Do you think the selection of the project manager had an influence on the performances of the project? If yes, how?
4. How do you see the project management method of the project manager?
5. Did you play a role in the project management lifecycle and what that role?
6. How do you see the commitment and contribution of the top management in the project management process?
7. Were project staff members from the different functional departments available when requested?

8. How do you describe the commitment of the functional department managers (their individual contributions and willingness for releasing their staff when requested for the project)?

9. Was there any third party project consultant working for the insurance company?

If yes:

a) How do you see the contribution of the consultant in the project management process?

If no:

a) What was the real challenge due to the absence of a consultant?

10. Were there any other constraints that influenced the progress of the project?

11. Was the standard project implementation procedures followed for each project? (Requirement Document Approval, Design Approval, Testing phases, Submission of Deliverables)

V. Project Integration Management

1. Was there a project charter?

2. How was the coordination and integration system in the project?

VI. Project Scope Management

1. How do you see the scope of the project?

2. How do you see the scope management method of the project manager?

VII. Project Time management

1. Was there a considerable delay between the contract agreement and the project kick-off ?

2. Was the project completed as per the set plan?

If no:

- a) How much was the slippage in the schedule?
 - b) Do you think it had implications on the project budget?
1. How do you see the time management method of the project manager for:
 - a) Time estimation for the each milestone
 - b) Time management for the milestones
 - c) Overall project time estimation
 - d) Overall Project time management
 2. How do you see the overall time management skill of the project manager?

VIII. Project Cost Management

1. Do you think the original estimated project budget was good estimation? How?
2. Do you see considerable cost overrun in the project?
3. What is your understanding on the project manager's ability in managing the project cost?

IX. Project Quality Management

1. How do you see the project quality management process?
 - a) Planning for quality
 - b) Quality controlling method?
 - c) Quality assurance method?
2. What is your understanding about the quality requirements for the project?
3. Do you think the quality requirements are fulfilled?

X. Project Human Resource Management

1. How do you see the human resource management ability of the project manager related to:
 - a) Project staff planning and role documentation?
 - b) Project team selection and assignment?
 - c) Project team building?
 - d) Project team development?
 - e) Project team conflict handling?
2. How do you see the harmony and cooperation among project staff?
3. Did you see any considerable influences on the progress of the project related to human resource management?
4. How the skill was mixes for the project staff members? Do you think the selection of the project staff members had an influence on the performance of the project?
5. How do you rate the commitment of the project manager and project staff members?

XI. Project Communications Management

1. Can you explain the communication system used throughout the project lifecycle?
 - a) Means of communication used and its effectiveness
 - b) Communication line of top management with the project manager, project committee and project staff members
2. Do you think the communication system used have influences on the progress of the project?

3. How was the means of communication for key project issues that needed immediate top management involvement?

XII. Project Risk Management

1. How do you see the risk management ability of the project manager in the project in relation to :
 - a) Risk management plan?
 - b) Risk identification?
 - c) Risk analysis and mitigation planning?
 - d) Risk controlling and Responses for risks?
2. Did the project face a risk in its lifecycle?
if yes:
 - a) What the risk?
 - b) How do you rate the damage level to the project?
 - c) And how was that finally handled?

XIII. Project Procurement Management

1. What is your understanding about the project procurement method used in relation to the following:
 - a) Were the inputs for the project planned ahead?
 - b) Were there any challenges in the procurement process? If yes, how do you see its influence on the progress of the project?

XIV. Project Stakeholder Management

1. Who do you think are the stakeholders for the project?

2. How do you see their contribution in the project?
3. How do describe the stakeholder handling style of the project manager?