



**AN ASSESSMENT OF TOP MANAGEMENT  
SUPPORT ON INFORMATION SYSTEM  
PROJECT SUCCESS**

**In the Case of Commercial Bank of Ethiopia**

**By Henok Doni**

**A Project Work Submitted to Addis Ababa University School of  
Commerce in Partial Fulfillment of the Requirements for the Award  
of Masters of Arts Degree in Project Management**

*Addis Ababa University School of Commerce Department  
of Business Administration and Information System*

July, 2019

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Advisor: Abraraw Chane (PhD)

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**ADDIS ABABA UNIVERSITY**

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**Graduate Studies**

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By: Henok Doni

Approved by Board of Examiners:

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Advisor

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## DECLARATION

I the undersigned, declare that this project work is my original work and has not been presented in any University. All sources of materials for this project have been fully acknowledged. The work was done under the guidance of Abraraw Chane (PhD) at the Addis Ababa University School of Commerce.

Name: Henok Doni

Signature: \_\_\_\_\_

Date: June, 2019

Place: Addis Ababa

In my capacity as supervisor of the candidate's project, I certify that the above statements are true to the best of my knowledge.

Name: Abraraw Chane (PhD)

Signature: \_\_\_\_\_

Date: July, 2019

Place: Addis Ababa

## **Acknowledgment**

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## Acronym

<b>Abbreviation</b>	<b>Meaning</b>
CEO	Chief Executive Officer
CIO	Chief Information Officer
COO	Chief Operating Officer
CSF	Critical Success Factor
IS	Information Systems
ISPP	Information Technology and Systems Project Performance
IT	Information Technology
PMI	Project Management Institute
PSAQ	Project Success Assessment Questionnaire
TMS	Top Management Support
TMSQ	Top Management Support Questionnaire

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## ***Abstract***

*Top Management Support is widely claimed to be a critical success factor responsible for Information Systems Project success. The objective of this study was to identify those top management support dimension that have the greatest effect on system implementation project success and to investigate whether these dimensions are actually used by top management in Information system Projects. Information system projects was selected as the unit of study. A descriptive approach that utilized both qualitative and quantitative methods was employed to investigate the contribution levels of top management support in an information system project, and the effect top management support has on Information system project success. The findings of this quantitative study addressed the research questions and demonstrated that (a) an important contribution does exist between “Provide Resources”, “Structural Arrangement”, “Expertise”, “Communication” and “Power” with Information system Project success. (b) A significant and relatively critical relationship does exist between “Provide Resources” with Information system Project success. (c) This study identified an overall relationship of top management support dimensions and information system project success and the findings do imply that information system project success might be improved by improving top management support on the five significant dimensions.*

***Key Words:*** *Top management support, Top Management Support Dimension, Project success, Information System Projects success*

# Chapter One

## I. Introduction

### 1.1 Background of the Study

Information system projects are the provision of a service to implement systems and solutions, including a variety of hardware and software products. Information System Projects are characterized by high uncertainty, need to use state-of-the-art system, rapid changes, a high need for interpersonal skills; high importance of organizational structure; customers who are not familiar with the system, large number of request changes during the project life cycle, high use of virtual teams, high importance of group learning and high influence of matrix organization structure (Kerzner, 2013).

The CHAOS report from the industry (Standish, 2013) (Standish, 2009) expresses concern regarding the low information system project success as do many academic reports. These reports point a finger at the Critical Success Factors (CSFs) for information system project success. Top management support has almost always been referred to in the literature as one of the most important of the CSFs (Young & Poon, 2013); (Zwikael, 2008(a)). Researchers argue that when CSFs are not managed, they take the project down a perilous path, leading to failure (Williams & Ramaprasad, 1996). The importance of top management support for better information system project success has been established by previous researchers (Boonstra, 2013), (Young & Poon, 2013) (Loonam & Donagh, 2005).

Advice in the literature is to ensure top management support for the project in order to secure safe passage to success (Young & Jordan, 2008). The literature indicates that there may be variations in the level and the nature or type of top management support during a project. Such subtle information however is rare to find in the existing body of knowledge. Academics that identified such gaps call for in-depth investigations of top management support and its impact on information system project success (Boonstra, 2013).

In contrast to this advice, the available literature appears to explore top management support at a surface level. Hence, the literature falls short of projecting an optimal view of top management support and is yet to appreciate what underlies top management support. There is also a lack of coherent literature where information system project success has been studied from the point of

view of a single overarching concept such as top management support (Young & Poon, 2013). A study designed to investigate such demands should investigate not just top management support, but its dimension and the level of support and finally the effect top management support has on information system project success. Such information is currently not available in the literature. Moreover, a consensus on the definition for top management support is yet to be established.

Therefore, one could argue that the effect top management has on information system project success has not yet been convincingly established. It is therefore assumed that this lapse of information in the literature is causing a lag of top management support in an information system project success context. Due to the underdeveloped body of knowledge, even the top managers with good intentions may fall short of rendering the necessary support at the hour of need. As such, the necessity of a detailed study that investigates the concept of top management support, and makes the effort to evaluate the effect top management support has on information system project success is justified.

This research study carried out to explore the missing elements in the literature that were described above. A definition for the concept of top management support is proposed based on popular theory from the discipline of general management and the five dimensional top management support framework (Boonstra, 2013). The framework of top management support developed by (Boonstra, 2013) through exploratory research cited the top management support as a multidimensional construct. These dimensions are used in this study and listed out as follow:

- Dimension 1: *Provide Resources*
- Dimension 2: *Structural Arrangement*
- Dimension 3: *Communication*
- Dimension 4: *Expertise*
- Dimension 5: *Power*

The main aim of this research is to provide both top managers and project managers with a better understanding of the concept of top management support, and the importance of top management support in information system project success. Findings from this study are expected to help practitioners to achieve better information system project success in the future.

## **1.2 Research Problem**

It is clear that too many IT projects in the software industry achieve poor results. Many studies have investigated the major reasons for this poor phenomenon. Whittaker (1999) has found that the three most common reasons for projects executed in the software industry to fail are: *poor project planning; a weak business case; and lack of top management involvement and support.*

Top management support has become a specifically important factor in the software sector with the introduction of maturity models, such as Organizational Project Management Maturity Model (PMI, 2017). Further, according to Zwikael (2008), Critical top management support processes that an organization may consider to implement, include develop project procedures, involve the project manager during initiation stage, support on-going project management training programs, establish a project management office (PMO), develop a supportive project organizational structure, define clear project success measures and support projects in quality management. However, these processes are general and hence may not be relevant to the Information System Projects Success. Thus by using Top management support multidimensional framework (Boonstra, 2013), this study assess the effect of top management support on information system projects.

Given the above, the study aims to discuss the following problem:

**Q1.** What are the actual pattern of support provided by top management in Information System Project success?

**Q2.** Which top management support dimensions contribute largely towards information system project success?

## **1.3 Objectives of the Study**

### **1.3.1 General Objectives**

The objective of this study is to investigate five dimensional top management support that have the greatest contribution to system implementation project success and to investigate whether these dimensions are actually used by top management in Information system Projects.

### **1.3.2 Specific Objectives**

This paper aims at addressing the following specific issues:

- i. To examine the importance of the *Provide Resources* dimension in information system projects success.
- ii. To examine the importance of the *Structural Arrangement* dimension in information system projects success.
- iii. To examine the importance of the *Communication* dimension in information system projects success.
- iv. To examine the importance of the *Expertise* dimension on information system projects success.
- v. To examine the importance of the *Power* dimension on information system projects success.
- vi. Identifying critical top management support dimensions for the Information System Projects Success.

#### **1.4 Significance of the Study**

The significance of this study is to learn whether top management focus on the most effective support dimension and these dimension may allow top manager to better use their limited time and budget while supporting projects. This research may enhance the current understanding of how top management support relates to project success by examining the perceptions of project managers. A closer examination of project managers and senior project professionals may help to bridge the gap between theory and practice. This study could help to effectively link project management and top management, reduce project failure rates, and increase overall information system project success.

The study raises important implications for the top management, project managers, and project professionals. This findings suggest that support from top management in terms of providing resources, structural arrangements, communication, expertise, and powers are effective dimensions to enhance the likelihood of information system project success. The results of this quantitative study provide an opportunity to the project professionals in developing appropriate project framework, policies, practices and procedures to ensure support from the top management throughout the implementation of a project. The findings of the study will also help the professionals to lead the projects with more enthusiasm where top management should take their role seriously to make sure availability of necessary support to the project managers.

Further, this study investigated top management support from the project managers' point of view. It would be interesting to see yet another study that investigates top management support from the top managers' point of view. Comparison of such findings may help to further understand top management support from different viewpoints and help to iron out any misunderstandings. A comparison of the findings from the present study and the suggested study may provide a broader view and may even lead to the elimination of any misunderstanding between the top and the project managers with regard to top management support.

## **1.5 Scope of the Study**

The research scope was defined in terms of how the constructs being studied were identified or recognized in this study. Anything additional was considered as outside of the scope. Top management support is investigated in this study as actions that arise from the role of the top management. Classifications explaining the role of the top management are available in previous literature. Top management support is just one organizational expectation from the top management among many. Therefore, top management support was assumed as part of the work carried out by the top manager. As such, top management support is expected to be embedded in the classifications given in the literature. The unit of study is information system projects. Data on ongoing projects were collected regardless of the level of performance in order to investigate top management support from across all of the project management processes. Participants selected were either project managers or team leaders who carried out information system projects.

## **1.6 Limitation**

This study has several limitations like other studies which should be addressed in future research. First, cause-and-effect relationship cannot be definitively inferred from the results because the study uses cross-sectional data. The data collected at different points in time can only be used to the causality. Therefore, longitudinal study would be interesting in the future to observe that how the relationships between multidimensional top management support and information system project success develop over time. The second limitation is the question of generalization of the results due to the investigation being from only the information system project context. The research was carried out only on projects from the Information System context in banking industry and matrix organizational structure. The questionnaire survey all gathered responses from

Information system project professional. Therefore, one could argue with regards to the applicability of the findings of this study into contexts beyond banking sector and matrix organizational structure. Complementary qualitative studies on the reasons underlying the necessity for different types of top management supportive dimensions across the sectors and on different types of organizational structure would also aid the understanding of the relationship between multidimensional top management support and project success. In order to overcome any prejudices, the researcher recommends future researchers to carry out investigations in the context of their interest. Third, this study utilizes a managerial role dimensions for defining the concept of top management support. The researcher acknowledges that there may be any number of other means to define the concept of top management support.

## **1.7 Operational Definition**

**Project success** can be defined as the projects' efficiency, impact on the customer, business and direct success, and preparation for the future (Shenhar & Dvir, 2007).

**Top Management Support** is defined as devoting time to the IS project in proportion to its cost and potential, reviewing plans, following up on results and facilitating the management problems involved.

**Provide resources** it refer to adequate human, financial, and material resources that are provided for projects.

**Structural Arrangements** it refer to appropriate establishment of procedures, processes, and structures for projects.

**Communication** it refer to timely and appropriate creation, collection, dissemination, storage, and disposition of project information.

**Expertise** refer to top manager's knowledge and skills in the field of project management.

**Power** refer to top manager's authority and uses it to support the project activities and look after the team members during crises.

## **1.8 Layout of the Research Paper**

The layout of this study can be divided into five major parts. Firstly, an introduction presents basic information regarding theoretical foundation of Top management support dimensions and the

information system project success. It also presents research hypothesis and explains the objective of the paper. The second part is the theoretical part of the study. It is based on the Top management support and information system success literature presented by academic circles and practitioners. In this section, analysis of the existing project management literature and discussion of the area of interest are presented. The third part, methodological, is based on the Empirical research. This part presents the chosen methods and ways the information were gathered. Furthermore, this section presents the justification of the choice of the top management support dimensions and project success measuring tool. The fourth section of the paper contains the results of the conducted research. The paper ends with a summary, conclusion, and recommendations which summarizes the work covered during the research and analysis. The appendix contains the questionnaire and statistical regressions outcomes.

## **Chapter Two**

### **II. Literature Review**

#### **2.1 Understanding Information Systems Project Success**

##### **2.1.1 Concept of Information Systems Project**

An information technology project is a temporary endeavor undertaken to create a unique product, service or result that involves generating, storing, processing, and/or distributing information electronically using computers and computer networks. An information system project is a temporary endeavor undertaken to create a computerized business solution that may generate, store, process and/or distribute business information electronically via computer networks.

Information system projects are the provision of a service to implement systems and solutions, including a variety of hardware and software products. Information System Projects are characterized by high uncertainty, need to use state-of-the-art system, rapid changes, a high need for interpersonal skills; high importance of organizational structure; customers who are not familiar with the system, large number of request changes during the project life cycle, high use of virtual teams, high importance of group learning and high influence of matrix organization structure (Kerzner, 2013).

Information Technology and Systems Project Performance (ISPP) is claimed to be below expectation and concerns are reported. The blame generally falls on project managers for not having effectively managed the Critical Success Factors (CSFs). Despite the convention that managing CSFs is the route to better ISPP, a close look at the literature shows that there is a lack of depth in knowledge. For example, research studies utilizing a fine-grained approach to elicit detailed information about each CSF and its impact on project performance are still rare. As a result, most literature available at present has only gone as far as to advise securing CSFs for IT/IS projects to ensure a better outcome. The complexities with and within CSFs are rarely addressed. The literature does however identify some CSFs as more important than others. Top Management Support is one such profoundly important CSF (Young & Poon, 2013).

## **2.1.2 Information System Project Success Measurement**

The traditional view of project failure and success is the golden or iron triangle of project budget, time, and scope. A project that remains within the targeted values of each is considered a success. A project that goes beyond the planned values is regarded as a failure. Additionally, project success and project failure are not necessarily opposite or contradictory notions (Fincham, 2002). Project failure and success is an essential field of study because projects drive business innovation and change, and are used to implement a strategy, innovation, or gain a competitive advantage. Projects are the “engine that drives innovation from idea to commercialization” and “drives that make organizations better, stronger, and more efficient” (Shenhar & Dvir, 2007)

The project management metrics of time, cost, scope, and quality have been the most important factors in defining the success of a project (PMI, 2017). Project success may include additional criteria linked to the organizational strategy and to the delivery of business results. It is possible for a project to be successful from a scope/schedule/budget viewpoint, and to be unsuccessful from a business viewpoint. This can occur when there is a change in the business needs or the market environment before the project is completed. Thus, successful projects are those that meet business requirements, are delivered and maintained on schedule, are delivered and maintained within budget, and deliver the expected business value and return on investment.

According to Shenhar and Dvir (2007), project success must reflect the strategic intent of the company and its business objectives for the following three reasons. First, the project must serve the organization, or there is no need to initiate the project. Second, measuring success cannot only happen at the end of the project, but must also include milestone successes. Finally, success measures should reflect the interests of all stakeholders who will be affected by the outcome of the project (Ika, 2009).

### **I. Project Success vs. Project Performance**

This section discusses the notions of project outcome in the literature. Project outcome is considered the dependent variable in this research study. In order to proceed with the study, it is necessary to illustrate how different notions were considered when selecting the most appropriate project outcome or the dependent variable. In general, the literature identifies two popular notions when discussing the outcome of information system projects (Savolainen, 2012). The first group identifies achieving the project goals as project success (Agarwal & Rathod, 2006); (Shenhar et

al, 2002) while the second group identifies this as project performance (Na et al, 2007); (Nidumolu, 1996). It is difficult to determine if one notion is preferred above the other, as some refer to these terms interchangeably (Gemino et al, 2007). Few others say that positive project performance will lead to project success (Hong, 2011), others do not report a direct connection (Turner & Muller, 2005). For the purpose of this research, project success were looked at in some detail.

Both project success and performance are reported as multi-dimensional, some of which are similar across performance and success notions. Project performance descriptions in the literature are usually segregated into two dimensions, following which further sub-dimensions are identified. “Process performance, which describes how well the software development process has been undertaken” (Nidumolu, 1996) and the “product performance, which describes the performance of the system actually delivered to users” (Nidumolu, 1996) are two main dimensions of information system project success. The concept of project success was the first to appear in the literature and scholars claim that the first initiatives towards a definition of project success were seen in the 1970’s (Davis, 2014) and early 1980’s (Müller & Jugdev, 2012). Project performance was a phenomenon that followed, possibly as a progression of the early knowledge.

When considering both performance and success notions on project outcome, most agree that a project has to meet the requirements of the iron triangle: i.e. time, cost and scope (PMI, 2017); (Agarwal & Rathod, 2006). Other researchers have added more dimensions to supplement the iron triangle. Most studies still include the iron triangle as part of project success. Others warn that they are parts of project management success. Hence, they advise not to confuse the iron triangle with actual project success, which they explain is more customer oriented (Savolainen, 2012); (Papke-Shields, Beise, & Quan, 2010); (Ika, 2009). Some researchers maintain that the quality of the product is as important as the iron triangle (PMI, 2017); (Agarwal & Rathod, 2006). Other factors that are mentioned as important include the project’s product (Wohlin & Andrews, 2001); (Nidumolu, 1996); the satisfaction of the team and customer (Agarwal & Rathod, 2006) and the satisfaction of the contractor (Shenhar et al, 2001) the preceding list captures many of the dimensions in the literature. However, it could still be argued that it is not an exhaustive list as there may be other project success/performance dimensions considered important by stakeholders (Davis, 2014); (Agarwal & Rathod, 2006); (Procaccino & Verner, 2006).

Top management support is identified as a CSF of very high importance for information system project success. Yet, adequate information with regard to what constitutes top management support and its changing nature within a project has not yet properly been recognized. Thus, top managers that render support and project managers that request support appear to be unaware of the type of support needed, and when support should be requested. As a result, project performance appears to suffer. Therefore, it is necessary to advance the body of knowledge with regard to top management support for information system project success.

## **II. Critical Success Factor in Information System Projects**

The CSF approach is a popular research area and has accumulated some worthy literature. There are debates as to the exact origin of the CSF approach ( (Belassi & Tukel, 1996); (Wasmund, 1993) but, there is agreement that (Rockart, 1979) pioneered the CSF approach for “project management and IS implementation” ( (Remus & Wiener, 2010). The CSF approach could be applied to find the factors that are important for success in many contexts such as the CSFs for an individual, CSFs for a project and/or organization (Williams & Ramaprasad, 1996); (Belassi & Tukel, 1996); (Rockart, 1982). According to (Rockart, 1982) CSFs are “those few key areas of activity in which favorable results are absolutely necessary for a particular manager to reach his or her goals”. Hence, CSF approach is utilized to draft a solution to a business problem by concentrating on achieving optimal results in the key areas of activity identified (Wasmund, 1993). Although CSF approach is acclaimed as an academic concept (Butler & Fitzgerald, 1999); (Williams & Ramaprasad, 1996), there is much interest from industry practitioners as well (Standish, 2013); (Standish, 2009). In fact, IT/IS project management is one area of research where academics and practitioners frequently refer to each other’s research findings.

The importance of CSFs in the discipline of IT/IS project management is evident from the large quantity of literature found. This may be due to the fact that CSFs in IT/IS projects are considered to be related to the fundamentals of project management techniques ( (Reel, 1999). It is advised that the CSF approach be initiated at IT/IS project definition by identifying the CSFs for that project. The importance of a particular CSF however, may vary during various stages of a project ( (Bassellier, Reich, & Benbasat, 2001). The importance of CSFs may also vary based on the organization and the type of the IT/IS project ( (Fortune & White, 2006). Some CSFs may even influence each other. Hence, it is clear that there are complexities involved with the CSF approach.

### **III Project Success Factor**

Project success factors are those inputs to the project management system that lead directly or indirectly to the success of the project or business. (De Wit, 1988) distinguishes between project success (measured against the overall objectives of the project) and project management success (measured against the common and traditional measures of performance in terms of cost, time and quality). The traditional definition of project success includes the triple constraints of project scope, budget, and time. This perspective assumes all projects to work in a linear sequence using common tools for all project types (Davis, 2014). However projects are unique and therefore need a specific set of tools that are adapted for each project, the measurement for project success has some alternative frameworks (Ali & Kidd, 2013). Project success to be consistent with the delivery of a final product at the right time, proper cost, and with an emphasis on quality. Ali & Kidd (2013) focus on four issues as vital to project success: scope, cost, time, and quality.

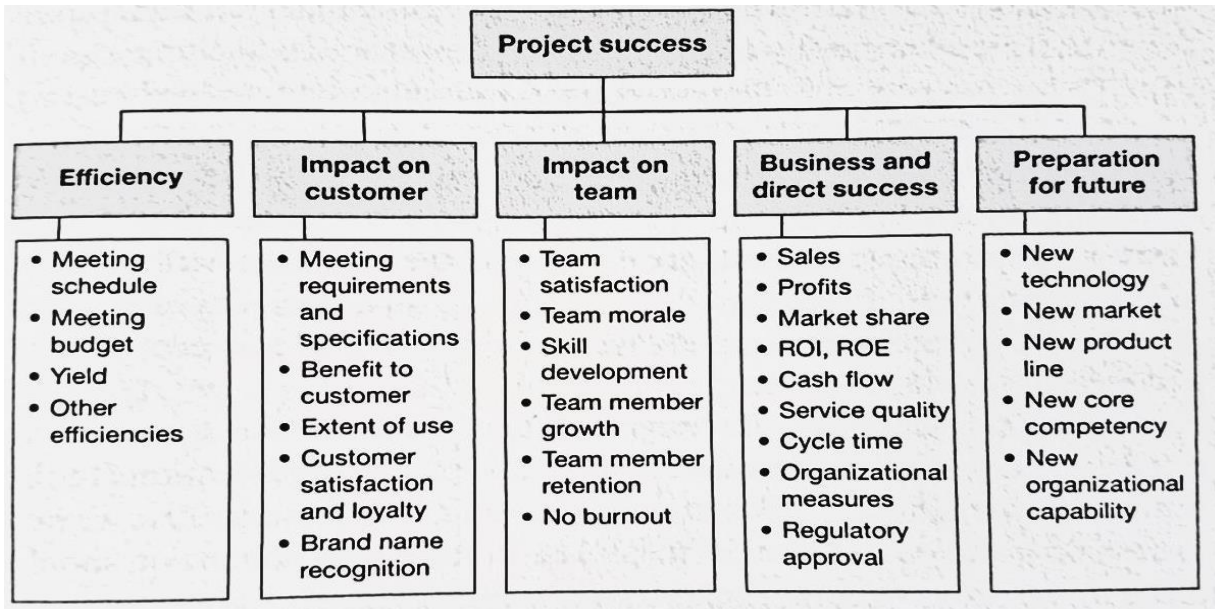
The measurement of project success factors is continuing to evolve with no standard method. Each industry defines the term “project success” differently. Collins and Baccarini (2004) researched the meaning of project success in different industries and found that many based project success on the traditional iron triangle and the additional criterion of customer satisfaction. Below is a chronological summary of the significant measures of project success factors which reveals the evolution of the topic.

Project success measures have both objective and subjective components which causes each stakeholder group to define success differently (Jugdev & Müller, 2005). Later, (Müller & Jugdev, 2012) reviewed the literature on project success that stemmed from the work of the seminal authors Pinto, Slevin, and Prescott in the 1980s. Their findings revealed that modern project success measures are thought of more broadly and more strategically with a focus on the business’ long-term objectives (Müller & Jugdev, 2012). In their publication, seminal authors (Pinto & Slevin, 2006) developed the ten project-critical success factors list in Table 1.

<b>Success Factor</b>	<b>Description</b>
Mission	Initial clarity of goals and general directions
Top-management support	The willingness of top management to provide the necessary resources and authority/power for project success
Project schedule/plans	A detailed specification of the individual action steps required for project implementation
Client consultation	Communication, consultation, and active listening to all affected parties
Personnel	Selection, recruitment, and training of the necessary personnel for the project team
Technical tasks	Availability of the required technology and expertise to accomplish the specific technical actions
Client acceptance	The effect of “selling” the final project to its ultimate intended users
Monitoring and feedback	Timely provision of comprehensive control information at each stage in the implementation process
Communication	The provision of an appropriate network and necessary data to all key actors in the project implementation
Troubleshooting	The ability to handle unexpected crises and deviations from the plan

**Table 1** Ten Project-Critical Success Factors

Shenhar and Dvir (2007) amended their 1997 framework of project success to include five dimensions of project efficiency which included impact on customer, impact on team, direct organizational and business success and preparing for the future. This model is strategic and tactical in both the short and long-term while considering multiple points of view from different project stakeholders.



**Figure 1.** The shifting criteria for project success over time (Shenhar & Dvir, 2007)

Project efficiency measures the performance of the budget, schedule, and other project efficiencies. This dimension evaluates the completion of the project on time, within budget, and with only minor changes.

The impact on the customer measures the improvements to the performance, customer satisfaction, and the meeting of the customer requirements through the functional requirements and technical specifications. This dimension measures the key stakeholder that is significant in the evaluation of the project success.

The third dimension is the impact on the team members that are an investment by the organization on the project. This dimension is measured by satisfaction, motivation, loyalty, morale, energy, experience of personal growth, and desire to stay in the organization by the project team members. The fourth dimension is the business and direct organizational success of the project that measures the economic business success, increased profitability, positive return on investment, and increased market share. This dimension also measures the project's contribution to the organization's direct performance. Preparing for the future addresses the long-term benefits of contributing to future projects and creating new products, markets, technologies, and business processes.

An additional aspect of the Shenhar and Dvir (2007) project success assessment questionnaire (PSAQ) is the ability to measure other success dimensions that are relevant to the project and the measure of overall success. This measure was used in a study by Ahmed, Mohamad, and Shakil (2014) to assess the effects of multidimensional top management support on project success.

Each of the five success dimensions identified by Shenhar and Dvir (2007) are significant, but the relative importance shifts depending on the short or long-term duration of the project. During short term projects, project efficiency is most critical. After project completion, the other dimensions are measured, and project efficiencies become irrelevant.

#### **IV Dimensions of project success**

Shenhar and Dvir (2007) adopted multidimensional and multi-observational framework to measure five dimensions of 'project success' that include project efficiency, impact on customer, impact on team, direct organizational and business success, and preparing for the future:

##### **Project Efficiency**

Project efficiency measures the performance of budget, schedule, and other project efficiencies. This dimension evaluates the completion of the project on time and within budget representing short-term measure.

##### **Impact on customers**

Impact on customer measures functional requirements, technical specifications, the satisfaction level of customer, the extent of customer using the product, and the extent of customer loyalty. It symbolizes the key stakeholder whose acuity is significant for evaluation of project success and it noticeably states that how the project results improve the customer's satisfaction or business and how it addresses the customer's need.

##### **Impact on the Team**

Impact on the team measures the indirect investment made by the organization for development of team members, the level of growth and learning achieved by the team, newly acquired skills by the team members, and new management and professional capabilities attained by the team. It assesses the collective impact of team satisfaction, morale, overall team loyalty with organization and team member retention after the completion of the project.

## **Business and Direct Organizational Success**

Business and direct organizational success measure immediate and direct impact on the organization in terms of income, sales levels, profits, cash flow as well as other financial actions in the business context. In some cases, this dimension is reflected through a typical business plan which sketch expected growth, profit and sales in the future, from the resultant product.

## **Preparing For the Future**

Preparing for the future addresses the long-term benefits and shows that how new opportunities are generated and how well the project support the organization to develop its infrastructure for the future. The measures of preparing for the future may contain creating a new product line, creating a new market, or a new technology development, whereas future infrastructure may comprise on organizational competencies, new organizational processes and additional technological competencies.

## **2.2 Understanding Top Management Support**

### **2.2.1 The Top Management**

The term, top management exists because there are different management levels defined in organizations. The literature indicates that management levels may differ according to organizational size ( (Lim, Stratopoulos, & Wirjanto, 2013): (Sambamurthy & Zmud, 1999) and structure (Li & Harrison, 2008). Researchers have associated authority and information needs (Felekoglu & Moultrie, 2014) with different managerial levels. The naming of managerial levels in the literature varies even with the same functionality. Some studies categories management levels as corporate managers, functional managers and frontline managers (Hill & McShane, 2008). Others refer to management levels as operational, middle and top (strategic) level management ( (Johnson et al, 2011). For clarity and ease of use, this study refers to the latter.

These management levels have different managerial responsibilities ( (Liu et al, 2010); (Bassellier, Reich, & Benbasat, 2001). Top level managers are involved with long term organizational goals, whereas lower level (operational) managers are more involved with short term goals, firefighting and conflict management. It is noted in the literature that lower levels in the management hierarchy experience greater levels of brevity and fragmentation of work (Mintzberg, 1994). Hence, support from management levels above has been noted as important when handling exceptions and

escalations (Boonstra, 2013); (Ragu-Nathan et al, 2004). Advice may also be useful in periodic reviews and to generate ideas ( (Shaul & Tauber, 2013). The flow of support and information needs to travel through the lines of hierarchy to the affected areas.

According to prior literature, a range of managers could be labelled the top management, for example the chief executive officer, senior manager, chief information officer, director and so on. There is some literature that uses such labels interchangeably without indicating a particular reason (Sharma & Yetton, 2003), this tends to confuse the reader. Many studies however say that the top management itself could be divided into multiple layers (Johnson et al, 2011); Hill & McShane, 2008;. In order to eliminate any ambiguities and clearly understand which levels of managers are commonly known as top managers, a look at the literature from over the years was taken. According to the studies, chief level managers, board of directors and senior managers may all be addressed as the top management.

### **2.2.2 Top Management Support**

Top management support is considered as the amount and nature of the support that the project leader expects from the top management both for the project and for himself as a leader ( (Pinto & Slevin, 2006). The committed and strong leadership at top management level is one of the major critical factor to project success which can moderate the accomplishment of project success. The high level planning and/or support from top management is sometime sufficient for project success, but the top management support is almost always essential for project success (Young & Poon, 2013).

Top management support plays a critical role in the project outcomes that have been investigated as a critical factor for project success by the recent studies differentiating project success from project management (Hwang & Schmidt, 2011); (Young & Poon, 2013). Top management is generally the individuals functioning in the capacity of CEO, President, Chairman /Chairperson, Director or other official positions at senior management level. The people working at senior level positions must possess leadership and management skills. Top management provides facilitative and supportive working environment for project implementation ( (Bryde, 2008). Top management support is one of the most important critical factors for successful implementation of projects (Liu et al, 2010). Projects are used as a mean to implement organizational strategies and top management support is believed to play a critical role in project success, but lack of top

management support is one of common factor in projects (Ali & Kidd, 2013). The terms senior management, upper management, and executive management used in this study refers to top management, as these terms are used interchangeably by (Basu, 2014).

Most of the critical success factors are quite different for each industry, but the top management support is still one of the most common critical success factors across the industry (Belassi & Tukel, 1996). The importance of top management support being an active stakeholder is a strong factor that must be present throughout the process of project implementation to ensure project success. Top management support is a combination of gaining attention and providing resources to project leaders for successful accomplishment of projects.

Top management support and stakeholder involvement have been identified as critical success factors relating to project management. (Pinto & Slevin, 2006) Identified a list of 10 critical success factors that are important for various types of projects in which top management support is one of them. The support from top management is essential for the life of the project and top management must be fully committed to support and involve in successful delivery of the project. Top management is responsible for strategy development, who must have clear knowledge and expertise about the prevailing situations of the organization. Top management is the major link across the organizational functions who should support the team's decision and involve in resolving the conflicts that may arise during the project implementation. It is very important that top management controls the resources necessary to support any project. Top management should communicate with project team in order to motivate, encourage and facilitate the project work.

Hayvari (2006) argued that critical success factors are vaguely listed or they are too specific. According to Besner and Hobbs (2008), critical success factors are also important for organizational support and use of proper tools, in addition to achieving project success. Lack of top management support is a critical barrier (Somers & Nelson, 2004) because the top leadership plays an important role throughout the life of the project. Top management support is essential in both implementation stage and the operation stage, where top management involves in setting up the projects, determining the goals, establishing goals, deciding budget, and providing human, material and technical resources. Young and Jordan (2008) cited top management support as one of the most critical success factors for project success.

Top management provides necessary human, material and financial resources required for the project, to sell the project with visible championship and enthusiasm, and support the project by exhibiting political power (Boonstra, 2013) (Young & Jordan, 2008). Top management introduces new workflow patterns, provide resources to change the organization, use formal power to enforce new structures for making the organization more adaptive to the information system (Sharma & Yetton, 2003).

Top management provides the resources to adapt the technology, make changes in the technology and encourage use of a new system for helping the developers and implementers to establish the necessary organizational structures. Top management motivate the powerful parties to cooperate with the implementer and influence the stakeholders through resource provisions, negotiations and persuasion (Boonstra, 2013).

Top management commitment is a key enabler for effective implementation of strategies through the projects. Top management support is essential for setting up the vision, mission, goals and strategies for integration of department and units in the organizations. Boonstra (2013) believed that top management plays a critical role in the success of projects when the top leaders are highly supportive in providing sufficient human, material, and financial resources to the project team. Effective roles of top management support include actively influencing the stakeholders through resource provision, negotiation, persuasion, and motivating powerful parties to support the implementers.

The financial and human resources are required for the projects to produce products or services which must be made available at an appropriate level by the top management pointed out that top management support for projects is a key to the use of certain methods and the quality of project planning. In the context of projects, number of studies have considered top management support as a critical success factor (Boonstra, 2013); (Dwivedi, et al., 2013): (Young & Jordan, 2008): (Zwikael, 2008(a)). Such as, all studies disregarded the direct effect of multidimensional top management support on project success.

The importance of top management support in projects have been recognized by project management and change management theories). A critical role is played by the top management in establishing and providing the resources needed for the successful accomplishment of the project. Literature recognizes the role of top management during the project definition and team

composition. An effective top management support inculcates confidence and encourages the project leader to focus their leadership towards project success. Top management support is the degree to which top management understands the importance of project success and the extent to which top management is involved in implementation of the project. Involvement of senior management is vital in providing guidance to the project leader, according to (Kerzner, 2013) and involvement of top management is not a new invention which plays an integral role in project success.

### **2.2.3 Dimensions of Top Management Support**

The framework of top management support developed by (Boonstra, 2013) through exploratory research cited the top management support as a multidimensional construct. Accordingly, these dimensions were identified by (Boonstra, 2013), for measurement of top management support and to investigate the effect of multidimensional top management support on project success. The dimensions of top management support are:

#### **Provide Resources**

Top management support and availability of resources to the project leaders are ranked at the highest rank for the success of projects in most of the industries whereas an unsupportive top management is one of the major reasons for failure of projects ( (Belassi & Tukel, 1996). Project leader must be able to get support from top management for successful completion of the project. The project leaders should have direct access to top management where senior management must support the project leaders to provide resources, gives authority, support in crises and develop their competencies through training and development programs. The project leader is not dependent on top management only for the support, direction, and authority, but also to implement the plans or goals of top management for the organization. An organizational influence on project leader is generally associated with a higher hierarchical position which is distinguished by his/her social status in an organization. The project leaders who have higher status in organizations are better at negotiating resources and attaining support from top management because the resources received by the project impact on the project leader's ability to influence decision making (Chollet et al, 2012)

The support from the top management is critical for project leaders in achieving project objectives, especially where top management is the champion of the project. A functional

organizational structure facilitates better resource sharing for the projects rather than a pure project or matrix structure (Dwivedi, et al., 2013).

### **Structural Arrangements**

Top management support is an essential element for delivery of the promised benefits to the customer. For successful delivery of product or services, top management support and commitment are significant throughout the duration of the project. Top management institute and enforces appropriate processes, procedures, and project structures for achieving project objectives, system adaptation, improve organizational efficacy, effective controlling mechanism, implementing organizational change, and strengthening the stakeholder's support (Boonstra, 2013). Top management commitment is a key enabler for effective implementation of strategies through the projects. Top management support is essential for setting up the vision, mission, goals and strategies for integration of department and units in the organizations. Boonstra (2013) believed that top management plays a critical role in the success of projects when the top leaders are highly supportive in providing sufficient human, material, and financial resources to the project team.

### **Communication**

Top management should communicate leadership initiatives, visions, strategic direction, and business goals with the project team. Top management regularly communicates to support the project, motivate the team, sell the project to the rest of the organization, discuss organizational implications and organizational changes, explain potential system changes, and collaborate with various group of stakeholders (Boonstra, 2013). Effective roles of top management support include actively influencing the stakeholders through resource provision, negotiation, persuasion, and motivating powerful parties to support the implementers.

### **Expertise**

Eventually, the project leaders are responsible for managing their projects successfully where top management is committed to provide resources and a set of requirements. Top management focus on strategic planning for providing support and ensuring commitment in all phases of project implementation. Top management should have advanced social skills such as understanding of role theory, role conflict, personality identification, and communication for dealing with project

stakeholders (Ehsani et al, 2013). Top management support is the degree to which top management understands the importance of project success and the extent to which top management is involved in implementation of the project. Involvement of senior management is vital in providing guidance to the project leader, according to (Kerzner, 2013) and involvement of top management is not a new invention which plays an integral role in project success.

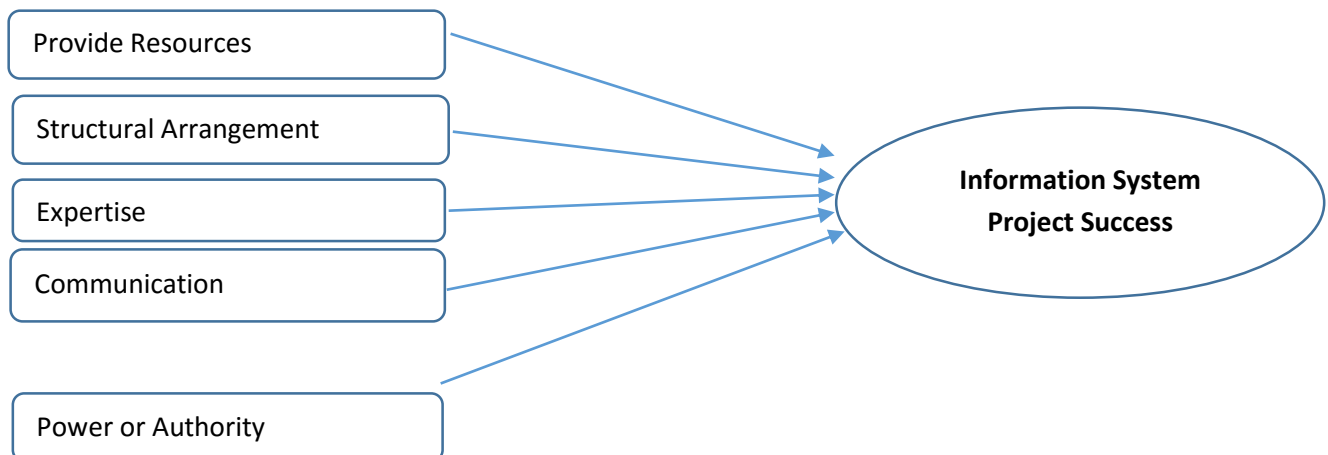
### **Power**

Top management has the power and use it to support the project, protect the team members, facilitate the system changes, and define the needs, roles and positions of project stakeholders. Strong top management support is crucial for the projects (Boonstra, 2013). Top management introduces new workflow patterns, provide resources to change the organization, use formal power to enforce new structures for making the organization more adaptive to the information system (Sharma & Yetton, 2003).

## **2.3 The Research Model**

The following research model is adopted from Top management support multidimensional framework (Boonstra, 2013). Hence, the independent variables are top management support dimensions and the dependent variables are project success measures.

### **Top Management Support Dimensions**



*Figure2. The Research Model (Boonstra, 2013).*

## **Chapter Three**

### **III Research Design and Methodology**

A methodology were developed for diagnosing the bank's information system project success, which includes questionnaire, measurements, data collection and statistical analysis. This survey were conducted to investigate the relationship between top management and information system project success.

#### **3.1 Research design**

According to Saunders et.al (2009), most common used research designs are exploratory, descriptive and explanatory which are classified based on the purpose of the research. Among these research designs, descriptive research design is applied. According to Kothari (1990), descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual, or of a group. This design enables the researcher to examine and describe the importance of top management support in information system project success. The research also adopted combination of both qualitative and quantitative research design in order to gain more insight regarding the study area.

#### **3.2 Participants**

Information system projects were selected as the unit of study. The participating organizations are Commercial Bank of Ethiopia. The primary participants of this quantitative study are project managers. The researcher encouraged participants to answer questions with regard to a project that has already been carried out and completed in the recent past. The researcher preferred the product of the project to have been handed over to the business unit, rather than discussing a project that was abandoned. Another reason for selecting ongoing and recently completed projects was because this study investigated the need for top management support from across the project management process (Initiation, Planning, Executing, Monitoring & Control and Closure). As such, answering questions relating to an actual experience was expected to bring forth genuine information as opposed to answering questions superficially.

### **3.3 Target Population**

Although it is not always the most practical and cost-effective method, measuring data from the total population is the most accurate and ideal method. The researcher were measure data from all members of the total population listed in participant section. The size of the total population of this study depend on the number of the project execute in project management office in Commercial Bank of Ethiopia. At present, there are 12 projects under implementation of which two projects are at early stage of execution while five others reach at acceptance level and two projects were recently handover. Hence, the total population were 40 since each project has one project manager and two team leaders, and Project management office has four project managers who are not assigned on a project.

### **3.4 Data Collection**

The Primary data were collected though valid instrument. Project Success Assessment Survey Questionnaire (Shenhar & Dvir, 2007) are used for all the dependent measures and Top Management Support Questionnaire “TMSQ” (Boonstra, 2013) also used for independent variables. In order to collect the data, personal visits were made to various commercial bank’s IT Project offices.

### **3.5 Statistical Analyses**

Microsoft Excel 2013 and IBM Statistical Package for Social Sciences (SPSS) version 20 were used to analyze the data. The data were analyzed in three stages.

In stage - I examined the demographic profiles of the respondents, mean, standard deviation, and frequency of all the variables used in the study.

In stage –II Measured the Project Success Assessment level (PSA)

In the stage - III examined the contributions of top management support dimensions towards information system project success.

### **3.6 Instrument**

For measurement of five dimensional top management support as a multidimensional construct, details of which including statements of measurement can be obtained from (Boonstra, 2013). The measurement items are: all he dimension of ‘top management support were measured on 5-point

Likert scale (1 = Not at all; 2 = Once in a While; 3 = Sometime; 4 = Fairly Often; and 5 = frequently, if not always)

***Provide resources*** were measured by using following five items: (1) Top management provided adequate resources for successful implementation of the project; (2) Top management provided sufficient resources for instituting organizational change to facilitate effective system implementation; (3) Top management provided adequate resources to facilitate system adaptations in the organizational setting; (4) Top management provided adequate resources to encourage a supportive stakeholder environment for successful project completion; and (5) Top management ensured availability of necessary resources to support the project team during crises.

***Structural arrangements*** five items were used to measure the dimension of ‘structural arrangements’ by using following five items: (1) Top management organized and enforced adequate project structures to achieve project objectives; (2) Top management instituted adequate processes, structures and controlling mechanism for implementing organizational change in the adapting organizations; (3) Top management established appropriate structures and strategies for adapting system for the organization; (4) Top management adapted the organization to strengthen the stakeholder’s support; and (5) Top management adapted strategic and structural planning to enhance organizational productivity and market value.

***Communication*** The ‘communication’ as dimension of top management support was evaluated (1) Top management established frequent communication with project team members for successful implementation of the project; (2) Top management often communicated to sell the project with the rest of the organization; (3) Top management regularly communicated and explained the organizational changes and implications linked with system implementation; (4) Top management

frequently communicated and discussed potential system changes with those involved in the implementation process; (5) Top management continuously communicated and discussed implications of the project with various groups of stakeholders; and (6) Top management effectively communicated with the stakeholders to enhance organizational efficiency.

***Expertise*** Five items were used to measure the dimension of ‘structural arrangements’ by using following five items: (1) Top management possesses relevant expertise and experience in project management; (2) Top management often recognized the changes and implications related to

system implementation; (3) Top management was proficient to understand the necessity for adaptation of the system to the organization; 4) Top management recognized the power and interest of stakeholders around the project; and 5) Top management motivated the project team to achieve project objectives and enhance organizational performance.

**Power** The ‘power’ dimension of top management support was measured by using following five items (1) Top management used its power to support the project and protect the project team members; (2) Top management used its power to facilitate effective system implementation for instituting organizational changes; (3) Top management used its power to facilitate and enforce essential system changes; (4) Top management used its power to determine the roles and responsibilities of project stakeholders; and (5) Top management exercised its authority to develop better project management capabilities in the organization.

**Project success** the researcher adapted the project success assessment questionnaire (PSAQ) from Shenhar and Dvir (2007) for measurement of project success, comprising on four dimensions that are; project efficiency, impact on the user/customer, direct business/organization’s success, preparing for the future.

## Chapter Four

### IV. Analysis and Discussion

#### 4.1 Analysis

A criterion in the participant selection was that all the participants had to be involved in project management, either as project managers or as project team leader. All participants received the same qualitative perception questionnaire (see Annex II). Of the 40 questionnaires sent out, 38 were returned. All 14 projects were measured.

The survey data needed some preparation prior to being subjected to the analysis. The preparation included identifying missing data, substituting values, and labeling coding where necessary. Among 40 questionnaires distributed, 38 (95%) were returned. The initial data set was established to a satisfactory level, following which certain preliminary tests were carried out. Microsoft Excel 2013 and IBM's SPSS Statistics Version 20 were used for preliminary analysis of the data. As indicated earlier, the questionnaire consists of three parts. The first part consisting of questions for demographic information. The second and third parts contained questions with regard to: top management support dimensions and project success that are largely responsible for investigating the research questions. Hence, the descriptive statistics technique was employed to explore the data regarding the project professional's gender, age, level of education, years of service, and current job role. These initial tests provided the researcher with a sense of familiarity with the data and confidence to press forward with statistical analysis techniques.

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
Provide_Resource	38	2.2000	5.0000	3.594737	.7180858
Structure_Arrangement	38	1.6000	5.0000	3.447368	.8754109
Communication	38	1.7	4.7	3.276	.7023
Expertise	38	2.2000	4.8000	3.436842	.7481224
Power	38	2.0000	5.0000	3.352632	.7758994
ProjectSuccess	38	2.0000	4.7000	3.368421	.7490914
Valid N (listwise)	38				

*Table 2 Descriptive Statistics*

**Statistical Analysis**

The empirical part of this study with the statistical results and findings are divided into and described in three stage. These parts match the research method set out in chapter 3.

**Stage I: Descriptive Statistics**

*In stage - I examined the demographic profiles of the respondents, frequency, mean and standard deviation of all the variables used in the study.*

Descriptive statistics were carried out to make general observations about the collected data. The respondents (N=38 for 14 projects) of the study were 95% male and 5% female. The respondents have experience of managing projects and working in the Bank ranged from less than 5 years to over 16 years, where 18% respondents were with less than 5 years, 32% respondents were with 6-10 years, 13% respondents were with 11-15 years, and 37% respondents having greater than 16 years of experience. Respondents were presently working in the positions of project management (37%), project technical management (29%), project business management (29%), and senior project professionals (5%). The respondent’s qualification level were 45% Bachelor degree and 55% master degree.

<b>Gender</b>	<b>Male = 36 95%</b>		<b>Female = 2 5%</b>	
<b>Age</b>	26-30 9 24%	31-35 9 24%	36-40 7 18%	40+ 13 34%
<b>Education Level</b>	Bachelor = 17 45%		Masters = 21 55%	
<b>Years of Services</b>	>5yrs 7	6-10yrs 12	11-15yrs 5	15+yrs 14
<b>Current Role</b>	Project Manager 14 37%	Technical Team Leader 11 29%	Business Team Leader 11 29%	Senior Project Professional 5 2%

*Table 3 Summary of Demography Information*

## Stage II: Project Success Score

*In stage –II Measured the Project Success Assessment level (PSA)*

The dependent variable of information system project success is a difficult concept to quantify and subjective to bias by self-reporting. It was found that this study had a statistically significantly higher level of project success than other studies utilizing the same survey instrument. The mean for the information system project success of this study utilizing the PSAQ is 3.36 (S.D. = 0.74, N=38). When studying the project success of IT projects, (Barnes, 2017) found the project success means were significantly lower (Mean = 2.96, S.D. = 0.50, n = 49,  $p < 0.00001$ ) than the information system projects in this research. (See Table 5)

	Mean	Std. Deviation	N
Provide Resources	3.594737	.7180858	38
Structural Arrangements	3.447368	.8754109	38
Communication	3.276316	.7022875	38
Expertise	3.436842	.7481224	38
Power	3.352632	.7758994	38
Project Success	3.368421	.7490914	38

*Table 4 Mean score of Top Management Support and Information System Project Success*

### Level of Top Management Support

The independent variable of top management support dimensions was measured with TMSQ. It was found that this study had a statistically significantly higher level of top management support dimension. The mean of the each dimensions of top management support of this study ranges from 3.27 to 3.5 (S.D. = .875, N=38). The finding is similar to the Top management support score measured by (Ahmed, Mohamad, & Shakil, 2014). (See Table 5)

<b>Projects</b>	<b>Top Management Support Level</b>	<b>Project Success Score</b>
1	3.8	<b>3.6</b>
2	3.4	<b>3.4</b>
3	3.4	<b>3.1</b>
4	3.1	<b>3.4</b>
5	3.2	<b>2.9</b>
6	3.9	<b>3.9</b>
7	3.4	<b>3.3</b>
8	3.4	<b>3.4</b>
9	3.9	<b>3.7</b>
10	2.7	<b>2.8</b>
11	3.3	<b>3.2</b>
12	3.5	<b>3.4</b>
13	4.8	<b>4.7</b>
14	2.1	<b>3.1</b>
<b>Score</b>	<b>3.4</b>	<b>3.4</b>

*Table 5 TMS level and PS score*

### **Stage III Examine Top Management Support Contribution**

*In the stage - III examined the contributions of top management support dimensions towards information system project success.*

The objectives of this section are to examine and identify critical top management support dimension for the information system project success. In this study, a top management support dimension is considered to be “critical” only if it has a positive and significant impact on project success measures. Hence, the impact of each top management support process on project success has been analyzed. A comparison analysis has been administered, using all five dimensional top management support as independent variables and information system project success measures as the dependent variable. A critical dimension has been identified when a dimension has had

significant impact (mean value above average 2.5) on the information system project success measures. Table 6 presents the significance levels in which each top management support dimension contributes to information project success measures in overall. In the overall analysis presented in Table 6, out of the five dimensions included in the study, one has been found to have significant contribution to information system project success.

<b>Projects</b>	<b>Provide Resource</b>	<b>Structural Arrangement</b>	<b>Communication</b>	<b>Expertise</b>	<b>Power</b>
1	3.8	3.9	3.8	3.9	3.7
2	4.0	3.4	3.1	3.5	3.1
3	3.4	3.2	3.3	3.6	3.3
4	3.2	3.0	3.4	2.9	2.9
5	3.6	3.4	2.4	3.3	3.3
6	3.9	4.0	3.7	3.8	3.9
7	3.5	3.5	3.4	3.3	3.1
8	4.0	3.4	3.1	3.5	3.1
9	3.7	3.9	3.9	3.9	4.0
10	2.9	2.7	3.1	2.5	2.6
11	3.7	3.2	2.9	3.4	3.4
12	3.5	3.9	3.2	3.5	3.5
13	5	5	4.0	4.8	5
14	2.2	1.8	2.0	2.2	2.2
<b>Score</b>	<b>3.6</b>	<b>3.4</b>	<b>3.2</b>	<b>3.4</b>	<b>3.4</b>

Table 6 TMS dimensions score

## 4.2 Discussion

### Provide Resources Dimension

The findings of the study indicated that “Provide Resources”, has significant effect on Information System project success. As evident from Table 6, the mean value of “Provide resources” has been 3.6 out of 5. This study validate that “*Provide resources*” is a significant dimension of top management support where adequate human, financial, and material resources are provided for information system projects. A functional organizational structure facilitates better resource sharing for the projects rather than a pure project or matrix structure (Dwivedi, et al., 2013). The shortage of adequate resources is a serious constraint in projects. Sufficient resources are required for successful implementation of the project. According to the participant responses, top manager

provided sufficient resources to complete the project successfully during the project team in crises. Respondents stated that, top manager ensured availability of sufficient resources to provide a supportive stakeholder environment for the successful accomplishment of the project and adaptations in the organization. So, top management provision of adequate resources for effective system implementation to institute organizational change has significant effect on the completion of information system project success. Mintzberg (1973) referring to the Resource Allocator says that “a top manager is responsible for the allocation of organizational resources of all kinds-in effect the making or approval of all sufficient organizational decisions”.

### **Structural Arrangement Dimension**

The findings set out in Table 6 show that the “Structural Arrangement” is accepted , since 3.4 out of 5, as significant dimension in relation to the other dimensions. Participants pointed out that having a well-structured arrangements of the project strategies and structures do have positive effect on information system project success. Adapted appropriate structures, processes, controlling procedures to implement organizational change and structural planning on information system projects have a significant effect on Information system project success instead of improve organizational efficiency and market value.

### **Communication Dimension**

As per the result, “Communication” has 3.2 out of 5. This result shows that “communication” has significant effect on information system project success. “Communication” was found by the project manager to be an important dimension of top management support. Participants said that top management established effective communication strategy to enhance project and organizational efficiency, and regularly communicate with the project team members and stakeholders to ensure successful project completion.

Top management should communicate leadership initiatives, visions, strategic direction, and business goals with the project team (Chen and Popovich 2003). Top management regularly communicates to support the project, motivate the team, sell the project to the rest of the organization, discuss organizational implications and organizational changes, explain potential system changes, and collaborate with various group of stakeholders (Boonstra, 2013).

### **Expertise Dimension**

“Expertise” has been found out as significant dimension, due to the mean value of 3.4 out of 5 for information system project success. It is interesting to note that project management roles played by the top management have come up as evidence of information System project success. Participants described that top management possessed relevant experience and expertise in project management and recognized the necessity of system adaptation in the Bank has significant effect on information system project success. This description appears top manager to accept ownership and gain better understanding of project work. Roles played by the top management, with its all-encompassing nature, is also identified as closely fitting the descriptions of the Leader role by Mintzberg (1973).

Eventually, the project leaders are responsible for managing their projects successfully where top management is committed to provide resources and a set of requirements. Top management focus on strategic planning for providing support and ensuring commitment in all phases of project implementation. Top management should have advanced social skills such as understanding of role theory, role conflict, personality identification, and communication for dealing with project stakeholders (Ehsani et al, 2013)

### **Power Dimension**

Regarding the last dimension, “power” or “authority” has also a significant effect on information system project success. Making timely use of power to implement critical system changes in the organization to enable the smooth flow of the project work was seen as important dimension by project managers and project professionals. Participants said that top management exercised its authority, to define unambiguous roles and responsibilities of project stakeholders and ensured effective system implementation to institute organizational change, do have significant effect on information system project success. Further, top management’s authority to support the team members during implementation of information system project activities has a positive impact on the project success. In most organizations, project managers are positioned at the operational level on the management hierarchy (Zwikael 2008). Since a project manager is entrusted with achieving high level of project performance, project managers possesses equivalent authority in executing certain tasks due to the hierarchical nature of authority in organizations.

Thus, results substantiated the research question indicating that five dimension of support (“Provide resources”, “Structural arrangement”, “expertise”, “communication”, and “power”)

from top management support significantly effect on project success. However, “Provide Resources” is relatively a critical dimension and significant effect on information system project success.

## Chapter Five

### V. Summary, Conclusion and Recommendations

#### 5.1 Summary

The findings set out in chapter four substantiate that “provide resources, structural arrangements, communication, expertise, and power” should be practiced by top management, to significantly enhance the likelihood of project success. These dimension may not be equal contribution to enhance the likelihood of project success. However, the key top management support dimensions which has higher impact on information system project success is identified. The key role identified is *Provide Resource*. This finding indicated that “expertise” dimension has relatively significant effect on information system project success.

The results indicated the presence of the effect of top management support in achieving information technology project success. Such support enables companies to achieve the highest positive project performance results. This can be explained by the fact that top management is keen on having support on the five dimensional support in line with information system projects, to make accurate, real time support, decisions, through the fast and timely flow of information across managerial levels. Top management support is known to have a positive influence on project success. Indeed, top managers in the organizations spend much effort in supporting projects in numerous ways. However, following the results of this paper, it seems that many managers are not aware of, or prefer to ignore, the different impact various supporting dimension have on project success. As a result, they pay similar attention to critical support processes and to support processes that have low impact on project success.

For example, most top managers choose to focus on developing project management procedures instead of defining clear and realistic project communications methods. Top management in the organization can improve information system project results by investing more effort in critical top management support processes.

#### 5.2 Conclusion

The findings of this quantitative study addressed the research questions and demonstrated that (a) an important contribution does exist between “*Provide Resources*”, “*Structural Arrangement*”,

*“Expertise”, “Communication” and “Power” with Information system Project success.* (b) A significant and relatively critical relationship does exist between *“Provide Resources”* with *Information system Project success.* (c) This study identified an overall relationship of top management support dimensions and information system project success and the findings do imply that information system project success might be improved by improving top management support on the five significant dimensions. Top management support is known to have a positive influence on project success. Indeed, top management spend much effort in supporting projects in numerous ways. However, it seems that many managers are not aware of, or prefer to ignore, the different effect of top management supporting dimensions on information system project success. As a result, they pay similar attention to critical support dimensions and to support processes that have low impact on project success. This paper has implemented the critical support dimensions. This paper has identified specific top management support dimensions which have higher effect on information system project success in the banking sector. These critical top management support dimensions have been found to be unique to apply cost-benefit analyses in order to decide whether to support project activities. However, in order to assist top managers implementing the system projects, results of this study, the most critical support dimensions have been identified. These processes have the most significant effect on information system project success.

In conclusion, this study sheds light on dimensions of top management support, including previous literature, assessment of five dimensions, and examining the effect multidimensional top management support on information system project success. The result of this study will allow better understanding and appropriateness support of top management support for successful completion of the information system projects. The results can also be used for development of training programs for both the top management and the project managers who are eventually responsible for successful completion of the information system projects.

### **5.3 Recommendations**

Top management support is identified as a critical success factor of very high importance for information system project success. Thus, top managers that render support and project managers that request support should be aware of the type of support needed, and when support should be requested. As a result, both parties can enhance the success rate of information system project success.

Findings from this research study promote top management support as a multifaceted concept and also as a resource that needs to be planned and managed in information system projects success. Thus, top managers and project managers should be plan ahead to provide top management support for information system projects.

Top managers should be made aware of these key roles and prepare themselves through project management training and development programs to obtain better performance in information system projects. The key role identified is *Provide Resource*.

Project professionals should develop appropriate project framework, policies, practices and procedures to ensure support from the top management throughout the implementation of a project.

Top management should focus on the most effective support dimension and these dimension may allow top manager to better use their limited time and budget while supporting projects.

Multi-dimensions of top management support should be taken into account by the practitioners during the implementation of projects and improving organizational performance. However, senior management and practitioners should be aware of multiple dimensions of top management support may not be equal drivers to enhance the likelihood of project success.

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**Annex**

**Questionnaire**

I am a student of Addis Ababa University School of Commerce Graduate Program and engaged to do practical study on Project Success in CBE. This survey is intended to obtain information on the issues that the effect of Top Management Support on Project Success. You have been selected to provide input into this process. Please read each statement carefully and encircle a number which closely reflects your point of view. It is important that you respond to all the statements in the questionnaire. Make sure that your response is confidential and use for academic sole purpose.

Thank you for agreeing to complete this questionnaire.

<b>Gender</b>	<b>Age</b>	<b>Educational Level</b>	<b>Years of Service</b>	<b>Your Current Role</b>
<input type="checkbox"/> Male	<input type="checkbox"/> 18-25	<input type="checkbox"/> Diploma	<input type="checkbox"/> Less than 1 year	<input type="checkbox"/> Project Manager
<input type="checkbox"/> Female	<input type="checkbox"/> 26-30	<input type="checkbox"/> Bachelor	<input type="checkbox"/> 1-5 years	<input type="checkbox"/> Technical Team Leader
	<input type="checkbox"/> 31-35	<input type="checkbox"/> Masters	<input type="checkbox"/> 6-10 years	<input type="checkbox"/> Business Team Leader
	<input type="checkbox"/> 36-40	<input type="checkbox"/> Ph.D.	<input type="checkbox"/> 11-15 years	<input type="checkbox"/> Technical Team Member
	<input type="checkbox"/> Over 40	Other_____	<input type="checkbox"/> Over 16 years	<input type="checkbox"/> Business Team Member Other_____

<b>Not at all</b>	<b>Once in a While</b>	<b>Sometime</b>	<b>Fairly Often</b>	<b>Frequently</b>
5	4	3	2	1

**Questions Related to Provide Resources**

1	Top Management provide sufficient resources to complete the project successfully	5	4	3	2	1
2	Top Management provide sufficient resources to the project team in crises	5	4	3	2	1
3	Top Management ensure availability of sufficient resources to provide a supportive stakeholder environment for the accomplishment of the project	5	4	3	2	1
4	Top Management provide sufficient resources to support system adaptations in the Bank	5	4	3	2	1
5	Top Management provide adequate resources for effective system implementation to institute organizational change	5	4	3	2	1

### Questions Related to Structural Arrangements

1	Top Management develop project strategies and structures to adapt system in the Bank	5	4	3	2	1
2	Top Management ensure implementation of appropriate project structures to accomplish project objectives	5	4	3	2	1
3	Top Management strengthen stakeholder support in the Bank	5	4	3	2	1
4	Top Management adapt appropriate structures, processes, and controlling procedures to implement organizational change	5	4	3	2	1
5	Top Management focus on strategic and structural planning to improve organizational efficiency and market value	5	4	3	2	1

### Questions Related to Communication

1	Top Management regularly communicate with the project team members to ensure successful project completion	5	4	3	2	1
2	Top Management tailor communication to promote the significance of project in the Bank	5	4	3	2	1
3	Top Management often deliberate project implications relating to system and organizational change	5	4	3	2	1
4	Top Management frequently communicate project implications to project stakeholders	5	4	3	2	1
5	Top Management encourage frequent communication to discuss potential system and organizational changes with various groups of project stakeholders	5	4	3	2	1
6	Top Management establish effective communication strategy to enhance project and organizational efficiency	5	4	3	2	1

### Questions Related to Expertise

1	Top Management possess relevant experience and expertise in project management	5	4	3	2	1
2	Top Management recognize the importance of project implications, system implementation and organizational change	5	4	3	2	1
3	Top Management recognize the necessity of system adaptation in the Bank	5	4	3	2	1
4	Top Management recognize the interest and power of project stakeholders	5	4	3	2	1
5	Top Management encourage the project team to enhance project efficiency and organizational performance	5	4	3	2	1

### Questions Related to Power

1	Top Management use its power to implement critical system changes in the Bank	5	4	3	2	1
2	Top Management exercise its authority to support the team members during implementation of project activities	5	4	3	2	1
3	Top Management often use its power to implement best project management practices in the Bank	5	4	3	2	1
4	Top Management exercise its authority to define unambiguous roles and responsibilities of project stakeholders	5	4	3	2	1
5	Top Management ensure effective system implementation to institute organizational change	5	4	3	2	1

**Questions Related to Project efficiency and Impact on the customer/user**

1	Projects meet their schedule objectives	5	4	3	2	1
2	Projects stay within budget limits	5	4	3	2	1
3	Projects meet their technical performance goals	5	4	3	2	1
4	Projects meet their operational performance goals	5	4	3	2	1
5	The business unit is satisfied with project results	5	4	3	2	1

**Questions Related to Business and direct organizational success and Preparing for the future**

1	The project increase the Bank's profitability	5	4	3	2	1
2	The project contribute to the Bank's direct performance	5	4	3	2	1

3	The project is an economic business success	5	4	3	2	1
4	The project outcome will contribute to future project	5	4	3	2	1
5	The project develop better managerial capabilities	5	4	3	2	1

**Thank you**