



**ADDIS ABABA UNIVERSITY
DEPARTMENT OF MANAGEMENT**

The mediating role of computer self-efficacy in the relationship between perceived ease of use and attitude towards use of ERP system: The case of Employees of commercial Bank of Ethiopia

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Statement of Certificate

This is to certify that Bethlehem Abebe has completed her thesis entitled “The mediating role of computer self-efficacy in the relationship between perceived ease of use and attitude towards use of ERP system: The case of commercial bank of Ethiopia” is her original work and is submitted for examination with my approval as thesis.

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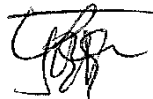
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List of Acronyms and Abbreviations

ERP	Enterprise Resource Planning
BPR	Business Process Reengineering
IT	Information Technology
HRM	Human Resource Management
CSF	Critical Success Factor
RFP	Request for Proposal
EEU	Ethiopia Electric Utility
ERC	Ethiopian Railway Corporation
CFF	Critical Failure Factor
PEOU	Perceived Ease of Use
CSE	Computer Self-Efficacy
CRM	Customer Relationship Management
BI	Business Intelligence
SCM	Supply Chain Management
IMS	Inventory Management System
FMM	Financial Management Module
RM	Risk Management
MRM	Marketing Resource Management
SOM	Sales-Order Management

APS	Advanced Planning System
EM	Event Management
MRP	Material requirements planning
DBMS	Database Management System
TRA	Theory of Reasoned Action
TAM	Technology Acceptance Model
UTAUT	Unified Theory of Acceptance and Use of Technology
DIT	Theory of Diffusion of Innovations
TTF	Task-Technology Fit
TPB	Theory of Planned Behavior
IT	Information Technology
PU	Perceived Usefulness
CBE	Commercial Bank of Ethiopia
SEM	Structural Equation Modeling
PCIL	Personal Characteristics and Information Literacy
OPC	Organizational-Process Characteristics
STC	System-Technological Characteristics

Abstract

The objective of this study is to assess the mediating role of employees' computer self-efficacy in the relationship between the employees' perceived ease of use and their attitude towards the Enterprise Resource Planning system used by taking employees of Commercial Bank of Ethiopia as an illustration. In the course of the study, a descriptive analysis of the levels of the three variables; perceived ease of use, computer self-efficacy, and attitude towards the use of the Enterprise Resource Planning system was also made. To address the study's objective, both descriptive and explanatory research designs were employed, while the research approach is entirely quantitative. The sample was drawn from the total population of the employees of the Commercial Bank of Ethiopia by targeting those employees who have exposure to the Enterprise Resource Planning system in one way or the other. Accordingly, a sample of 388 employees was taken from a population of 12, 453 employees by using the multi-stage cluster sampling method. Questionnaires and document analysis were used as data collection instruments. The data obtained through the questionnaire has been analyzed quantitatively using descriptive statistics: frequency, percentage, mean, standard deviation, as well as inferential statistics, was employed. The findings of the study were found to be as follows; the descriptive statistics of the variables of the study were found to be more positive as they are all above 3 points in the 5-points Likert scale. Factors like computer self-efficacy and perceived ease of use were found to have a direct linear effect on the employees' attitude towards Enterprise Resource Planning system use. Moreover, perceived ease of use has a direct linear relationship with the employees' computer self-efficacy. Besides, computer self-efficacy is found to be a partial mediator in the relationship between perceived ease of use and employees' attitude towards Enterprise Resource Planning system use. Hence, one can conclude that the nature of employees' attitude towards Enterprise Resource Planning system use significantly depends on those factors included as antecedents of it in this particular study. The power of the variables in explaining the variation in the employees' attitude towards Enterprise Resource Planning system use was found to be meaningful compared to those previous studies' reports. Thus, the researcher would like to suggest some helpful ways to improve employees' attitude towards Enterprise Resource Planning system use. Accordingly, CBE could engage in those activities that enhance the employees' perceived ease of use of the ERP system. Such behaviours orientations on the benefits of the system; success stories on the implementation of the system in other organizations and exposing employees to the use of related systems will be beneficial.

Key words: self-efficacy, enterprise, mediation, bank, Ethiopia.

Chapter One

Introduction

Chapter one presents topics like the background of the study, a statement of the problem, basic research questions, objectives of the study and, limitations of the study. Furthermore, significance and scope are dealt with under this chapter. For a proper flow of the thesis idea, the thesis structure was also discussed in this chapter.

1.1 Background of the study

For the success and competitiveness of the organization, it's important to use the present and best technology. During this competitive and dynamic business environment when organizations are expanding and have plenty of employees, it's difficult to manage their data so that they have to have a central database that each department can store and share its data. Nowadays different organizations use a range of systems to integrate, simplify, and coordinate their process. Also, companies wish to reduce costs, plan and manage the interior and external business process activities efficiently and effectively. To induce the above benefits one among the packaged software that organizations began to use is Enterprise Resource Planning (ERP). According to Matende & Ogao (2013) enterprise resource planning is a management technology that integrates essential corporate activities and diverse functions of the organization to help rapid decision-making, greater managerial control, and cost reduction. They also claim that ERP system is a user-interfaced software that is designed to provide information useful to operations, management analysis, support strategy, and decision-making functions in an enterprise.

ERP began to be widely employed in the first 1990s and has become one in every of the most effective software by enabling its service to industries, higher education, hospitality, health care, financial services, and government offices. The top five ERP vendor companies are SAP-AG, Oracle, JD Edwards, PeopleSoft, and Baan (Shehab, Sharp, Supramaniam & Spedding, 2004). In Ethiopia, some organizations like Ethio Telecom, Ethiopian Airlines, Ministry of Finance, Mesfin Industrial Engineering, Moha Soft Drink Company, etc. implemented ERP in their organizations. Nawaz & Channakeshavalu (2013) mentioned the importance of implementing an ERP as a unified enterprise database that encompasses all functions and departments and where all business

transactions are entered, recorded, processed, monitored, and reported. ERP also increases interdepartmental cooperation which increases communication and responsiveness to all stakeholders. According to Devaraj & Epstein (2020) ERP system allows you to eliminate repetitive back-office processes, increase customer retention & satisfaction, time-saving inventory management features, automatically consolidate financial data and also the system incorporates a feature to store your data on an online database which will be accessed whenever and wherever you like. Additionally, the system enables you to facilitate team communication and accommodate your file sharing needs. This way, you'll manage more projects competently and be more proactive in your operations.

According to Kumara, Gunawardana & Halwatura (2013) implementation of ERP could be a radical change in a company and some staff members are willing to just accept new challenges, whereas, others don't seem to be. Therefore, there is a niche between the attitudes of the staff who would involve in the ERP systems and the desired objectives of the system. The result of their study indicated that the user's attitudes vary from different age groups, and also the education level of the workers. Further, findings revealed that attitudes have a positive impact, depending on their income level and also the number of years that they worked for the corporation. Escobar-Rodriguez & Bartual-Sopena (2013) claimed that personal characteristics of ERP users appear to be the most important for explaining users' attitudes towards using ERP systems. They also found that prior experience is the most relevant variable for explaining users' attitudes. Thus, the technological experience proved to be a key factor in explaining the attitude towards using the ERP. Also, when people have experience in using specific IT, they'll tend to grasp their functions, and the way to use it.

Govindaraju & Indriany (2007) conducted their research on the important antecedents leading to the lack of user acceptance towards the implemented ERP systems. The research revealed that personal innovativeness of IT has a direct significant effect on perceived ease of use. Besides the argument for change, a shared belief in the benefit of ERP system has a significant and direct effect on ERP usefulness. Also investigated that ERP usefulness has a significant direct effect on attitude towards ERP system use, which suggests an argument for change, and a shared belief within the benefit of ERP system has an indirect significant effect on attitude towards ERP system use. This research was conducted to look at the direct relationship of perceived ease of use and attitude towards the use of ERP systems and the mediating role of computer self-efficacy in the relationship

between perceived ease of use & attitude towards the use of ERP systems. It is obvious that an ERP system developed in Western countries may not be a perfect suit in organizations in developing countries. Thus, this study adds to the development of knowledge on ERP success or ERP acceptance in particular and its backgrounds in general.

1.2. Statement of the problem

Enterprise Resource Planning (ERP) project is an expensive process that takes longer to understand its benefits (Kumar & Malik, 2012). For instance, Wong, Scarbrough, Chau & Davison (2005) claims that roughly from 40% to 60% or higher of ERP projects fail and mentioned some of the reasons: ERP system misfit; the high turnover rate of project team members; over-reliance on heavy customization; poor consultant effectiveness; poor IT infrastructure; poor knowledge transfer; poor project management effectiveness; poor quality of Business Process Reengineering (BPR); poor quality of testing; poor top management support; too tight project schedule; the unclear concept of the nature and use of ERP system from the users' perspective; unrealistic expectations from top management concerning the ERP system and users' resistance to change. On top of those reasons, the users' attitude towards its use is of paramount importance. If users don't feel positive about the system, they would have a hard time using it in their day-to-day activities. There is no point to implement the ERP if the users don't appreciate and exploit it. Therefore, it is necessary to analyze the factors that affect, the users' attitude towards its use to enable effective implementation and utilization of the system.

Saadé, Nijher & Sharma (2017) argued that 53% of the ERP implementations have been delivered late and 58% of the implementations have gone over budget. They also mentioned the major reasons why ERP implementation fails: Weak top management support, no or minimal ERP customization, testing plan not comprehensive, inadequate training, not taking the opportunity of business process reengineering, lack of change management strategy, not addressing readiness of employees, changing scope & reactive management, contextually weak project manager, weak implementation strategy, leaving user involvement till the end and no communication strategy.

Many researchers in Ethiopia have contributed to the concept and implementation of ERP. According to Ahmed (2017), as a part of the IT transformation project, CBE decided to implement an ERP system to upgrade and replace the existing back-office support systems like supply chain management, human resource management, financial, operation, and business intelligence support

systems. Some of the research which is done at CBE is as follows: Mulatu (2020) studied the critical factors that affect the successful implementation of enterprise resource planning. While Nedesa & Mekonen (2019) reviewed the effect of ERP on employees' job performance. On the other hand, Mengstu (2019) reviewed ERP implementation.

There are many studies concerning the implementation, success, failure, and delay factors of an ERP system. Though, many kinds of research indicate the failure of an ERP system in many organizations regardless; its implementation in CBE is proved to be more or less successful but there are some modules and some features of some modules which are not implemented as planned (Mengstu, 2019). To the best knowledge of the researcher, there is no study specifically done on the mediating role of computer self-efficacy in the relationship between perceived ease of use and attitude towards ERP use. The researcher also reviewed the literature related to ERP adoption by users, develop hypotheses to explain ERP user acceptance and conduct a survey to test the hypotheses. Thus, the study attempts to contribute to the development of knowledge on ERP success, or ERP acceptance in particular, and its antecedents in general.

1.3 Basic research questions

In line with the statement of the problem, the following basic research questions were addressed;

- What does the attitude of the users towards ERP use look like?
- What is the extent of users' perceived ease of use?
- What is the extent of users' perceived computer self-efficacy?
- What is the effect of perceived ease of use on the attitude towards ERP use look like?
- How is the effect of computer self-efficacy on the attitude towards ERP use?
- How is the effect of perceived ease of use on the computer self-efficacy of the users?
- What does the mediating role of computer self-efficacy in the relationship between perceived ease of use and attitude towards ERP use look like?

1.4 Objective of the study

1.4.1 General objective

The main objective of this research is to thoroughly examine the mediating role of computer self-efficacy in the relationship between perceived ease of use and attitude towards use of ERP in the case of Commercial Bank of Ethiopia.

1.4.2 Specific objective

In line with the general objective, the researcher addressed the following specific objectives;

- To assess the nature of the attitude of the users towards ERP use.
- To examine the extent of users' perceived ease of use.
- To explore the level of users' computer self-efficacy.
- To determine the effect of perceived ease of use on the attitude towards ERP use.
- To assess the effect of computer self-efficacy on the attitude towards ERP use.
- To find out the effect of perceived ease of use on the computer self-efficacy of the users.
- To explore the mediating role of computer self-efficacy in the relationship between perceived ease of use and attitude towards ERP use.

1.5 Delimitation of the study

Commercial Bank of Ethiopia is chosen for this particular study mainly because; it is the pioneer to introduce modern banking to the country and is the first national bank implementing the Oracle ERP system in Ethiopia. Secondly, it plays an intermediary role in the economic progress and development of the country. Besides, its business experiences & services of CBE are multi-functional and can be shared as a role example to other banks and organizations. Because of the above reasons the researcher selected CBE as it is a focal study.

The study covers all the concerned bodies of ERP project managers, team leaders, and team members as appropriate in the project area. The study refers to last year; 2020 and shall not include anything beyond. Conceptually, it is very difficult to cover all issues related to the ERP, thus, the study is delimited to the mediating role of computer self-efficacy in the relationship between

perceived ease of use of the system and attitude towards the use of ERP in the case of Commercial Bank of Ethiopia for selected branches in Addis Ababa.

1.6 Limitations of the Study

The present study has certain limitations like other studies. Even though the ERP system operates in the same manner wherever the unit is located, due to geographical, financial, and time limitations the research covers only those CBE branches which are found in the capital city Addis Ababa. The total number of CBE employees as of August 17, 2020, is 37513. Of those employees, 12453 works on ERP in Addis Ababa branches, which is one-third of the population.

Also, executives or people in higher management positions were not easily approachable. In addition, due to the current pandemic (Covid-19), it became difficult to do interviews. Besides, the survey respondents had time constraints due to the office workload. Though, such efforts had been made to mitigate the consequences of the problems, the aforementioned causes of the limitations need to be taken into consideration while the recommendations are going to be implemented.

1.7 Significance/Contribution of the Study

The importance of this study is experience and knowledge sharing of the factors that affect the attitude towards ERP use at the Commercial Bank of Ethiopia employees. Since this research is purely done for academic reasons it is free from any intervention that may have an interest. However, the employees and the management staff of CBE can accept the finding to better understand and look into the main areas of problems or they can take it as a post-project lesson assessment.

Also, the findings of the present study contribute to a better understanding of the factors that affect attitude towards ERP use. The findings of this research will help as an input to other banks and organizations to plan and implement the system. Besides, it can be used as a source of information for future researches. Finally, it helps for Ethiopian universities as an input to review their project management courses curriculum and includes it in the ERP-related sources and materials.

1.8 Organization of the paper

This paper is organized into five chapters. The first chapter includes the background of the study, statement of the problem, research questions, the objective of the study, delimitation of the study, limitation of the study, the significance of the study, and organization of the paper. The second chapter contains a theoretical & empirical literature review, conceptual framework, literature gap, and summary. In the third chapter, operational definition of the study variables, research approach & design, sampling design & target population, source of data, data collection techniques, method of data analysis, validity & reliability, and ethical issues are discussed. The fourth chapter is about such topics as data presentation, analysis, and interpretation. The last chapter that is chapter five deals with the summary of findings, conclusions, and recommendations.

Chapter Two

Review of Related Literature

2.1. Introduction

Under this chapter, the researcher presents the theoretical reviews related to the subject of the study. Definitions, benefits, characteristics, and evolution of ERP are dealt with in great detail. Arguments for and against the prevailing debates around the subject of the study were also reviewed. Moreover, the conceptual framework was also adopted due to the reviews. In the final, empirical evidence from previous research results was consulted to determine the existing knowledge gap.

2.2. The Concept of ERP

Enterprise Resource Planning (ERP) is introduced in the early 1990s and defined as an integrated computer-based system that manages internal and external organization resources such as tangible assets, financial resources, materials, and human resources (Shehab, Sharp, Supramaniam & Spedding, 2004). They also expressed ERP as an enterprise-wide information system that uses a centralized database and business functions inside and outside an organization. Arik Ragowsky (2002) argued ERP as computer software that helps to integrate all processes and data of an enterprise and gives current information to the authorized user. Besides, the software delivers a solution to a business and everybody has a set of privileges and unique access. In this case, all of the business processes have an end-to-end connection which helps top-level managers to make well-informed effective decisions.

Klaus, Rosemann & Gable (2000) listed some components of ERP software which are human resources, customer relationship management, business intelligence, supply chain management, inventory management, and financial management. In addition to the general business functions, ERP often supports student administration at universities, high volume warehousing transactions for retailers, industry-specific functions and patient management in hospitals. The human resource ERP module in your software can handle employee monitoring tasks such as timekeeping, clock in, clock out, and benefits management. The software also automates payments including tax and benefits deductions and reduces human error and time spent on repetitive tasks such as data entry.

The Customer Relationship Management (CRM) module stores and lets you track customer and lead data. It also helps to track customer buying habits and detailed conversation history of the salesperson with a customer (when & what they talked about). The Business Intelligence (BI) module of ERP gathers data and makes an analysis that can provide actionable understandings about the business processes. Supply Chain Management (SCM) component starts by collecting real-time data which allows you to make predictive analytics with the demand planning, to find and fix issues as they happen, and to create an accurate production plan. SCM together with CRM can help customers to follow the status of their purchase. Inventory Management System (IMS) components include tracking features that can reduce manual inventory control. It is also advantageous to manufacturers with distribution centers. Financial Management Module (FMM) helps to examine and keeps track of your financial data including accounts payable, accounts receivable, costs, and budgets. It also helps to better understand how your profit is calculated and closely find where you can lower costs. There are additional ERP features like Risk Management (RM), Marketing Resource Management (MRM), Sales-Order Management (SOM), Advanced Planning System (APS), and Event Management (EM) that help to target more specific business needs.

ERP system requires connectivity media, proper hardware gadgets, and other power backup resources. ERP systems can be implemented in manufacturing, construction, aerospace, defense distribution, transportation, education, healthcare, banking, and other industries (Momoh, Roy & Shehab, 2010). The key users of an ERP system are operation, finance, and quality control/assurance personnel. Passive users (i.e. reviewers of results) of an ERP system include executive personnel and department managers.

2.2.1 Evolution of ERP

According to Bidgoli (2004), ERP is a result of continuous improvement of different systems that organizations use for smooth operation. Before 1960, organizations use a traditional way of doing inventory to manage their business. The idea of an integrated computer-based system for calculating material and delivery schedules was first introduced in the late 1960s–early 1970s with the development of Material Requirements Planning (MRP). MRP is an integrated computer-based system that combines capacity planning, materials planning, inventory management, purchasing, and distribution. The next major step is the introduction of Manufacturing Resource Planning

(MRP II) in the early to mid-1980s. The system was extremely popular and widely utilized by a variety of large and midsize companies. MRP II uses one centralized database to fully integrate materials & capacity planning with sale ordering, distribution planning, human resources, finance/accounting, and marketing.

The next step within the evolution of ERP started in the early 1990s. At the time the system utilized client-server technology and could run on personal computers and used powerful servers that utilize multiple operating platforms. At the end of the 1990s, internet-based new front-end e-commerce solutions were introduced. The systems were characterized by collaborative planning, scheduled optimized operations, easy access to the system by customers, suppliers, and employees. Eyob (2019) claimed the introduction of an ERP system named Extended ERP (E- ERP) or web-enabled ERP in 2000. The system involved the technology of internet and World Wide Web (WWW). She also claimed the development of Enterprise Resource Planning II (ERP- II) which is an advanced step of E-ERP that included capabilities like workflow management, human resource management, knowledge, and customer relationship management.

2.2.2 Ways of Deploying the ERP

After having the right software packages that suit your company the next step is to choose the method of deployment of the system. There are different ways of deploying ERP software. The first one, cloud ERP gives a choice of utilizing public or private cloud and the software runs on a provider's cloud computing platform. It is gaining acceptance because of the low upfront costs and maintenance of the system is handled by the provider. The second one on-premise ERP is traditional model software which allows total controlling by installing the software on data center at the locations of your choice. On-premise ERP method, your staff has a responsibility to install and maintain the hardware and the software. The last model a Hybrid ERP (two-tier ERP) is a mixture of cloud ERP & on-premise ERP, where some of your ERP applications and data will be stored on the cloud and some on premise.

2.2.3 ERP life-cycle

The ERP system goes through different phases during its implementation within the hosting organization. These phases constitute the life cycle of ERP. According to Esteves & Pastor (1999) the ERP life-cycle consists of six phases. The first one is the adoption decision; here managers

question the need for a new ERP system to address the critical business challenges and to improve the organizational strategy. In addition, analysis of the impact of adoption at a business and organizational level and definition of system requirements will be included. In the second phase, the selection of product and consulting company that best fits the requirements of the organization is done. The third step is the implementation phase which is, with the help of consultants who provide implementation methodologies and training, customization and adaptation of the ERP package are acquired. In the fourth phase which is the use and maintenance phase, the system is implemented, and by correcting malfunctions and by minimizing disruption the use of the product, in a way that returns the expected benefits have to be made. In the fifth phase, the integration of more capabilities into the ERP system like advanced planning and scheduling, customer relationship management, and supply-chain management is expected. In the last and final step, managers decide if they will substitute the ERP software with other information system approach which is more suitable to the organizational requirements of the moment.

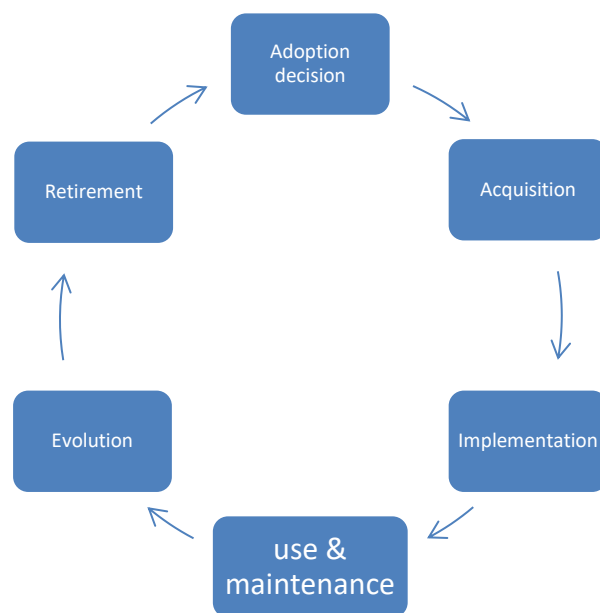


Fig 2.1: ERP Life cycle Framework (Esteves & Pastor, 1999)

2.2.4 Characteristics of ERP

Uwizeyemungu & Raymond (2005) claims some characters of an enterprise resource planning system such as, the modular design of the system which integrates different business modules to provide a continuous flow of data between the various modules; the system uses a central common

database (DBMS) which is utilized by all departments simultaneously; the system has a flexible and open database to respond to the changing needs of the enterprise and to attach or detach any module without affecting the other modules; real-time operation and simulation allow the same information to be communicated to all parts of the organization.

The ERP system will be expected in the future to have different characteristics like machine integration, artificial intelligence, and cloud ERP. The first characteristics, machine integration is most suitable in the manufacturing industries where the connectivity of computers with machines and the ERP software gets feedback about the machine's real-time performance from a sensor that is placed on manufacturing machines. Artificial Intelligence is another characteristic that simply implies assisting human activity as opposed to replace them. The fear is robots and computers might be replacing jobs that used to be done exclusively by humans. The other expected characteristic is cloud ERP which is eliminating the in-house systems and moving over to the cloud. The benefits include data security, accessibility, and cost reduction (Planettogether, 2020).

2.2.5 Benefits of ERP

Organizations purchase ERP to stay highly competitive in their respective business sectors and to gain the utmost benefits from implementing the system. According to Staehr & Seddon (2002) the operational, managerial, strategic, IT infrastructure and organizational benefits of implementing ERP software are: cost reduction, cycle time reduction, productivity improvement, data quality improvement, customer services improvement, better resource management, better decision making, better performance control; supports current and future business growth plan, enable worldwide expansion, increased IT infrastructure capability and supports business organizational changes. Also, companies adopt ERP for their day-to-day operations to get the benefits like improved customer service, total visibility of information, data integration & availability, and cost & time-efficient software solution.

O'Leary (2004) specifically indicated tangible and intangible benefits of ERP software like inventory reduction, productivity improvement, order management improvement, procurement cost reduction, transportation cost reduction, on-time delivery, customer responsiveness, cost reduction, standardization, flexibility, and globalization. In addition, Sadrzadehrafiei, Chofreh, Hosseini & Sulaiman (2013) mentioned some advantages of ERP software: improve supplier

performance, tying the suppliers to the ERP system, real-time data access across multiple sites, improve the interaction between business units, improve order cycle, improve cash management, improve employee performance management, high-quality customer services, and better customer satisfaction.

2.2.6 Critical Success Factors (CSF)

As argued under the benefit of ERP above, most companies implement ERP systems mainly to stay competitive in their respective business. Hence, implementing an ERP system is one of the most challenging projects any company faces. Understanding the CSF will help you to uncover the best way to build your ERP solution (Al-Fawaz, Al-Salti & Eldabi, 2008). Success cannot be achieved easily and knowing the CSF is essential for a better result of ERP implementation. For the success or failure of ERP implementation, there is no set formula or does not depend on a single factor. The key to the successful implementation of the software is, to monitor each step of the ERP implementation and to apply people, process & product initiatives within a structured methodology framework. Bobek & Sternadi (2010) mentioned fourteen CSFs for ERP implementation projects: top management support & involvement, user involvement, data analysis & conversion, clear goals, objectives & scope, consultants project team competence & organization project management, project champion, user training & education, architecture choice (package selection), business process reengineering, change management, minimal customization, and effective communication.

Other factors that are attributed to the CSF of ERP implementation are ERP teamwork and composition, change management program and culture, top management support, business plan and vision, business process re-engineering, effective communication, project management, software development, and evaluation of performance (Gargeya & Brady, 2005). Moreover, Chauai & Dika (2016) mentioned some CSF for ERP implementation: detailed knowledge of the organization and legacy systems, having a clear and concise strategy, having top management sponsorship, following top-notch project and change management practices, and having a skillful and knowledgeable team composition. Besides, creating a clear procedure for data entry and accuracy, conducting training and streamlining the communication, creating performance measures, and deciding on the implementation approach have a big impact on the critical success of the software.

2.2.7 ERP implementation challenges

Even though ERP is widely used for all sizes and types of business, the implementation of the system had a bad reputation for being challenging as each organization has different processes, expectations, and needs. ERP implementation challenges might lead to the project being delayed and cost overruns. In the end, the system will be a disappointing solution and will force the organization to avoid implementing the system at all costs. The challenges of ERP shouldn't hinder us from implementing the system, rather helps us to be cautious of the obstacles and avoid them during implementation. Ranjan, Jha & Pal (2016) argued ERP implementation is an ongoing possibly never-ending process and may require major changes in the organization. It's also very expensive to purchase the system and even more to customize it. They also presented some common challenges of ERP software like ERP technology selection, change management, knowledge management, and emerging technologies and future proof challenges.

Menon (2019) mentioned some common challenges of ERP software implementation: excessive customization, lack of change management, poor data quality, hidden costs, lack of senior management support, failure to redesign business processes to fit the software, insufficient training, and lack of integration. Besides, lack of proper management structure, insufficient internal expertise, ERP vendor selection, user training, employee's resistance to change, conflicts with vendors, and with business strategy are also challenges for the successful implementation of the ERP system in an organization.

According to Seo (2013) even if the implementation of ERP is complex and challenging, companies are investing in ERP to improve processes and move to a paperless environment. He mentioned some of the potential organizational and human-related implementation challenges like resistance to change, organizational culture, incompatible business processes, project mismanagement, and top management commitment. Also finding the perfect software & the right partner, insuring commitment from managers, lack of testing, and absence of budgeting are also common challenges for the system.

2.2.8 ERP implementation failure factors

In the long run, ERP systems can support organizations to increase efficiency and productivity, but if it is implemented badly it could have a negative effect. The majority of previous studies and

research projects have been done in finding ERP Critical Success Factors (CSFs) instead of Critical Failure Factors (CFFs). Many assume success or failure is the fault of the software that you purchase. Somewhat, failure comes from several factors that should have been taken care of earlier. In reality, 95% of a project's success or failure is in the hands of the organization implementing the software.

Sar and Garg, (2012) mentioned some of the ERP implementation failure factors :lack of business plan and vision, lack of top management/awareness, inaccurate data, poor seasoned experienced consulting support, user resistance to change, lack of effective communication, inadequate education and training, inability to identify risk, inadequate ERP teamwork and composition, poor project management, poor vendor support, poor middle management support, poor interdepartmental communication, inadequate project scheduling ,no priority for ERP projects, poor relation between implementation consultant & managers, wrong ERP product selection, poor user involvement, over-dependence on heavy customization, poor testing, too tight project schedule, poor reputation of ERP vendor, poor IT infrastructure, no proper implementation strategy, lack of effective communication, ineffective change management, inadequate financial management, poor knowledge transfer, no pre-implementation analysis and no tight control on proposed modification.

Furthermore, according to Wong, Chau, Scarbrough, and Davison (2005) the critical failure factors in ERP implementation are ERP system misfit, high turnover rate of project team members, over-reliance on heavy customization, poor consultant effectiveness, poor IT infrastructure, poor knowledge transfer, poor project management effectiveness, poor quality of Business Process Reengineering (BPR), poor quality of testing, poor top management support, too tight project schedule, the unclear concept of the nature and use of ERP system from the users' perspective, unrealistic expectations from top management concerning the ERP system and users' resistance to change.

2.2.9 Factors affecting attitude towards ERP use

According to Gumussoy, Calisir & Bayram (2007) the different elements affecting users' behavioral intention to use the ERP system are perceived usefulness, subjective norms, education

level, perceived ease of use, and compatibility. Furthermore, Sternad & Bobek (2013) examined 13 external factors on the relationship of the attitude of ERP users toward the ERP system. The result of the research revealed that personal innovativeness, computer anxiety, data quality, system performance, and user manuals have a strong effect on perceived ERP ease of use which indirectly affects attitude towards ERP use. Besides, business process fit and organizational culture have a strong impact on perceived ERP usefulness which indirectly affects attitude towards ERP use.

2.2.10 Disadvantages of ERP

Scholars who study ERP argue that, with so many benefits of ERP software, it's equally as important to understand the disadvantages. Shehab, Sharp, Supramaniam & Spedding (2004) argued that ERP projects are large and require a large investment in capital and staff. They also identified some disadvantages of implementing ERP: networking requirements, huge storage needs, training overheads, need management time, its high cost prevents small businesses from setting up an ERP system, customization is costly and time-consuming, very beneficial for large companies only, long implementation process, user-friendliness for the occasional user, report terminology can be difficult to understand and the accounting rules are difficult to understand.

Additional disadvantages of ERP are: information updating & system upgrading is costly, requires continuous maintenance, difficult to customize, requires high experienced staff and the system involves an ongoing possibly never-completed process for implementation. Also, re-engineering current business processes to align with the ERP processes sometimes can lead to losing the uniqueness and competitive advantage and also might eliminate the human elements. From the above studies it can be concluded that ERP implementation has a lot of disadvantages, and it needs a lot of time & effort, a high initial cost for (training, implementation, and maintenance), the software also needs integration with other applications in the enterprise and the system is inflexible and there are a few numbers of experts in the field.

2.3. Theoretical Literature Review: Technology adoption models

A good understanding of end-users acceptance of ERP systems is vital to ERP implementation success. Several theoretical models explain user acceptance of information systems. These include the theory of diffusion of innovations (Rogers, 1995), task–technology fit (Goodhue and Thompson, 1995), the theory of reasoned action (Fishbein and Ajzen, 1975), theory of planned

behaviour (Ajzen, 1985), technology acceptance model (Davis, 1989), unified theory of acceptance and use of technology (Venkatesh, Morris, Davis & Davis, 2003), etc. From the above-mentioned theories, the technology acceptance model is one of the most influential and commonly employed theories that describe an individual's acceptance of information systems (Lee, Kozar & Larsen, 2003).

2.3.1 Theory of Diffusion of Innovations (DIT)

According to Lai (2017) diffusion is when members of a social system use a certain channel to communicate innovation. As a result, penetration or acceptance of the new idea, behavior, or physical innovation will happen. The diffusion of innovation theory is one of the most popular theories that seek to explain how, why, and at what rate the new ideas and technology will be accepted (Al-Jabri & Sohail, 2012). Also, the theory attempted to explore factors that affect an individual to adopt an innovation or a new technology. Rogers (2010) identified some attributes of an innovation that influence an adoption behavior like a relative advantage, complexity, compatibility, trialability, and observability. In addition, Rogers develop an S-shaped adoption curve of innovators, early adopters, early majority, late majority, and laggards as shown in Fig. 2.2.

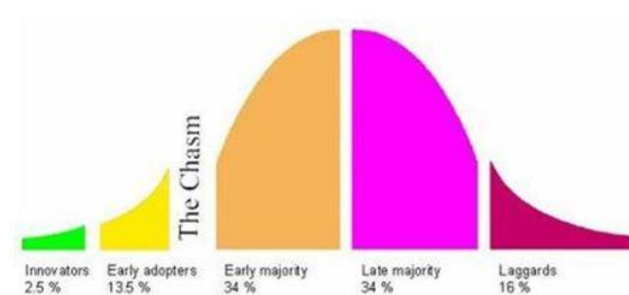


Figure 2.2 Innovation Adoption Curve (Rogers, 1995)

2.3.2 Task-Technology Fit (TTF)

To increase the likelihood of utilization and performance impact of the technology, the technology must be a good fit with the tasks it supports. The task-technology fit model is appropriate for measuring the real usage of new technology applications that are already released in the marketplace (Lai, 2017).

TTF is the correspondence between task requirements, the functionality of the technology, and individual abilities. As the gap between the functionalities of technology and requirements of a task widens, TTF is reduced (Goodhue & Thompson, 1995).

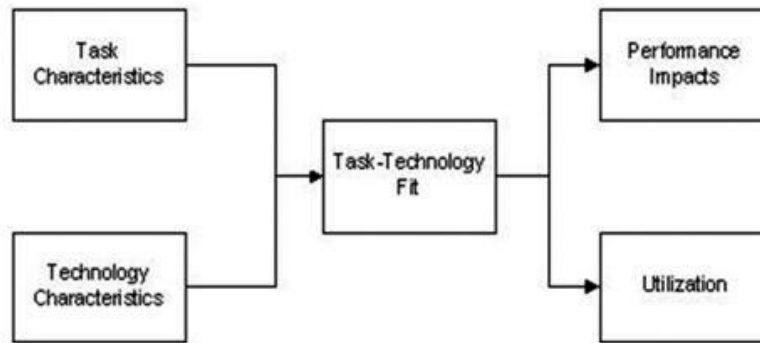


Figure 2.3: Task-Technology Fit (Goodhue & Thompson, 1995)

2.3.3 Theory of Reasonable Action (TRA)

Fishbein and Ajzen (1975) developed the Theory of Reasoned Action (TRA). The objective of the theory is to explain volitional behaviors which are caused by information that has been adjusted by a central nervous system. The theory suggests that the strongest predictor of volitional behavior is one's behavior intention and that behavioural intentions are the effect of both attitudes towards performing the behavior and subjective norm related to the behavior. According to Hale, Householder & Greene (2002) attitude in TRA is the degree to which a person felt positive or negative towards performing some behavior. In addition, the subjective norm is a person's belief about whether significant others feel that he or she should perform the target behavior and behavioural intention is a person's motivation in the sense of his or her conscious plan to exert effort to perform the target behaviour (Conner, 2020). In the theory of reasoned action behaviours requiring resources, skills or opportunities are not considered.

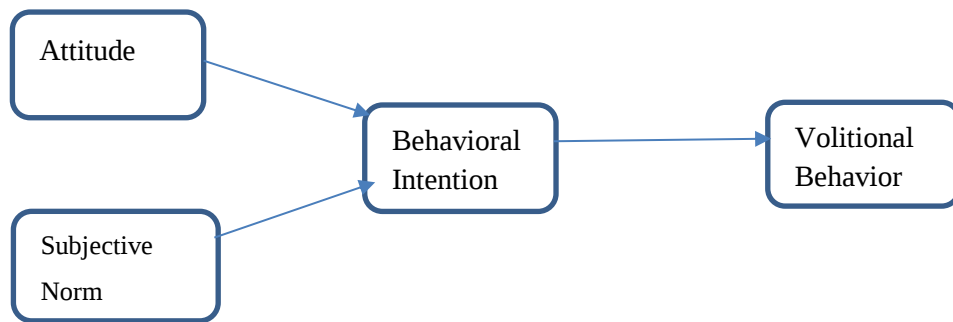


Figure 2.4: Theory of Reasonable Action (Hale, Householder & Greene, 2002).

2.3.4 Theory of Planned Behavior (TPB)

The theory of planned behaviour is an extension of the earlier theory of reasoned action which was developed to broaden the applicability of the TRA beyond purely volitional behaviours. The theory includes a third predictor of behavioral intentions, perceived behavioural control, which is the individual's perception of the extent to which performance of the behaviour is easy or difficult (Conner, 2020). As volitional control over behavior decreases,' the addition of perceived behavioral control should become increasingly useful. People will tend to perform desirable behaviours that they have control over, and not perform behaviours they have little or no control over. Hence in this theory, behavioural intention is a linear regression function of perceived behavioural control, attitudes, and subjective norms.

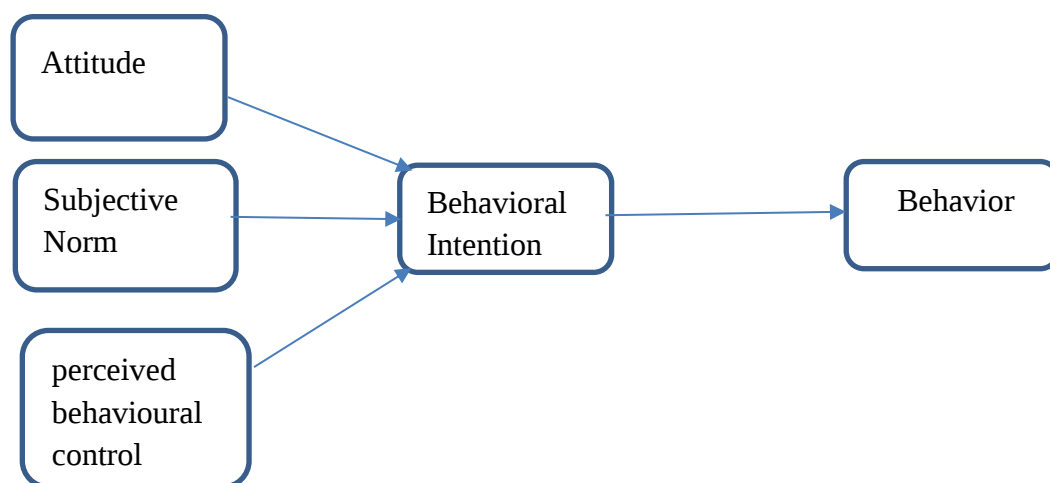


Figure 2.5: Theory of Planned Behaviour (Hale, Householder & Greene, 2002).

2.3.5 Technology Adoption Models (TAM)

According to Lee, Kozar, & Larsen (2003), the Technology Acceptance Model (TAM) is considered the leading influential and commonly employed theory for describing an individual's acceptance of data systems. TAM adapted from the theory of reasoned action which assumes that an individual's information systems acceptance is set by two main variables: perceived ease of use (PEOU) and perceived usefulness (PU). The technology acceptance models tried to identify and investigate the behavioral intentions of users (Ahmad, 2015).

Soto-Acosta, Ramayah & Popa (2013) explained Technology Acceptance Model (TAM) as one of the most significant models employed in explaining the acceptance of information technology (IT). TAM indicates that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), together with attitude toward using, are the major criteria of behavioural intention to use IT. Perceived usefulness is an individual believes that using a specific system or technology would increase his or her job performance. In contrast perceived ease of use, is defined as the extent to which a person believes that using the particular system or technology would be free from effort. This model has suggested a link that the higher the user's PU and PEOU, the higher the attitude. Accordingly, the degree of attitude and PU would result in a higher degree of behavioural intentions and lastly the actual system usage.

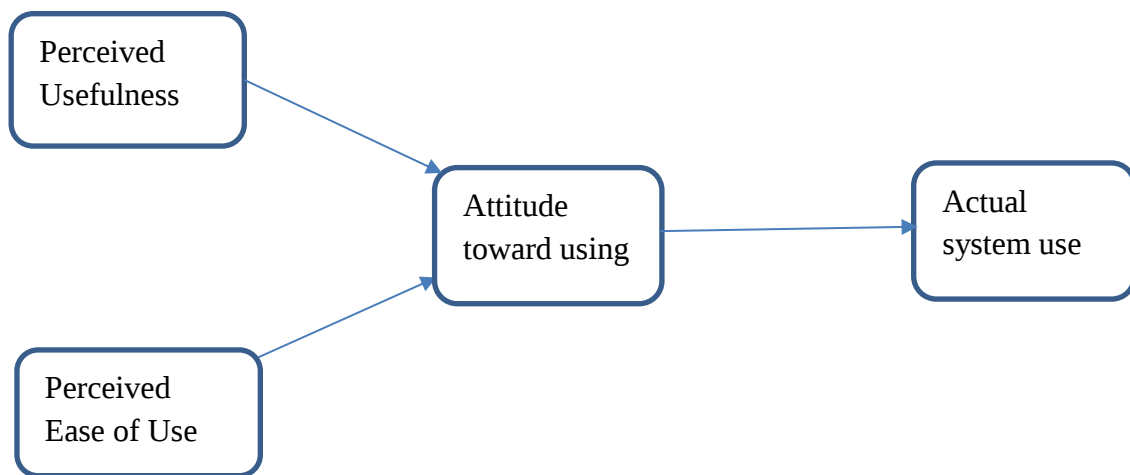


Figure 2.6 Theory of Reasonable Action (Hale, Householder & Greene, 2002).

2.3.6 Unified Theory of Acceptance and Use of Technology (UTAUT)

Unified Theory of Acceptance and Use of Technology (UTAUT) was introduced by (Venkatesh, Morris, Davis & Davis, 2003) and considered as a trial to unify different models and theories of technology acceptance (Ahmad, 2015). The theory was constructed on four theoretical concepts representing determinants of the intention to use: performance expectancy, effort expectancy, social influence, and facilitating conditions. In addition, moderating factors like gender, age, experience, and voluntariness of use are also included in the relations between various constructs and the intention to use.

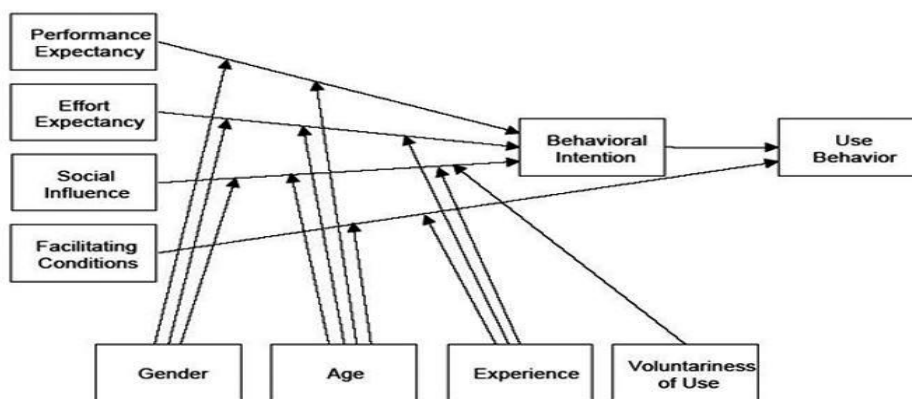


Figure 2.7: Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, Morris, Davis & Davis, 2003)

2.4 Theoretical Framework

User attitude can be defined as “a predisposition to respond favorably or unfavorably to a computer system, application, system staff member, or a process related to the use of that system or application” (Melone, 1990, p.81). Attitude toward ERP system use is the behavioral tendency of users to like or dislike the usage of the applied information systems (Govindaraju & Indriany, 2007). It is manifested as positive, negative, or neutral. Users might form attitudes toward using a system, which affect their productivity (Nah, Tan & Teh, 2004). Thus, it is true for people to hold a certain attitude towards the subject of the present study that is ERP. Enterprise resource planning is an integrating mechanism of such processes as planning, purchasing inventory, marketing, finance & HR. So, the usefulness of the system is not questionable. However, not all persons have

a positive attitude towards it. Besides, the reason behind this lack of acceptance of ERP is not yet clear to both the academic and practitioner community.

For attitude to be negative or positive there are various underlying reasons. For example (Akca & Ozer, 2016) argues that the system's ease of use positively and significantly influences attitude towards the use of ERP. On the other hand, scholars (Almajali & Tarhini, 2016; Darban, Kwak, Deng, Srite & Lee, 2016; Ram & Pattinson, 2009) put forward several antecedents of the attitude towards the use of ERP. Some of these antecedents are individual, while others are organizational. Attitude towards the use of ERP is a function of various factors. Though the consensus is not yet reached, users' perceived ease of use plays a significant role in this matter. According to Davis (1989) perceived ease of use is "the degree to which a person believes that using a particular system would be free from effort". If the technology is easy to use, then the barriers are conquered. Most scholars (Akça & Özer, 2016; Shih & Huang, 2009; Amoako-Gyampah, 2007) argue that there exists a positive and significant effect of perceived ease of use on the attitude towards ERP.

Perceived ease of use mainly manifests itself in various ways; such as clarity and understanding ability of the interaction with ERP; the level of interaction need not require a lot of mental effort; finding ERP is easy to use; finding ERP ease to do what one wants to do. All these dimensions of the perceived ease of use may have a mixed effect on the person's degree of belief about their ability to use the ERP system. In order to confirm the nature of and magnitude of the effect of the perceived ease of use on the attitude towards ERP, the following hypothesis was tested based on the data to be collected from the Commercial Bank of Ethiopia. Accordingly, the researcher proposes;

H₁: perceived ease of use has significant positive effect on the person's attitude towards ERP use.

From the personality characteristics that can influence individuals' perceptions of ERP system acceptance and usage, the researcher uses only computer self-efficiency. From now onwards, individual context is referred to as computer self-efficiency. Computer self-efficiency is defined as the degree to which an individual believes that he or she has the ability to perform a specific task/job using the computer (Sternad & Bobek, 2013). Regarding the individual context that determines the nature of attitude towards the use of ERP, scholars hold a mixed perspective. Scholars (Hasan, 2018; Rajan & Baral, 2015; Albashrawi & Motiwalla, 2016; Albashrawi, Turner

& Balasubramanian, 2020) argue that there exists a positive and significant effect of computer self-efficacy on the attitude towards ERP usage. On the other hand, Govindaraju & Indriany, (2007) identified no positive relationship between computer self-efficacy and attitude towards the use of ERP. However, there seems to be a convincing relationship between these two constructs; computer self-efficacy and attitude towards ERP use. Thus, the researcher would like to test the nature and magnitude of the relationship between computer self-efficacy and attitude towards ERP use. The justification for the present study is that the data from such a setting as Commercial Banks would add to the universality of the theoretical relationship between the variables. In line with this argument, the researcher proposes the following hypothesis.

H₂: computer self-efficacy has significant positive effect on the person's attitude towards ERP use.

In the overall process of enhancing the peoples' attitude towards ERP use, the relationship between the independent variable (perceived ease of use) and the mediator variable (computer self-efficacy) is an important idea. Hence, the relationship is believed to be positive and significant as per the findings of some scholars (Hasan, 2007; Igbaria & Iivari, 1995). However, the relationship has not been confirmed with the use of data from the banking context. There is a study that argues a better computer self-efficacy leads to a greater level of perceived ease of use. However, these arguments seem awkward from the beginning due to the diversion of influence between ease of use and computer self-efficacy. The relationship between these two variables should have been from the ease of use to computer self-efficacy. Computer self-efficacy is people's judgment of their capabilities to organize a course of action to attain a designated type of performance. This self-judgment is logically drawn from the perceived ease of use. That is, the easier the system, the more is the personal computer self-efficacy. Thus, the influence from the ease of use on the CSE needs to be empirically tested.

H₃: perceived ease of use of the ERP has significant positive effect on the person's computer self-efficacy.

Moreover, the influence of the perceived ease of use on the users' attitude has to be sorted out as to whether it is direct or indirect. In the previous hypothesis, the direct relationship between the two constructs was proposed and confirmed from the previous studies (Akça & Özer, (2016); Amoako-Gyampah, (2007)). However, the validity of the direct linear relationship is less likely,

as there could be intermediary variables. One of those intermediary variables is the personal computer self-efficacy of the user. Though there are studies that argue the prevalence of a strong positive relationship between perceived ease of use and users' attitude towards ERP, there still are a significant number of studies (Govindaraju & Indriany, (2007); Shih & Huang, (2009)) that are skeptical about the relationship. Thus, the researcher at this juncture would like to propose the following hypothesis for a further test based on the data from the banking sector. Hence, the relationship between the level of perceived ease of use and the users' attitude towards ERP is mediated by the personal computer self-efficacy of the user. This would be the same as saying putting computer self-efficacy between the perceived ease of use and the users' attitude may intensify the magnitude of the effect of one on the other. As there has not been enough empirical evidence of this kind of relationship between the three constructs in one model, the present study is the first of its kind. The effect of the perceived ease of use on the attitude of the user towards ERP is more when it is through the personal computer self-efficacy. Accordingly, the following hypothesis is going to be tested on the basis of the data from the banking sector.

H₄: Computer self-efficacy mediate the relationship between perceived ease of use of ERP and attitude towards ERP use.

2.5 Empirical review

Under this subsection, empirical studies that have been done on ERP are reviewed. The findings of the research were analyzed critically which is significant to find out the gaps of the studies and suggest hypotheses that can be tested empirically.

Accordingly, Mengstu (2019) investigated the implementation of ERP at the Commercial Bank of Ethiopia by using mixed method research (questioners & interview). The study found out that even if some module & features the system is not implemented as planned, overall implementation of ERP was more or less successful. The results of the study showed that except obedience to schedule & appropriate vendor selection, theoretically and the empirically proven CSF of ERP implementation was fully implemented. The research also revealed the ERP system in CBE has brought the quality of work, quality of information, team synergy as well as positive organizational impact.

Moreover, Ahmed (2017) investigated the factors affecting the ERP system implementation at CBE. The researcher gathers the information using a qualitative research method and a pattern matching technique to research the collected data. The research discovered factors which affect ERP implementation as organizational, technological and the stages of CBE enterprise resource planning implementation (requirement analysis, solution design, solution built & test, and production transition & support). The research finally recommends a clear communication during the implementation of the system and a good management strategy which could lead to the success of the ERP.

Akale (2018) conducted her research to identify the challenges facing the implementation of ERP at CBE. The researcher used a purposive sampling technique and to make a descriptive analysis of the data, SPSS version 21 software is used. The findings of the study revealed that the major challenges that face the implementation of ERP are grouped in to three variables called organizational, technological and individual.

Mulugeta (2018) conducted a descriptive and explanatory type of research to assess the contribution of project management knowledge on ERP project success. The purposive sampling technique was used and data were collected through questionnaire and interview. Also, a Statistical Package for Social Sciences (SPSS) ver. 20 software was used to analyze the data. The result of the study showed that from the important indicator of the project success (top management commitment, top management support, stakeholder's communication and engagement, project team's qualities and training and knowledge transfer) top management commitment and support have a strong and positive impact on project success.

Govindaraju & Indriany (2007) examined the important antecedents of ERP (ERP ease of use, ERP usefulness, ERP compatibility, ERP business fit, shared belief in the benefit of ERP system, facilitating condition, ERP self-efficacy, argument for change, and personal innovativeness of IT) which leads to the lack of user acceptance towards the implemented ERP systems. The antecedents were hypothesized and the researchers conducted a survey to test the hypotheses and LISREL 8.50 was used as model testing tool. The findings of this research were argument for change and shared belief in the benefit of ERP system has a direct significant effect on ERP usefulness also personal innovativeness of IT has a direct significant effect on ERP ease of use. ERP usefulness has a direct significant effect on attitude towards ERP system use. But facilitating condition has no significant

effect on attitude towards ERP system use. The researchers concluded that argument for change and shared belief in the benefit of ERP system has an indirect significant effect on attitude towards ERP system use.

Amoako-Gyampah & Salam (2004) conducted their research on how a shared belief within the benefits of the ERP system together with the two widely known technology implementation success factors (project communication and training) impact the core TAM variables (perceived usefulness and perceived ease use). A mail survey was distributed to gather the data, and that they used a Structural Equation Modeling (SEM) to research the collected data. The result showed that both training and project communication, influence the shared beliefs that users form about the advantages of the technology, which the shared beliefs influence the perceived usefulness and ease of use of the technology. Since perceived usefulness and ease of use contribute to behavioural intention to use the technology.

Gumussoy, Calisir & Bayram (2007) examine the different elements affecting users' behavioral intention to use the ERP system. A questionnaire was distributed and multiple regression analysis was employed to examine the variables. The result of the study revealed that perceived usefulness, subjective norms, and education level have a direct effect on behavioral intention to use ERP systems. Among them, the subjective norm has a robust impact on behavioral intention. Also perceived ease of use and compatibility have an indirect effect on behavioral intention to use ERP systems.

Garača (2011) study the effect of the perceived ease of use of ERP system, perceived usefulness of ERP system, and computer anxiety on user's satisfaction with the ERP system. Questionnaires were distributed and regression analysis was used to test the hypotheses. The result of the study revealed that both perceived ease of use and usefulness of the ERP system significantly contributes to the satisfaction of the system and indirectly affect the intention to use the ERP system.

Sternad, & Bobek (2013), aimed to develop and understand the relationship of Personal Characteristics and Information Literacy (PCIL), System-Technological Characteristics (STC), and Organizational-Process Characteristics (OPC) with the attitude of ERP users toward the ERP system. To assess the relationship between the factors, questioners were distributed and structural equation modeling was employed. The result of the research revealed that from personal

characteristics and information literacy column personal innovativeness and computer anxiety have a strong effect on ERP ease of use which indirectly affects attitude towards ERP use. Whereas, self-efficacy and computer experience were not significant for ERP ease of use. From the second group of character (System and Technology Characteristics (SCT)) data quality, system performance, and user manuals have a strong impact on perceived ERP ease of use which indirectly affects attitude towards ERP use. Whereas ERP functionality was not statistically significant. From the third pillar Organization-Process Characteristics (OPC) business process fit and organizational culture have a strong impact on perceived ERP usefulness which indirectly affects attitude towards ERP use. The other three characteristics (ERP support, ERP communication, and ERP training) were not significant for ERP usefulness.

2.6 Conceptual framework and hypotheses formulation

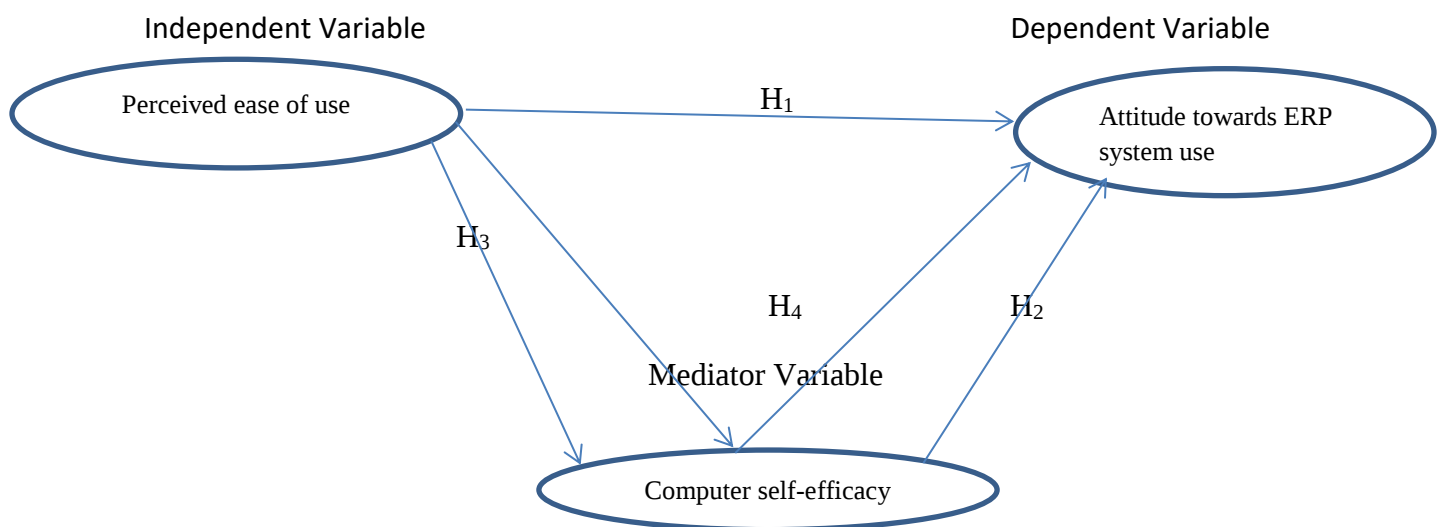


Figure 2.8: Conceptual framework

2.7. Summary and literature gap

There are different technology adoption models that seek to explain how, why, and at what rate the new ideas and technology will be accepted and the theory attempted to explore factors that affect an individual to adopt an innovation or a new technology. Pertaining to the relationship between the variables of the present study, the simple linear relationships between the variables more or less exhibit a similar pattern of relationship. For instance, there is no such debate on whether the relationship between perceived ease of use and attitude towards the use of ERP is

positive or otherwise. The same holds for the relationship between the employees computer self-efficacy and the attitude towards the use of ERP. However, as far as the knowledge of the researcher is concerned, there is no study specifically done on the mediating role of computer self-efficacy in the relationship between perceived ease of use and attitude towards ERP use.

The researcher also reviewed the literature related to ERP adoption by users, developed hypotheses to explain ERP user acceptance, and conducted a survey to test the hypotheses. Thus, the study attempts to contribute to the development of knowledge on ERP success, or ERP acceptance in particular, and its antecedents in general by determining the mediating role of computer self-efficacy in the relationship between the perceived ease of use and the employees attitude towards the use of ERP.

Chapter Three

Research Design and Methodology

3.1 Introduction

This chapter discusses the operational definition of the study variables and the research method of the study, specifically the research approach and design, target respondents, sampling design, source of data, data collection technique, method of data analysis, validity & reliability, and at last some ethical issue were explained.

3.2 Operational Definition of the study variables

The model consists of constructs that determine attitude towards the use of ERP such as computer self-efficacy and perceived ease of use.

Attitude towards ERP use

User attitude can be defined as “a predisposition to respond favorably or unfavorably to a computing system, application, system staff member, or a process associated with the utilization of that system or application” (Melone, 1990, p.81). Attitude toward ERP system use is the behavioral tendency of users to like or dislike the usage of the applied information systems (Govindaraju & Indriany, 2007). Users might form attitudes toward employing a system, which affect their productivity (Nah, Tan & Teh, 2004).

Computer Self-Efficacy (CSE)

Self-efficacy is the beliefs a person has about their abilities to effectively perform a particular behavior or job (Cassidy & Eachus, 2002). Levels of self-efficacy are believed to be determined by previous experience of success or failure; indirect experience by observing other's successes and failures; verbal influence from families, colleagues, and peers. As computers are becoming common in all features of everyday life the construct must be measured accurately and appropriately (Cassidy & Eachus, 2002). Computer self-efficacy is people's judgment of their

abilities to operate computers/IT/IS (Compeau & Higgins,1995). Individuals with high self-efficacy use computers frequently and prefer using them more and experience less computer-related concern (Compeau, & Higgins, 1995). Perceived efficacy about computers plays an important role in determining an individual's decision on how to use the system effectively. Perceived efficacy with computer technology leads to a higher possibility of technology adoption. (Hill, Smith & Mann, 1987).

Perceived Ease of Use (PEOU)

perceived ease of use is a personal belief that using a particular system would be free of effort (Davis,1989). It is also the user's perception of the amount of effort needed to use the system and is one of the determinants of user behavior (Davis, 1989). perceived ease of use (PEOU) is of prime relevance in explaining the behavioral intention to use IS. TAM assumed that computer usage is determined by a behavioral intention to use a system, where the intention to use the system is jointly determined by a person's attitude toward using the system and its perceived usefulness (Amoako-Gyampah & Salam, 2004). People with high PEOU are more likely to believe in the ease and usefulness of the system (Robey and Farrow, 1982) and in the ease of access for using the system (Amoako-Gyampah, 2007). In determining the acceptance and use of information systems both Ease of Use (EOU) and usefulness are significant factors (Keil, Beranek & Konsynski, 1995).

All the constructs were measured with the items adapted from prior research and used a 5-point Likert-type scale questionnaire, where 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree, 5 = strongly agree.

To measure the attitude construct, the researcher adopted the five-item questionnaire from (Amoako-Gyampah & Salam, 2004) and the other two from (Nah, Tan & Teh, 2004). The items are already validated tools to assess users' attitudes towards the use of ERP. These are, "the ERP system provides access to more data; the ERP system makes data analysis easier; the ERP system is better than the old system; the ERP system provides accurate information; the ERP system provides integrated, timely and reliable information; using ERP is a good idea and the idea of using the ERP system to perform the job".

The operational definition of computer self-efficacy was adopted from (Howard, 2014). The twelve (12) items included are, "I can always manage to solve difficult computer problems if I try

hard enough; If my computer is “acting-up,” I can find a way to get what I want; it is easy for me to accomplish my computer goals; I am confident that I could deal efficiently with unexpected computer events; I can solve most computer programs if I invest the necessary effort; I can remain calm when facing computer difficulties because I can rely on my abilities; when I am confronted with a computer problem, I can usually find several solutions; I can usually handle whatever computer problem comes my way; failing to do something on the computer makes me try harder; I am a self-reliant person when it comes to doing things on a computer; there are few things that I cannot do on a computer and lastly, I can persist and complete most any computer-related task”.

Perceived ease of use mainly manifests itself in various ways. The four items listed below were adopted from (Venkatesh & Davis, 1996) and the other three were adopted from (Davis, 1989): “clarity and understandability of the interaction with ERP; the level of interaction need not require a lot of mental effort; ERP is easy to use; finding ERP ease to do what one wants to do; learning to operate ERP would be easy for me; ERP is flexible to interact with; it is easy to become skillful by using ERP”. All these dimensions of the perceived ease of use may have a mixed effect on the person’s degree of belief about their ability to use the ERP system.

3.3 Research Approach and Design

To achieve the general and specific objectives of the study, the researcher uses a descriptive and explanatory research designs. In descriptive research, the researcher collects data to test hypotheses and to answer questions concerning the current status of the subject of the study. The research design is descriptive as long as the attitude towards use of ERP is concerned. The situation of the variables of the study is to be dealt with by the use of descriptive design while the relationship between the variables of interest are analyzed with the use of explanatory research design. Also, explanatory research focuses on explaining the characteristics of your study which was not well researched before in a detailed manner.

In addition, a quantitative research approach was used. According to Newman, Benz & Ridenour (1998) quantitative research is used to test or confirm theories and hypotheses and also to establish generalizable facts about the topic. According to the study, the quantitative approach also deals with numbers and statistics which is expressed in numbers and graphs. Common quantitative methods include observations recorded as numbers, experiments and surveys with closed-ended

questions. While qualitative research deals with words and meanings which are used to understand concepts that enable you to gather in-depth insights and focuses on exploring ideas and formulating a theory or hypothesis (Leavy, 2017). Common qualitative methods include observations described in words, interviews with open-ended questions, and literature reviews that explore concepts and theories. The intention of this study is an investigation of the mediating role of individual context i.e. computer self-efficacy in the relationship between the perceived ease of use and attitude towards ERP use.

3.4 Sampling Design and Target population

3.4.1 Sampling Design

When you conduct research it's impossible to collect data from everyone instead, you select a sample. There are several different sampling techniques. The first type is probability sampling, which is a random selection from the whole group, which entails that every member of the population has a chance of being selected (Taherdoost, 2016). This type of sampling method is time-consuming and expensive. The other type is a non-probability sampling where the selection is based on convenience that involves a non-random selection which implies, not every individual has a chance of being included. The method is useful for exploratory research and is cheaper than the probability sampling method. For this research multistage cluster sampling (the researcher creates multiple clusters of people from a population) which is categorized under probability, sampling is employed to identify the target population. To calculate the sample size, we used the formula of (Yamane, 1967).

$$n = \frac{N}{1+N(e)^2}$$

n is the sample size

N is the population size and is equals to 12453

Where,

e is the level of precision or sampling error = (0.05)

n=?

$$n = \frac{12453}{1+12453(0.05)^2} = 388$$

Thus, a sample size of 388 employees was selected from the population of 12453 employees, by using the aforementioned sampling technique, that is, the multi-stage cluster sampling method. The sample came from the forty selected branches of the bank located in Addis Ababa.

3.4.2 Targeted Respondents

The population is the total group that you want to draw inferences about and from those you select a specific group of individuals that you will collect data from (Kothari, 2004). To determine how big your sample should be you can use a sample size calculator. For this study, the researcher considers managers, team leaders, and team members of the ERP in those selected branches of CBE in Addis Ababa with a total population of 12, 453 employees.

The Commercial Bank of Ethiopia is chosen for this particular study mainly because; it is the pioneer to introduce modern banking to the country and is the first national bank implementing the Oracle ERP system in Ethiopia. Secondly, it plays a catalytic role in the economic progress and development of the country. Also, its business experiences and services of CBE are multi-functional and can be shared as a role model to other banks and organizations. Because of the above reasons the researcher selected CBE as it is a focal study. For this particular study a multi-stage cluster sampling was used to divide the branches regionally (Addis Abeba & other regions) and within Addis Abeba different district zones (Arada, Bole, Kirkos, Kolfe, Megenagna, Merkato, Nifas silk, and Yeka), and then selected five branches haphazardly from each of the eight districts. So, the questioners were distributed to a total of 388 employees working in the 40 branches.

3.5 Sources of Data

This study uses both primary and secondary sources of knowledge. The primary data are real-time data gathered by the researcher (Ajayi, 2017). Primary data sources include personal interviews, surveys, experiments, observations, and questioners. In this study, the primary data was collected through a closed-ended questionnaire which is adopted by the researcher from a valid research article. Secondary data are those past data that is collected by someone else earlier (Ajayi, 2017). The sources of secondary data are internal records, government publications, journal articles, websites, and books. The researcher examined different articles, academic journals, useful academic books, and the CBE official website as a secondary source of information.

3.6 Data collection techniques/instruments

The data collection techniques for this research were close-ended questionnaires, and to strengthen the findings of the study, the researcher examined different articles, relevant literature, academic journals, useful academic books, and CBE official website. To measure the variables, the questions were adopted from previous research works such (Amoako-Gyampah & Salam, 2004; Howard, 2014; Venkatesh & Davis, 1996). To ensure the validity of the questionnaire the researcher asked for feedback from the advisor and experts and conduct a pilot test on a portion of the target population. To collect the data from the sample respondents, close-ended types of questionnaires were prepared in the English language, and the data that were collected through the questionnaire is measured using a 5-point Likert-type scale, where 1 = strongly disagree, 2 = disagree, 3 = Moderately agree, 4 = agree, 5 = strongly agree.

To collect the data for the study, the researcher follows the following steps. First, to get adequate information about the topic different articles, relevant literature, academic journals, books, and CBE official websites were reviewed. Second, research questions were prepared and conducted by the researcher herself and at last, a data-gathering tool was developed.

3.7 Method of data analysis

The model consists of constructs that determine attitude towards use of ERP such as (1) computer self-efficacy, which is people's judgment of their capabilities to operate computers/IS/IT (Govindaraju & Indriany, 2007); (2) perceived ease of use, is a personal believe that using a particular system would be free of effort (Davis,1989). All the constructs were measured with the items adapted from prior research and used a 5-point Likert-type scale questionnaire, where 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree, 5 = strongly agree. Once the raw data are collected, quantitative methods of data analysis was used to test the hypothesis and the collected close-ended questions were inserted into SPSS version 26 software and process macro for the mediation; which allow the generalization of the results obtained from a sample to a population of interest. Moreover, the use of means and standard deviations were made to describe the variable of the study as they currently are. Inferential statistics such as correlation and regression were used to conclude the interplay between the variables of interest. A more advanced

analysis such as the mediation effect of a third variable between the dependent and independent variables was also run.

3.8 Validity and reliability

To measure the study variables, the questions were adopted from already validated, previous research works such as (Amoako-Gyampah & Salam, 2004; Howard, 2014; Venkatesh & Davis, 1996). Besides, to ensure the validity of the questionnaire the researcher asked for feedback from the advisor and experts and conduct a pilot test on a portion of the target population.

3.9 Ethical issues

As this research paper was done only for academic purposes, before conducting the research the researcher informed the objective of the study to the participants and asked permission to conduct the study. The researcher maintained the confidentiality, respect privacy, and protect the anonymity of all respondents on the selected bank. Concerning references, all the materials and sources were duly acknowledged.

Chapter Four

4.1 Data presentation, analysis, and discussion

This chapter presents the discussions and analysis of the research findings obtained from the questionnaires. The first section consists of a summary of the demographic characteristics of the respondents. This is followed by analyzing the outcomes of all the assumptions of linearity, normality, multi-collinearity, auto-correlation, and homoscedasticity. In the end, the results of the hypothesis testing are presented.

4.2. Data Cleaning

As we have discussed in chapter three, 12453 dedicated employees of CBE engaged in the ERP implementation project. For the purpose of this survey, a selected sample of 388 candidates was approached with a questionnaire out of which 355 responded properly.

4.3 Respondents Demographic Information

As indicated in the survey, the first part of our questionnaires consists of the demographic characteristics of respondents. To investigate for possible correlation with the attitude towards the use of ERP the respondents were required to indicate their gender, age, education level, work experience, marital status, position, length of using the ERP system, and frequency of using the system. The results and analysis of demographic information obtained from the questionnaire are summarized below:

4.3.1 Gender

Gender has been attributed as a significant variable in determining the intention of accepting new technology. Past studies indicated that males have more confidence in using technology than do females (Goswami & Dutta, 2015; Pasaoglu, 2011; Venkatesh, Thong & Xu, 2012). As depicted in Table 4.1 below, the gender data analysis shows that in CBE, 178 (50.1%) of employees are female, and 177(49.9%) are male. Although the independent t-test comparison results imply that regarding gender there is no statistically significant evidence of the difference. We can infer that the gender doesn't have any significant impact on the attitude towards the use of

the ERP system which is in contrary with the previous research results (Goswami & Dutta, 2015; Pasaoglu, 2011; Venkatesh, Thong & Xu, 2012).

	Gender	N	Percent	Mean	Std. Deviation
AVERAGE ATTITUDE TOWARDS ERP	Male	177	49.9	3.7022	.05239
	Female	178	50.1	3.5730	.05137
	Total	355	100.0		

Table 4.1: Average attitude by respondents' gender (own survey, computed in SPSS, 2026)

Independent Samples Test						
		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
AVERAGE ATTITUDE TOWARDS ERP	Equal variances assumed	1.770	.184	1.760	353	.079
	Equal variances not assumed			1.760	352.822	.079

Table 4.2: Independent sample T-test for gender (own survey, computed in SPSS, 2026)

4.3.2 Age

Chronological age is negatively associated to technology acceptance. Older people face more difficulty in processing novel or complex information which affect their learning of new technologies (Venkatesh, Thong & Xu, 2012). Most researches indicate that younger adults are more likely use technology in general than older adults (Kolodinsky, Hogarth & Hilgert, 2004; Ma, Chan & Chen, 2016; Venkatesh, Thong & Xu, 2012). From the below Table 4.3, we can learn that the majority of the respondents lie within the age range of 26-33 years, which accounts for 236(66.5%) and 58(16.3%) of the respondent lie in the age group of 34-45 years. Whereas respondents within the age ranges of 18-25 years have 42(11.8 %) representation. From the total sample, 19(5.4%) of respondents are above 45 years. Besides, the one-way ANOVA result (3.9116) implies that even if majority of employees (66.5%) at CBE are within the age range of 26-33 years, regarding acceptance of such technologies (ERP) the age inclination of the respondents is more

towards young (18-25 years). Hence, we can conclude that in CBE those employees within the age range of 18-25 had a positive significant attitude towards ERP use and our research result is similar to the above research result (Kolodinsky, Hogarth & Hilgert, 2004; Ma, Chan & Chen, 2016; Venkatesh, Thong & Xu, 2012).

Age category	N	Mean	Std. Deviation	Std. Error
18-25	42	3.9116	.59945	.09250
26-33	236	3.5357	.70408	.04583
34-45	58	3.7857	.63508	.08339
ABOVE 45	19	3.8421	.67662	.15523
Total	355	3.6374	.69324	.03679

Table 4.3: Average attitude by respondents' age (own survey, computed in SPSS, 2026)

ANOVA					
AVERAGE ATTITUDE TOWARDS ERP					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.669	3	2.556	5.523	.001
Within Groups	162.458	351	.463		
Total	170.127	354			

Table 4.4: Comparison of attitude by age (own survey, computed in SPSS, 2026)

Multiple Comparisons						
Dependent Variable: AVERAGE ATTITUDE TOWARDS ERP						
Bonferroni						
(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
18-25	26-33	.37585*	.11394	.006	.0735	.6782
	34-45	.12585	.13784	1.000	-.2399	.4916
	ABOVE 45	.06946	.18810	1.000	-.4296	.5685
26-33	18-25	-.37585*	.11394	.006	-.6782	-.0735
	34-45	-.25000	.09971	.076	-.5145	.0145
	ABOVE 45	-.30639	.16224	.359	-.7369	.1241
34-45	18-25	-.12585	.13784	1.000	-.4916	.2399
	26-33	.25000	.09971	.076	-.0145	.5145
	ABOVE 45	-.05639	.17983	1.000	-.5335	.4208
ABOVE 45	18-25	-.06946	.18810	1.000	-.5685	.4296
	26-33	.30639	.16224	.359	-.1241	.7369
	34-45	.05639	.17983	1.000	-.4208	.5335
*. The mean difference is significant at the 0.05 level.						

Table 4.5: Post hoc analysis of age wise comparison (own survey, computed in SPSS, 2026)

4.3.3 Highest education level

Education levels were found to have a stronger effect on perceptions of technology and are expected especially when a higher level of education is associated with more usage of technology. Scholars (Riddell & Song, 2017; Ma, Chan & Chen, 2016) indicated that there is a positive relationship between the rate of technology adoption and level of education which means, workers with a higher level of education tend to adopt new technology faster than those with lesser education level. From Table 4.6 below, regarding the highest education level, 232(65.4%) of respondents have a Bachelor's Degree and 85(23.9%) have a Second Degree. Whereas, 38(10.7%) of respondents have a College Diploma. Hence, the below one-way ANOVA result (3.7227) shows that employees with Second Degree had a more positive attitude towards the use of ERP, but the difference is not supported as the significance is greater than .05.

Descriptive				
AVERAGE ATTITUDE TOWARDS ERP				
	N	Mean	Std. Deviation	Std. Error
COLLEGE DIPLOMA	38	3.3985	.73082	.11855
BACHELOR DEGREE	232	3.6453	.67935	.04460
SECOND DEGREE (MA, MSC, MBA)	85	3.7227	.69824	.07573
Total	355	3.6374	.69324	.03679

Table 4.6: Average attitude by respondents' highest educational level (own survey, computed in SPSS, 2026)

ANOVA						
AVERAGE ATTITUDE TOWARDS ERP						
		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	(Combined)	2.802	2	1.401	2.947	.054
Within Groups		167.326	352	.475		
Total		170.127	354			

Table 4.7: Comparison of attitude by highest educational level (own survey, computed in SPSS, 2026)

4.3.4 Work experience

The effect of work experience on the acceptance of new technology is significant (Mohammad, 2016). Users with greater work experience have better familiarity with the technology than users with less experience (Alba & Hutchinson, 1987). The work experience data analysis from below Table 4.8 shows that 182(51.3%) of respondents have 6-10 years of work experience whereas 117(33%) have 1-5 years of experience. In addition, 24(6.8%) of the total sample have 11-15 years of experience and 32(9%) of respondents have above 15 years of experience. In addition, the one-way ANOVA result (4.0357) showed that employees who have experience of above 15 years have more positive and significant attitudes regarding the attitude towards the use of ERP. Our research

result is similar to the above research result (Alba & Hutchinson, 1987), which indicates that people with higher work experience are better at accepting new technology.

Work experience	N	Mean	Std. Deviation	Std. Error
1-5 YEARS	117	3.7228	.60501	.05593
6-10 YEARS	182	3.5078	.74458	.05519
11-15 YEARS	24	3.6726	.39625	.08088
ABOVE 15 YEARS	32	4.0357	.68847	.12171
Total	355	3.6374	.69324	.03679

Table 4.8: Average attitude by work experience (own survey, computed in SPSS, 2026)

ANOVA						
AVERAGE ATTITUDE TOWARDS ERP						
		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	(Combined)	9.015	3	3.005	6.547	.000
Within Groups		161.112	351	.459		
Total		170.127	354			

Table 4.9: Comparison of attitude by work experience (own survey, computed in SPSS, 2026)

Multiple Comparisons						
Dependent Variable: AVERAGE ATTITUDE TOWARDS ERP						
Bonferroni						
(I) For how long have you been in the organization	(J) For how long have you been in the organization	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1-5 YEARS	6-10 YEARS	.21498*	.08028	.047	.0020	.4280
	11-15 YEARS	.05021	.15182	1.000	-.3526	.4530
	ABOVE 15 YEARS	-.31288	.13516	.127	-.6715	.0457
6-10 YEARS	1-5 YEARS	-.21498*	.08028	.047	-.4280	-.0020
	11-15 YEARS	-.16477	.14713	1.000	-.5552	.2256
	ABOVE 15 YEARS	-.52786*	.12987	.000	-.8724	-.1833
11-15 YEARS	1-5 YEARS	-.05021	.15182	1.000	-.4530	.3526
	6-10 YEARS	.16477	.14713	1.000	-.2256	.5552
	ABOVE 15 YEARS	-.36310	.18295	.288	-.8485	.1223
ABOVE 15 YEARS	1-5 YEARS	.31288	.13516	.127	-.0457	.6715
	6-10 YEARS	.52786*	.12987	.000	.1833	.8724
	11-15 YEARS	.36310	.18295	.288	-.1223	.8485
*. The mean difference is significant at the 0.05 level.						

Table 4.10: Post hoc analysis of attitude by work experience (own survey, computed in SPSS, 2026)

4.3.5 Marital status

Scholars have mixed views regarding the effect of marital status on the acceptance of new technology. Some researchers (Selamat, Jaffar & Ong, 2009; Ma, Chan & Chen, 2016) revealed that married people are more friendly in using new technology. On the contrary, other scholars (Lim & Ting, 2012; Bere, 2014) have found to have opposing views in that, single people have easy acceptance for new technology over married people. Based on the below Table 4.11, 197(55.5%) of respondents are married and 152(42.8%) are single. Only 4(1.1 %) of the total respondent are divorced. Though the one-way ANOVA result (3.6766) indicates that in CBE married employee's have a more positive and significant attitude towards the use of ERP, the research result is similar to the above research result by (Selamat, Jaffar & Ong, 2009; Ma, Chan & Chen, 2016).

Marital status	N	Mean	Std. Deviation
SINGLE	152	3.6137	.71075
MARRIED	197	3.6766	.67550
DIVORCED	4	2.6429	.14286
8.00	2	3.5714	.00000
Total	355	3.6374	.69324

Table 4.11: Average attitude by marital status (own survey, computed in SPSS, 2026)

ANOVA						
AVERAGE ATTITUDE TOWARDS ERP						
		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	(Combined)	4.353	3	1.451	3.072	.028
Within Groups		165.775	351	.472		
Total		170.127	354			

Table 4.12: Comparison of attitude by marital status (own survey, computed in SPSS, 2026)

Multiple Comparisons						
Dependent Variable: AVERAGE ATTITUDE TOWARDS ERP						
Bonferroni						
(I) Marital Status	(J) Marital Status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
SINGLE	MARRIED	-.06286	.07419	1.000	-.2597	.1340
	DIVORCED	.97086*	.34811	.033	.0472	1.8945
	8.00	.04229	.48914	1.000	-1.2555	1.3401
MARRIED	SINGLE	.06286	.07419	1.000	-.1340	.2597
	DIVORCED	1.03372*	.34709	.019	.1128	1.9546
	8.00	.10515	.48841	1.000	-1.1907	1.4010
DIVORCED	SINGLE	-.97086*	.34811	.033	-1.8945	-.0472
	MARRIED	-1.03372*	.34709	.019	-1.9546	-.1128
	8.00	-.92857	.59516	.718	-2.5077	.6506
8.00	SINGLE	-.04229	.48914	1.000	-1.3401	1.2555
	MARRIED	-.10515	.48841	1.000	-1.4010	1.1907
	DIVORCED	.92857	.59516	.718	-.6506	2.5077

*. The mean difference is significant at the 0.05 level.

Table 4.13: Post hoc analysis of attitude by marital status (own survey, computed in SPSS, 2026)

4.3.6 Job Titles

The respondents were asked to indicate their job titles. Data analysis was done and below Table 4.14 indicates that 65(18.3%) of respondents are in the middle management position and 49(13.8%) are holding technical positions. Of those who are in accounting positions are 63 (17.7%) and 28(7.9%) of respondents are in top management positions. On the other hand, 31(8.7%) of the respondents work as administrators, while 5(1.4%) are in supervisory positions. Moreover, the one-way ANOVA result (4.2120) showed that those employees who are working in administrative positions have a positive significant attitude towards the use of ERP when we compared with other positions.

	N	Mean	Std. Deviation	Std. Error
EXECUTIVE/TOP MANAGEMENT	28	3.0918	.63199	.11944
MIDDLE MANAGEMENT	65	3.9868	.56114	.06960
ADMINISTRATION	31	4.2120	.56769	.10196
TECHNICAL	49	3.3178	1.06237	.15177
SUPERVISORY	5	3.7429	.15649	.06999
ACCOUNTING	63	3.4762	.42160	.05312
OTHER	114	3.6378	.52401	.04908
Total	355	3.6374	.69324	.03679

Table 4.14: Average attitude by job title (own survey, computed in SPSS, 2026)

ANOVA						
AVERAGE ATTITUDE TOWARDS ERP						
		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	(Combined)	33.203	6	5.534	14.064	.000
Within Groups		136.925	348	.393		
Total		170.127	354			

Table 4.15: Comparison of attitude by job title (own survey, computed in SPSS, 2026)

Multiple Comparisons						
Dependent Variable: AVERAGE ATTITUDE TOWARDS ERP						
Bonferroni						
(I) What department do you work in?(position)	(J) What department do you work in?(position)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
EXECUTIVE/TOP MANAGEMENT	MIDDLE MANAGEMENT	-.89498*	.14179	.000	-1.3289	-.4610
	ADMINISTRATION	-1.12014*	.16354	.000	-1.6207	-.6196
	TECHNICAL	-.22595	.14860	1.000	-.6807	.2289
	SUPERVISORY	-.65102	.30454	.698	-1.5831	.2810
	ACCOUNTING	-.38435	.14247	.154	-.8204	.0517
	OTHER	-.54601*	.13230	.001	-.9509	-.1411
MIDDLE MANAGEMENT	EXECUTIVE/TOP MANAGEMENT	.89498*	.14179	.000	.4610	1.3289
	ADMINISTRATION	-.22517	.13691	1.000	-.6442	.1939
	TECHNICAL	.66903*	.11867	.000	.3058	1.0322
	SUPERVISORY	.24396	.29111	1.000	-.6470	1.1349
	ACCOUNTING	.51062*	.11090	.000	.1712	.8500
	OTHER	.34897*	.09749	.008	.0506	.6473
ADMINISTRATION	EXECUTIVE/TOP MANAGEMENT	1.12014*	.16354	.000	.6196	1.6207
	MIDDLE MANAGEMENT	.22517	.13691	1.000	-.1939	.6442
	TECHNICAL	.89420*	.14395	.000	.4536	1.3348
	SUPERVISORY	.46912	.30230	1.000	-.4561	1.3943
	ACCOUNTING	.73579*	.13761	.000	.3146	1.1570
	OTHER	.57414*	.12706	.000	.1853	.9630
TECHNICAL	EXECUTIVE/TOP MANAGEMENT	.22595	.14860	1.000	-.2289	.6807
	MIDDLE MANAGEMENT	-.66903*	.11867	.000	-1.0322	-.3058
	ADMINISTRATION	-.89420*	.14395	.000	-1.3348	-.4536
	SUPERVISORY	-.42507	.29449	1.000	-1.3264	.4762
	ACCOUNTING	-.15841	.11948	1.000	-.5241	.2073
	OTHER	-.32006	.10715	.063	-.6480	.0079
SUPERVISORY	EXECUTIVE/TOP MANAGEMENT	.65102	.30454	.698	-.2810	1.5831

	MIDDLE MANAGEMENT	-.24396	.29111	1.000	-1.1349	.6470
	ADMINISTRATION	-.46912	.30230	1.000	-1.3943	.4561
	TECHNICAL	.42507	.29449	1.000	-.4762	1.3264
	ACCOUNTING	.26667	.29144	1.000	-.6253	1.1586
	OTHER	.10501	.28661	1.000	-.7722	.9822
ACCOUNTING	EXECUTIVE/TOP MANAGEMENT	.38435	.14247	.154	-.0517	.8204
	MIDDLE MANAGEMENT	-.51062*	.11090	.000	-.8500	-.1712
	ADMINISTRATION	-.73579*	.13761	.000	-1.1570	-.3146
	TECHNICAL	.15841	.11948	1.000	-.2073	.5241
	SUPERVISORY	-.26667	.29144	1.000	-1.1586	.6253
	OTHER	-.16165	.09847	1.000	-.4630	.1397
OTHER	EXECUTIVE/TOP MANAGEMENT	.54601*	.13230	.001	.1411	.9509
	MIDDLE MANAGEMENT	-.34897*	.09749	.008	-.6473	-.0506
	ADMINISTRATION	-.57414*	.12706	.000	-.9630	-.1853
	TECHNICAL	.32006	.10715	.063	-.0079	.6480
	SUPERVISORY	-.10501	.28661	1.000	-.9822	.7722
	ACCOUNTING	.16165	.09847	1.000	-.1397	.4630
*. The mean difference is significant at the 0.05 level.						

Table 4.16: Post hoc analysis of attitude by job title (own survey, computed in SPSS, 2026)

4.3.7 Length of using the ERP system

The respondents were asked to indicate how long they have been using the ERP system. The result from below Table 4.17 shows that 300 (84.5%) of the total sample used the ERP system for more than one year and 55 (15.5%) of respondents used the system for less than one year. Also, the independent t-test comparison result (3.6943) imply that those employees who are working for more than one year have a more positive significant attitude towards the use of ERP.

Group Statistics					
	How long have you been using the ERP system	N	Mean	Std. Deviation	Std. Error Mean
AVERAGE ATTITUDE TOWARDS ERP	BELOW ONE YEAR	55	3.3273	.91336	.12316
	ABOVE ONE YEAR	300	3.6943	.63039	.03640

Table 4.17: Average attitude by length of using the ERP system (own survey, computed in SPSS, 2026)

Independent Samples Test						
		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
AVERAGE ATTITUDE TOWARDS ERP	Equal variances assumed	12.668	.000	-3.672	353	.000
	Equal variances not assumed			-2.858	63.756	.006

Table 4.18: Independent sample T-test for length of using the ERP system (own survey, computed in SPSS, 2026)

4.3.8 Frequency of using ERP system

Regarding the frequency of using the ERP system the below Table 4.19 indicates that 143 (40.3%) of the respondents use the ERP system often and 101 (28.5%) of the respondents use the system sometimes. Also, 84(23.7%) of respondents use the system most often and 27(7.6%) of respondents use the system seldom. Although the one-way ANOVA result implies that regarding frequency of using the ERP system those employees who are using the system most often have a significant and positive attitude towards using the ERP system.

Frequency of using ERP	N	Mean	Std. Deviation	Std. Error
SELDOM	27	3.6032	.52911	.10183
SOMETIMES	101	3.4894	.67351	.06702
OFTEN	143	3.6384	.63680	.05325
MOST OFTEN	84	3.8248	.81187	.08858
Total	355	3.6374	.69324	.03679

Table 4.19: Average attitude by frequency of using ERP system (own survey, computed in SPSS, 2026).

ANOVA						
AVERAGE ATTITUDE TOWARDS ERP						
		Sum of Squares	df	Mean Square	F	Sig.
Between Groups	(Combined)	5.195	3	1.732	3.685	.012
Within Groups		164.932	351	.470		
Total		170.127	354			

Table 4.20: Comparison of attitude by frequency of using ERP system (own survey, computed in SPSS, 2026).

Multiple Comparisons						
Dependent Variable: AVERAGE ATTITUDE TOWARDS ERP						
(I) How often do you use the system	(J) How often do you use the system	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
SELDOM	SOMETIMES	.11378	.14851	1.000	-.2803	.5078
	OFTEN	-.03519	.14384	1.000	-.4168	.3465
	MOST OFTEN	-.22166	.15165	.868	-.6240	.1807
SOMETIMES	SELDOM	-.11378	.14851	1.000	-.5078	.2803
	OFTEN	-.14897	.08910	.573	-.3854	.0874
	MOST OFTEN	-.33544*	.10122	.006	-.6040	-.0669
OFTEN	SELDOM	.03519	.14384	1.000	-.3465	.4168
	SOMETIMES	.14897	.08910	.573	-.0874	.3854
	MOST OFTEN	-.18647	.09423	.292	-.4365	.0636
MOST OFTEN	SELDOM	.22166	.15165	.868	-.1807	.6240
	SOMETIMES	.33544*	.10122	.006	.0669	.6040
	OFTEN	.18647	.09423	.292	-.0636	.4365

Table 4.21: Post hoc analysis of frequency of using ERP system (own survey, computed in SPSS, 2026)

4.4 Reliability test

It is important to test for reliability to confirm the internal consistency across the parts of a measuring instrument. When using Likert scales, the most commonly used internal consistency measure is the Cronbach Alpha coefficient (Taherdoost, 2016). Cronbach's alpha is the average value of the reliability coefficients one would obtain for all possible combinations of items and does not provide reliable estimates for single items (Gliem, J. & Gliem, R., 2003). Mostly Cronbach's alpha reliability coefficient ranges between 0 and 1. The closer the coefficient to 1 is the greater the internal consistency of the items in the scale. There are no absolute rules for cut-off points for reliability, however, most agree on a minimum internal consistency coefficient of .70. In general, reliabilities less than 0.50 are considered low reliability; those in the range of 0.50 to 0.70 are moderately reliable; the coefficient in the range of 0.70-0.90 are highly reliable and from 0.90 and above are excellent reliable (Taherdoost, 2016). Consequently, a reliability test was conducted for each of the variables under the study (attitude towards the use of ERP, perceived ease of use, and computer self-efficacy). The reliability test result confirms that the entire variables Cronbach alpha surpasses the 0.70 minimum requirements and hence the reliability of the data used in this case is not a concern. The alpha value for each variable is identified and summarized in Table 4.22 below.

Variable	No of Items	Cronbach Alpha Coefficient
Attitude towards ERP	7	0.894
Perceived ease of use	7	0.816
Computer self-efficacy	12	0.887

Table 4.22: Reliability test result (own survey, computed in SPSS, 2026)

4.5 Descriptive Analysis of the variables of interest

4.5.1 Descriptive Analysis of attitude towards ERP use

Looking into Table 4.23 below, one can learn that the highest score goes to the idea that “Using the ERP system is a good idea”, and its mean value of 3.7746 indicates that on average most of the employees agree on the idea. Besides, its standard deviation of 0.75159 indicates that regarding the idea individual responses did not deviate much. On the other hand, the least score

is on the idea that goes as “The NEW system will provide accurate information”. This idea has a mean and standard deviation value of (3.5127 & 0.96944), which indicates that on average most employees moderately agree on the idea and the individual responses did not differ much from each other. Overall, the average score of the response concerning attitude towards ERP use lies between the score for these two ideas.

Attitude towards ERP use	Mean	Std. Deviation
The new ERP system will provide access to more data	3.7577	.79042
The new ERP system will make data analysis easier.	3.6254	.92543
The new system will be better than the OLD system.	3.6873	.94225
The NEW system will provide accurate information	3.5127	.96944
The NEW system will provide integrated, timely and reliable information	3.4563	.94192
Using the ERP system is a good idea.	3.7746	.75159
I like the idea of using the ERP system to perform my job.	3.6479	.86519

Table 4.23: Descriptive statistics of attitude towards ERP (own survey, computed in SPSS, 2026)

4.5.2 Descriptive Analysis of computer self-efficacy

Regarding computer self-efficacy, Table 4.24 below, presents that the least score is on the idea that goes as “I can solve most computer programs if I invest the necessary effort.” while the highest score goes to the idea that says “It is easy for me to accomplish my computer goals”. Generally, the average score of the rest of the items under the computer self-efficacy is between the score for these two ideas. Pending the conclusion about the overall average score of computer self-efficacy, there seems to be a positive response on almost all of the items under this construct.

Computer self-efficacy	Mean	Std. Deviation
I can always manage to solve difficult computer problems if I try hard enough	3.1972	.91780
If my computer is “acting-up,” I can find a way to get what I want.	3.2028	.98777
It is easy for me to accomplish my computer goals.	3.7070	.89179
I am confident that I could deal efficiently with unexpected computer events.	3.2113	.75755
I can solve most computer programs if I invest the necessary effort.	3.1718	.94856
I can remain calm when facing computer difficulties because I can rely on my abilities.	3.3183	.76843
When I am confronted with a computer problem, I can usually find several solutions.	3.2817	.86657
I can usually handle whatever computer problem comes my way.	3.2338	.87913
Failing to do something on the computer makes me try harder	3.5831	.82390
I am a self-reliant person when it comes to doing things on a computer.	3.6366	.73285
There are few things that I cannot do on a computer.	3.2000	.92486
I can persist and complete most any computer-related task.	3.4901	.83144

Table 4.24: Descriptive statistics of computer self-efficacy (own survey, computed in SPSS, 2026)

4.5.3 Descriptive Analysis of perceived ease of use

According to table 4.25 below, one can notice that the highest score is on the idea that goes as “I find it easy to get the system to do what I want it to do”, while the lowest score goes to the idea that “It would be easy for me to become skillful at using the system”. Generally, the average score of the response on the rest of the items under the perceived ease of use is between the score for these two ideas.

Perceived ease of use	Mean	Std. Deviation
My intention with the system is clear and understandable	3.3662	.86095
Interacting with the system does not require a lot of my mental effort.	3.2451	.83646
I find the system to be easy to use.	3.4817	.76769
I find it easy to get the system to do what I want it to do.	3.5268	.80341
Learning to operate the system would be easy for me.	3.5239	.74513
I would find the system to be flexible to interact with	3.5127	.83140
It would be easy for me to become skillful at using the system	3.0169	.90806

Table 4.25: Descriptive statistics of perceived ease of use (own survey, computed in SPSS, 2026)

4.5.4 Combined descriptive statistical results for the variables of interest

Based on table 4.26 below, one can understand that the highest mean value score was the attitude towards ERP use with a mean value of (3.6374) followed by the perceived ease of use (3.3819), and the least score is for the computer self-efficacy with a mean value of (3.3528). The overall attitude towards the use of ERP, which is an aggregate of the seven statements tends to be towards agreement rating with a mean and standard deviation given as follows (M=3.6374, SD=.69324). This implies that on average, the majority of respondents have a positive attitude towards the use of ERP. Moreover, we can see from the table that the mean score of each variable is ranged from a high of 3.6374 (SD = .69324) to a low of 3.3528 (SD =.57707), indicating the score for the three constructs are very much close to each other, with a negligible difference.

Variables	Mean	Std. Deviation	Extent of highest mean score
Computer self-efficacy	3.3528	.57707	3 rd
Perceived ease of use	3.3819	.56799	2 nd
Attitude towards ERP use	3.6374	.69324	1 st

Table 4.26: Combined descriptive statistics of variables (own survey, computed in SPSS, 2026)

4.6 Inferential Analysis

Inferential statistics use a random sample of data taken from a population to test a hypothesis or assess whether the data is generalizable to a larger population or not. In line with this, the researcher conducts various inferential analyses to explore more about each variable and its interrelationships. Such inferential tools as correlation and regression are employed to explore the association between the variables involved in the present study. Moreover, a multiple linear regression including mediation analysis was employed to determine the causal relationship between the variables of interest.

4.6.1 Analysis of Associations between the variable of interest

Through correlation analysis, one can explore the direction and magnitude of association between two or more variables. In linear correlation analysis, we can explore the magnitude and direction of association between two variables, without any reference as to which of the variables is a cause or an effect. Correlation analysis is a statistical method useful to explore the association between independent and dependent variables (Senthilnathan, 2019). A high correlation means that the variables have a strong relationship with each other, while a weak correlation means that the two variables are hardly related. Correlation analysis can be done with either, Spear Man's or Pearson's approach. Pearson correlation analysis (r) measures the strength and direction of the linear association between two variables. A correlation coefficient is a proportion that lies between -1 and $+1$ only. The correlation coefficient r being close to $+1$ if the relationship is positive (or direct), or close to -1 if the relationship is negative (or inverse); where $r = 0$ indicates that there is no linear relationship between the variables (Schober, Boer & Schwarte, 2018).

Range over which the coefficients' strength	Description
0.00–0.10	Negligible correlation
0.10–0.39	Weak correlation
0.40–0.69	Moderate correlation
0.70–0.89	Strong correlation
0.90–1.00	Very strong correlation

Table 4.27: Cut-off point for determination of correlation strength (Schober, Boer & Schwarte, 2018)

Variable	ATT	PEOU	CSE
ATT	1		
PEOU	.569**(moderate)	1	
CSE	.272** (weak)	.474**(moderate)	1

Table 4.28: Correlation test (own survey, computed in SPSS, 2026)

The above table 4.28 shows the level of correlation between attitude towards ERP use and perceived ease of use as well as computer self-efficacy. Perceived ease of use is positively correlated to attitude towards ERP use with a Pearson correlation coefficient of $r=0.569$ and sig. is 0.000 which is < 0.01 implies that there is a moderately significant relationship between the two variables. Also, perceived ease of use is positively correlated to computer self-efficacy with a Pearson correlation coefficient of $r=0.474$ and sig. is 0.000 which is < 0.01 implies that there is a moderately significant relationship between the two variables. Computer self-efficacy is positively correlated to attitude towards ERP use with a Pearson correlation coefficient of $r=0.272$ and sig. is 0.000 which is < 0.01 implies that there is a weak but significant relationship between the two variables.

4.6.2. Test of assumptions for multiple linear regression analysis

To draw a conclusion about the population under the study, assumption of multiple-linear regression (normality, homoscedasticity, auto-correlation, linearity and multicollinearity) was checked and pass the standards to run regression analysis. The outcomes of all the assumptions are presented as follows.

4.6.2.1. Normality test

The normality test of data is useful to test whether the mean is valid as a representative value of the data or not (Jarque & Bera, 1987). From the different techniques of measuring normality; kurtosis, skewness, and histogram were used in this study. Skewness is a measure of symmetry and Kurtosis is a measure of the peakedness of a distribution. If the mean, median, and mode of a distribution coincide, then it is called asymmetric distribution, that is, skewness = 0, kurtosis (excess) = 0. A distribution is called approximate normal if skewness or kurtosis (excess) of the data are between -1 and $+1$. For sample size >300 , the normality of the data is determined by the

histograms and the total values of skewness and kurtosis. According to Kim, (2013) either an absolute skewness value ≤ 2 or an absolute kurtosis (excess) ≤ 4 is also used as reference values for determining considerable normality. A histogram is an estimation of the probability distribution of a continuous variable. If the graph is approximately bell-shaped and symmetric about the mean, we are able to assume normally distributed data. We can also check the P–P plot for evaluating how closely two data sets agree and it forms an approximately straight line when data are normally distributed.

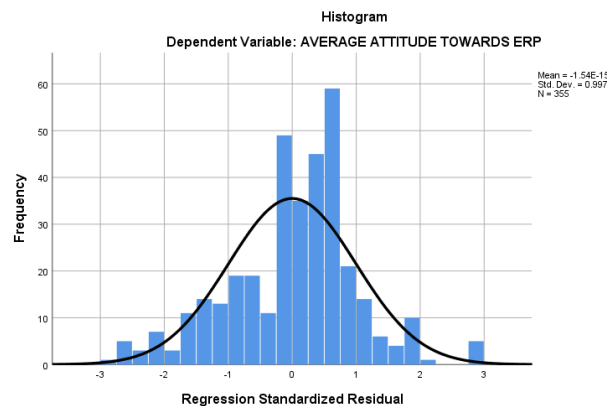


Figure 4.1: Normality test with the use of histogram (own survey, computed in SPSS, 2026)

Descriptive Measures	ATTITUDE TOWARDS ERP	COMPUTER SELF EFFICACY	PERCIVED EASE OF USE
Mean	3.6374	3.3528	3.3819
Median	3.7143	3.3333	3.2857
Mode	3.86	3.17	3.29
Std. Deviation	.69324	.57707	.56799

Table 4.29: Normality test (own survey, computed in SPSS, 2026)

The above graph 4.1, shows a nice bell-shaped curve and Table 4.29 exhibits the mean, median, and mode are equal or close to each other. Therefore, both indicate that the underlying frequency distribution shows a normal distribution, and no outliers and no extreme values are observed.

Variables	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Attitude towards ERP	-.331	.129	.329	.258
Computer self-efficacy	.335	.129	-.039	.258
Perceived ease of use	.369	.129	.642	.258

Table 4.30: Test of normality with the use of Skewness and Kurtosis (own survey, computed in SPSS, 2026)

The above Table 4.30 shows normality of the variables (attitude towards ERP use, computer self-efficacy & perceived ease of use), and the value of skewness (-0.331, 0.335 & 0.369) and kurtosis (0.329, -0.039 & 0.642) indicates that the results are individually within ± 1 . Hence, lack of normality in the underlying distribution of data would not be a concern.

4.6.2.2 Test for Homoscedasticity

Homoscedasticity refers to the variance of errors is constant across all levels of the independent variables (Osborne & Waters, 2002). That is, the error term does not vary much as the value of the independent variable changes. This assumption can be checked by visually examining the scatter plots of the residuals. Therefore, the homoscedasticity of the study is tested using scatter plots.

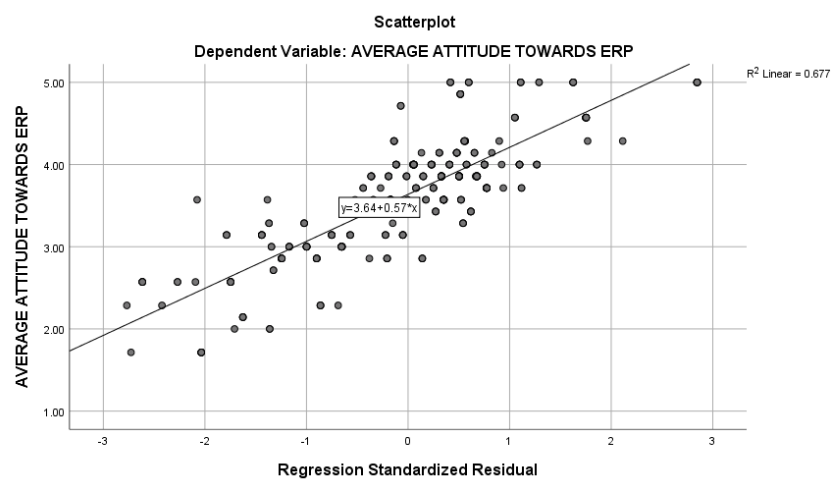


Figure 4.2: Scatter plots for test of homoscedasticity (own survey, computed in SPSS, 2026)

From the above diagram 4.2, it is evident that the errors are evenly distributed and showed no observable signs of deviations. Therefore, the assumption of homoscedasticity has been met.

4.6.2.3 Test for autocorrelation

Autocorrelation refers to a characteristic of data that shows the degree of similarity between the values of the same variables across different observations in the data. Thus, autocorrelation can also occur if observations are dependent on aspects other than time. To check for autocorrelation, we can use the Durbin-Watson test. The Durbin-Watson test produces a test statistic that ranges from 0 to 4. A value of $DW = 2$ shows that there is no autocorrelation. When the value is below 2, it indicates a positive autocorrelation, and a value higher than 2 indicates a negative serial correlation (Brooks, 2019).

Durbin-Watson test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.569 ^a	.323	.320	.57182	1.90

Table 4.31: Test of Durbin-Watson (own survey, computed in SPSS, 2026)

From the above Table 4.31, the Durbin-Watson value of 1.90 indicates a nearly equals to 2 value, which stands for no auto-correlation with this regard. The independence of the observations was checked by the Durbin-Watson test and has met the requirement.

4.6.2.4 Linearity

Linearity means that the relationship between the dependent and independent variables must be capable of being expressed diagrammatically using a straight line (Brooks, 2019). Linear regression is a statistical test applied to a data set to define and quantify the relationship between the considered variables. By using the SPSS, the researcher tried to check the linearity of the relationship. Looking into the following diagram 4.3, we can see that the relationship between the

dependent and independent variables could be modeled by a straight line suggesting that the relationship between these variables is linear.

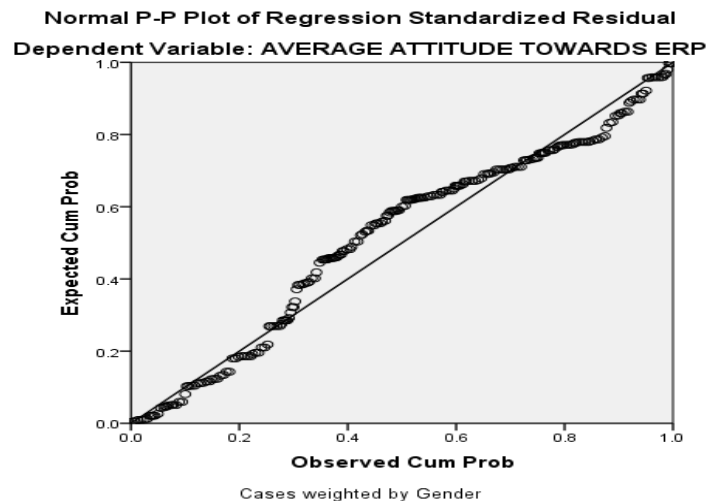


Figure 4.3: Test of linearity (own survey, computed in SPSS, 2026)

4.6.2.5 Multicollinearity

Ho (2006) defines multi-collinearity as a situation in which more than two independent variables in a multiple regression model are highly correlated. In regression analysis, the presence of multicollinearity implies that one is using redundant information in the model, which can easily lead to unstable regression coefficient estimates. There are different ways of checking multi-collinearity: if a correlation between two independent variables is 1 there is complete collinearity between the two but if it is 0 that means there is no collinearity at all; if the value of tolerance is less than 0.1 or the variance inflation factor (VIF) is greater than 10 there is a problem of multicollinearity; if the condition index is >15 collinearity is suspected but if it's >30 there is serious multicollinearity. The researcher assesses multicollinearity among the independent variables using tolerance value & variance inflator factor (VIF) and the results are displayed in below Table 4.30.

Coefficients

Model	Collinearity Statistics	
	Tolerance	VIF
1 Computer self-efficacy	.775	1.290
Perceived ease of use	.775	1.290

- a. Dependent variable: Average attitude towards ERP

Table 4.32: Test of Multi-collinearity (own survey, computed in SPSS, 2026)

From the above correlation Table 4.32, the value of the independent variables (CSE & PEOU): Variance Inflation Factor (VIF) is (.775) which is less than 10 and the value of tolerance (1.290) is greater than 0.1. In this study, we can conclude that there is no multi-collinearity problem between the two variables (CSE & PEOU).

4.7. Regression Results

Regression analysis is a statistical method used for the estimation of relationships between a dependent variable and one or more independent variables (Sykes, 1993). A mediation analysis was conducted to check the effect of computer self-efficacy on the relationship between perceived ease of use and attitude towards ERP use.

Table 4.33 below shows which of the independent variables are significant predictors of the dependent variable. The beta coefficient compares the strength of the effect of each predictor variable to the outcome variable. The higher the beta coefficients, the stronger will be the effect of the independent variable on the dependent variable. The interpretation for the negative beta coefficient is that for every 1-unit increase in the independent variable, the dependent variable will decrease by the beta coefficient value. The standard errors that are associated with each of the beta values show the range over which the values vary through different samples. P-value on the other hand measures whether the probability of the observed difference occurs by chance or not. The relationship is statistically significant if the value of p is 5% or smaller. The value of R showed the correlation between the predictor (X) and observed values of the outcome variable (Y) whereas the R² shows the percentage of variation explained by the regression line out of the entire variation. Based on the above explanation the value of each variable is explained in Table 4.33.

		B	SE	P	R	R ²
H ₁	PEOU → ATT	.6942	.0534	.0000	.5687	.3235
H ₃	PEOU → CSE	.4820	.0476	.0000	.4744	.2251
H ₂	CSE → ATT	.327	.062	.0000	.272	.074
H ₄	PEOU → CSE → ATT	.6925	.6925	.0000	.5688	.3235

Table 4.33: Regression of attitude towards ERP on perceived ease of use & computer self-efficacy (own survey, computed in SPSS, 2026)

4.7.1 Perceived ease of use towards attitude of using ERP

From the above Table 4.33, the result of the regression of the direct effect of PEOU on attitude towards ERP use (H1) with a value of ($\beta=.6942$, $p=.000$ and $R^2=.3235$) indicates that holding the other independent variables constant, when PEOU increases by one unit, attitude towards ERP use will be increased by .6942 and the value of the R^2 (.3235) shows 32.35% of the variance of attitude towards ERP use is explained by the change in PEOU. Besides, the value of p ($<.05$) shows PEOU is a significant predictor of attitude towards ERP use. The result implies that whenever employees have a positive attitude about the perceived ease of use regarding the ERP system, they do exhibit a positive attitude towards the system.

4.7.2 Perceived ease of use towards computer self-efficacy

Table 4.33 above presents the outcome regarding the direct effect of perceived ease of use on computer self-efficacy (H3) with a β value .4820 and $p=.0000$ which shows that holding the other independent variables constant, for every unit increase in a PEOU a computer self-efficacy increases by .4820, that is significant with an associated p - value of $<.05$. Also, the value of R^2 (.2251) shows that 22.51% of the variance in computer self-efficacy is explained by the change in perceived ease of use. This indicates that perceived ease of use is a significant predictor of computer self-efficacy. In actual terms, any positive change in the perceived ease of use on the ERP leads a better feeling of competence in the use of a computer for ERP.

4.7.3 Computer self-efficacy towards attitude of using ERP

From the above table 4.33 the result of the third model (H_2) of the regression of CSE on ATT had a value of ($\beta=.327$, $p=.0000$ and $R^2=.074$) which indicate that holding the other independent variables constant, for every unit increase in computer self-efficacy, attitude towards ERP use increases by .327 confirmed with the value of p is $<.05$. From the result, it can be inferred that computer self-efficacy is a significant predictor of attitude towards ERP use. Beside this, the value of R^2 (.074) shows that only 7.4% of the variance in attitude towards ERP use is explained by the change in the computer self-efficacy.

4.7.4 The mediation role of Computer self-efficacy in the relationship between Perceived ease of use and attitude towards ERP use

While classical multiple regression analysis is a simple and comprehensive approach to explore the relationship between a dependent and two or more independent variables, plugging in the third group of a variable into this relationship would enable a better knowledge of why the dependent variable acts as it does. To better understand why or how the relationship between two variables occurs, a mediation analysis yields a better understanding. The mediated (indirect) effect represents the effect of the independent variable on the dependent variable via the mediator variable. The mediator variable allows the relationship to be better explained.

A mediation relationship is one in which the independent variable causes the mediator which then causes the dependent variable (MacKinnon, 2008). According to Baron & Kenny, 1986 the three conditions for a variable to function as a mediator are when the variations in levels of the independent variable significantly account for variations in the presumed mediator (H_3); variations in the mediator significantly account for variations in the outcome variable (H_2) and after controlling (H_3) and (H_2), a previously significant relation between the predictor and criterion variables (H_1) is no longer significant. When Path (H_4) is zero, it is strong evidence for a single, dominant mediator and in contrast, when the residual path (H_4) is none zero, it shows the operation of multiple mediating factors.

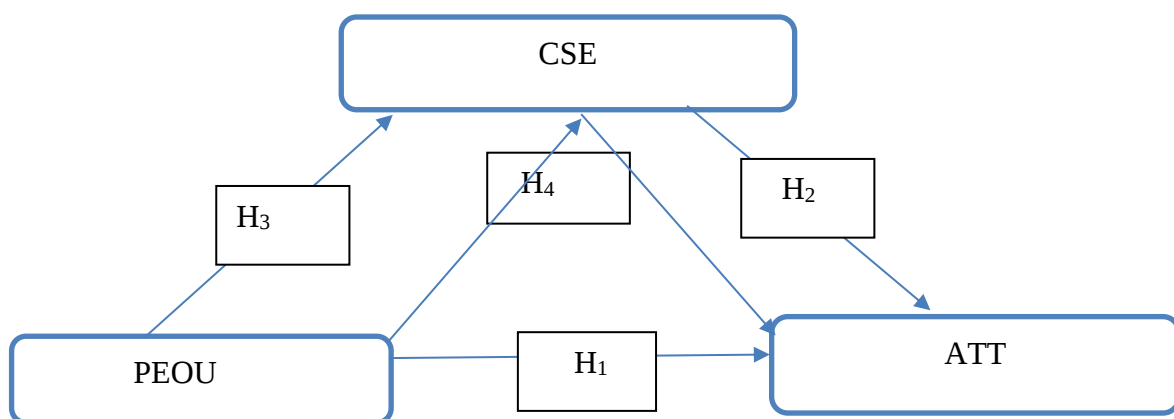


Figure 4.4. Mediation Model

H_4 is the indirect effect of PEOU on ATT

To test for mediation, separate coefficients for each equation should be estimated and tested. First, we have to regress the mediator on the independent variable to test the effect of the independent variable on the mediator (H_3); second, regressing the dependent variable on the independent variable to check the effect of the independent variable on the dependent variable (H_1); and third, regressing the dependent variable on both the independent variable and on the mediator (H_4). Mediation occurs if both the first & second equations hold in the predicted direction and in the third equation the mediator must affect the dependent variable and the effect of the independent variable on the dependent variable must be less than in the second equation. Perfect or full mediation holds if the predictor variable does not affect on the outcome variable when the mediator is controlled (Baron & Kenny, 1986).

In the above Table 4.33, it can be observed that the result of the indirect effect of PEOU on attitude towards ERP after controlling path (H_3) and (H_2), is significant with a ($\beta=.6925$, $P=.0000$). These indicate that holding the other independent variables constant, whenever PEOU increases by one unit the attitude towards ERP use increases by .6925, which is significant at the 5% level of tolerance. The power of the model to explain the variation in attitude toward ERP use, that is due to the level of perceived ease of use is $R^2=0.3235$, which means 32.35% of the variance in attitude towards ERP use is explained by the change in perceived ease of use when computer self-efficacy mediates the relationship.

When we conclude the test result of the mediating variable, all the first, second, and third models which test the direct effect of (PEOU on ATT; PEOU on CSE; CSE on ATT) are significant. Moreover, the indirect effect of PEOU on ATT after controlling path (H_3) and (H_2) is also significant and we can conclude that CSE partially mediates the relationship between PEOU and attitudes towards ERP.

Chapter Five

Summary, Conclusion and Recommendations

This chapter contains a summary and conclusions that are in line with the research objectives. Recommendations for practitioners as well as for theory were also included. Moreover, the limitations, as well as the future research directions of the study, were duly indicated.

5.1 Summary of Findings

This part of the study presents the summary of findings regarding the influence of perceived ease of use on attitude towards the use of ERP with computer self-efficacy playing a mediation role. In line with this, the research proposed such hypotheses as perceived ease of use has a significant positive effect on the person's attitude towards ERP (H1); computer self-efficacy has a significant positive effect on the person's attitude towards ERP (H2); perceived ease of use has a significant positive effect on the person's computer self-efficacy (H3); computer self-efficacy mediates the relationship between perceived ease of use and attitude towards ERP (H4). All hypotheses (H1, H2, and H3) were tested using linear regressions to find out whether those hypotheses proposed in this study are acceptable or not. The last hypothesis, hypothesis (H4) was tested using the mediation analysis to find out the mediating role of computer self-efficacy.

Moreover, descriptive statistics such as mean, median, and mode; and standard deviation, variance, minimum and maximum variables, kurtosis, and skewness were conducted to get the basic information about the variables in a dataset and to measures the variability & central tendency of the variables. Besides, inferential statistics such as; correlation, multiple regressions, and confidence intervals are conducted to study, predict and compare the relationship and to investigate the potential differences between the independent (perceived ease of use & computer self-efficacy) and dependent variable (attitude towards ERP use).

From the result of the descriptive analysis of the demographic characteristics, the number of male and female employees are almost equal in number and the majority of the respondents lie within the age range of 26-33 (66.5%). Regarding the highest educational level, 65.4% of respondents

have a Bachelor's Degree with the highest numbers of CBE employees 51.3% having 6-10 years of work experience, and 55.5% are married. Also, 65 (18.3%) of respondents are in the middle management position while most CBE employees 300 (84.5%) used the ERP system for more than one year with 40.3% using the ERP system often.

Also, from the descriptive mean result of the independent and dependent variables, the highest mean value was scored by attitude towards ERP with a mean value of 3.6374, perceived ease of use 3.3819, and computer self-efficacy 3.3528 respectively. In general, the respondents in the given sample are relatively rated all of the variables in the average score of the 5-point liker scale. To confirm the internal consistency across the parts of a measuring instrument reliability tests were conducted for each of the variables under the study (Attitude towards use of ERP, perceived ease of use, and computer self-efficacy). The reliability test result confirms that the entire variables Cronbach alpha surpasses the 0.70 minimum requirements and hence the reliability of the data used in this study is not a concern.

The strength and direction of the linear association between the variables were checked by Pearson correlation analysis (r). The result shows that perceived ease of use is positively correlated to computer self-efficacy ($r=0.474$ and $\text{sig}=0.000$) and to attitude towards ERP use ($r=0.569$ and $\text{sig}=0.000$), both of which imply that there is a moderately significant relationship between the two variables. Accordingly, computer self-efficacy is positively correlated to attitude towards ERP use ($r=0.272$ and $\text{sig}=0.000$) which implies that there is a weak but significant relationship between the two variables. Therefore, the analysis indicated that perceived ease of use was the most correlated variable with the dependant variable (attitude towards ERP use) = ($r=0.569$ and $\text{sig}=0.000$) and the lowest correlation is found between computer self-efficacy and attitude towards ERP use at ($r=0.272$ and $\text{sig}=0.000$). All the assumptions of the classical linear regression model (normality, autocorrelation, homoscedasticity, linearity, and multi-collinearity) were checked and pass the standards to run regression analysis.

The multiple regression results indicate that PEOU had a statistically significant implication over attitude towards ERP use with an R^2 value of .3235, which implies 32.35% of the variance of the attitude towards ERP use is explained by the change in PEOU. In addition, PEOU had a statistically significant implication over computer self-efficacy with R^2 value .2251, which implies 22.51% of

the variance of the computer self-efficacy is explained by the change in PEOU. Besides, computer self-efficacy had a weak but significant relationship with attitude towards ERP use with R^2 value .074, which implies that only 7.4% of the variance in attitude towards ERP use is explained by the change in the computer self-efficacy. Moreover, the test result of the indirect effect of PEOU on attitude towards ERP after controlling path (H3) and (H2), is significant with the value of $R^2 = 0.3235$, which means 32.35% of the variance in attitude towards ERP use is explained by the change in perceived ease of use when computer self-efficacy mediates the relationship. When we conclude the test result of the mediating variable, all the first, second, and third models which test the direct effect of (PEOU on ATT; PEOU on CSE; CSE on ATT) are significant. Moreover, the indirect effect of PEOU on ATT after controlling path (H₃) and (H₂) is also significant.

Hypothesis (H1), states that the greater the person's degree of perceived ease of use, the better is the person's attitude towards the use of ERP. The result of the correlation coefficient ($r=0.5687$ and $\text{sig}= 0.000$) indicates that there is a moderately significant relationship between the two variables. In addition, the result of the beta coefficient ($\beta=.6942$, $p=.000$) shows keeping the other independent variables constant when PEOU increased by one-unit attitude towards ERP use will be increased by .6942, and the p-value showed that PEOU is a strong significant predictor of attitude towards ERP. These findings are consistent with previous research findings (Sternad & Bobek, 2013; Lodhi, Tahir, Safdar & Mahmood, 2016; Mekić & Hadžimusić, 2015; Nah, Tan & Teh, 2004); Amoako-Gyampah, 2007). Therefore, we accept hypothesis H1, because it is significant with a beta value of $\beta = .6942$ at a 5% significant level.

The second hypothesis (H2) states that the greater the person's computer self-efficacy, the better is the person's attitude towards ERP use. The result of the correlation coefficient ($r=0.272$ & $\text{sig}= 0.000$) indicates that there is a weak significant relationship between the two variables. Also, the result of the beta coefficient ($\beta=.327$, $P=.0000$) indicates that keeping the other independent variables constant when computer self-efficacy increased by one unit the value of attitude towards ERP use will increase by .327 and the sig value indicates CSE is significant predictors of attitude towards ERP. These findings are consistent with previous research findings (Rajan & Baral, 2015; Hasan, 2018). Therefore, we accept H2, because it is significant with a beta value of $\beta = .327$ at a 5% significant level.

The third hypothesis (H3) states that the greater the level of the perceived ease of use of the ERP, the better is the person's computer self-efficacy. The result of the correlation coefficient ($r=0.4744$ & $\text{sig}= 0.000$) indicates that there is a moderately significant relationship between the two variables. Also, the result of the beta coefficient ($\beta=.4820$, $P=.000$) indicates that by keeping the other independent variables constant when perceived ease of use increased by one unit the value of computer self-efficacy will be increased by .4820 and the sig value indicates that PEOU is a significant predictor of CSE. These findings are consistent with previous research findings (Kass, 2014; Rajan & Baral, 2015; Hasan, 2018). Therefore, we accept H3 because it is significant with a beta value of $\beta =.4820$ at a 5% significant level.

The fourth hypothesis (H4) states that a greater level of the perceived ease of use will result in a better attitude towards ERP use under a greater personal computer self-efficacy. The result of the correlation coefficient ($r=0.5688$ & $\text{sig}= 0.000$) indicates that there is a moderate and significant relationship between the two variables. The result of the mediation analysis indicates that, by the inculcation of the third variable i.e. computer self-efficacy, the relationship between perceived ease of use and attitude towards ERP use is a bit modified. This implies that the existing effect of the perceived ease of use on the attitude towards ERP use ($\beta=.6942$, $P=.000$) didn't disappear, it rather was reduced to some extent ($\beta = .6925$, $p=.000$), which implies a partial mediation of the CSE in the relationship between the two variables. Accordingly, the hypothesis that says "the effect of perceived ease of use on the attitude towards ERP use will be great at a greater extent of the person's computer self-efficacy" is found to be significant. This shows that a greater level of PEOU leads to a more positive attitude towards ERP if and only if there is a higher level of employees' computer self-efficacy.

No	Hypotheses	Result/decision	Error Tolerance
1	H1: perceived ease of use has significant positive effect on the person's attitude towards ERP.	Accepted	sig=0.000, P<0.05
2	H1: computer self-efficacy has significant positive effect on the person's attitude towards ERP.	Accepted	sig=0.000, P<0.05
3	H1: perceived ease of use of the ERP has significant positive effect on the person's computer self-efficacy.	Accepted	sig=0.000, P<0.05
4	H1: computer self-efficacy mediates the relationship between perceived ease of use of ERP and attitude towards ERP.	Accepted	sig=0.000, P<0.05

Table 5.1: Summary of hypothesis test results (own survey, computed in SPSS, 2026)

5.2 Conclusions

The general objective of the study was to examine the determinants of attitude towards the use of ERP and the mediating effect of computer self-efficacy on the relationship between perceived ease of use and attitude towards ERP use by taking the employees of CBE as an illustration. In line with this general objective, the researcher addressed the following specific objectives;

- To assess the nature of the attitude of the users towards ERP use.
- To examine the extent of users' perceived ease of use.
- To explore the level of users' perceived computer self-efficacy.
- To determine the effect of perceived ease of use on the attitude towards ERP use.
- To assess the effect of computer self-efficacy on the attitude towards ERP use.
- To find out the effect of perceived ease of use on the computer self-efficacy of the users.
- To explore the mediating role of computer self-efficacy in the relationship between perceived ease of use and attitude towards ERP use.

The researcher proposes (gender, age, highest educational level, work experience, marital status, job titles, length of using ERP system, and frequency of using ERP system) as a demographic variable and tested their significance in predicting the employees' attitude towards ERP use. As a

result, some of the demographic variables have come out as a significant predictor of the outcome variable.

Regarding the first objective that says, “to assess the nature of the attitude of the users towards ERP use”, the study revealed that the users’ attitude towards ERP use tends to be more positive. On the other hand, the study also revealed a more positive result on the users’ perception regarding the perceived ease of use. Concerning the employees’ extent of their computer self-efficacy, the result came out to be on the positive side of the Likert scale. Thus, the overall result is such that all the variables of interest were seen in a positive light from the employees’ perspective.

In the present study, various hypotheses have been formulated and tested with both multiple regression and a Baron and Ken model of mediation analysis with the use of process macro in SPSS.

Accordingly, the proposition that says “a greater perceived ease of use leads to a positive attitude towards ERP use” was found to be a plausible statement. Passing all the tests of the classical multiple regression assumptions, the employees’ degree of perceived ease of use was found to be a significant predictor of the attitude towards ERP use. Hence, it is concluded that, under a greater level of employees perceived ease of use of the ERP system, it is expected that their attitude would be positive about the system.

The other hypothesis that was formulated and tested in the course of this study was the effect of the perceived ease of use on computer self-efficacy. Under this hypothesis, it was stated that the higher one’s perceived ease of use, the better is his/her computer self-efficacy. The result was such that there is a significant and positive effect of the perceived ease of use on the employees’ level of computer self-efficacy. This result indicates that if someone reports a higher level of perceived ease of use, that would result in a higher personal feeling of computer self-efficacy. This effect is confirmed from both magnitude and direction. It is in line with the findings of most scholars in the field.

The third path was about the effect of computer self-efficacy on the attitude towards ERP use. The proposition that goes as “the greater one’s computer self-efficacy, the better is the person’s attitude towards ERP use”, was tested and the result was a significant and positive effect of the prior

variable on the latter. Thus, it is valid to say that the greater the level of one's perceived level of CSE, the better is the positivity of the employees' attitude about the ERP use.

In the final analysis, the mediation role of computer self-efficacy on the relationship between perceived ease of use and attitude towards ERP use was tested. The proposition goes as "the greater one own perceived ease of use, the better is the person's attitude towards ERP use when its mediated by computer self-efficacy". The test result was a significant mediation role of the computer self-efficacy in the relationship between the perceived ease of use and attitude towards ERP use. Thus, the relationship between perceived ease of use and attitude towards ERP use is not direct as it is proved by plugging in this particular variable. The mediation was partial as the already existing relationship between perceived ease of use and attitude towards ERP use was not abolished by the coming in of the employees' computer self-efficacy.

5.3 Recommendation

Keeping the objectives of the study and the findings therein suggestions for practitioners and literature are forwarded as follows. Based on the findings and conclusion, CBE could engage in those activities that enhance the employees' perceived ease of use of the ERP system. Such behaviors orientations on the benefits of the system; success stories on the implementation of the system in other organizations and enable employees to experience the use of related systems will be beneficial. In addition, employees may use online resources, talk with an expert, practice daily, and review the benefits of the system. Furthermore, preparing training programs that are aimed at increasing computer technology attitudes and self-efficacy is also important.

Moreover, the practitioners are advised to work on improving employees' belief about their ability to solve difficult and unexpected computer-related problems in getting to find a way to get what they want. Furthermore, it is also advisable to train employees on how to remain calm whenever they face computer difficulties as it will help them develop self-reliance on matters related to the use of computer effect on the ERP issues. In addition, implementing the best ERP training methods for your employees like online seminars, traditional classroom lessons, e-learning, preparing onsite training sessions, and attending virtual workshops that cover advanced topics will ensure everyone is always up-to-date and understands how the ERP system works.

On the basis of the conclusion that is arrived at, regarding the relationship between the employees' computer self-efficacy and their attitude towards ERP use the executives are advised to take such actions as those which make employees feel that they can analyze data much easily that is said emanate from their computer self-efficacy. In order to improve the employees' level of computer self-efficacy and the resultant attitude of them on the ERP use, there is a need to work on making sure that every employee tries hard in finding the way to solve any problem that arises in the course using the ERP.

As part of the strategy to utilize the employees' computer self-efficacy to accelerate the influence of the employees' perceived ease of use on the employees' attitude of ERP use, such actions as making the employees' intention as clear and understandable as possible to help them feel at ease in accomplishing their computer goals, which in turn help them feel positive about the use of the ERP. In addition, employees have to get an orientation program about the fact that, the system doesn't require a lot of their mental effort, which in turn enhances their computer self-efficacy and the subsequent attitude towards ERP use.

The present study has all the limitations that other similar studies have. While some of the limitations are methodological, others are material. Methodologically, the sampling procedure was less representative when seen from the overall size and variety of the workers of the commercial bank of Ethiopia. Hence, one can do the same survey by taking a more representative sample from more branches of the same and other banks. Besides, the data were collected with the use of a questionnaire alone and shows little about non-quantifiable aspects of the subject under study. Thus, any further study may consider the use of interviews together with the questionnaire.

Reference

Ahmad, M. I. (2015). Unified theory of acceptance and use of technology (UTAUT). *LinkedIn Pulse*, 179-211.

Ahmed, F. (2017). Factors affecting the implementation of enterprise resource planning at commercial bank of Ethiopia.

Ajayi, O. V. (2017). Course Title: Advance Statistical Methods in Education Course Code: EDU 901 Course of Study: PhD Science Education.

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In *Action control* (pp. 11-39). Springer, Berlin, Heidelberg.

Akça, Y., & Özer, G. (2016). Determination the factors that affect the use of enterprise resource planning information system through technology acceptance model.

Alake, Sedate. (2018). *Implementation Challenges of ERP Project a Case of Commercial Bank of Ethiopia*. AAU.

Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of consumer research*, 13(4), 411-454.

Albashrawi, M. A., Turner, L., & Balasubramanian, S. (2020). Adoption of Mobile ERP in Educational Environment: Computer Self-Efficacy and System Security. *International Journal of Enterprise Information Systems (IJEIS)*, 16(4), 184-200.

Albashrawi, M., & Motiwalla, L. (2016). Adoption of Mobile ERP in Traditional-ERP Organizations: The Effect of Computer Self-Efficacy.

Al-Fawaz, K., Al-Salti, Z., & Eldabi, T. (2008). Critical success factors in ERP implementation: A review.

Al-Jabri, I. M., & Sohail, M. S. (2012). Mobile banking adoption: Application of diffusion of innovation theory. *Journal of Electronic Commerce Research*, 13(4), 379-391.

Almajali, D. A., & Tarhini, A. (2016). Antecedents of ERP systems implementation success: a study on Jordanian healthcare sector. *Journal of Enterprise Information Management*.

Amoako-Gyampah, K. (2007). Perceived usefulness, user involvement and behavioral intention: an empirical study of ERP implementation. *Computers in human behavior*, 23(3), 1232-1248

Amoako-Gyampah, K., & Salam, A. F. (2004). An extension of the technology acceptance model in an ERP implementation environment. *Information & management*, 41(6), 731-745.

Arik Ragowsky, T. M. S. (2002). Enterprise resource planning. *Journal of Management Information Systems*, 19(1), 11-15.

Aynalem, S. (2018). Factors Influencing Implementation of Core Banking System Project: The Case of Commercial Bank of Ethiopia (CBE). *Available at SSRN 3287040*.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.

Bere, A. (2014, April). Exploring determinants for mobile learning user acceptance and use: An application of UTAUT. In *2014 11th International Conference on Information Technology: New Generations* (pp. 84-90). IEEE.

Bidgoli, H. (2004). *The Internet Encyclopedia Vol, 3 PZ*. John Wiley & Sons, Inc., Hoboken, New Jersey.

Bobek, S., & Sternad, S. (2010). *Management of ERP solutions*.

Brooks, C. (2019). *Introductory econometrics for finance*. Cambridge university press.

Chausi, B. A., Chausi, A., & Dika, Z. (2016). Critical success factors in ERP implementation. *Academic Journal of Business, Administration, Law and Social Sciences*, 2(3).

Conner, M. (2020). Theory of planned behavior. *Handbook of sport psychology*, 1-18.

- Darban, M., Kwak, D. H. A., Deng, S. L., Srite, M., & Lee, S. (2016). Antecedents and consequences of perceived knowledge update in the context of an ERP simulation game: A multi-level perspective. *Computers & Education*, 103, 87-98.
- Davis, F. D. (1985). *A technology acceptance model for empirically testing new end-user information systems: Theory and results* (Doctoral dissertation, Massachusetts Institute of Technology).
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Davis, F.D. (1986) "Technology Acceptance Model for Empirically Testing New End-user Information Systems Theory and Results" Unpublished Doctoral Dissertation, MIT.
- Devaraj, M., & Epstein, G. (2020). An Extended AIAC Framework with Tools and Techniques Used in Each Step (RAIAC). *Journal of Information and Technology*, 4(1), 13-22.
- Escobar-Rodriguez, T., & Bartual-Sopena, L. (2013). The roles of users' personal characteristics and organisational support in the attitude towards using ERP systems in a Spanish public hospital. *Health Information Management Journal*, 42(1), 18-28.
- Esteves, J., & Pastor, J. (1999, November). An ERP lifecycle-based research agenda. In *1st international workshop in enterprise management & resource planning*.
- Eyob, S. (2019). *Critical Success Factors of Enterprise Resource Planning Implementation And Their Impact On Organizational Performance At Commercial Bank Of Ethiopia*.
- Fishbein, M., & Ajzen, I. (1975). Belief. *Attitude, Intention and Behavior: An Introduction to Theory and Research*, 578.
- Garača, Ž. (2011). Factors related to the intended use of ERP systems. *Management-Journal of Contemporary Management Issues*, 16(2), 23-42.
- Gargeya, V. B., & Brady, C. (2005). Success and failure factors of adopting SAP in ERP system implementation. *Business process management journal*.

Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.

Goodhue, D. L., & Thompson, R. L. (1995). Task-technology fit and individual performance. *MIS quarterly*, 213-236.

Goswami, A., & Dutta, S. (2015). Gender differences in technology usage—A literature review. *Open Journal of Business and Management*, 4(1), 51-59.

Govindaraju, R., & Indriany, N. (2007). A Study on ERP system acceptance based on technology acceptance model.

Gumussoy, C. A., Calisir, F., & Bayram, A. (2007, December). Understanding the behavioral intention to use ERP systems: An extended technology acceptance model. In *2007 IEEE International Conference on Industrial Engineering and Engineering Management* (pp. 2024-2028). IEEE.

Hale, J. L., Householder, B. J., & Greene, K. L. (2002). The theory of reasoned action. *The persuasion handbook: Developments in theory and practice*, 14, 259-286.

Hasan, B. (2007). Examining the effects of computer self-efficacy and system complexity on technology acceptance. *Information Resources Management Journal (IRMJ)*, 20(3), 76-88.

Hasan, B. (2018). Effects of general and ERP self-efficacy beliefs on the acceptance of ERP systems. *Journal of Information & Knowledge Management*, 17(03), 1850031.

Hill, T., Smith, N. D., & Mann, M. F. (1987). Role of efficacy expectations in predicting the decision to use advanced technologies: The case of computers. *Journal of applied psychology*, 72(2), 307.

Ho, R. (2006). *Handbook of univariate and multivariate data analysis and interpretation with SPSS*. CRC press.

- Howard, M. C. (2014). Creation of a computer self-efficacy measure: analysis of internal consistency, psychometric properties, and validity. *Cyberpsychology, behavior, and social networking*, 17(10), 677-681.
- Igbaria, M., & Iivari, J. (1995). The effects of self-efficacy on computer usage. *Omega*, 23(6), 587-605.
- Jarque, C. M., & Bera, A. K. (1987). A test for normality of observations and regression residuals. *International Statistical Review/Revue Internationale de Statistique*, 163-172.
- Kass, K. D. (2014). Computer self-efficacy: instructor and student perspectives in a university setting.
- Kim, H. Y. (2013). Statistical notes for clinical researchers: assessing normal distribution (2) using skewness and kurtosis. *Restorative dentistry & endodontics*, 38(1), 52.
- Klaus, H., Rosemann, M., & Gable, G. G. (2000). What is ERP?. *Information systems frontiers*, 2(2), 141-162.
- Kolodinsky, J. M., Hogarth, J. M., & Hilgert, M. A. (2004). The adoption of electronic banking technologies by US consumers. *International Journal of Bank Marketing*.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Kumar, A., & Malik, P. (2012). Critical Success Factors in ERP Implementation in India. *International Transactions in Applied Sciences*, 4(2).
- Kumara, A., Gunawardana, K., & Halwatura, R. (2013). An Empirical Study of the Impact of User Training and Attitude Towards ERP Implementation in selected Companies in Sri Lanka. In *Proceedings of the ITRU Research Symposium*.
- Lai, P. C. (2017). The literature review of technology adoption models and theories for the novelty technology. *JISTEM-Journal of Information Systems and Technology Management*, 14(1), 21-38.

- Leavy, P. (2017). Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches.
- Lee, Y., Kozar, K. A., & Larsen, K. R. (2003). The technology acceptance model: Past, present, and future. *Communications of the Association for information systems*, 12(1), 50.
- Lim, W. M., & Ting, D. H. (2012). E-shopping: An Analysis of the Technology Acceptance Model. *Modern Applied Science*, 6(4), 49.
- Lodhi, R. N., Tahir, S., Safdar, S., & Mahmood, Z. (2016). Empirical study of the acceptance of ERP system in public sector service-based organizations of Pakistan. *Journal of Quality and Technology Management*, 12(1), 121-136.
- Ma, Q., Chan, A. H., & Chen, K. (2016). Personal and other factors affecting acceptance of smartphone technology by older Chinese adults. *Applied ergonomics*, 54, 62-71.
- MacKinnon, D. (2008). Multivariate applications series. *Introduction to statistical mediation analysis*.
- Matende, S., & Ogao, P. (2013). Enterprise resource planning (ERP) system implementation: a case for user participation. *Procedia Technology*, 9, 518-526.
- Mekić, E., & Hadžimusić, B. ERP Adoption Using Technology Acceptance Model: Case of Bosnia and Herzegovina. *Open Journal for*, 33.
- MENGSTU, B. (2019). *ASSESSMENT OF ENTERPRISE RESOURCE PLANNING IMPLEMENTATION THE CASE OF COMMERCIAL BANK OF ETHIOPIA* (Doctoral dissertation, St. Mary's University).
- Menon, D. (2019). Critical challenges in enterprise resource planning (ERP) implementation. *International Journal of Business and Management*, 14(7).
- Mohammad Khani MS, A. (2016). The effect of work experience with computer and task-technology fit on acceptance of computer technology: new perspectives of social psychology. *Educational Psychology*, 6(16), 104-130.

Momoh, A., Roy, R., & Shehab, E. (2010). Challenges in enterprise resource planning implementation: State-of-the-art. *Business Process Management Journal*.

MULATU, A. (2020). *CRITICAL FACTORS THAT AFFECT SUCCESSFUL IMPLEMENTATION OF ENTERPRISE RESOURCE PLANNING: IN CASE OF COMMERCIAL BANK OF ETHIOPIA* (Doctoral dissertation).

Mulugeta, Wondwosen. (2018). *Assessment of Enterprise Resource Planning (ERP) Project Implementation: The Case of Commercial Bank of Ethiopia*. AAU.

Nah, F. F. H., Tan, X., & Teh, S. H. (2004). An empirical investigation on end-users' acceptance of enterprise systems. *Information Resources Management Journal (IRMJ)*, 17(3), 32-53.

Nawaz, N., & Channakeshavalu, K. (2013). The impact of enterprise resource planning (ERP) systems implementation on business performance. *Available at SSRN 3525298*.

Nedesa, M., & Mekonen, R. (2019). *EFFECT OF ENTERPRISE RESOURCE PLANNING ON EMPLOYEES'JOB PERFORMANCE: THE CASE OF COMMERCIAL BANK OF ETHIOPIA, DIRE DAWA DISTRICT, ETHIOPIA* (Doctoral dissertation, Haramaya University).

Newman, I., Benz, C. R., & Ridenour, C. S. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum*. SIU Press.

O'Leary, D. E. (2004). Enterprise resource planning (ERP) systems: an empirical analysis of benefits. *Journal of emerging Technologies in Accounting*, 1(1), 63-72.

Osborne, J. W., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical assessment, research, and evaluation*, 8(1), 2.

Pasaoglu, D. (2011). Analysis of ERP usage with technology acceptance model. *Global Business and Management Research*, 3(2), 157-165.

planettogether. (2020). *Enterprise Resource Planning (ERP) Trends in 2020*.

- Rajan, C. A., & Baral, R. (2015). Adoption of ERP system: An empirical study of factors influencing the usage of ERP and its impact on end user. *IIMB Management Review*, 27(2), 105-117.
- Ram, J., & Pattinson, M. (2009). Exploring antecedents of organisational adoption of ERP and their effect on performance of firms.
- Ranjan, S., Jha, V. K., & Pal, P. (2016). Literature review on ERP implementation challenges. *International Journal of Business Information Systems*, 21(3), 388-402.
- Riddell, W. C., & Song, X. (2017). The role of education in technology use and adoption: Evidence from the Canadian workplace and employee survey. *ILR Review*, 70(5), 1219-1253.
- Rogers, E. (1995). *Diffusion of Innovations* (4th Eds.) ACM The Free Press (Sept. 2001). New York, 15-23.
- Rogers, E. M. (2010). *Diffusion of innovations*. Simon and Schuster.
- Saade, R., Nijher, H., & Sharma, M. (2017, July). Why ERP implementations fail—a grounded research study. In *Proceedings of the Informing Science and Information Technology Education Conference* (Vol. 5, No. 31, pp. 191-200).
- Sadrzadehrafiei, S., Chofreh, A. G., Hosseini, N. K., & Sulaiman, R. (2013). The benefits of enterprise resource planning (ERP) system implementation in dry food packaging industry. *Procedia Technology*, 11, 220-226.
- Sar, A., & Garg, P. (2012). Analysis of critical failure factors in ERP implementation: an Indian experience. *International Journal of Business Information Systems*, 11(3), 360-378.
- Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: appropriate use and interpretation. *Anesthesia & Analgesia*, 126(5), 1763-1768.
- Selamat, Z., Jaffar, N., & Ong, B. H. (2009). Technology acceptance in Malaysian banking industry. *European journal of economics, finance and administrative sciences*, 1(17), 143-155.

Senthilnathan, S. (2019). Usefulness of correlation analysis. *Available at SSRN 3416918*.

Seo, G. (2013). *Challenges in implementing enterprise resource planning (ERP) system in large organizations: similarities and differences between corporate and university environment* (Doctoral dissertation, Massachusetts Institute of Technology).

Shehab, E. M., Sharp, M. W., Supramaniam, L., & Spedding, T. A. (2004). Enterprise resource planning. *Business process management journal*.

Shih, Y. Y., & Huang, S. S. (2009). The actual usage of ERP systems: An extended technology acceptance perspective. *Journal of Research and Practice in Information Technology*, 41(3), 263-276.

Soto-Acosta, P., Ramayah, T., & Popa, S. (2013). Explaining intention to use an enterprise resource planning system: a replication and extension. *Tehnički vjesnik*, 20(3), 397-405.

Staehr, L., Shanks, G., & Seddon, P. (2002). Understanding the business benefits of enterprise resource planning systems. *AMCIS 2002 Proceedings*, 129.

Sternad, S., & Bobek, S. (2013). Impacts of TAM-based external factors on ERP acceptance. *Procedia Technology*, 9, 33-42.

Sykes, A. O. (1993). An introduction to regression analysis.

Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *How to Choose a Sampling Technique for Research* (April 10, 2016).

Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *How to test the validation of a questionnaire/survey in a research* (August 10, 2016).

Uwizeyemungu, S., & Raymond, L. (2005). Essential characteristics of an ERP system: conceptualization and operationalization. *Journal of information and organizational sciences*, 29(2), 69-81.

Venkatesh, V., & Davis, F. D. (1996). A model of the antecedents of perceived ease of use: Development and test. *Decision sciences*, 27(3), 451-481

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.

Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*, 157-178.

Wong, A., Scarbrough, H., Chau, P., & Davison, R. (2005). Critical failure factors in ERP implementation. *Pacis 2005 Proceedings*, 40.

Appendix

A. Questionnaire English version

Dear Participant;

My name is Bethlehem Abebe. I'm MSc. Student in Management at Addis Ababa University. The main purpose of this questionnaire is to gather information about the mediating role of computer self-efficacy in the relationship between perceived ease of use and attitude towards use of ERP: The case of commercial bank of Ethiopia. Knowing that your time is valuable, please take a few minutes of your time to complete the questionnaire. The information that you will provide in this questionnaire will be used for academic purpose only and will be kept strictly confidential. Your genuine response to the questionnaire is vital for the quality and successful completion of the study. If you require additional information or have questions, please contact me via, Mobile: - +251-920-24-36-51 Email: - gbethlehemabebe@gmail.com. Thank you very much in advance for your cooperation!

Note:

- ➔ Please put a “√” mark on your choice on the space provided.
- ➔ You don't need to write your name on the questionnaire.

Part I: Demographic Information

1. **Gender:** Male ☐ Female ☐
2. **Age:** 18-25 ☐ 26-33 ☐ 34-45 ☐ Above 45 ☐
3. **Highest Educational Level:**
College Diploma ☐ Bachelor Degree ☐
Second Degree (MA, MSc, MBA) ☐ Other _____
4. **For how long have you been in the organization?**
1-5 ☐ 6-10 ☐ 11-15 ☐ Above 15 ☐
5. **Marital Status:** Single ☐ Married ☐ Divorced ☐ Widowed ☐
6. **What department do you work in? (position)**

Executive/Top Management ☐ Administration ☐ Human Resource ☐
 Middle Management ☐ Technical ☐ Accounting ☐
 Supervisory ☐ other ☐

7. How long have you been using the ERP system?

Below one year ☐ Above one year ☐

8. How often do you use the system?

Seldom ☐ Sometimes ☐ Often ☐ Most often ☐

Part 2: Issues Related with the study area

A. Attitude towards ERP system

Please indicate how much do you agree or disagree with the following statements about Attitude towards ERP system implementation by putting a “√” mark in the appropriate column in the table below against each of the response scales.

	Attitude towards ERP system	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree
1	The NEW ERP system will provide access to more data.					
2	The NEW ERP system will make data analysis easier.					
3	The NEW system will be better than the OLD system.					
4	The NEW system will provide accurate information.					
5	The NEW system will provide integrated, timely and reliable information.					
6	Using the ERP system is a good idea.					
7	I like the idea of using the ERP system to perform my job.					

B. Computer Self-Efficacy

The below questions are about Computer Self-Efficacy. Please, kindly indicate the degree of your agreement/disagreement by putting '√' mark on the number that best describes your view.

	Computer Self-Efficacy	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree
1	I can always manage to solve difficult computer problems if I try hard enough.					
2	If my computer is "acting-up," I can find a way to get what I want.					
3	It is easy for me to accomplish my computer goals.					
4	I am confident that I could deal efficiently with unexpected computer events.					
5	I can solve most computer programs if I invest the necessary effort.					
6	I can remain calm when facing computer difficulties because I can rely on my abilities.					
7	When I am confronted with a computer problem, I can usually find several solutions.					
8	I can usually handle whatever computer problem comes my way.					
9	Failing to do something on the computer makes me try harder					
10	I am a self-reliant person when it comes to doing things on a computer.					
11	There are few things that I cannot do on a computer.					
12	I can persist and complete most any computer-related task.					

C. Perceived Ease of Use

The following questions are about Perceived Ease of Use. Please, kindly indicate the degree of your agreement/disagreement by putting '√' mark on the number that best describes your view.

	Perceived Ease of Use	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree
1	My intention with the system is clear and understandable					
2	Interacting with the system does not require a lot of my mental effort.					
3	I find the system to be easy to use.					
4	I find it easy to get the system to do what I want it to do.					
5	Learning to operate the system would be easy for me.					
6	I would find the system to be flexible to interact with					
7	It would be easy for me to become skilful at using the system					

አዲስ አበባ ዩኒቨርሲቲ

በቢዝነስና ኢኮኖሚክስ ኮሌጅ ፡ የድህረ ምረቃ ፕሮግራም፡

MSC. ማኔጅመንት ዲፓርትመንት

ውድ ተሳታፊ፤

እኔ በአዲስ አበባ ዩኒቨርሲቲ የ MSC. ማኔጅመንት ተማሪ ስሆን፡ የዚህ መጠይቅ ዋና ዓላማ ስለ ERP አጠቃቀም ቀላልነት እና የተጠቃሚዎች አመለካከት ዙሪያ ከኢትዮጵያ ንግድ ባንክ ሰራተኞች መረጃ ለመሰብሰብ ነው። በጣም ውድ ከሆነው ጊዜዎች ላይ ጥቂት ደቂቃዎችን ሰውተው መጠይቁን ይሞሉ ዘንድ ስጠይቅዎ በታላቅ ትህትና እና ምስጋና ጋር ነው። በዚህ መጠይቅ ውስጥ የሚሰጡት መረጃ ለአካዳሚክ ዓላማ ብቻ የሚያገለግል ሲሆን በጥብቅ ሚስጥር ይቀመጣል ። ለጥናቱ ጥራት እና በተሳካ ሁኔታ ለማጠናቀቅ ለጥያቄዎቹ ትክክለኛ ምላሽዎን መስጠትዎ በጣም አስፈላጊ ነው ። ተጨማሪ መረጃ ከፈለጉ ወይም ጥያቄ ካለዎት እባክዎ በሞባይል፡- + 251-920-24-36-51 ኢሜል፡ - gbethlehemabebe@gmail.com ያግኙኝ ። ስለ ትብብርዎ አስቀድሜ በጣም አመሰግናለሁ!

ማስታወሻ፡

እባክዎን በመረጡት ቦታ ላይ “√” ምልክት ያድርጉ ።

ስምዎን በመጠይቁ ላይ መጻፍ አያስፈልግዎትም።

ክፍል I፡ የግል መረጃ

ሀ. ያታ፡ ወንድ ☐ ሴት ☐

ለ. ዕድሜ፡ 18-25 ☐ 26-33 ☐ 34-45 ☐ 46-55 ☐ 56-65 ☐

ሐ. ከፍተኛ የትምህርት ደረጃ፡

የኮሌጅ ዲፕሎማ ☐ የመጀመሪያ ዲግሪ ☐

ሁለተኛ ዲግሪ (MA፣ MSC ፣ MBA) ☐ ሌላ _____

መ. በድርጅቱ ውስጥ ለምን ያህል ጊዜ አገለገሉ?

1-5 ዓመት ☐ 6-10 ዓመት ☐ 11-15 ዓመት ☐ Above 15 ዓመት ☐

ሠ. የጋብቻ ሁኔታ፡ ያላገባ ☐ ያገባ ☐ የፈታ ☐

ባል/ሚስት የሞተበት/ችበት ☐

ፈ. በየትኛው የስራ ዘርፍ ነው የሚሰሩት?

ሥራ አስፈጻሚ / ከፍተኛ አስተዳደር ☐ አስተዳደር ☐ የሰው ኃይል ☐
 መካከለኛ አስተዳደር ☐ የሂሳብ አያያዝ ☐ ቴክኒካዊ ☐
 ተቆጣጣሪ ☐ ሌላ ☐

ሰ. የ ERP ስርዓትን ለምን ያህል ጊዜ ሲጠቀሙ ቆይተዋል?

ከአንድ አመት በታች ☐ ከአንድ አመት በላይ ☐

ሸ. የ ERP ስርዓቱን ለምን ያህል ጊዜ ደጋግመው ይጠቀማሉ?

ብዙ ጊዜ ☐ አልፎ አልፎ ☐ አንዳንድ ጊዜ ☐
 በጣም ብዙ ጊዜ ☐

ክፍል 2: - ከጥናት ርእሱ ጋር ቀጥታ ግንኙነት ያላቸው ጥያቄዎች

ሀ/ ስለ ERP ስርዓት ያለው አመለካከት

እባክዎን ስለ ERP ስርዓት አተገባበር ስላለዎት አመለካከት በሚቀጥሉት ጥያቄዎች ላይ በእያንዳንዱ የምላሽ ሳጥን ውስጥ “v” ምልክት በማስቀመጥ ምን ያህል እንደሚስማሙ ወይም እንደማይስማሙ ያመልክቱ ::

	ስለ ERP ስርዓት ያለው አመለካከት	ፈጽሞ አልስማማም	አልስማማም	በመጠኑ እስማማለሁ	እስማማለሁ	ፈጽሞ እስማማለሁ
ሀ	አዲሱ የ ERP ስርዓት ለበለጠ የመረጃ አቅቦት ይጠቅማል።					
ለ	አዲሱ የ ERP ስርዓት የመረጃ ትንታኔን ቀላል እንዲሆን ያደርገዋል።					
ሐ	አዲሱ የ ERP ስርዓት ከነባሩ ስርዓት የተሻለ ነው።					
መ	አዲሱ የ ERP ስርዓት ትክክለኛነቱ የተረጋገጠ መረጃ ይሰጣል ።					
ሠ	አዲሱ የ ERP ስርዓት የተቀናጀ ፣ ወቅታዊና አስተማማኝ መረጃ ይሰጣል					
ረ	አዲሱ የ ERP ስርዓትን የመጠቀሙ ሀሳብ ጥሩ ነው።					

ሰ	ሥራዬን ለማከናወን የ ERP ሲስተምን የመጠቀም ሀሳብ ደስ ይለኛል።					
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ለ/ የኮምፒውተር አጠቃቀም ብቃትዎን በተመለከተ

ከዚህ በታች ያሉት ጥያቄዎች ስለኮምፒውተር አጠቃቀም ብቃትዎን የሚመለከቱ ናቸው። እባክዎን አመለካከትዎን በተሻለ በሚገልጸው ሳጥን ውስጥ (v) ምልክት በማድረግ ምን ያህል እንደሚስማሙ ወይም እንደማይስማሙ ያመልክቱ።

	የኮምፒውተር አጠቃቀም ብቃት	ፈጽሞ አልስማማም	አልስማማም	በመጠኑ እስማማለሁ	እስማማለሁ	ፈጽሞ እስማማለሁ
ሀ	ያለመታከት ከሞከርኩ ከባድ የኮምፒውተር ችግሮችን መፍታት እችላለሁ ።					
ለ	ኮምፒውተሩ የተለየ ባህሪ ሲያሳይ እንኹዋን፣ የምፈልገውን ነገር ከማድረግ አያግደኝም።					
ሐ	ኮምፒውተር በመጠቀም መከናወን ያለባቸውን ነገሮች መከናወን እችላለሁ።					
መ	ያልተጠበቁ የኮምፒውተር ችግሮችን ሲከሰቱ እንኹዋን ችግሮቼን የመፍታት በራስ መተማመን አለኝ ።					
ሠ	አስፈላጊውን ጥረት ካደረግኩ ብዙዎቹን የኮምፒውተር ፕሮግራሞችን መፍታት እችላለሁ ።					
ረ	በችሎታዬ ስለምተማመን የኮምፒውተር ችግሮች ሲያጋጥሙኝ መረጋጋት እችላለሁ ።					
ሰ	የኮምፒውተር ችግር ሲያጋጥመኝ ብዙውን ጊዜ ብዙ መፍትሄዎችን ማግኘት እችላለሁ ።					

ሸ	የኮምፒውተርን ችግር ሲያጋጥመኝ አብዛኛውን ጊዜ መፍታት እችላለሁ።					
ቀ	በኮምፒውተር ላይ አንድ ነገር አለማድረግ አለመቻል የበለጠ እንድሞክር ያደርገኛል።					
በ	በኮምፒውተር ላይ ነገሮችን ለማድረግ በራስ መተማመን አለኝ።					
ተ	በኮምፒውተር ላይ ማድረግ የማልችላቸው ጥቂት ነገሮች ናቸው ።					
ቸ	ከኮምፒውተር ጋር የተዛመደ ማንኛውንም ሥራ በፅናት ማጠናቀቅ እችላለሁ ።					

ሐ/ ስለ ERP አጠቃቀም ምችትን በተመለከተ

የሚከተሉት ጥያቄዎች ስለ ኢአርፒ አጠቃቀም ምችትን በተመለከተ ናቸው። እባክዎን አመለካከትዎን በተሻለ በሚገልጸው ሳጥን ውስጥ (v) ምልክት በማድረግ ምን ያህል እንደሚስማሙ ወይም እንደማይስማሙ ያመልክቱ።

	ሐ/ የአጠቃቀም ቀላልነት	ፈጽሞ አልስማማም	አልስማማም	በመጠኑ እስማማለሁ	እስማማለሁ	ፈጽሞ እስማማለሁ
ሀ	ስለ ERP ስርዓት ያለኝ ፍላጎት ግልጽ እና ለመረዳት የማያስቸግር ነው።					
ለ	ስለ ERP ስርዓት ያለኝ መስተጋብር ብዙ የአእምሮዬ ጥረት አያስፈልገውም።					
ሐ	የ ERP ስርዓት ለመጠቀም ቀላል ሆኖ አግኝቼዋለሁ።					
መ	የ ERP ስርዓት በመጠቀም የምፈልገውን ስራ ለመስራት ቀላል ሆኖ አግኝቻለሁ።					

ሠ	የ ERP ስርዓትን ማስኬድ መማር ለእኔ ቀላል ሆኖ አግኝቶአለሁ ::					
ረ	የ ERP ስርዓት ከእኔ ጋር መስተጋብር ለመፍጠር ሲስተሙ ምቹ ሆኖ አግኝቶአለሁ::					
ሰ	የ ERP ስርዓት መጠቀም የተዋጣክለት ባለሙያ እንድሆን አስችሎኛል::					

እባክዎ ተጨማሪ አስተያየት ካለዎት በአጭሩ ይግለጹ
