Factors Affecting the Adoption of E-Learning in UNECA

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June 2016, Addis Ababa

Addis Ababa University School of Commerce
Graduate Studies
Human Resources Management

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Acknowledgment

I would like to express my deepest appreciations to those who have helped me to complete this Dissertation. I thank my supervisor, Dr. Mengistu Bogale, for his direction, guidance and encouragement. I thank experts and colleagues in ECA, my respondents, for their willingness and participation in my study. Their responses, inputs and feedbacks were valuable in completing this research.

Finally, I wish to take this opportunity to express my sincere gratitude to my family. I dedicate this work to them. Their support and understanding was essential over the whole process of this research work.

Abstract

The adoption of e-Learning is found to be important to enhance employee performance of organizations. The study analyzes factors enabling and hindering the adoption of e-Learning in the UNECA. The study identifies enabling and inhibiting factors that affected the adoption of e-Learning on one hand and its possible impact on performance of employees in the UNECA on the other hand. Survey, secondary research and qualitative interview results are expected to empirically show that technological readiness, self-efficacy of employees and experience in the use of computer, internet and information technology are inhibiting factors in the UNECA context. The need for satisfying the growing stakeholders' demand and the desire to minimize cost but yet to enhancing service delivery of the organization are the driving factors. The study argues for the importance of e-Learning and concludes e-Learning is essential for the improvement of service delivery in the UNECA. Based on the driving and inhibiting factors identified, the study looks into employee readiness that is expected to facilitate the adoption of e-Learning with its possible impact on the development of employee performance in the UNECA.

Keywords E-Learning, Enablers, Inhibitors, UNECA

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Acronyms

UN – United Nations

UNECA – United Nations Economic Commission for Africa

ERP – Enterprise Resource Planning

ICT – Information and Communication Technology

SRO – Sub-Regional Office

SDU – Staff Development Unit

OHRM – Office of Human Resources Management

OAHs – Offices Away from Headquarters

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Chapter One

1. Introduction

This section reviews introduction about the areas of e-Learning. The sub sections include background of the study, a statement of the problem, objectives, and significance of the study, limitation and the delimitation.

1.1. Background of the study

In the current world order, organizations are recognizing the positive influence of a more effective management of human resources towards the achievement of their goals. Accordingly, due emphasis is being given to investing time and resource in developing employees as a way of improving organizational performance. This is highly influenced by the need for continuous improvement, innovation and adaptation (Gilley, et al., 2003). As a result, organizations are influenced by the demand and expectation of their stakeholders for improved performance of operation for better achievement of organizational goals and thus invest in employee training and development and information technology according to the research findings reported in the UK by Gratton (1997:25):

> "… The sources of sustained competitive advantage have shifted from financial resources to technological resources and now for human capital. This change has a number of profound implications, it requires a fundamental change in organizational timescales from short term to long term and is predicated by integration and coherence rather than ad-hoc thinking and incoherence. It also means that we must take into account people's aspirations and values and not allow people manage to be dominated by tools and techniques." (Cited in John P Wilson, 2005:2/23).

Learning organizations, that promote learning as a positively required aspect of organization culture, show commitment to the importance of learning pertaining to improving organizational performance. According to Nemeth (2010), organizational learning gains significant importance during the last couple of decades. Apparently, organizational learning is seen as an effective way of having trained and skilled human capital that immensely and directly contribute to enhance organizational effectiveness (Abel, 2010).

Shoaib Akhtar (2011) defined learning as a way to understand others as well as oneself and also provides an opportunity for individuals to discover and understand themselves. Organizational learning takes into account the use of individuals' dynamic knowledge to direct behaviors in ways that helps the organization to adapt to the changing scenarios (Kaur & Abas, 2007). Understanding that trained employees are the source of competitive advantage, Kisielnicki (2010), organizations show interest and give attention to training employees as effective learning process leads to an organizational improvement and performance (Shoaib Akhtar, 2011).

However, the impact of learning on organizational performance depends on how effective the learning process is (Purnomo & Lee, 2010). This is also tied to learning factors, including relevancy, approach, content and management support and commitment to learning Programme Kisielnicki (2010). The influence of Information and Communications Technology (ICT) is not limited to, our day-to-day activities (Vonderwell, Liang & Alderman, 2007) such as banking and shopping, but extended its implication on the way we learn, acquire skills and knowledge. ICT contributed towards the improvement of organizational learning as it provides learning resources and tools to manage an organizational learning as a process. As stated by Abel (2010), ICT gives alternatives for organization, considering learning preference of adult learners, flexibility and cost effectiveness Kenan & Crinela (2012). Regardless of the location, size and mission of the organizations, the learning endeavors of international and multinational organization do not exempt from the influence of e-Learning and it becomes indispensable and an uncompromised alternative to develop. Continuous learning is the most important aspect for dynamic organizations. E-Learning provides the necessary environment and appropriate tools for task oriented, up to date and continuous learning. E-Learning also makes organizations capable to train their geographically scattered workforce and make them eligible with the dynamic knowledge and skill demands with greater efficiency but at less cost.

The introduction of new information and communication technology system for better delivery of service calls for training of employees in an efficient and cost effective manner. The United Nation (UN) as a service giving organization also recognizes the need to change the way of doing business that leads to giving more focus on continuous employee training and

development besides adopting state of the art information and communication technology. The UN believes that the need to operate more effectively by managing human, financial and physical resources will lead to organizational transformation that in turn will enable the organization to upgrade its technology management, streamline fragmented business processes and comply with international industry standards and its employees to reduce the amount of time spent on paperwork and manual administration. (Umoja: An Introduction to Staff)

The high expectation for quality service delivery and decreasing cost have thus made organizations responsive to employ better ways of delivering services by using state of the art information technology and trained and knowledgeable employees. The use of information technology has brought an array of opportunities for organizations and employees to undertaking learning activities in a more flexible way expanding its reach with non-traditional approaches through the use information and communications technologies. As David, Salleh and Iahad (2012) stated in their research, these include the use of various methods such as a systematized feedback system, computer-based operation network, video conferencing and audio conferencing, internet worldwide websites, intranets and computer assisted instructions.

One of the developments that came with the advancement of information technology is the applicability of employee training which is e-Learning. E-Learning can be defined broadly as any use of web and internet technologies to create learning experiences. (Horton, 2003).

In the effort of adopting efficient and effective means of training and development of employees ECA needs to look more closely into the existing factors that hinder and foster the adoption and development of e-Learning. The identification is critical as the ECA will be able to take advantage of the findings to reap the benefits of adopting e-Learning most. This research, therefore, reviews the enablers and the inhibitors for the adoption of e-Learning in the UNECA.

1.2. Statement of the problem

The introduction of internet and internet technology revolutionized face-to-face and distance learning and replace the conventional learning approach to e-Learning. As explicitly explained

by Watkins, Leigh and Triner (2004), Internet-based learning extended beyond academic institutions and put its intrinsic implication on private, governmental and non-governmental firms. According to Watkins, Leigh and Triner (2004) e-Learning, today, is a common delivery of training with many organizations. As e-Learning is known for its cost effectiveness, flexibility and easy to use, its popularity has increased and became a preferred means to meet the learning and development needs of organizations.

The introduction of internet technology revolutionized learning experience and replaced the conventional learning approach to e-Learning (Davies, 2012). Internet-based as the byproduct of ICT does not take time to spread widely and to reach not only academic institutions, but learning organizations at private, governmental and non-governmental firms. The pressure from technology to adopt technology-assisted (supported) learning-Technology has changed the way we live, work, think and learn. As stated by Sun (2006), with the progress of information and communication technology development, e-Learning is emerging as the paradigm of modern learning and the shift of learning approaches become imminent where trainer-centered is replaced by learner-centered.

As the result of its perceived benefits, e-Learning is considered an important means of employee learning media for better achievement of organization goals. E-Learning enables learning to take place when it is most needed and when it is most convenient (Armstrong, 2010). Due to convenience in providing customized learning medium at learners' convenience, and possibility of delivery in smaller parts and to a wider number of participants made e-Learning convenient means of learning in organizational settings. Recently, the use of e-Learning in the UNECA is growing as compared to that of the traditional face-to-face learning to realize the overall change of doing business (The UN Intranet iSeek).

In 2009 the United Nations Secretary-General, Mr. Ban KiMoon, promulgated commitment to competencies of staff around the world as an important priority as it represents a critical investment in the Organization's future through the UN's Learning and Development Policy to ensuring that all staff members are aware of the learning and development policy of the organization and its objective to enhance the skills and competencies of staff members as a

means to meet the changing needs of the organization, which may require high investment. Conversely, due to economic recession, the UN resorted to do more with less in order to attain the utmost cost-efficiency which has led it to seriously consider to shift from a traditional learning means and consider a more cost effective approach to learning and develop skills and knowledge of its civil servants all over the world. As part of this endeavor and following the 2013 Learning Managers Meeting OHRM and OAHs, an Online Advisory Services Group dedicated to establishing and provide a global advisory on e-Learning and blended (hybrid) learning approaches.

In addition to the change in the learning approach, ECA has been heavily involved in recent wave of changes and as part of the refocusing and recalibrating initiatives, where re-profiling exercise was introduced for ECA to effectively support Africa' s Transformative agenda that could only be achieved through appropriate learning and skills development programmes aimed to meet specific knowledge and skills of the staff to meet the primary objectives of the Commission i.e. to ensure that UNECA becomes and remains Africa's premier think-tank, consistently generating top-quality, thoroughly researched products reflecting the latest thinking on issues related to Africa's transformative agenda.

Moreover, UNECA has been in the preparation stage of deploying the new ERP system also known as Umoja. This UN-Secretariat wide enterprise application requires staff not only to have the right skill and knowledge but also the attitude to accept the change and use the application. In both cases, the changes in the Commission obviously requires effective learning that surely helps to diffuse the changes. Particularly, e-Learning is a quick win in ensuring that employees as learners have the basic skills and acquire knowledge to blend into the changes at hand.

E-Learning as recently frequented medium of learning in the UNECA, is expected to assist employees in updating the required knowledge in executing their daily tasks and to the achievement of organizational goals with the new transformation in the company which includes the deployment of Umoja in November 2015. The deployment, among other issues, observed challenges where employees are faced with compressed schedules to acquire knowledge on the new system alongside of executing their daily tasks (The UN Intranet iSeek).

A preliminary interview was held with a Staff Development Unit of the UNECA. Accordingly, the issues along with other challenges mentioned during the adoption of e-Learning in the organization were: employees were faced with compressed schedules to acquire the knowledge from e-Learning alongside of executing their daily tasks, the learning capacity of learners were not addressed (some being fast learners and others not), challenges faced with ICT by ECA offices and favorable environment for e-Learning, Information Technology related knowledge gap, low self-efficacy and resistance to change.

This research, thus, focuses on analyzing the enablers and inhibitors of e-Learning with the objective of understanding the possible effect on UNECA employees' performance.

1.3. Research Questions

The research questions are related to the factors that affect the adoption of e-Learning and its impact on the performance of employees of the UNECA. Thus, the research questions are:

1. What are the inhibiting factors that hinder adoption of e-Learning in UNECA?
2. What are the enabling factors that help develop e-learning in UNECA?
3. What lesson do we get on factors that affect e-Learning and effects on performance from the experience of selected UNECA employees?

1.4. Objectives

This study focuses on identifying the enablers and inhibitors for the adoption of e-Learning and its effect on UNECA employee performance. This study reviews enablers and inhibitors and recommend ways as to how to augment the impact of e-Learning on improvement of UNECA employee performance.

General objective

The research questions are thus related to the factors that favor the use of e-Learning and the impact on the performance of employees.

Specific Objectives

In order to answer this question, the specific objectives are:

- To find out whether there are inhibiting factors that hinder the adoption of e-Learning in UNECA,
- To find out whether there are enabling opportunities for the use to e-Learning in UNECA, and
- To find out whether there are lessons about the effects of e-Learning on performance from practical experience of selected employees in UNECA.

1.5. Significance of the Study

The significance of the study is that

1. It will bring an understanding of the enabling and inhibiting factors of e-Learning and the possible effect on employee performance.
2. Based on the findings, the study will have significance for addressing issues that hinder the effectiveness of e-Learning towards better achievement of employee performance and achievement of organizational goals.
3. The research can be used as a preliminary study for further review and improvement of e-Learning in UNECA.

1.6. Delimitation of the Study

The UNECA, which is one of the Secretariat offices of the United Nations, has five sub-regional offices across Africa in addition to its main office based in Addis Ababa. The UNECA employs about 834 staff members in total comprising locally recruited staff members (general staff and national officers) and internationally recruited professional staff members.

The scope of the study is limited to obtain an understanding of the impact of learner led e-Learning on the performance of UNECA employees and whether there are impediments that may deter the effectiveness of e-Learning and as a result affect organizational success and may further suggest possible ways forward. The study considers on selected locally and

internationally recruited staff members with exposure to e-Learning and working in the UNECA offices due to time constraint.

1.7. Limitations of the Study

With respect to the limitations faced while conducting the study are the use of non-probability sampling method which has limited the outcome not to be generalized to the population. It would have also been good to include other UN organs to see the factors that affect the adoption of e-Learning in their respective environment. Time had also been the other limitation of the study.

1.8. Organization of the Study

Chapter one presents the introduction: background of the study, problem statement, research questions and research objectives, significance of the study and scope. Chapter two deals with a review of related literature: situate e-Learning and factors that affect its adoption in the e-Learning. Chapter three presents the methodology and its approach. The fourth chapter presents data results, discussion and findings. The last chapter presents major findings, conclusion and recommendations.

Chapter Two

2. Related Literature Review

This section reviews what the existing research papers found out about the areas e-Learning. The sub-sections include what e-Learning is, the evolution of e-Learning, theories of e-Learning, components of e-Learning, factors that favor the adoption of e-Learning, barriers to the adoption of e-Learning, and organizational overview.

2.1. What is Learning and e-Learning

As mentioned by Jeffrey (2001), learning is a means to enhancing employees' performance alongside of minimizing cost and making the organization more competitive. Bachman (2000) indicated that learning can be clustered as asynchronous and synchronous. Synchronous learning stands for a real-time, instructor-led online learning event where all participants are logged on at the same time and communicate directly with one another. Asynchronous learning is where learners cannot communicate without time delay through use of CD-ROM, videotaped classes etc.

Various scholars and researchers defined e-Learning from different angles. According to Bachman (2000) e-Learning is defined as the delivery of content via all electronic media, including the internet, intranets, extranets, satellite broadcast, audio/video tape, interactive TV, and CD-ROM and excluding text-based learning and courses conducted via written correspondence unlike distance learning. Pollard and Hillage (2001) had also forwarded their definition of e-Learning as 'the delivery and administration of learning opportunities and support via computer, networked and web-based technology to help individual performance and development'.

E-Learning has made learning easily accessible to many across wide range of location. In a similar fashion e-Learning is defined as 'learning that is delivered, enabled or mediated by

electronic technology' (Sloman and Rolph 2003, p. 1). It is, thus, said to be learning that is tailored to individuals. E-learning can also be defined as a dynamic and immediate learning environment through the use of the internet to improve the quality of learning by providing students with access to resources and services, together with distant exchange and collaboration. E-Learning supports learners with some special capabilities such as interactivity, strong search, immediacy, physical mobility and situating of educational activities, self-organized and self-directed learning, corporate training, personalized learning, and effective technique of delivering lesson and gaining knowledge (Mohammadi, 2015).

Wang and Hwang (2004) recognize the fact that learning is becoming more prevalent and suggest the question of what e-Learning should be responded in the following different manners: e-learning covers a wide set of applications and processes such as Web-based learning, computer-based learning, virtual classrooms, and electronic collaboration. The media that these should be delivered through were mentioned to include internet, intranet/extranet (LAN/WAN), audio and videotape, satellite broadcast, interactive TV, and CD-ROM. Boezerooy (2006) stresses on the difficulty to have a common definition for e-Learning and that the meaning of e-Learning differs among various people such as e-Learning is

- computer-based training delivered over intranets and the Internet,
- a term covering a wide set of applications and processes, such as Web-based learning, computer-based learning, virtual classrooms, and digital collaboration. It includes the delivery of content via Internet, intranet/extranet (LAN/WAN), audio and videotape, satellite broadcast, interactive TV, CD-ROM, and more
- a distance education or education delivered on the Web.
- the delivery of a learning, training or education program by electronic means, and
- e-Learning as it involves the use of a computer or electronic device (e.g. a mobile phone) to provide training, educational or learning materials.

Ramayaha's (2012) stated that the definition of e-Learning is well-documented in the IT literature and it has increasingly provided an entirely new environment and experience of learning that goes well beyond the classrooms, curricula and text-based formats. He further elaborated that e-Learning generally involves the delivery of course content using the electronic

media, such as Internet, Intranets, Extranets, satellite broadcast, audio/video tape, interactive TV, and CD-ROM. E-learning can be defined as a dynamic and immediate learning environment through the use of the internet to improve the quality of learning by providing students with access to resources and services, together with distant exchange and collaboration.

With this framework, for the purpose of this research, e-Learning can be defined as efficient and effective means of delivering continuous learning opportunity to employees in a more convenient way of overcoming barriers like space, time, etc. via information technology and the use personal computers, laptops, mobile phones, CD-ROM, internet and intranet.

E-learning has been described in various ways as learning using a number of different technologies and methods of delivery, e.g. Computer Based Training (CBT), Internet-based training (IBT), Web-based instruction (WBI), advanced distributed learning (ADL), distributed learning (DL), distance learning, online learning (OL), mobile learning (or m-learning) or remote learning and learning management systems (LMS) (Khan, 2005). Managing of learning environment like, registration of learners, scheduling learning resources, controlling and guidance of learning processes and analyzing learners' performances are all accomplished in Learning Management System (LMS) (Brown, 2006; Gulatee and Combes, 2007).

These are some of the popular definition for e-Learning. Even that these definitions showed no consensus and none come to the agreement to have one definition that fit the need for all. Nonetheless, for this research, e-Learning is defined as electronic learning, and typically this means using a computer to deliver part, or all of a course, whether it is in an organization, a relevant business training or a full distance learning course meant to fulfill the skill development requited by the staff and the organization.

Organizations should set focused learning strategy while setting their goals and devise a knowledge management system to achieve competitiveness and sustainable development. As described by Moore (2006) organizational goals should include performance improvement and learning systems in order to bring a paradigm shift to the organizational goal achievement.

Moore, Hanfland, Shank, et.al (2007) described learning strategy incorporating input, output, and measures of the system, and also to have organizational, departmental, business unit, and individual references that details the way to attain continuous employee improvement. The writers outlined the below stated three key components required for achieving the organizational goal.

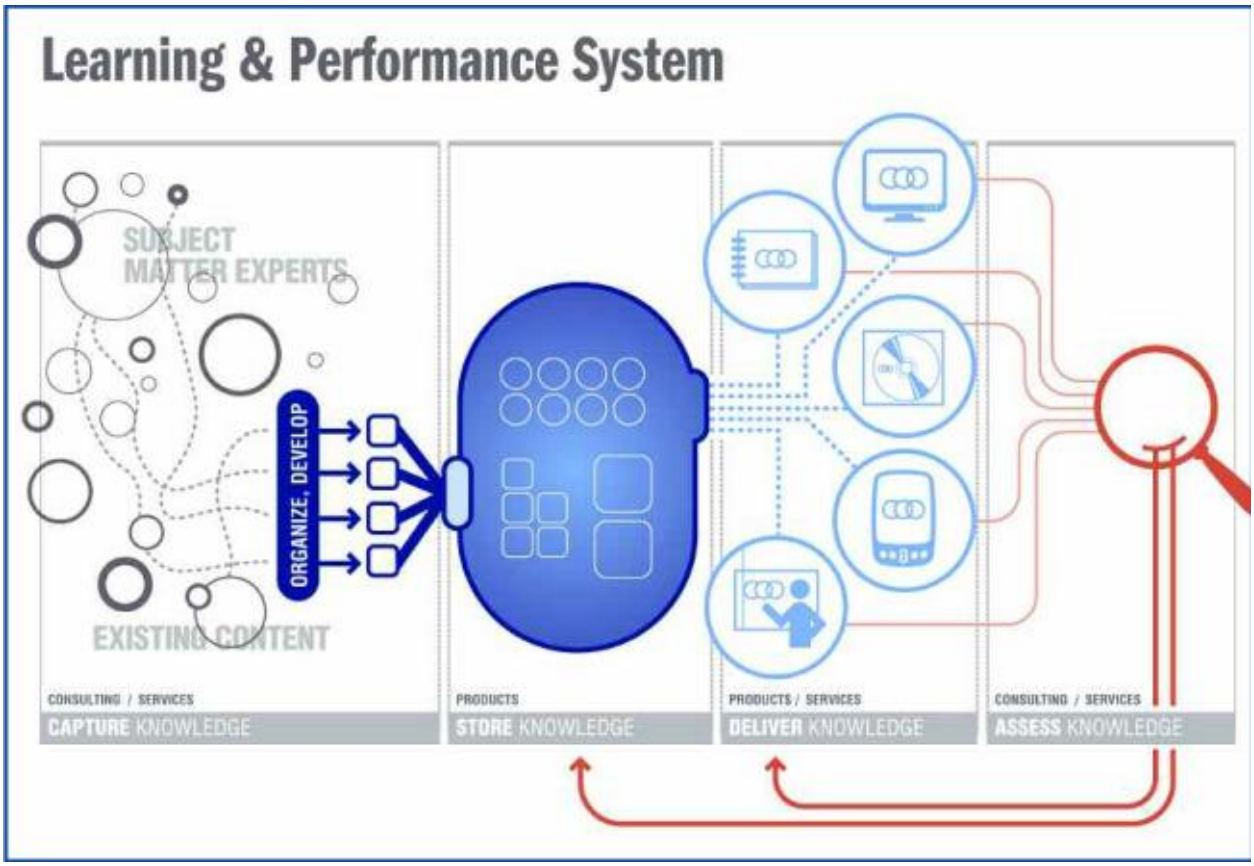


Figure 1. The learning and performance system (cited in Moor et.al, 2007)

The primary component is to capture and creation of data, information, knowledge assets in support of an individual's performance in the company and also links the knowledge management and document management practices. The secondary component is storing intelligent knowledge, leverage useful taxonomies, and search and retrieve capability that better manages and improves access to content. The tertiary component is the dissemination and access practices that includes, e-Learning, instructor-led training, mentoring and coaching and outside sources.

2.2. Evolution of e-Learning

The technological advancement in telecommunication played an important role in opening educational opportunities for learners that could not participate in the traditional face-to-face learning. Enhanced educational technology has played a critical role in the professional development of employees in the business field, as online learning instruction is one of the popular options for so many professionals in the business (Yang S. and Lin C., 2011). E-Learning thus came into existence with the advancement of information and communication technology. Specifically, the term e-Learning first appeared in the US in the mid-1990 but became prominent in the late 1990s (Armstrong, 2006). E-Learning was, therefore, based on developments of training programmes that were delivered via an online internet connection, computers, and with the use of intranet which is believed to have enhanced the scope.

E-Learning further developed to have taken different types that are dependent on technology. It can take the form of individual learning at own pace, or where with group of individuals at varying locations can log on at the same time with a facilitator or collaborative where learning is by exchange and sharing of knowledge in chat rooms bulletin boards (Torrington et al., 2008). From the development of e-Learning it can be noted that the main focus is on self-initiated and monitored learning which minimizes the traditional face-to-face learning.

Horton (2003:13) also segregated e-Learning into types as

- Learner-led e-Learning – which is aimed towards independent learners or self-directed e-Learning with contents consisting of Web pages, multimedia presentations, and other interactive learning experiences housed and maintained on a Web server.
- Facilitated e-Learning – focuses on learners who cannot conform to the rigid classroom training but want to augment learning through discussions with other learners as well as with a facilitator. This type combines the reliance on Web content found in learner-led e-Learning with the collaborative facilities found in Instructor-led e-Learning.
- Instructor-led e-Learning – is aimed to conducting conventional classes with distant learners using a variety of real-time technologies such as video and audio conferencing, chat, screen-sharing etc.

- Embedded e-Learning – focuses on catering e-Learning to solitary learner who is in need of an immediate solution to a problem. It deals with providing just-in-time training embedded in computer programs, help files, web pages, or network applications.
- Telementoring and e-coaching – focuses on mentoring, which tends to be long term and focused on career development. It uses the latest technologies for one of the oldest forms of learning and use video conferencing, instant messaging, Internet telephones, etc.

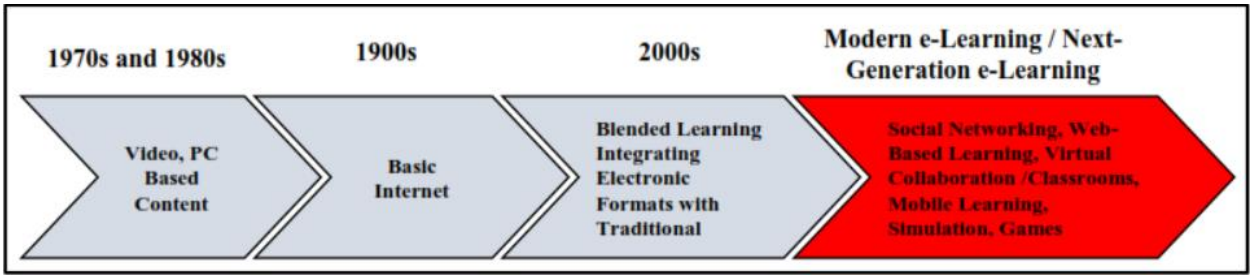


Figure 2. Evolution of e-Learning (cited in Alshaher, 2013)

As the evolvement of e-Learning indicated in the timely-lined figure above, since the beginning of distance learning in the 1980s and the introduction of digital learning in the 1990s, as a means of providing learning and training, claimed to be the starting point of e-Learning. Further with the inclusion of fast and reliable internet technology, the following were manifested as major changes in the e-Learning arena,

1. Increase in the number of participants who participate in e-Learning programmes, as a means of meeting their personal skill development and knowledge acquisitions,
2. Diversified e-based or computed–based learning alternatives as learning product of digital technology increased
3. Improvement in efficiency and effectiveness due to the fact that traditional learning becomes hybrid as ‘stand-n-talk’ approaches as a result of optimized computer-based learning options supported by countless e-Learning tools
4. Enhanced interaction and real-time communication of the learners with virtual learning facilitator, learning content and fellow learners.
5. Improved contents in quality and format that diversify the learning resources, including real-time chat rooms, discussion forums, video and sound.
6. A shift from a trainer center to learner center approaches that provided learners an option to learn at their own pace and leisure time.

7. The high flexibility of the e-Learning approach that made it easy and affordable.

2.3. Theories of e-Learning

The theories of Learning, as agreed by various authors, include the e-Learning. Learning theories are used to demonstrate how people learn and, thus, become bases for planning and implementing learning and development programmes. According to Armstrong (2010), the learning theories are stated as below.

- Reinforcement theory – this theory stresses the development of skills via instruction where positive feedback is used to reinforce behaviors.
- Cognitive learning theory – under this theory, learners understand and internalize by being exposed to learning materials such as through e-Learning etc., and also exposed to solving issues.
- Experiential learning theory – learning occurs as per this theory through encouraging learners to experience what they have learnt by reflecting and constructing meaning and developing their abilities.
- Social learning theory – according to this theory, learning is most effective in social settings where individuals have the opportunity to shape their understanding by actively participating in actual situations in a team or other network settings.

2.4. Components of e-Learning

The components of e-Learning have been stated in various ways by many authors. Maryam (1994) listed the components of e-Learning as Learning Management System (LMS) or Learning Content Management System (LCMS), Content, Collaboration, Testing and Assessment, Skills and Competency, e-Commerce, and the Internet Video-Based Learning.

Additionally, the components of e-Learning have been pointed out by Khan (2005) as an assembly of instructional design-learning and instructional theories, instructional strategies and techniques, multimedia component, internet tools, computer and storage devices, connection and

service provider, authoring/management programs, ERP (Enterprise Resource Planner) software, and standards, and Server and related applications.

2.5. Gains and Setbacks of e-Learning

Researchers have pointed out various gains and setbacks of e-Learning from their points of views. Some are mentioned as below.

Gains of e-Learning

According to Awad (2014) the benefits of e-Learning includes the ability to provide individualized Instruction that suits to the need, abilities, learning styles and interests of the learners (Learner Centered), easy access that breaks all barriers of time, place and distance, qualitative which is unique feature for allowing access to unlimited number of learners with same quality of content as that of fulltime students, ability to be an effective media and tool to face various challenges, its ability to cater different learning styles and promote collaboration among learners from various localities, cultures, regions etc. It also includes the ability for its flexibility in terms of delivery media, providing learning experience from simulation and gaming techniques, capturing the interest and motivation to learn by providing various learning experiences, the ability to engage in and offline or online or live interaction among learners and instructors, and the ability to providing evaluation and feedback for further improvement.

Audrey R. Lipshits and Steven P. Parsons (2008) segregated the advantages of e-Learning as key and other advantages. The Key advantages of e-Learning are:

- Flexibility, convenience ability to study at own pace with no time or place limitation and wherever connection is available.
- The feature where participants can participate and complete coursework without disturbing their other commitment
- Cost and time benefits of not having to commute to and from as would otherwise be required by face-to-face learning

The other advantages of adopting e-Learning include the feature where learners are able to chat and exchange information over the internet with their other fellow classmates, greater adaptability to the learner's needs including the availability of streamlined video lectures, non-verbal presentation of teaching materials etc.

Setbacks of e-Learning

All the blossoming benefits of e-Learning comes with some pitfalls as some argued the extent that e-Learning cannot fully replace the conventional learning as it has the following short falls. Learners with low motivation or bad study habits may fall behind

1. Without the routine structures of a traditional class, learners may get lost or confused about course activities and deadlines
2. Learners may feel isolated from the instructor and classmates
3. An instructor may not always be available when students are studying or need help
4. Slow internet connections or older computers may make accessing course materials frustrating
5. Managing computer files and online learning software can sometimes seem complex for students with beginner-level computer skills
6. Hands-on or lab work is difficult to simulate in a virtual classroom

Beka (2014) enumerates the following e-Learning setbacks as below.

- Educational related disadvantages which are the mostly the lack of face-to-face interaction
- Social/Cultural and economic related disadvantages which include expensiveness of the software development, the development of adaptive materials which are time-consuming and costly
- Situational limitations which relate to the prevailing circumstances, environment or device making i.e., mobile device limitations, e.g. having no mouse, or poorly designed website etc.
- Long lasting limitations

2.6. Factors that Favor Adoption of e-Learning

Factors that stimulate adoption of e-Learning are mainly the ever increasing demand of stakeholders for the delivery of better service by organizations and organizations desire to minimize their cost to a possible low amount without compromising the quality of their services and the desire to survive business competition.

> "Social, technological, and economic drivers are transforming education around the world. As globalization encompasses local economies like never before, the development of a skilled workforce becomes a genuinely international concern. And as human capital becomes the chief source of economic value, education and training become lifelong endeavors for the vast majority of workers." Peter J. Stokes, Eduventures.com, 1999 (cited in Keith Bachman, 2000:3/88).

Bachman (2000) viewed the possible factors for adoption of e-Learning by organizations due to the occurrences various reasons. Some of the factors for companies to adopt e-Learning are the increase in complexity and velocity of work environment due to technological changes, the manifestation of multiple challenges due to Globalization of business, the social and demographic changes direct education toward older target groups, knowledge workers require greater flexibility in the work place substantial cost savings due to elimination of travel expenses, just-in-time access to timely information, higher retention of content through personalized learning, improved collaboration and interactivity among students and online training is less intimidating than instructor-led courses.

The nature of e-Learning which includes the use of interactive and interesting presentations and the possibility of training a large number of employees at different location in short period of time is more appealing to companies to invest in e-Learning activity (Torrington et al., 2008)

Learners are also attracted to e-Learning as it gives them the opportunity to learn at their convenience and without fearing judgment of others. The interactive nature is also appealing to employees to pursue participating in this kind of learning.

Apart from the individual factors positively affecting the use of e-Learning, the driving force for organizations to employ e-Learning as stated by Bachman (2000) is depicted as below.

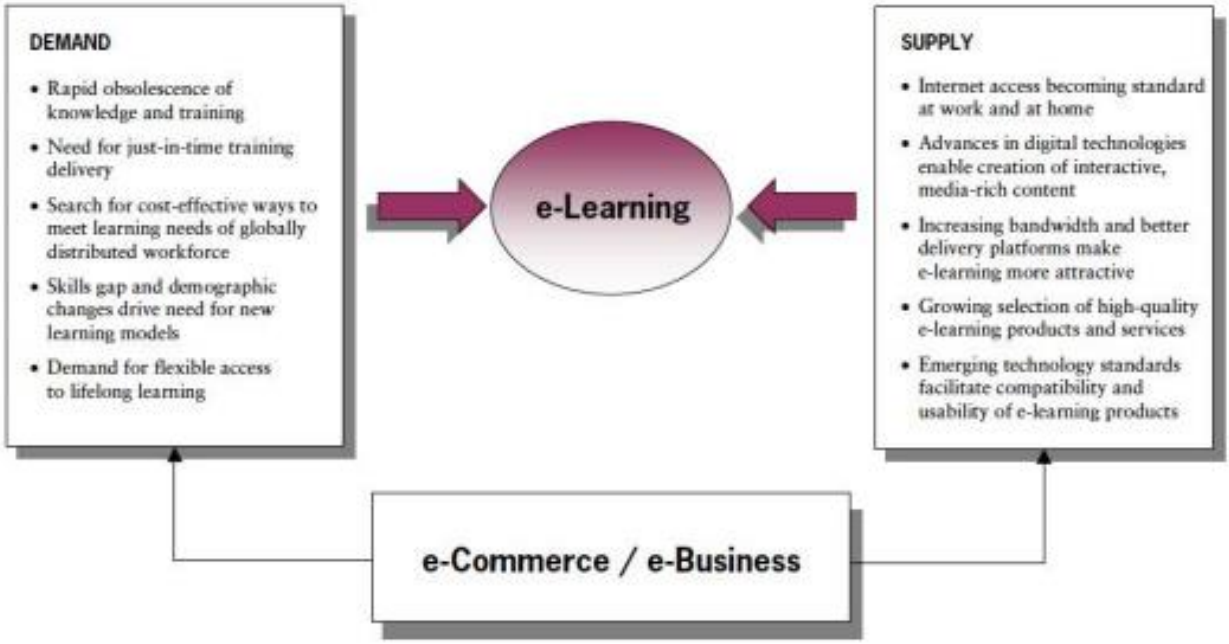


Figure 3. Driving force to adopt e-Learning (cited in Bachman, 2000)

2.7. Barriers to Adoption of e-Learning

Contrary to factors that favor the adoption of e-Learning, there are factors that delay its adoption in organizations. The prominent ones are heavy initial investment requirement in terms of hardware, software and design time (Torrington et al., 2008) and personal judgment of one's capabilities in organizing and executing courses of actions to attain designated goals – self-efficacy (Yang S. and Lin C.,2011). In addition, experience in the use of computer, internet, and information technology are also believed to be critical variables determining the success and thus considered a precondition influencing the success of the e-Learning activity.

2.8. Historical Trajectory of e-Learning experience in UNECA

Summary of the e-Learning experience of the Commission referred from the Staff Development Unit of UNECA data base are depicted as below.

i.) In 2005 UNECA introduced a UN global online platform known as "NetG" that had more than thousand technical and non-technical skills development courtesies. The UN generic contract with NetG was phased out in 2009 where there was a 21.1% utilization rate of the resources by UNECA staff members within four years in NetG Service.

ii) Staff members of UNECA were involved in taking online courses on UN mandatory courses including Security in the Field (Basic and Advanced), Sexual Harassment, Ethics and Integrity in the Workplace where 87.9% participation was recorded.

iii.) In 2010, after the contract with NetG was phased-out, the UN Secretariat contracted Soft Skill, with the UN Skills Port brand, was made available to all staff as an online platform. This platform, that served the organization until November 2014, had more than 6,000 online courses in some of the UN official languages (English, French and Arabic) compresses of competency-bases, language and technical skills courses. UNECA was a pioneer and exemplary with best practices to share with other offices of the UN Secretariat. UNECA managed to have the highest utilization rate leading all offices with the rate of 43% to 69 % through tremendous effort to promote the resources and use the relevant sessions by linking appropriate face-to-face session as a prerequisite or follow up session by setting a blended approach.

iv.) In some ad-hoc situations, UN staffs have experienced and involved in an on online courses including courses with UNITAR, Staff College, eCornell, some ITEC courses.

v.) Recently, UNECA had been striving to deploy new enterprise application, i.e. Umoja and new accounting system IPSAS. These changes require staff to be involved to take online courses and expected to be familiar with the new way of doing business. Moreover, staff are expected to complete some mandatory computer-based courses prior to the deployment of the system, November 2015.

2.9. Related Empirical Studies of factors affecting the adoption e-Learning experience

In relation to the related empirical studies, various scholars have addressed the issue of factors that affect the adoption and development of e-Learning from their own research points of views. The adoption of e-Learning is reviewed by examining the social factors using the institutional theory (Jan, Lu & Chou, 2012). The analysis result indicated an

insightful managerial and theoretical implication. Accordingly, the researchers were able to demonstrate how institutional forces influence the attitude and intention of using e-Learning. The result indicated that e-Learning can benefit from social influence on employees to agree to use e-Learning (i.e. mimetic institutional force). This study further revealed that age, gender and income demonstrated no significant impact on the intention to use e-Learning.

Amos, Otaghogho & Prince's (2014) empirical evidence observed that even with the wide acceptance of e-Learning in educational systems in Ghana, there exists factors that hinder the implementation. The researchers outlined the factors that hinder the implementation of e-Learning and categorized them as social, technological and organizational factors.

The factors affecting to effective learning were also investigated from the learner's perspective which in their case were students (Gamage, Fernando & Perera, 2014). The researchers were able to identify the most important dimensions students required was for the e-Learning to be interactive and allow interactions among other students and the lecturer, collaborativeness which is the success and the motivation from the collaborated environment provided in learning, the need to keeping students motivated and also Network of opportunities and recognition.

Ahmadpour et.al (2010) have researched the factors affecting the development of electronic learning in the agricultural extension network in Iran. According to the researchers, they were able to identify some of the factors that hinder the adoption of e-Learning in agricultural extension to include psychological, organizational, cultural, technical, financial and managerial. They have also identified that extension organizations should involve appropriate strategies and approaches to try and optimize the benefits of ICT in education. Moreover, the existence of shortages in provision of appropriate hardware and software, and infrastructure were also found to be a hindrance to the success of the e-Learning projects.

The empirical pilot study undertaken on the e-Learning policies, practices and challenges in two Norwegian organizations found a mismatch between policy writers and staff in terms of the need for pedagogical understanding in planning and implementing e-Learning and thus

the absence of such understanding in the policy and indicated the need to balance individual and organizational learning needs and goals (Welle-Strand and Thune, 2001). This, according to the researchers, called for reflecting in an articulated corporate learning strategy endorsed by the top management and implemented in such a manner that both time and space are created to facilitate learning. The researchers finally stressed on the necessity of knowing how to use technology and not only acquiring the information on what types of technology to use.

Chapter Three

3. Research Methodology

3.1. Introduction

For the purpose of this study, a non-experimental research will be applied. Since the research topic is of a relatively recent issue in the training and development area in the UNECA, there is no adequate information in the organization. There are researches on the subject matter from various angles.

3.2. Research Strategy

Among the various strategies applied while undertaking a descriptive, non-experimental research. This research plans to analyze factors that enable and disable the adoption of e-Learning and the possible effect of e-Learning on employee performance, considering employees of the UNECA. Quantitative and qualitative research design will be implemented to conduct the study and achieve a systematic way of analyzing issues, collecting data, reviewing documents and reporting the results and also to get an insight on the issue. The relevant data and information on facts will be collected by questionnaire.

The questionnaire will be used for a systematic survey of the factors that enable and disable the adoption of e-Learning from employees of UNECA and possible influence on performance.

3.3. Research Design

This research is conducted on a quantitative and qualitative research design strategy. The study analyzes the primary data collected through questionnaire and secondary data to gain insight on the issue. Additionally, the management members in UNECA were approached and inquired about their perception of the factors that affect e-Learning system and data was collected via interview. The analysis focuses on understanding the relationships of variables (enablers and

inhibitors) and the possible impact on employee performance. An interview was used to collect data for supplementation.

Demographic questions were included in the questionnaire along with the other questions focusing on the factors, i.e. training cost reduction, learners' satisfaction on the e-Learning, the significance of e-Learning in creating improved performance, technological and social readiness of ECA and its staff, significance of identified disabling factors for adopting e-Learning and relevant requirements to the development of e-Learning are included in Likert Scale format questions. Additional four open-ended questions were included to capture the impression of the respondents on e-Learning in the questionnaire. The questionnaire will be distributed to respondents via online tool known as Survey Monkey. This tool enabled the researcher to produce cross tabulation and charts. As the Survey Monkey automatically detects and reports through summary data, questions skipped, etc. it is, thus, considered free from human error. Two sets of interview questions are prepared, first to target respondents from employees to assess the impression as to why ECA adopted e-Learning and the resulting challenges and consequences, on policy issues of the organization regarding the adoption of e-Learning. The second interview questions are for the management of the organization at the Learning and Development Unit (SDU) to assess on the existence of workable policy and strategic framework to ensure continuous and reliable e-Learning training in ECA.

3.4. Research Method

A research can follow a qualitative or quantitative approach. A mixed design – quantitative – qualitative approach will be followed to uncover the relationships of variables (enablers and inhibitors) and analyze the possible effect of e-Learning on employee performance in the UNECA.

The research employed three methods to collect the relevant data and information. The first questionnaire was administered through the Survey Monkey tool, which is as part of the quantitative research strategy. Data and information collected by this method were enablers and inhibitors for the adoption of e-Learning and possible effect on employee performance in the UNECA. The target respondents were selected employees in the organization. Likert scaling

type of response were used in the questionnaire with five levels of scaling to understand the awareness on the benefits and performance impact of the e-Learning. The first two scales (Extremely Relevant and Very Relevant) are assumed to show a positive correlation among variables (level of influence on performance and as an inhibitor or enabler). The first is seen as the strongest extreme while the second has a relatively low rate of strong relationship. The 3rd scale (Relevant) is assumed to show an 'average' level of influence which falls within 50% correlation rate between inhibitor and enabler variables. The two last scales (Less Relevant and Not Relevant) are assumed to imply a relatively negative and/or weak correlation between variables. Less relevant is assumed to represent below an average. The last one (Not Relevant) is assumed to imply the non-existence of correlation among variables or the extreme effect of inhibiting variables on the performance of employees.

The second research method is secondary data research. It is obtained from publications, books and website, which is employed as part of qualitative research strategy. This method is used to collect data that are assumed to show the historical development of the e-Learning and to further enable to analyze how the problem surfaces itself. The last research method was semi-structured interview. This was being used to collect relevant data from few selected employees and officials of UNECA to corroborate the facts uncovered through the questionnaire and secondary data researches.

3.5. Sampling

This research adopts a convenience and snowball sampling, which is one form of non-probability sampling methods. This is done so as to minimize the variations attribute to any non-related factors with the objective of getting a better understanding of the subject matter in the context of UNECA. The data were collected in seven working days of which five days were consecutive working days.

As mentioned before, the research theme is a relatively recent phenomenon in UNECA. The very purpose of this research is to bring a better understanding on the subject matter rather than to make generalizations on the findings.

The sample size is determined based on the researcher's own experience and judgment. This research considers as a total population all of 834 UNECA employees working in Addis Ababa and its five regional offices. Users of e-Learning were selected using convenience and snowball sampling technique. A total of 75 participants were invited and to participate in the online survey and a response of 69 participants were collected. The researcher has taken such a judgment due to the fact that the smaller the sample size, the better for management and simplicity, particularly from the time constraint point of view. Similarly, two management members with exposure to the Staff Development activities in Human Resources Services Section of the UNECA were also be approached and interviewed. Additional four employees exposed to e-Learning were interviewed based on the personal judgment and experience of the researcher.

No.	**Composition of UNECA Staff Members**		**Population Size**	**Sample Size**
1.	Internationally recruited Staff	378		
2.	Locally recruited Staff	456		
	Total Staff	834	834	**75**

Table 1. UNECA Staff Members (4 March 2016)

The main focus remains to be to attaining a better understanding of factors affecting the adoption of e-Learning and the possible effect on performance with regards to the factors.

3.6. Sampling Procedure

The research in order to attain fair and better outcome of the analysis used convenience and snowball-sampling methods. A total of 75 employees were sent an internet link on the Survey Monkey tool via their email addresses. The convenience and snowball sampling are used because organized data on which employees were involved in e-Learning was not readily available during the time of the research. The other reason was also to benefit from quality

response by taking into consideration respondents' experience and involvement in e-Learning activities, information technology in the organization and to assist in minimizing failures to timely submit responses to the questionnaires.

Two management members of the Staff Development Office and four additional employees were also be approached and interviewed for validating replies from the questionnaires. Similar to the administration of the questionnaires, this structured interview was conducted after the interviewees were informed prior to the actual interview session is held. The selection of the interviewees was also made based on the personal experience and judgment of the researcher with consideration of their experience and involvement in e-Learning activities and information technology in the organization.

3.7. Data Collection

Data collection is one of the major steps in conducting any research. Two sources and types of data were employed – primary and secondary data sources and types. Both were used in the data collection process. The primary data was collected through interview and questionnaire. The primary data were used to examine factors that enable and inhibit adoption of e-Learning. An interview was used to collect data for supplementation.

Secondary data source was used to gather information on the historical development of e-Learning in UNECA, from the perspectives of factors that affect e-Learning and e-Learning milestones globally. The sources of the secondary data are, official reports, published resources, previous research materials on the topic, books, websites, and journals.

3.8. Data Analysis

The data analysis part of the study bases on the type and character of data collected. The data collected was scientifically analyzed and interpreted to arrive at conclusions in line with the research questions and/or objectives. The study thus employs a descriptive data analysis approach in document research and used descriptive statistics.

The data summary was presented in the form of tables and in certain cases by narratives. This helps in identifying new variables and giving explanations on relationships in the description process. The analysis takes into account the responses obtained from the questionnaires. This process served to ensure both the triangulation of methods and the analysis of findings in the final research report.

Chapter Four

4. Discussions of Results

Discussion on the results has been made using statistical data analysis in the effort of presenting the responses collected from the participants of the research. Below, the response and implications are presented.

4.1. Respondents Demographic Data

Demographic data collected from the staff respondents to the questionnaire are conducted as part of the descriptive analysis. This includes the gender, age, highest level of education, current division/section, employee category and number of years of employment at the UNECA.

The below doughnut chart indicates that out of the total 69 respondents 36 (52.94%) were female while 32 (47.06%) were male staff members.

Figure 4. Gender Composition of Respondents (2016 Survey Monkey Tool)

The below distribution of the age of respondents indicate that the age group of the majority of the respondents' fall in the 41-50 years of age (55.07%), the next highest fall in the 31-40 years of age group (28.99%) while the next lowest group falls above the age group of 50 and above (14.49%). The lowest of all the groups fall in the age group of 21-30 (1.45%).

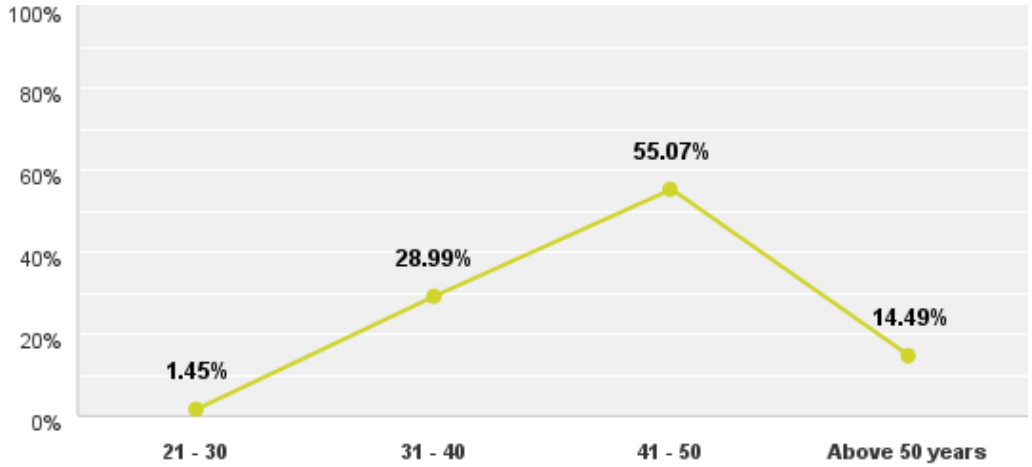


Figure 5. Age of respondents (2016 Survey Monkey Tool)

The level of academic achievement of the respondents revealed a distribution where 35 (50.72%) are Master's Degree holders, 28 (40.58%) hold a Bachelor's Degree and 6 (8.7%) are PHD Degree holders. This data indicated that high school certificate/diploma holders and Certificate/Diploma holders did not participate in the survey.

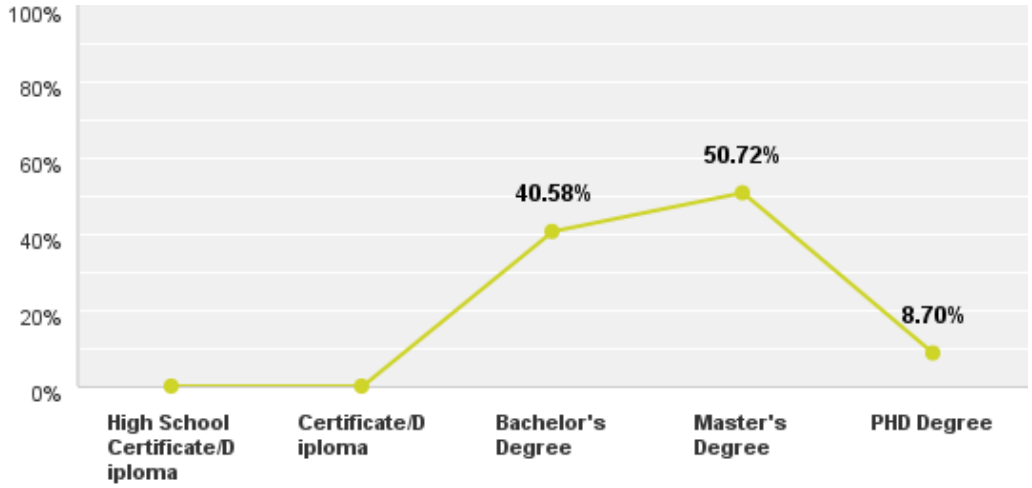


Figure 6. Level of highest academic achievement (2016 Survey Monkey Tool)

The respondents' employment category distribution depicted in the below figure shows that 36 (52.17%) are from the General Staff category, while the 21 (30.43%) fall under the Professional category and 12 (17.39%) are grouped in the National Officer category.

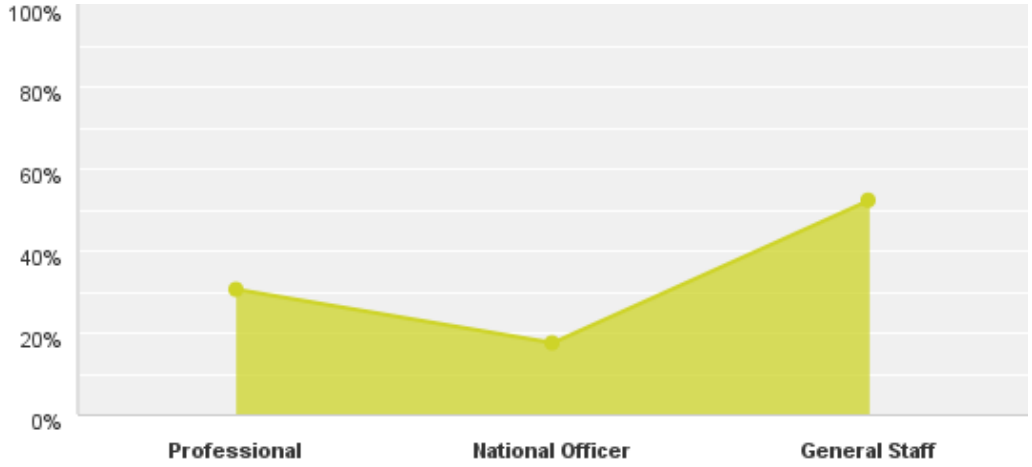


Figure 7. Professional cateory (2016 Survey Monkey Tool)

Table 2 Professional category of respondents in UNECA

Answer Choices	Responses	
Professional (1)	**30.43%**	21
National Officer (2)	**17.39%**	12
General Staff (3)	**52.17%**	36
Total		**69**

Basic Statistics				
Minimum	**Maximum**	**Median**	**Mean**	**Standard Deviation**
1.00	3.00	3.00	2.22	0.88

While reviewing the number of years the respondents worked in the UNECA, 27 (39.13%) have worked in ECA between one to five years, 22 (31.88%) are working in ECA from 6-10 years while 20 (28.99%) have worked for more than 10 years in the organization.

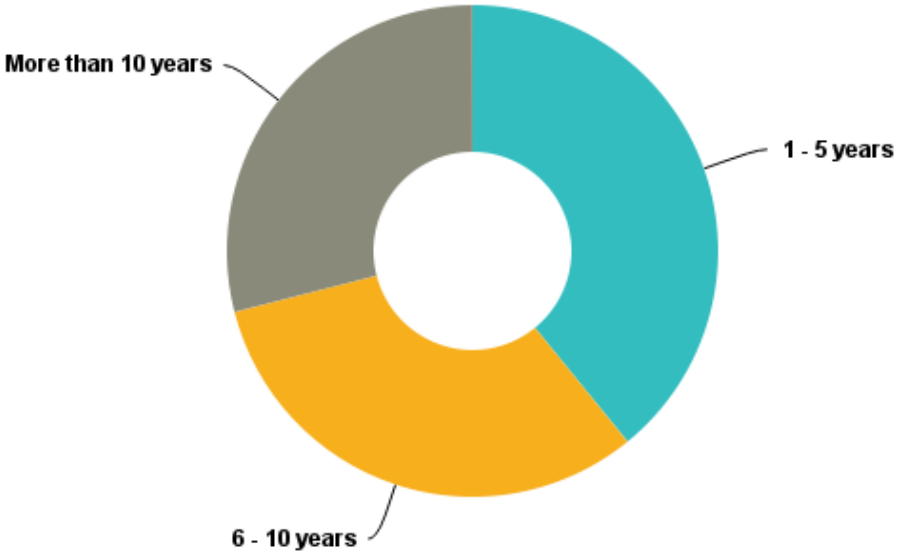


Figure 8. Age group of respondents (2016 Survey Monkey Tool)

Table 3 Age group of respondents in UNECA

Answer Choices	Responses	
Less than 1 year (1)	**0.00%**	0
1 - 5 years (2)	**39.13%**	27
6 - 10 years (3)	**31.88%**	22
More than 10 years (4)	**28.99%**	20
Total		**69**

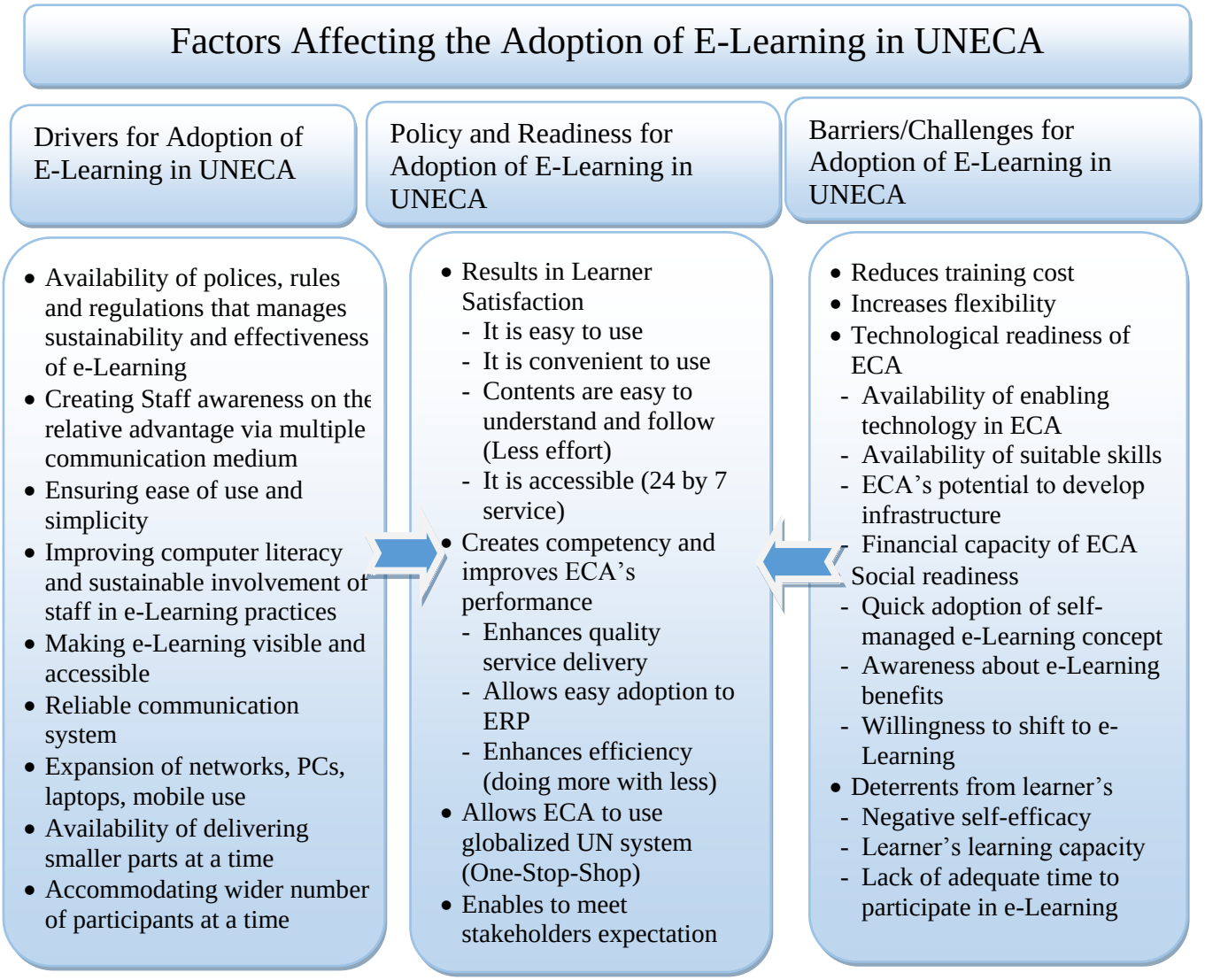
Basic Statistics				
Minimum	**Maximum**	**Median**	**Mean**	**Standard Deviation**
2.00	4.00	3.00	2.90	0.82

4.2 Research Model

A list of variables was identified based on the literature review and the assumed determinant factors for decisions to adopt the e - Learning were sorted. The applicability of these variables

was measured in the context of UNECA using analysis of data collected both from secondary and primary sources. Primary data were gathered from respondents of the survey questionnaire and from interviews and document research was conducted on secondary sources. The overall research model for this study is thus summarized in the Figure below.

Figure 9. Research Model



Source: Own analysis framework depiction (2016)

The factors that affect the adoption of e-Learning were discussed in the literature part previously. Various scholars were able to ascertain the influences of different factors for the adoption of e-

Learning from varying angles of research they conducted. One factor that the researchers were able to verify by showing the experience of the use of e-Learning from other learners, they were able to convince the remaining learners to recognize the benefits of using e-Learning and engage in practicing e-Learning themselves. This result indicates also that by seeing others are using it well, which showed the importance of social readiness for the success of e-Learning adoption.
The researchers were able to identify the importance of other factors that influence the adoption of e-Learning such as the e-Learning to be interactive to successfully engage learners, the existence of an online medium where learners could interact with instructors and other co-learners to raise queries and get responses. Studies undertaken on the factors that influence the adoption and development of e-Learning indicated the importance of the existence of an articulated corporate learning strategy endorsed by the top management and the dedication of time and space for facilitating effective learning. The importance of acquiring the appropriate technology was also identified an important factor.

Below, the factors that influence the adoption and development of e-Learning in the context of UNECA are reviewed from the responses of questionnaire and interview participants.

4.3 Drivers for Adopting e-Learning in UNECA

The major factors that favor the adoption of e-Learning training programmes were discussed in the literature review parts. These were used to measure the applicability of these variables in the UNECA contest, and to identify new variables as to why ECA adopts e-Learning training programmes. Descriptive statistics (distribution frequencies, mean/rating average/weighted average) based on the major variables were presented for analysis.

4.3.1 Discussions on Findings of the Questionnaire

The figures in Table 4 below show the driving factors for the adoption of e-Learning in UNECA. The broader category of the driving factor variables were learner satisfaction and creating competency and improving ECA's performances. See Table 4 below.

Table 4 Driving Factors for Adopting E-Learning in UNECA

How do you rate the importance of e-Learning to the following factors related to improving your performance							
Answer Options Resulting in Learner Satisfaction	**Not relevant**	**Less relevant**	**Relevant**	**Very relevant**	**Extremely relevant**	**Rating Average**	**Response Count**
It is easy to use	0	1.45% 1	28.99% 20	57.97% 40	11.59% 8	3.80	69
It is convenient to use	0	1.47% 1	27.94% 19	54.41% 37	16.18% 11	3.85	68
Contents are easy to understand and follow (less effort)	0	13.24% 9	29.41% 20	47.06% 32	10.29% 7	3.54	68
It is accessible (24 by 7 anytime)	0	14.71% 10	26.47% 18	42.65% 29	16.18% 11	3.60	68
It saves time (traveling to class)	0	1.47% 1	25.00% 17	55.88% 38	17.65% 12	3.90	68
It offers cross-border training option (access training anywhere, anytime)	0	2.94% 2	17.65% 12	45.59% 31	33.82% 23	4.10	68
Average		*5.88% 4*	*25.91% 18*	*50.59% 30*	*15.90% 12*		
					Answered question		69
					Skipped question		0
How do you rate the significance of e-Learning in creating competencies and improve performance of ECA?							
Answer Options Creates competency and improves ECA's performance	**Not relevant**	**Less relevant**	**Relevant**	**Very relevant**	**Extremely relevant**	**Rating Average**	**Response Count**
It enhances its quality of service delivery	2.9% 2	4.35% 3	37.68% 26	40.58% 28	14.49% 10	3.59	69
It allows ECA to achieve its goal (Africa's Transformative Agenda)	2.94% 2	11.76% 8	33.82% 23	42.65% 29	8.82% 6	3.43	68
It allows to easily adopt new work systems (ERP)	1.47% 1	5.88% 4	29.41% 20	42.65% 29	20.59% 14	3.75	68
It allows to equip employees with the required knowledge	1.47% 1	8.82% 6	25.00% 17	38.24% 26	26.47% 18	3.79	68
It allows to achieve the UN's direction of doing more with less.	0	5.97% 4	35.82% 24	40.30% 27	17.91% 12	3.70	67
It allows ECA to use the globalized UN system of one data source and system seamlessly (one-stop-shop service)	1.47% 1	4.41% 3	26.47% 18	48.53% 33	19.12% 13	3.79	68
It enables to meet its stakeholders expectations	1.54% 1	4.62% 3	36.92% 24	41.54% 27	15.38% 10	3.65	65
Average	*11.79% 1*	*15.27% 5*	*37.52% 25*	*49.08% 33*	*20.46% 13*	*3.80*	
					Answered question		69
					Skipped question		0

Source: Own source (Survey 2016) tabulated using the Survey Monkey Tool

In the above table, the factors that enable the adoption of e-Learning were analyzed based on two main categories which are bringing learner satisfaction and creating competency and improving ECA's performances. The variables which were identified as factors that affect learner satisfaction were presented in Table 4 in the context of ECA. The majority of the employees that replied to the survey questions considered these variables to be positively improving learner's satisfaction. The average ratings for all variables fell in the "Very Relevant" category. This was in conformance with the value of the mean (rating average). The majority of respondents considered cross-border training option variable as "Extremely Relevant" for the adoption of e-Learning and improving performance. The majority of respondents agreed that variables such as ease of use, convenience and time sensitivity were all "Very Relevant". For the option of e-Learning contents are easy to understand and follow variable the majority of the respondents (42.65%) rated "Very Relevant". The majority of respondents fell into "Very Relevant" and C scales. This confirms that the importance of identified variables that influence e-Learning adoption by ECA.

The next factor for which variable were identified was creating competency and improving ECA performance. The average rating for this variable indicated that the majority of respondents (49.08%) considered it as "Very Relevant" for the adoption of e-Learning in ECA. The sub factors such as enhancing quality service delivery, allowing ECA to achieving its goal (Africa's Transformative Agenda), allowing easy adoption of the new ERP system, achieving UN's direction of doing more with less, equipping employees with the required knowledge, allowing ECA to use the UN globalized system and meeting stakeholders' expectations were found to be "Very Relevant" (first ranking) for the creation of competency and improving ECA's performance. Accordingly, they were identified as enablers for the adoption of e-Learning in ECA. More than 26% of the respondents found e-Learning as "Extremely Relevant" for the ECA to equip employees with the required knowledge.

Variables that were identified as enablers for the adoption of e-Learning in ECA (reference to the outcome of the survey questionnaire) were presented. The results of the analysis of the questionnaire responses confirmed that the variables identified were very relevant such as training cost reduction and increase training flexibility in UNECA.

4.3.2 Discussion on Findings of the Interviews

An interview was conducted with four of the SDU staff members to support the findings of the questionnaire. In this category, the main theme of the interview was to find out as to why ECA adopts e-Learning and what benefits it gives to ECA. Most interviewees responded that ECA used e-Learning services for reinforcing face-to face training by blending with online preliminary activities, to save resources monetary and material wise. Two of the respondents agreed on the accessibility and flexibility of e-Learning as determinant factors for adoption of e-Learning practices.

4.4. Barriers for Adopting e-Learning in UNECA

The adoption of e-Learning highly depends on the technological readiness, development of ICT, social and personal readiness. Variables that were identified to measure the barriers were discussed below. The data sets gathered were from questionnaire and interviews.

4.4.1. Discussions on Findings of the Questionnaire

Table 5 Barriers to the Adoption of E-Learning in UNECA

How do you rate the technological readiness of ECA for e-Learning?							
Answer Options Barriers (delaying) factors	**Not good**	**Fair**	**Good**	**Very good**	**Extremely good**	**Rating Average**	**Response Count**
The availability of enabling technology in ECA	8.82% 6	13.24% 9	25.00% 17	45.59% 31	7.35% 5	3.29	68
The availability of suitable skills	2.94% 2	10.29% 7	45.59% 31	35.29% 24	5.88% 4	3.31	68
The financial capability of ECA in investing on suitable technology	1.49% 1	13.43% 9	40.30% 27	34.33% 23	10.45% 7	3.39	67
The efforts of ECA towards setting up infrastructure	1.49% 1	28.36% 19	31.34% 21	31.34% 21	7.46% 5	3.15	67
Readiness and willingness to cover the high initial set-up costs of e-learning	4.55% 3	16.67% 11	45.45% 30	21.21% 14	12.12% 8	3.20	66
The potential for development of technological infrastructure	0	17.91% 12	40.30% 27	31.43% 21	10.45% 7	3.34	67
Average	***3.2% 2***	***22.59% 11***	***37.99% 26***	***33.20% 22***	***8.95% 6***		
						Answered question	**68**
						Skipped question	**1**
How do you rate the social readiness for adopting e-learning?							
Answer Options Social readiness	**Not good**	**Fair**	**Good**	**Very good**	**Extremely good**	**Rating Average**	**Response Count**
Employees willingness to quickly adopt to the self-managed concept of e-learning	4.48% 3	31.34% 21	44.78% 30	16.42% 11	2.99% 2	2.82	67
Employees awareness about the perceived benefits of e-learning	3.03% 2	31.82% 21	43.94% 29	18.18% 12	3.03% 2	2.86	66
Employees willingness to shift to e-learning	6.06% 4	33.33% 22	40.91% 27	15.15% 10	4.55% 3	2.79	66
Average	***4.52% 3***	***32.16% 21***	***43.21% 29***	***16.58% 11***	***3.52% 2***		
						Answered question	**67**
						Skipped question	**2**
How significant are the factors that hinder the adoption of e-learning based on the following aspects?							
Answer Options Individual Readiness	**Not relevant**	**Less relevant**	**Relevant**	**Very Relevant**	**Extremely Relevant**	**Rating Average**	**Response Count**
Personal judgment of one's capabilities in organizing and executing courses of action to attain set goals	1.54% 1	9.23% 6	40.00% 26	33.85% 22	15.38% 10	3.52	65
Learning Capacity of learners	1.52% 1	10.61% 7	33.33% 22	36.36% 24	18.18% 12	3.59	66
Compressed work schedule not adequate time to participate in e-Learning	1.54% 1	7.69% 5	32.32% 21	29.23% 19	29.23% 19	3.77	65
Average	***1.53% 1***	***9.18% 6***	***35.21% 23***	***33.14% 22***	***20.93% 41***		
						Answered question	**66**
						Skipped question	**3**

Source: Own source (Survey 2016) tabulated using the Survey Monkey Tool

The major factors that contributed to the delay in adoption of e-Learning and thus is considered as barriers for the adoption and development of e-Learning in UNECA are presented in Table 5. The barriers are broadly categorized as technological, social and individual readiness factors.

The average rating for the majority of respondents (37.99%) for the technological readiness fell within "Good" category. The availability of enabling technology is rated as "Very Good" by most of the respondents (45.95%). The majority of respondents considered readiness and willingness to cover the high initial set-up costs of e-Learning and availability of suitable skills as "Good". The respondents considered the financial capability of ECA in investing on suitable technology and the potential for the development of technological infrastructure by ECA as "Good". These results were supported by the values of the rating average. The overall rating was good, implying that the factors that delay the adoption of e-Learning are moderately significant in UNECA. This indicates that the technological readiness of ECA can be identified as barriers for the adoption of e-Learning in ECA. These are policy and investment areas that need to be redressed for laying the basis for the adoption of e-Learning.

On the social readiness factors, a similar result was obtained and the majority of the respondents rated the variables as "Good". This indicates that the issues still are not at a developed state. Variables such as the willingness of employees to quickly adopt to the self-managed concept of e-Learning, employees' awareness on the perceived benefits of e-Learning and their willingness to shift to e-Learning were all found important. As per the indication of the survey, the majority rating of "Good" implies that the variables could delay the adoption of e-Learning if not properly addressed. A significant average percentage (32.16%) rating as "Fair" also reiterates the threat from not properly addressing this issue.

The individual readiness for the adoption of e-Learning is found by the majority of the respondents (35.21%) to be "Relevant". The individual readiness is seen from three viewpoints. The negative self-efficacy, the learning capacity of learners, and not adequate time due to compressed work schedules. In the respondents' response to these variables a "Very relevant" rating (36.36%) is given to the importance of learning capacity as an hindrance to the adoption of e-Learning in ECA whereas the negative self-efficacy and learner's learning capacity is rated as

"Relevant" hindrance factor. Both ratings indicate the significance of the factors to hindering the adoption of e-Learning.

The discussion on factors focused on barriers to the adoption of international e-Learning in ECA. The result of the discussion indicated the relevance of the identified variables for UNECA. Supporting this result, interview results also exhibited same output. The summary of the interview is shown below.

4.4.2 Discussions on Findings of the Interview.

All interviewees responded that with regards to technological barrier, there is an issue interruption and inaccessibility of e-Learning due to the problem of internet connection especially for Sub Regional Offices of ECA. This has negative effects on staff in SRO's to fully commit and finish e-Learning exercise confidently. All the interviewees have a common understanding of the benefits which is participation in the e-learning exercise at own pace.

The other disadvantage shared by the respondents is the insufficient awareness creation about the e-Learning through various media. They indicated that there is uncertainty on whether or not the staff will actually do the training and finalizes it and there is a lack of mechanisms where the participant can ask questions and get feedback from peers and facilitators.

4.5. Policy and Strategy Issues for Adopting e-Learning in UNECA

The adoption and development of e-Learning requires and enabling environment which is supported with the appropriate policy and readiness. The major issues that need to be reflected in relation to policy and readiness are discussed below. It is discussed from the perspective of UNECA Staff Development staff and management and staff members with the exposure to e-Learning exercise.

4.5.1. Discussions on Findings of the Questionnaire.

The concern presented in Table 6 below are related to policy and readiness for adopting e-Learning in ECA. The specific issues on which data was collected were reliability and dependability of telecommunication system, availability of acceptance networks, education on

the benefits and practices, availability in smaller parts and availability to accommodate a wider number of participants at a time.

Table 6 Policy Issues and Readiness of UNECA to Adopt e-Learning

How do you rate the relevance of the following requirements for the development of e-learning?							
Answer Options Policy Issue and Readiness	Not relevant	Less relevant	Relevant	Very relevant	Extremely relevant	Rating Average	Response Count
Reliable and dependable telecommunication system	0	1.49% 1	20.90% 14	38.81% 26	38.81% 26	4.15	67
The availability of acceptance networks such as PCs, laptops	0	1.49% 1	22.39% 15	34.33% 23	41.79% 28	4.16	67
Educations on benefits and practices of e-learning	0	1.49% 1	22.39% 15	40.30% 27	35.82% 24	4.10	67
Availability of smaller parts of training at a time	0	5.97% 4	29.85% 20	49.25% 33	14.93% 10	3.73	67
Availability to accommodate a wider number of participants at a time	1.52% 1	12.12% 8	13.64% 9	46.97% 31	25.76% 17	3.83	66
Average	*0.30% 0*	*4.51% 3*	*21.83% 15*	*41.93% 28*	*31.42% 21*		
						Answered question	67
						Skipped question	2

Source: Own source (Survey 2016) tabulated using the Survey Monkey Tool

For the adoption of e-Learning, the factor of reliable and dependable telecommunication system is found to be "Extremely Relevant" and "Very Relevant) with similar ratings (38.81%) by the respondents which also tallies similar to the rating average. The availability of acceptance networks is found to be rated as "Extremely Relevant" (41.79%) while educations on the benefits and practices of e-Learning, availability of smaller parts of training at a time and availability to accommodate a wider number of participants at a time are rated as "Very Relevant" by the majority of respondents. This is again supported by the value of rating average. The majority of the respondents indicated the importance of the policy and readiness issues which needs to be redressed with appropriate policy preparation and application.

4.5.2. Discussions on Findings of the Interview:

The interview was conducted with four staff development unit employees and two higher officials to verify and support the findings of the questionnaire. Holding the interview was important to identify policy and readiness issues that are required for faster adoption and development of e-Learning in ECA. Almost all the interviewees from the staff agreed that they

are not receiving adequate and/or guides as to why and how the e-Learning is used. The interviewees agree that the few brochures, posters and flyers are not adequate and there should be adequate learning materials with updated information. Most of the interviewees explained that ECA still needs to work on encouraging e-Learning usage by the staff. They indicated this will contribute to the upgrading the knowledge of staff on e-Learning and will allow staff to keep abreast with the international standards and new knowledge in their specific areas of expertise. ECA still has to work more on the awareness creation on the overall benefits, usage and changing aspects in the Global UN learning direction. With regards to the policy issue, two of the interviewees acknowledged the existence of UN global policy direction but not ECA policy. They felt that the lack of policy and direction has weighed on further expansion of usage of e-Learning by ECA Staff.

The next interview was held with the Chief and Supervisor of SDU in ECA who are responsible for overseeing and leading the learning management system. The major concern was to identify the availability of rules and regulations to supervise the e-Learning in the UNECA. The Chief of SDU confirmed that there is no specific ECA policy on e-Learning nor any ECA specific strategy framework. The supervisor also confirmed that currently there is no Standard Operations Procedure for ECA to use as a rule, but the SDU follows the best practices from other regional commissions and UN Headquarter and other UN officials.

In general, the readiness that ECA requires include reliable and dependable Information and Telecommunication system, expansion of acceptance networks, creating awareness, and designing ECA strategies in line with the UN global strategy. These issues can be essential for adopting the needed e-Learning activities and for developing skills and knowledge of the staff at the global UN level.

Chapter Five

5. Conclusion and Recommendations

The findings of the factors that influence the adoption of e-Learning in the context of UNECA, the conclusion and the recommendations are presented as below.

5.1. Summary of the findings

The drivers and barriers to the adoption of e-Learning in UNECA are thus presented in groups in the research model. Under the enablers sub factors, creating competency, improving the organization‘s performance and meeting stakeholders expectations are found to be the major enablers in the context of UNECA. The barriers that are profound and need to be redressed, are readiness of technology to address the ICT challenges, especially for the SROs and the requirement of e-Learning adoption factor which are grouped under the social and personal readiness in the research model.

5.2. Conclusion

The advancement in the information and technology revolutionized the traditional face-to face and distance learning and replaced it with e-Learning which present varying types of opportunity to delivering learning and changing the way we learn. Due to globalization, learners all over the world are now uniting in terms of their choice of learning and seeking for flexible and more convenient mode of learning, which mostly now addressed by the adoption of e-Learning. Like service giving organization around the world and as part of the UN body, e-Learning is at its infant stage, which makes it important to investigate the factors that will affect the adoption in UNECA. This study was useful for exploring factors that will enhance and/or inhibit the adoption of e-Learning and enhancing/inhibiting e-Learning development in UNECA. Based on the experiences of other organizations, factors that favor the adoption of e-Learning includes the recognized benefits of delivering learner satisfaction and creating competency and improving performance of ECA. It has been established that e-Learning brings learner satisfaction as it

offers ease of use with contents that are easy to understand and follow, convenience, and accessibility to learners. It has also been proved that e-Learning assists UNECA to create competency and improved performance through enhancing quality service delivery, allowing easy adoption to ERP and enhancing efficiency by doing more with less. The major benefits of e-Learning include that it allows ECA to use globalized UN system (one-stop-shop) and enables to meet its stakeholders' expectation.

The factors that are segregated as enablers to the adoption of e-Learning have been investigated in the context of UNECA based on the survey distributed and interview conducted to selected sample population. The result proved that factors that were identified as enablers can positively enhance the adoption of e-Learning in ECA. The experts and policy makers in the Staff Development office of ECA have recognized the importance of these enabling factors for adoption of e-Learning in ECA. The fact that the e-Learning in the UNECA context is still at its infant stage despite recognizing its potential is a gap that should be redressed and this is the major conclusion from this research. The major reason for this gap is related to the fact that absence of policy and strategy direction specific to the environment of UNECA which will guide it through the identifying of gap analysis, linking of training objectives with that of ECA objective and selecting and devising e-Learning subjects geared to this end.

The drivers for the adoption of e-Learning with the learner satisfaction was not the priority area, but surviving with the budget cringe in the UN with regards to training and development of staff which has resulted from the economic recession which hit hard the donor member states resulting in the decline of their contributions to the UN. Therefore, the adoption of e-Learning with the objective of enhancing learner's satisfaction could not have been the agenda for the UNECA.

The readiness of the technology in addressing ICT challenges, especially at the SROs still remains a challenge for ECA. Like most innovative products, the adoption of e-Learning is driven by the development if Information Technology. This issue is identified as a pertinent barrier for the adoption of e-Learning.

In addition, the adoption of e-Learning requires the social and personal readiness as well. In this respect, computer literacy rate, learner's awareness, the self-managed e-Learning concept, awareness of its benefits, positive self-efficacy, dedicating adequate time for e-Learning and willingness to shift to e-Learning are essential. As noted in the outcome of the questionnaire and interviews these factors are not yet well developed and a lot has to be done to bring the required level of ability for the adoption and development of e-Learning in ECA.

5.3. Recommendations

The data analysis has indicated factors that affect the adoption of e-Learning in ECA. The analysis was made from two dimensions, which are enabling factors and inhibiting factors. Depending on these groups of factors, the ECA needs to formulate and implement policies to ensure the adoption and development of e-Learning. The enabling factors are those factors for adopting e-Learning services for the ECA to successfully improve performance and meet stakeholders' expectations. The factors that are identified as inhibitors might be properly addressed to facilitate the adopting and development of e-Learning. The following recommendations on the policy formulation level are forwarded below.

5.3.1. Expansion and Development of ICT

A strategic framework that encourages the development of information and communication technology in the offices of ECA should be in place. This policy needs to consider not only the existence but also the quality of the ICT to facilitate the interactive e-Learning training programmes.

5.3.2. Policy and Strategy Frameworks

A policy and strategy framework for the e-Learning adoption and development should be in place in ECA to enable the attainment of organizational goals and at the same time address the learner's needs. The policy, rules and regulation framework should also be in place as an

enforcing guide to ensure the adoption and development of e-Learning training programmes, and also manage the sustainability and effectiveness of e-Learning. This ensures continuity and stability of the practice of e-Learning in the organization and builds learner's confidence to engage and develop by taking self-managed e-Learning training programmes.

A policy that encourages the delivery of training programmes through various such as for personal computers, laptops, smart phones will address the expansion of outreach and increase engagement.

A strategy that encourages the availability of smaller parts of subject matters a time and the establishment and the establishment of online communities where trainees will get the chance to discuss with peers and facilitators. This may assist in addressing the issue on whether the learners' have grasped the essence of the training.

5.3.3. Social Issues

A policy that encourages computer literacy and learners' awareness about the benefits of e-Learning should be in place. The policy should allow ease of use taking into account learners' learning capacity, training needs, language use, etc.

A policy should also allow a regular dedicated learning time during work hours and set up a monitoring and evaluation mechanism.

5.3.4. Suggestion for further research

From the data collected using the questionnaire and interviews an effort was made to understand the factors affecting the adoption of e-Learning in ECA. The purpose of the study was to understand the determining factors and pinpoint issues for further analysis and policy formulation. The study result suggests that more studies should be conducted in the area. The results in this study were from cross sectional data research and this was supported by the

historical overviews of ECA's e-Learning exposures. The results of this study point that more studies should be needed as ECA will be in the future involved more in delivering training programmes through e-Learning. Since the direction of delivering training programmes more through e-Learning option, more analysis of different dimensions is essential. The issues of study are:

- Investigate whether UNECA has the right e-Learning configuration, such as appropriate organizational structure, management support and positive perception of staff towards e-Learning, to introduce and adopt e-Learning as a key skills development alternative
- A policy framework for the development of e-Learning in ECA taking into account the pertinent peculiar environmental characteristics of countries where the offices function.
- Learner behavior and perspective of e-Learning and to cater to the various learning needs
- Taking step-by-step adoption of e-Learning which can be started by blended learning approach

Reference

Abel, R. (2005) 'Achieving success in internet-supported learning in higher education: Case studies illuminate success factors, challenges, and future directions', Lake Mary, FL: The Alliance for Higher Education Competitiveness, Inc.

Alexander, S. 2001 "E-learning developments and experiences ". Education+Training 43 4/5 (2001) 240-248

Ahmadpour, A., Mirdamadi, M., Hosseini, J., and Chizari, M. (2010) 'Factors affecting the development of electronic learning in agricultural extension network in Iran', Middle-East Journal of Scientific Research 5 (4): 261-267, IDOSI Publications

Alshaher, A. (2013) 'The McKinsey 7S model framework for e-leaning system readiness assessment', International Journal of advances in Engineering &Technology, Vol.6, Issue 5, PP.1948-1966

Amos, J., Otaghogho, I., Prince, S. (2014) 'Factors hindering the implementation of E-learning', Information Technology Research Journal Vol.4 (1), PP.1-6

Armstrong, M. 2006 "A handbook of Human Resource Management Practice", 10th edition, Kogan Page Limited, PP 583-591.

Armstrong, M. 2010 "Essential Human Resource Management Practice", Kogan Page Limited, 224- 227.

Armstrong, M., Murlis, H. (2007) "Reward Management", Kogan Page Limited, 286.

Audrey R. Lipshitz and Steven P. Parsons (2008) "21st Century Issues and Challenges: E-Learning for All", Nova Sciences Publishers, Inc.

Bachman, K., (2000) Corporate E-Learning: Exploring a New Frontier [Online]. WR HAMBRECHT+CO.

Beka, A. (2000). Advantage and Disadvantage of e-Learning [online]. Academia. Available from: http://www.academia.edu/4052785/Advantages_and_Disadvantages_of_e_Learning [Accessed 20 December 2015]

Boezerooy P. 2006.E-Learning Strategies of Higher Education Institutions. CHEPS Czech Republik

Boshera, A. (2014) "Empowerment of Teaching and Learning Chemistry through Information and Communication Technologies", AJCE Special Issue (Part II)

Brown, M., Anderson, B., and Murray F. (2007) 'E-learning policy issues: Global trends, themes and tensions', In ICT: Providing choices for learners and learning. Proceeds ascilite Singapore

Bryman, A., Bell, E. (2009)" Business Research Methods", 2nd edition, Oxford University Press, Saurabh Printers Pvt. Ltd

David, O., Salleh, M. and Iahad, M. (2012) 'The impact of e-learning in workplace: Focus on organizations and health care environments', International Arab Journal of e-Technology, Vol. 2, No.4

Davies, S. (2010) 'Effective Assessment in a Digital Age', published by the Higher Education Funding Council for England (HEFCE) on behalf of JISC

Gamage, D., Fernando, S. and Perera, I. (2014) 'Factors affecting to effective eLearning: Learners Perspective', Scientific Research Journal (SCIRJ), Volume II, Issue V, 42

Gilley, A., Gilley J.W., Quatro S. A., Dixon P. (2003) "The Praeger Handbook of Human Resource Management", volume 1and 2, 25/5 (2003)272 -281, wood Publishing Group

Imran, M. 2012. Trends and Issues of E-Learning in LIS-Education in India: A Pragmatic Perspective 6 (2): 26-45

Jan, P., Lu, H., Chou, T. (2012) 'the adoption of e-Learning: An institutional theory perspective', The Turkish Online Journal of Educational Technology, vol.11 Issue 3

Jeffrey, R.2001. E-Learning: Strategies for Delivering Knowledge in the Digital Age. New York: McGraw-Hill

John P. Wilson (2005)" Human Resource Development: Learning and Training for Individuals and Organizations", Kogan Page Limited, PP 2/23

Kaur, K., and Abas, Z. (2007) 'An Assessment of e-Learning readiness at Open University Malaysia', Faculty of Education, Arts and Social Sciences, Open University Malaysia

Kevin M., Frank H., Patti S. et.al (2007). Handbook of e-Learning Strategy. CA: The eLearning Guild Publishing

Khan, B. (2005). Managing e-Learning strategies: design, delivery, implementation and evaluation. London: Information Science Publishing,

Kisielnicki, J. and Sobolewska, O. (2010)'E-learning as a strategy of acquiring a company's intellectual capital', Interdisciplinary Journal of E-Learning and Learning Objects, Vol.6

Mohammadyari, S., Sinh, H. (2014)"Understanding the effect of e-learning on individual performance: The role of digital literacy". Computers & Education 82 (2015): 11-25

Mohammadi, H. (2015) 'Investigating users' perspectives on e-learning: An integration of TAM and IS success model'. Computers in Human Behavior 45 (2015): 359–374

Moore, K., Hanfland, F., Shank, P., et.al (2007), 'Handbook of e-Learning strategy', published by the eLearning Guild

Nemeth, L. (1997), 'Measuring Organizational Learning', Faculty of Graduate Studies the University of Western Ontario

Paton, R. et al. (2005). Handbook of Corporate University Development: Managing Strategic Learning Initiatives in Public and Private Domains UK: Gower Publishing Limited

Pollard, E and Hillage, J (2001) Explaining e-Learning, Report No 376, Institute for Employment Studies, cited in Armstrong M. (2010) "Essential Human Resource Management Practice", Kogan Page Limited, PP 227.

Purnomo, S. and Lee, Y. 'An assessment of readiness and barriers towards ICT programme implementation: Perceptions of agricultural extension officers in Indonesia', International Journal of Education and Development using Information and Communication Technology (IJEDICT, Vol.6, Issue 3, PP.19-36

Ramayaha, T. (2012). System Characteristics, Satisfaction and e-Learning Usage: A Structural Equation Model [Online]. The Turkish Online Journal of Educational Technology – April 2012, volume 11 Issue 2 Available from: <http://www.tojet.net/articles/v11i2/11221.pdf>

Sloman, M. and Rolph, J. (2003) E-learning: The learning curve – The change agenda. London: CIPD., cited in Derek T., Laura H., Stephen T. (2008) "Human Resource Management", 7th edition, Pearson Education Limited, PP 431.

Torrington, D., Hall, L., Taylor, S. (2008) "Human Resource Management", 7th edition, Pearson Education Limited, PP 431-433.

Vonderwell, S., Liang, X. and Alderman, K. (2007), 'Asynchronous discussions and assessment in online learning', Journal of Research on Technology in Education, ITSC (International Society for Technology in Education) 39(3), 309-328

Watkins, R., Leigh, D. and Triner, D. (2004), 'Assessing Readiness for E-Learning', Performance Improvement Quarterly, Volume 17, Number 4, PP. 66-69

Wang, M. and Hwang, M. 2004. 'The e-learning library'. 22 (5) : 408 – 415

Welle-Strand, A. and Thune, T. (2001) E-Learning policies, practices and challenges in two Norwegian organizations, Evaluation and Program Planning 26 (2003) 185-192.

Yang, S. and Lin, C.(2011)'The effect of online training on employee's performance', Journals of Computers, vol.6, No.3

Http://www.iseek-addisababa.un.org - The UN Intranet iSeek

A Guide for Mangers in Addressing and Resolving: Underperformance issued by the New York Office of the United Nations, April, 2011; United Nations Competency Development Practical Guide, issued by the Human Resources Management, New York, April 2010.

Available from: http://www.internettime.com/Learning/articles/hambrecht.pdf.pdf [Accessed 04 March 2016].

Umoja: An introduction for staff. (2015). Retrieved from https://www.unumoja.net/ [Accessed 15 February 2016].

UNECA Knowledge Generation and Delivery Strategy, 2013.

Appendix

Appendix 1 – Survey Questionnaire

Date: 10 May 2016

Dear Respondents,

The purpose of this questionnaire is to gather primary data for a postgraduate degree study, which I am pursuing at the Addis Ababa University School of Commerce. I would like to kindly invite you to participate in my project by responding to the attached questionnaire with a reliable information.

The topic of my study is on "Factors Affecting the Adoption of e-Learning in the UNECA and effect on Performance". The purpose of my study is to have a better understanding on how to adopt and develop e-Learning in UNECA. Your valuable inputs which I am hoping to get through this questionnaire, will help to meet the intended purpose of the study.

I would like to assure you that all information obtained in this questionnaire will be treated confidentially and will be used solely for a research purpose, and under no circumstances it will be applied for commercial and business purposes. No response will be identified in isolation. Finally, I would like to express my appreciation for your time, patience and diligence in responding to this questionnaire and for allowing me to fulfill my objectives.

Sincerely,

Welela Siyoum

Part I – Personal Information

1. Gender

   ☐ Female
   ☐ Male

2. Age

   ☐ 21 - 30
   ☐ 31 - 40
   ☐ 41 - 50
   ☐ Above 50 years

3. Highest level of education

   ☐ High School Certificate/Diploma
   ☐ Certificate/Diploma
   ☐ Bachelor's Degree
   ☐ Master's Degree
   ☐ PHD Degree

4. Current Division/Section

5. Employment Category

   ☐ Professional
   ☐ National Officer
   ☐ General Staff

6. Employee of ECA for

   ☐ Less than 1 year
   ☐ 1 – 5 years
   ☐ 6 – 10 years
   ☐ More than 10 years

Part II – Enabling and Disabling Factors

7. How do you rate the relevance of training cost reduction as drivers for the adoption and development of e- Learning in ECA?

	Extremely relevant	Very relevant	Relevant	Less relevant	Not relevant
Reduces training costs for ECA	☐	☐	☐	☐	☐

8. How do you rate the relevance in increasing flexibility as drivers for the adoption and development of e-Learning in ECA?

	Extremely relevant	Very relevant	Relevant	Less relevant	Not relevant
Increases flexibility	☐	☐	☐	☐	☐

9. How do you rate the importance of e-Learning to the following factors related to improving your performance

	Extremely relevant	Very relevant	Relevant	Less relevant	Not relevant
It is easy to use	☐	☐	☐	☐	☐
It is convenient to use	☐	☐	☐	☐	☐
Contents are easy to understand and follow (less effort)	☐	☐	☐	☐	☐
It is accessible (24 by 7 anytime)	☐	☐	☐	☐	☐
It saves time (travelling to class)	☐	☐	☐	☐	☐
It offers cross-border training option (access training anywhere, anytime)	☐	☐	☐	☐	☐

10. How do you rate the significance of e-Learning in creating competencies and improve performance of ECA?

	Extremely relevant	Very relevant	Relevant	Less relevant	Not relevant
It enhances its quality of service delivery	☐	☐	☐	☐	☐
It allows ECA to achieve its goal (Africa's Transformative Agenda)	☐	☐	☐	☐	☐
It allows to easily adopt new work systems (ERP)	☐	☐	☐	☐	☐
It allows to equip employees with the required knowledge	☐	☐	☐	☐	☐
It allows to achieve the UN's direction of doing more with less.	☐	☐	☐	☐	☐
It allows ECA to use the globalized UN system of one data source and system seamlessly (one-stop-shop service)	☐	☐	☐	☐	☐

It enables to meet its stakeholders expectations	☐	☐	☐	☐	☐

11. How do you rate the technological readiness of ECA for e-Learning?

	Extremely good	Very good	Good	Fair	Not good
The availability of enabling technology in ECA	☐	☐	☐	☐	☐
The availability of suitable skills	☐	☐	☐	☐	☐
The financial capability of ECA in investing on suitable technology	☐	☐	☐	☐	☐
The efforts of ECA towards setting up infrastructure	☐	☐	☐	☐	☐
Readiness and willingness to cover the high initial set-up costs of e-learning	☐	☐	☐	☐	☐
The potential for development of technological infrastructure	☐	☐	☐	☐	☐

12. How do you rate the social readiness for adopting e-learning?

	Extremely good	Very good	Good	Fair	Not good
Employees willingness to quickly adopt to the self-managed concept of e-learning	☐	☐	☐	☐	☐
Employees awareness about the perceived benefits of e-learning	☐	☐	☐	☐	☐
Employees willingness to shift to e-learning	☐	☐	☐	☐	☐

13. How significant are the factors that hinder the adoption of e-learning based on the following aspects?

	Extremely Relevant	Very Relevant	Relevant	Less relevant	Not Relevant
Personal judgment of one's capabilities in organizing and executing courses of action to attain set goals	☐	☐	☐	☐	☐
Learning Capacity of learners	☐	☐	☐	☐	☐
Compressed work schedule not adequate time to participate in e-Learning	☐	☐	☐	☐	☐

14. How do you rate the relevance of the following requirements for the development of e-learning?

	Extremely relevant	Very relevant	Relevant	Less relevant	Not relevant
Reliable and dependable telecommunication system	☐	☐	☐	☐	☐
The availability of acceptance networks such as PCs, laptops	☐	☐	☐	☐	☐
Educations on benefits and practices of e-learning	☐	☐	☐	☐	☐
Availability of smaller parts of training at a time	☐	☐	☐	☐	☐
Availability to accommodate a wider number of participants at a time	☐	☐	☐	☐	☐

Part III – Open-ended questions

15. What other factors do you believe would contribute to the adoption e-learning in ECA?

_____

_____

_____

16. What other factors do you believe would contribute to the development of e-learning in ECA?

_____

_____

_____

17. What factors do you think needs to be corrected by ECA to quickly adopt e-learning?

_____

_____

_____

18. What factors do you think needs to be redressed by policy to quickly adopt e-learning in the commission?

_____

_____

_____

Appendix 2 – Interview Questions for Training Section Employees

Main question: Why ECA adopts e-learning?

1. For what purpose do you usually use e-learning?
2. How do you explain the efficiency of the e-learning you are using for the last five years in your opinion?
3. Have you ever used e-learning outside of the normal working hours of ECA?
4. What do you think would be the relative advantage of e-learning as compared with the traditional classroom training programmes in your opinion?
5. How do you explain about the accessibility and flexibility of the e-learning services as compared with other traditional instructor led classroom training in ECA?

Main questions: What are challenges, risks and consequences incurred by adopting e-learning?

1. How do you rate the accessibility and reliability of the e-learning services you are using currently, as compared with other conventional learning methods that are rendered by the Commission? What do you think will be the relative disadvantage of e-learning as compared with traditional classroom training programmes?
2. How do you think about the cost of e-learning from your perspective as compared with other similar traditional classroom training programmes?
3. How was your first time experience in participating in e-learning in terms of simplicity and /or complexity?
4. How do you find the "self-monitored" concept of e-learning? Is it compatible to your learning needs, value or do you prefer instructor led training programmes?
5. How do you rate the ECA's efforts in creating awareness and education about e-learning services to employees?

Main questions: Policy issues in adopting e-learning services in ECA?

1. Do you get adequate support or manuals that guides on how and why to use the services?
2. What do you think ECA needs to do to encourage e-learning services usage?
3. What do you think the learning policy be to encourage e-learning services in ECA?

Appendix 3 – Interview for Staff Development Unit (SDU) Officials

Main question: as to the existence of policy and/or strategy framework to ensure continuous and reliable e-learning training programmes in ECA?

1. Is there any policy/ strategy framework that governs the e-learning in ECA?
2. Does the SDU have a clear and specific rules and regulations that supervise e-learning training programmes in ECA?
3. How do you rate the ECA's effort to have a rules and regulations that help to manage the pertinent slacks and to ensure stability of e-learning usage as a main training delivery means?

Declaration

I, the undersigned, declare that this thesis is my work and all sources of materials used have been duly acknowledged.

Name_____ Signature_____

Place_____ Date of Submission_____

This thesis has been submitted for examination with my approval as a University Advisor.

Signature_____

Name_____