AN INVESTIGATION TOWARDS E-LEARNING AT THE WORKPLACE: A CASE STUDY OF UNEP STAFF AT GIGIRI

BY

JOSEPHINE NYOKABI MWANGI

UNITED STATES INTERNATIONAL UNIVERSITY AFRICA

SUMMER 2014
STUDENT’S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

Signed: __________________________ Date: __________________________

Josephine Nyokabi Mwangi (ID. 640278)

This project has been presented for examination with my approval as the appointed supervisor.

Signed: __________________________ Date: __________________________

Mr. Dalton Ndirangu

Signed: __________________________ Date: __________________________

Dean, Chandaria School of Business
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ABSTRACT

The purpose of the study was to investigate the adoption and use of e-learning at the workplace with a focus on UNEP staff members working in Gigiri. The study addressed the following objectives. Identify the perceptions towards e-learning initiatives; highlight the organizational challenges faced in adopting and using of e-learning practices and finally identify factors that mostly influence the adoption of e-learning in work places

The research design used was descriptive survey in nature where the total population was 250 out of which a sample size of 80 respondents was drawn to participate in this research. The probability method was used to select the employees from senior management, administration, finance, human resource, programme management and information technology departments across the organization. A stratified sampling technique was used to come up with categories as indicated above. Questionnaires specifically designed for the employees were adopted for data collection. A total of eighty (80) questionnaires were dispatched and sixty two (62) responses were received, giving a response rate of 75%.

This research adopted the descriptive survey design which was used to investigate e-learning at UNEP. The descriptive survey design is concerned with studying subjects that have already been exposed to the independent factor and those who have not. On the other hand, the descriptive technique helps in measuring who, what where, when, or how much of an activity. The research design adopted in this study used both quantitative (use of graphs & charts) and qualitative techniques to aid in accomplishing the set objectives. Quantitative approach in this sense was designed to come up with numerical data and results.

The collected data were analyzed using both quantitative and qualitative approaches. Quantitative data from the questionnaire were analyzed with the help of SPSS and presented using descriptive statistics. Qualitative data collected was analyzed using content analysis approach and reported in a narrative Other areas of concern in qualitative approach include individual views of the respondents and human phenomena such as attitudes and emotions.
The findings regarding the first research objective on the assessment of perceptions towards e-learning initiatives indicated that (90%) of the interviewed employees said that they agreed that e-learning is the most effective tool for undertaking training and development programmes for the organization. (58%) of the respondents felt that e-learning practices should be designed to cater for organizational issues that e-learning could address while another 54% of the respondents rated e-learning programs as very important in in the day-to-day work activities of the organization, (39%) indicated that they felt that it was moderately important while 5% indicated that it was not important.

The findings regarding the second research objective on organizational challenges facing the adoption and use of e-learning practices revealed that (55%) of the respondents were of the view that work place e-learning applications fail to meet the needs of learners hence not motivating employees to learn, while 45% disagreed. Regarding people interaction (76%) of the respondents said that they felt that e-learning cuts on the social and cultural interaction of people while another (81%) did not agree that e-learning should be replaced by human instructors.

Regarding factors mostly influencing the adoption of e-learning in work places, the findings showed that 53% of the employees interviewed attributed the lack of interactivity as the single-most important factor to overcome learner resistance to workplace e-learning, while only 6% attributed the same to assumed poor quality irrelevance. Concerning financial implications of implementing e-learning practices, 65% of the staff members said that they agreed that initiating e-learning programs is an expensive affair which has financial implications on the organization.

The study acknowledges the importance of using e-learning in the workplace as such; it recommends the following to the organisation on the perceptions of e-learning initiatives; future development of e-learning programs should focus not only on technical issues of design but also on organizational issues. The study also recommends that the e-learning research should be based on the context of use and application at workplace instead of formal courses in educational institutions.

In addressing some of these challenges, UNEP can then seek to maximize the consistency and efficacy of delivering on UN projects as part of its efforts to implement the
Millennium Development Goals (MDGs). E-learning at this point can be benchmarked at the preferred tool to advocate for these MDGs and demand that the UN development system increases coherence and effectiveness of its operations in different countries. The end goal will be to work towards developing a UN e-learning system that delivers efficiently and provides more for its poorest and most disadvantaged.
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My Special thanks go to colleagues at UNEP who volunteered to participate in the data collection process and took their time and assisted me in gathering as much information as possible.

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Thank you and may our good Lord bless you all abundantly.
DEDICATION

I dedicate this work to the Almighty God for giving me the strength and wisdom to make it this far. A special tribute also goes out to my family members who have stood by me throughout this study giving me the perseverance to make it to the end.
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<tr>
<td>AICC</td>
<td>Aviation Industry Computer-Based Training Committee</td>
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<td>CB</td>
<td>Capacity Building</td>
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<td>CBT</td>
<td>Computer-based Training</td>
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<td>CDs</td>
<td>Compact Disks</td>
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<td>f2f</td>
<td>face-to-face</td>
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<td>ICT</td>
<td>Information, Communication and Technology</td>
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<td>IMS</td>
<td>Instructional Management Systems</td>
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<td>Learning Management System</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>SCORM</td>
<td>Sharable Content Object Reference Model</td>
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<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNEP</td>
<td>United Nations Environment Programme</td>
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Problem

The concept of e-learning started in the 1930s, during World War II when there was a need for a massive training of the army troops. According to Fe-ConE Team (2008), this created a massive instructional problem and training of new recruits was initiated thereby unprecedented level of mastery gave rise to sophistication of new weapons. Conway (1997) states that in 1945 Skinner developed the first learning system called the teaching machine which consisted of a method in which teaching was brought to learning through information learned. Fe-ConE Team (2008) acknowledges that the didactical model of Behaviorism spanned from the late thirties until the early seventies when the personal computer was introduced.

Earlier the personal computer was introduced and then improved upon the mid to late seventies, where learning with computer was mostly used for simulations in mathematics and science. The cognitive model spanned from this time until the early nineties. Conway (1997) state that his is a learning approach where the process of learning is comparable with the way a computer is working and thereby emphasizes students' ability to unravel everyday practical difficulties. Neo (2005) highlights that globally the computer-based training saw its beginning as the technological advances increased. In the late eighties and early nineties during constructivism, a new learning model was introduced. This philosophy of learning was founded on the premise that, by reflecting on our experiences of the world we live in, our own understanding is constructed.

Learning Management Systems (LMS), such as Blackboard, were launched and used predominantly in educational institutions and during this time learning standards such as Sharable Content Object Reference Model (SCORM), Instructional Management Systems (IMS) and Aviation Industry Computer-Based Training Committee (AICC) were in the infancy of their development. According to Neo (2005), these fundamental standards have helped determine and define the future of e-learning as we know it today. According to Lodhia (2006), education and training have become strategic tools that a society needs to continuously apply in order to sustain a global competitive advantage.
and create better standards of living or development. Africa has not been left behind and has been seen to embrace technology in all its facets. E-learning Africa Report (2012) acknowledges that as many African economies continue to experience rapid economic progression coupled with access to mobile phones, internet connectivity and social media are major drivers of change transforming learning and skills development. Africa is the most dynamic e-learning market in the world. Over the past two years, many countries in Africa have embarked on new government-backed initiatives to integrate learning technology into education and training. For example, the Kenyan government has embarked on an ambitious digitization plan for the nation's academic system.

According to a press release by Plato (a supplier in East Africa), Adkins (2013) claims that the decision by the government to create and deploy digital learning nationally will result in massive demand for educational material, computer hardware and software, internet bundles, consultancies and a variety of communication solutions. Nonetheless, Africa still faces numerous challenges in meeting its populations’ basic needs and it is essential to avail relevant and customized content specific to its needs. Omwenga, Waema and Wagacha (2005) cite that a blend of different types of information and communication technologies can be used in innovative ways in order to resolve some of these limitations. However, the same technology brings about other challenges such as the costs that are associated and change of attitude and training on the part of the e-content developers).

However, it is encouraging to know that e-learning is becoming an established practice in a continent that is plagued with a history of social and political instability. On the flip side, e-learning council (2012) notes that there are certain problems in Africa that poses a threat to the successful implementation of e-learning practices. To begin with, there is a severe lack of qualified teachers. E-learning council (2012) further reiterate that the few available graduate teachers also lack adequate teaching material to train and become educators. E-learning offers hope in that programs can be quickly and creatively developed and disseminated to such groups to ensure a steady flow of information. However, Botturi (2007) emphasizes that it's important for educational content circulated via e-learning platforms is tailor-made to suit local education requirements as many Western programs offered to Africa are developed without knowledge of the local curriculum, rendering much of this information irrelevant. According to Coman (2002),
another big problem hindering e-learning initiatives in Africa is the lack of infrastructure. It is worth noting that most higher education institutions on the continent utilize the broadband technology which poses a threat to information dissemination because of poor infrastructure. He further proposes that more e-learning programs should be developed using mobile devices, given that mobile networks are now more extensive in Africa than broadband connections.

In this regard, Steen (2008) highlights that more organizations worldwide as well as those in Africa are making attempts to implement e-learning strategies to promote education. The most obvious advantage as stated by Tochermann (2008), is the convenience that it presents, that is, it can be done at your pace, which is a huge advantage for busy people. At United Nations Environmental Program (UNEP) offices in Gigiri, technology is part and parcel of the work culture which supports many of the administrative support functions. Human resource recruitment, procurement, travel logistics and every day administrative tasks all heavily rely on various programs and software meant to enhance work efficiency.

Unfortunately, in terms of education development, a majority of staff members are not keen on taking up training courses posted on e-learning platforms and are very evasive of them despite such initiatives being free of charge. According to Tochermann (2008), e-learning courses are designed to allow the participants to fit study around their work schedules and learn from the comfort of their computers whilst still achieving high quality training. Invaluable group consultations, mockups as well as opportunities for global networking and collaboration amongst participants are facilitated through the online learning platform.

Other unique opportunities created by the advent and development of e-learning are more efficient training of a globally dispersed audience; reduced publishing and distribution costs therefore web-based training becomes more popular (Kruse, 2002). Understandably, the typical notion is e-learning is associated with high end devices (Growth of e-learning in Africa, 2002) and this could be the reason why many staff members are not ambitious to undertake e-learning programs. Verheijen (2000) mentions that gradually, there is rising appreciation amongst public administration practitioners and scholars that capacity
building in ICT is at the Centre of the public administration and that, without it, even past achievements could be reversed.

Similarly, it is evident that Human Resource can play more strategic role in the offering service to the public since Human Resources Management impacts and influences the policies, practices, and systems that influence both employees and the members of public capacity, attitudes and behaviors in adopting and utilizing e-learning in public service delivery domains. According to Yambesi (2012), it is evident that human resources, knowledge and skills are crucial in exercising e-learning practices. However, the question is how those human capacities should be developed and reside, and the importance of ensuring that they are sustainable.

The answer to the above question would be to implore capacity building which is the ability of organizations, staff, and societies to execute tasks, resolve problems, plan and deliver on objectives in a sustainable manner. Ley (2005) defines capacity building as the process through which abilities to do so are achieved, reinforced, adapted and sustained over time To understand this context, institutional and administrative capacity can be defined as the set of attributes related to both structural-systemic attributes and human capital or resources that, collectively, define the organization’s ability to perform its mandated functions(Growth of e-learning in Africa, 2002).

This research sought to advocate e-learning as the most ideal and cost effective mode of disseminating information and providing education and training to staff members at UNEP. The sole purpose of this research is to highlight the opportunities and challenges facing the integration of e-learning platforms in UNEP for education purposes and personal development as opposed to the traditional face to face teaching methods. This research analyzed these challenges and looked at the unutilized opportunities that e-learning presents.

1.2 Statement of the Problem

Much debate surrounds the question of whether introducing technology into Education and promoting e-learning has instigated positive change across the continent. Whilst
proponents assert that efforts of the last decade have resulted in a new educational landscape, James and Miller (2005) states that critics suggest this change is unproven and that a structural shift, especially within formal educational frameworks which continuously linger as a long term challenge. However, given that this is a globalized environment where technology is part of our everyday life, e-learning practices at the workplace have not been fully embraced as a means of fostering education and training initiatives for staff. Therefore many senior executives are hesitant to use e-learning as a tool to educate their employees. According to Ettinger, Holton and Blass (2006a), some of the reasons for not using e-learning are lack of sufficient knowledge, budgetary constraints, lack of IT infrastructure and staff reactions to the idea.

Therefore it is crucial for organizations to understand the limitations of the e-learning environment and work it into a well thought out plan to implement e-learning in order to succeed. In addition, Ettinger et al.(2006b) acknowledge that the lack of knowledge, budget constraints, information technology facets, staff reactions and e-learning standards are probably the most limiting in that, the standards create difficulties since portability of content from one system to another is a challenge. These standards even though over time been developed by various professional organizations, current e-learning environment offer no regulations as to the standardization of products, thus there is a difficulty for content and data to be shared between different e-learning applications. Once an organization uses a particular delivery system and licenses with a third-party, Singh and Reed (2002), emphasizes that it cannot transport the content to another system since content prepared for one system cannot be transferred easily.

According to Ettinger et al., (2006a), it is because of these limitations that e-learning requires a great deal of motivation on the part of the employee. Although e-learning is self-directed, motivation can be a legitimate problem since the demanding work environment makes it harder for training to take place. Féraud (2005) states that it is therefore vital that organizations take this into consideration and promote the fact that the e-learning opportunity is available 24 hours a day, 365 days a year, and it is possible to learn from work and home at the individual’s own pace. Ettinger et al. (2006a) pin points that the availability and convenience of e-learning could outweigh employees’ lack of motivation thereby making it successful but a cultural change is needed on how training and learning occurs and most importantly, how it is delivered.
Kotter (1996) points out that, the most difficult limitation to overcome in implementing e-learning is resistance when referring to culture in his book *Leading Change* where he defines culture as the norms of behaviour and shared values among a society. Therefore, if the organizational culture has a normal way of acting that is familiar amongst employees, Ettinger et al. (2006a) states that naturally they will continue to act in that way. But if the organizational culture has not been introduced to e-learning, they will lean towards resistance and not want to even try e-learning. In addition, the greatest obstacle for organizations is getting staff to adopt e-learning.

Ettinger et al. (2006a) and Mitchell and Honore (2007), acknowledge that previously, learning methods occurring in an organization were ingrained in the culture and therefore if learning has been static then it must be provided in books or documentation, or even delivered by a stand up trainer and the organization need to facilitate a cultural change on how learning occurs. For e-learning to be successful, cultural change is needed about how training and learning happens and, most importantly, how it is delivered. According to Lee, Tseng, Liu F. and Liu S. (2007), another reason why e-learning may not be embraced by employees and cause them to resist is the social interaction of training sessions. For instance, some people prefer the few days offsite plus its social pecks and hence may object to learning in an alternative way. If the behaviour within the corporate culture is friendly and open then the likelihood to classroom learning would prevail.

This research sought to understand the negative perceptions associated with this trend and strive to highlight e-learning as one of the best drivers of both educational and personal development.

**1.3 General Objective**

The purpose of the study was to investigate the adoption and use of e-learning at the workplace with a focus on UNEP staff members working in Gigiri.

**1.4 Specific Objectives**

The specific objectives of this study were to:

1.4.1 Identify the perceptions towards e-learning initiatives
1.4.2 Highlight the organizational challenges faced in adopting and using of e-learning practices

1.4.3 Identify factors that mostly influence the adoption of e-learning in work places

1.5 Significance of the Study

This research pinpointed the relevance of e-learning programs at the workplace as important drivers of knowledge and information sharing. The practical knowledge that the study generates will be used to design e-learning initiatives at UNEP and assist in the improvement planning of future programs. Lessons learnt from this research will be used to improve the overall service delivery of e-learning programs and help test theoretical concepts and practices in actual knowledge management problem solving situations. Beneficiaries of this study include:

1.5.1 UNEP Management

The management of UNEP will be enthusiastic to learn about different ways of improving work performance through initiating constructive e-learning programs for its staff.

1.5.2 Staff Members

Acquiring new skills and gaining expertise in one’s work is very crucial because it helps develop employees’ potential and ability to undertake his duties. Therefore, e-learning is viewed as an ideal tool to propagate a continuous learning culture at the workplace.

1.5.3 Researchers and Scholars

This study will make a unique contribution to existing knowledge in regards to e-learning practices in the industry as well as institutions of higher learning.

1.6 Scope of the Study

The research focused on United Nations Environment Programme (UNEP) staff members, whose population is about 4,000 staff working in the Nairobi duty station. This study took place over a six-month period starting from October 2013 to March 2014.
According to UNEP (2014), the focus was limited to perceptions of e-learning among the staff of UNEP especially the Nairobi duty station whose training arm serves some 27,000 beneficiaries annually by conducting more than 400 capacity development and research activities around the world. The UN system training arm seeks to deliver innovative training and conduct research on knowledge systems to develop capacities of beneficiaries in the fields of Peace, Environment, Governance, Diplomacy and Security. Many UNEP divisions offer training on themes relevant to their respective mandates, however none of them offers the expertise on how best to deliver training and capture thus retain the knowledge and build upon it.

However, several divisions are concentrating on the means of delivering adult training and professional learning; how to monitor and evaluate their impact on behaviour and how to capitalize on capacity development. Thus the study looked at the transformational process initiated in 2007 with the goal of upgrading institutional structure and enabling the institute to increase its future contribution towards addressing emerging training and capacity developments needs of UNEP employees.

1.7 Definition of Terms

1.7.1 e-learning

According to Ley (2005), technology refers to the use of electronic media and information and communication technologies (ICT) in education. Garrison (2011) defines e-learning as broadly inclusive of all forms of educational technology in learning and teaching.

1.7.2 Information and Communications Technology (ICT)

Okpurukhre and Esiekpe (2013) defines ICT as an extended synonym for information technology (IT), but is a more specific term that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information.
1.7.3 Learning Management System (LMS)

According to Nichols (2003), LMS is a collection of e-learning tools available through a shared administrative interface. A learning management system can be thought of as the platform in which online courses or online components of courses are assembled and used from.

1.8 Chapter Summary

This chapter addresses the issues of background, purpose, justification and scope of the study. e-learning programs are important assets to any organization. The study looked at the objective of examining the perceptions towards e-learning initiatives among staff at the work place and puts forth research objectives in relation to the perceptions towards e-learning initiatives; organizational challenges faced in adopting and using of e-learning practices and the factors which mostly influence the adoption of e-learning in work places.

In the next chapter, a review of literature was done on the topic to present the key components of the research objectives. The following chapters cover research methodology, results and findings while the last chapter includes the discussion, conclusion and relevant recommendations based on the research findings.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

The aim of this chapter is to examine on what other researchers have done in the area of e-learning programs at workplace. It will discuss the identification of the perceptions towards understanding e-learning initiatives, the organizational challenges faced in adopting and using of e-learning and sought to identify factors that mostly influence the adoption of e-learning in work places. Finally a summary of the chapter gives a brief of what has been covered in the chapter.

2.2 Perceptions Towards Understanding e-learning Initiatives

2.2.1 The e-learning Platform

e-learning refers to the use of computer system technology, primarily through the internet to communicate and relay information to individuals (Ley, 2005). Nowadays, e-learning is developing as a common methodology for training and development in organizations because of its flexibility and accessibility (Rosenberg, 2005). He goes on to further state that regardless of this emerging trend of using e-learning in the workplace; nearly half of these applications inhibit employees from learning. This is because when it comes to e-learning, considerable gaps exist between the needs of the learner and those of the organization.

According to Tynjala and Hakkinen (2005), it has been argued that while specific knowledge can be acquired by taking part in e-learning initiatives, more frequently e-learning is viewed as not helpful given that the knowledge learned is not substantial enough to boost task performance. Evidently by and large e-learning is designed by organizations without achieving their vision and mission. In addition, Tynjala and Hakkinen (2005) note that the existing progression of e-learning is inclined towards devising technological concerns and disregarding didactic and managerial issues which are essential for efficient programs in e-learning.
Further they point out that the ascendancy of technology-oriented approaches has made the performance of e-learning to become ineffective in achieving goals thereby alleged to be poor in quality and design. One of the biggest challenges in discussing e-learning comes from different understandings of this topic.

According to Siemens (2004), this is brought about by when most people attach their everyday experiences and career to their conversations, offering an good image of e-learning that replicates what they have encountered. Therefore, for a teaching instructor e-learning often means designing courses or learning materials focused on achieving the set objectives within the larger scope of program implementation (Siemens, 2004). Isaacs and Hollow, (2012) note that, in Africa seeking ways to break into the globalizing world, it has to utilize the means necessary to steer its own growth.

Therefore, this cultural, traditional and historical information is essential and should be accorded top priority in the education system to enable citizens acquire the identity they need to organize and establish their lives in this 21st century. According to Kylli (2005), intellectual development in these areas, significantly science and technology must be pursued and strengthened. The study highlighted that the core problem e-learning research emanated from its foundation on prescribed modules in learning institutions. On the other hand, since learning in organizations and educational institutions is distinct, the capacity building in workplaces has to be founded on deliverables with the intention of achieving organizational goals. This is because contextually, practical application in workplaces is based on learning put into practice.

World Bank (2011) concedes that in most organizations environments, the knowledge among employees is shared is more communally and becomes essential as part of the organization’s performance. It is therefore vital to note that workplace learning is changing. The UN Environment Programme Executive Director, Achim Steiner, welcomed the ingenuity by saying, learning through technology-supported creates remarkable potential to address the capacity development needs of a wide range of beneficiaries in developing countries. He further added that, the work of the UN country teams will ultimately be strengthened through this collaboration and member states will be better served (UNEP, 2014).
According to Easterly (2009), the aim is to maximize coherence and effectiveness among UN projects at the country-level as parts of efforts to implement the Millennium Development Goals (MDGs). Therefore in becoming enlightened on the contemporary trends of learning in workplaces, Zorba (2013) highlights the history as noted below.

### 2.2.2 The History of Workplace Learning

Workplace Learning is rapidly and continuously changing. To understand what and why this is happening today requires to first to take a look back at the past. Below is a potted history of workplace learning to the present day. There have been a number of identifiable stages in the history of workplace learning as shown in Fig 2.1 below.

![Fig 2.1: Stages 1-3 of workplace learning](image)

Source: Mills, Pyrch and Sawchuk, 2003

#### 2.2.3 Classroom Training

Previously in workplaces learning took a conventional approach where the employees were trained in classrooms separately from their duty stations (Schank, 1997). This type of approach according to Rennie and Morrison (2012), confirms that the training was a point of reference to all other forms of learning. The advantages in this approach was that the student is socially involved with other coworkers enhanced by the presence of a mentor.

On the other hand, the disadvantage in using this approach is that all participants have to move at the same pace (Ellis, 2007). For many people, all too often, training of this kind is sometimes considered to be a holiday from the day job as working and learning in many cases are considered to be quite separate activities. In the recognition of the
disadvantage of classroom learning even though many organizations still continue to use the approach, many have adopted e-learning in their trainings.

2.2.4 e-Learning

As a matter of fact, the roots of e-learning are historically traced back in the 1980s traced back with the introduction of technological gadgets where learning was supported by training in film, TV and videotapes (Kylli, 2005). But it was in the 1990s that saw the emergence of the World Wide Web, which propagated the use of online learning where the Web was used to disseminate learning across the globe (Scott and Carrington, 2011).

Originally internet access was mostly in higher educational institutions thereby making online learning online learning activities more established. However, in the 90s, online transfer of knowledge become fashionable as organizations adopted the use of online approaches as a way of training their employees using cost effective means (Kylli, 2005).

Additionally the climax of technological advancement gained huge interests in the year 2000 with most things adopting the “e-” slogan from “e-business to “e-learning” (Maglajlic, 2010). It is in the following year, 2001 that the Chief Executive Officer of Cisco Systems, Mr. John Chambers predicted that e-Learning would be the next killer app: something that would make email look like a rounding error (Wild, Griggs and Downing, 2002).

Rennie and Morrison (2012) acknowledge that e-learning practices that were being promoted at that time brought about great benefits. Among the benefits were the reduction of time and travelling distances in attending training workshops. All one needed was to have access to learning, night or day, anytime at home or at work. This meant that an employee could take the learning at their own pace taking responsibility of when to do it and how much to do.

Additionally e-learning took a huge turn as it developed into profitable businesses in the rise of online libraries and companies started offering courses online and introduced learning management systems ((Wild, Griggs and Downing, 2002). According to Bates and International Institute for Educational Planning (2001) back in 2001 Cisco’s definition of e-learning encompassed education, training, communication, collaboration
and knowledge sharing most organizations focused on the packaging of training content where the term e-learning is the case for groups of people tantamount with online courses

Despite the early fanfare surrounding e-learning, soon people became disenchanted with the e-learning practice and many online participants were dropping out of the course. This caused concern among managers and investing on learning management systems became tedious and costly thus was against the intent of organizational deliverables. As a result classroom based learning was confirmed as the concept which was superior among employees (Wild, Griggs and Downing, 2002).

Maglajlic, (2010) states that this was because many people were used to a classroom teacher being physically present especially in the African context where the social aspect of culture bore more fruit by adding value to the whole process therefore just working through an online course wasn’t enough. The online courses were not well designed or developed therefore making the employees feel they were getting a raw deal thus become less enthusiastic about sitting at their computers ploughing their way through hours of online courses. Kotler and Caslione (2009) emphasize that consequently as time went on a number of new training approaches emerged to address some of these concerns, especially the prerequisite for social interaction

2.2.5 Blended Learning

In definition blended learning is a production of solutions that combine learning forums that participants are physically present with online basics to form a merge (Osguthorpe and Graham, 2003). In merging solutions, it is not obvious since there are a number of dependants involved. These include the profile of the learner, problem to be tackled and the resources. In reality, hybrid a phrase used in education is another name for blended learning and more widely meaning the delivery of learning using diverse methodologies and designs (Garrison, 2003).

According to Rennie and Morrison (2012), in circumstances of a learner not able to be physically present especially the learning locations distributed thus not facilitating same time tutoring, then it is known as live e-learning which is distinct from self-paced learning. Due to these reasons Garrison (2003) notes that, organizations advanced learning at workplaces to be integrated with content which had both online features blended with physical learning. Also the LMS was included so that the participants
activities would be reported and their results and completion of modules would be supported by live e-learning using web-conferencing systems. However, O'Neill (2004) states that the most important influential aspect correlated to the conceptualization of workplace learning and the recognition that the significant feature is learning informally which has been ignored for a long time.

2.3 Organizational Challenges Faced in Adopting and Using of e-learning

2.3.1 e-learning Practices

Wang (2010) point out that, there has been low performance in employees motivation in spite of the use of e-learning thus not achieving the aim of the applications of technology in the workplace. Therefore developing systems that go hand in hand with organization’s needs are to strategized so as to address the problem.

According to Maglajlic (2010), investigating the problem by identifying the fundamental elements of the workplace learning environment comprising of the learning material, the organization, the learner, the social context and their relationships can result to the discovery that workplace e-learning should align individual and organizational learning requirements that connect work performance and learning while supporting social interaction among individuals.

Therefore to attain this Cook, VanSant, Stewart and Adrian (1995) suggested that organizations have to use the performance-oriented approach which looks at key performance indicators utilizing the opportunity to clarify organizational goals, thereby making sense of work context and requests on work performance. It is in the interest of the organizations that these help employees set up rational learning objectives and enhance their learning process. Rennie and Morrison (2012) recognize using an archetype system approach is one way in which experimental demonstrations are used so as to effective examine the approaches.

2.3.2 Benefits and Drawbacks of e-learning

Mouzakitis (2009) illustrates that, the significant shift towards e-learning is clearly motivated by the various advantages it offers. Alkharang and Ghinea (2013), point out
that despite the fact that e-learning has received much commendation, it remains that human instructors will never be replaced completely by computer systems.

Nevertheless, establishing the benefits achievable through e-learning is important since it is recognized that some of the key benefits include the following; reduction of overall cost (instructors’ salaries, travel costs, and meeting room rentals), access to quality education, provision of convenience and flexibility, a reduced environmental impact through lower paper use, energy consumption, and higher retention (Gill, 2000; Roy, Potter, and Yarrow, 2008).

According to Collins, Buhalie, and Peters (2003), although the benefits of e-learning are obvious, it could be argued that it still has several weaknesses. For instance, because time is not a hindrance the course is available 24/7 therefore it does not require physical attendance which could reduce the social and cultural interaction. This leads to the learners feeling isolated and unsupported while learning since the instructors and instructions are not always available. Technology issues required for e-learning could also pose potential problems for the learning process. It is worth noting that learners require resources such as computers, internet, and software and in addition possess computer skills with programs such as word processing, internet browsers, and e-mail.

2.3.3 Barriers to e-learning Adoption

Reviewed literature on e-learning practices highlight a common agreement on the importance of information and communication technology in today’s learning environment (Lytras, Pouloudi, and Poulomenakou, 2002). Most organizations have understood that e-learning has to be integrated as part of daily tasks for employees and managers, thus not to be seen as a separate tool or technique for learning and training. Therefore, e-learning has to become a strategic advantage that participates in the realization of the organizational strategic plan (Magalhaes, 2004).

Rosenberg (2005) points out that the e-learning initiative came about as a result of environmental trends made up of the same factors that are the cause and the consequence of the revolutionized technology. The outcome of these trends has been an increasing
amount of pressure on educational organizations to use IT to improve their capacity to respond to learning needs. From this pressure, the decision to implement e-learning emerges. According to Attwell (2007) e-learning is not so much a technical question as an educational one, given that changes in technology are essential factors in educational change. It is worth noting that the face of education is ever changing and organizations need to pay attention to the different ways in which the so-called net generation is using technology for learning.

Given that e-learning is more of a personal decision, organizations would only be willing to provide tools to support that learning based on the employees’ motivation. Attwell (2007) recognizes that the role of the individual is to organize his or her own learning. In this regard, employees need to recognize that they are important stakeholders within any organization as they play a crucial role in working towards achievement of organizational objectives, short-term and long-term plans. Therefore e-learning tools should be embraced so that employees produce at their optimum using the most efficient and effective tools.

There has been much written about e-learning practice however little attention has been given to e-learning theory. Nichols (2003) argues that a lack of established theory hinders further development in e-learning. He emphasizes that there are certain underlying principles that apply to e-learning in all situations. Nichols (2003) suggests that the establishment of this theory could serve as a basis against which decisions at political, financial, educational and social levels can be implemented authoritatively. Unless attention is given to e-learning theory, e-learning practice cannot fully develop.

Nichols (2003) further recommends that for e-learning to have an effective future beyond much of the current literature, it is crucial that its theoretical foundations be made explicit and available for critique. Indeed, as society continues to practice e-learning, it is essential that organizations reflect on transferable principles of the practice that will be of great benefit to others.

The existing models of education and roles of educators is a challenge to the adoption of e-learning practices since learning at the workplace has generally been aligned to be
experiential rather than theoretical (Schoenfeld, 1999). In addition, Smith, Collins and Clark (2005) point out that discussions and theories about e-learning are undervalued and under-researched thereby leading to lack of or comparatively. In addition, little literature related directly to workplace learning to be reviewed, in comparison to learning in other sectors and contexts for example, early childhood education, primary and secondary school education, and adult education.

In retrospect, Nichols (2003) highlights that a key reason for the lack of directly relevant literature is a perception that learning which takes place in workplaces is not recognized as true learning. Instead it is viewed as on-the-job training since people are not certified thus prefer to go to a learning institution. In other words, workplace learning has generally been perceived as being primarily about the workplace.

2.3.4 Existing Educational Structures

Presently in Kenya, Buchmann (1999) depicts that it is clear that the state is handicapped as it experiences inability to control demand for education to its population. In fact, this has created two contemporary problems: the extremely competitive nature of the educational system and the serious imbalance between education and the labor market.

According to Mills, Pyrch and Sawchuk (2003), the current educational structures have marginalized workplace learning because the employees participating in formal workplace learning programs are those more likely to have had less satisfying school experiences and feel as less able learners and are more motivated by extrinsic rewards like credit, qualifications and promotions than intrinsic pleasure in learning. In many cases, workplace learning or training programs, has served to understate the idea of learning so that these people are not further alienated

Loi (2006) explains that theoretical perspectives coupled with practical insights offer a conceptualization of adaptive educational environments as creative spaces for fostering certain intellectual abilities associated with creativity. Loi (2006) further clarifies that educational systems may be good for promoting some forms of learning, however, it may not be ideal for promoting certain intellectual abilities linked to innovation and creativity. It is suggested that crafted interventions may change the system so that it is more
conducive and utilizes technologies and teachings that will change both the situational, contextual and social dynamics.

2.4 Factors Mostly Influencing Adoption of e-learning

2.4.1 Major Influence Factors

Understanding the influences on e-learning effectiveness in workplaces is a necessary, but contentious task (Abbad, 2011). The transfer of knowledge about e-learning from higher education to workplace situations has resulted in discursive tensions between expectations and practice. Additionally, to improve understanding of the factors influencing effectiveness of e-learning, especially in dispersed and large workplaces a developed model base has to be in place (Abbad, 2011). Thus highly skilled and qualified people are to be involved in effectively using less expensive ways to effect success in the knowledge economy. This requires quick, operational and cost effective education and training.

According to Gunasekaran, McNeil and Shaul (2002), e-learning being scalable and inexpensive than traditional learning becomes clearly advantageous for learners to access educational information and content easily at a given time and place. However, evaluating the effectiveness of e-learning programs, and establishing the understanding of e-learning is vital in highlighting the factors that mostly influence the adoption of e-learning. In addition, understanding these factors will help learning institutions to channel resources to significant factors rather than unimportant ones.

Garrison (2011) points out that developing measure for the effectiveness of e-learning and defining the factors that influence them has to be understood broadly by implementers thereby implementing the proper understanding of what e-learning means. It is from the understanding of the entire learning system that dynamism is experienced through time and thus responds to the changing needs of organisations, aspirations of individuals in the labour market and inputs from the education system.

In doing this, Eraut (2004), confirms that people are differently engaged in learning in different contexts, but they have to recognise much of this learning by being prompted to reflect on particular types of experience or specific changes in their capabilities. Hence learning attributions to particular experiences may be unreliable unless they are
accompanied by detailed narratives; and the influence of prior learning often remains hidden or even unconscious.

2.4.2 Technology Acceptance

Jawadi (2006) acknowledges that e-learning has significant financial, social and organizational advantages. However, e-learning use among professional workplaces still remains limited compared to traditional teaching methods. This is in view of today’s globalized society where internet-based learning systems are being used in many organizations but their adoption requires a thorough understanding of the user’s capabilities. According to Abbad (2011), it is crucial that organizations advocate for employees to have a good knowledge and understanding of various technologies and software within e-learning processes.

Abbad (2011) adds that acceptance of technology among staff in a work environment requires an organization to look at the technology adoption theories developed in information system researches which provide a conceptual framework to apprehend this key factor that influence employees’ motivation to adopt e-learning practices. It is also important for employees to value and have the perception of usefulness of e-learning programs as this will ease their use of computer programs which are key determinants of e-learning acceptance. He further clarifies that e-learning systems that are now been adopted in many organizations and universities requires a thorough understanding, knowledge and acceptance of the user acceptance processes which have been used to test the acceptance of various technologies and software within an e-learning context.

2.4.3 Working Alongside Others

Eraut (2011) states that working alongside others involves influencing by allowing people to observe and listen to others at work and also participate in activities hence learn some new practices and new perspectives. According to Jawadi (2006), this allows for people to become aware of different kinds of knowledge and expertise enhancing tacit knowledge. e-learning is important in the sense that it underpins routines and intuitive decisions which are learnt through observation (Jawadi, 2006).
Therefore in listening to what is being said and done; it is easier for employees to understand using shorter explanations with fine detailed data. This multi-sensory engagement over time enables the gradual development of tacit as well as explicit situational understanding. It is with the understanding that human relations is crucial in implementing e-learning programs that the situation can be addressed through effective leadership and change management.

2.4.4 Consultations

Consultations done within or outside the working group or organization can be used to coordinate activities and learn from others in the context of e-learning practices. Abbad (2011) highlights that the act of initiating consultation relies on the solid relationships between parties, the extent of a worker’s network and the culture of the workplace. Bolman and Deal (2011) mentions that for new beginners a distinction between a consultation and being mentored is not always clear, because part of a mentor’s or supervisor’s role is making oneself available for consultation.

Eraut and Hirsh (2010) mentions that on-the-job learning requires tackling challenging tasks and roles and if successful, leads to increased adoption of e-learning. They further note that people are less inclined to take on challenges unless they feel confident both in their ability to succeed as a result of previous experience and in the support of their manager or colleagues. Without such previous experience and support, challenges posed can be enormous.

Participation in group processes involves teams working together towards a common outcome and groups set up for a special purpose such as discussing a client, problem solving, reviewing some practices, planning ahead, or responding to external changes (Eraut, 2011). Group process entails learning and may involve acquiring new knowledge for solving problems, searching for relevant information and informants, imagination, persistence and interpersonal negotiation (Eraut, 2008).

Eraut (2008) encourages that the intention to learn from the others experience is distinguished from less purposeful behavior but requires some prior assessment of risk, especially where other people might be affected, and may require special arrangements for getting feedback as well as time for subsequent reflection and evaluation. Shadowing
and visits to other sites assists in inducting new employees, for workers taking on new responsibilities and for improving cooperation between different sites. These group process strategies could be very helpful for developing a wider understanding of projects, other work groups, suppliers and customers; but this need is often underestimated (Eraut and Hirsh, 2010).

Eraut (2011) puts forth that provision for coaching and mentoring is mainly for newcomers and occasionally for newly appointed managers who require training in new technology. Coaching is often limited since managers are not prepared to release potential coaches from their normal work and often lack informal opportunities to develop an appropriate relationship. In many situations mentoring is provided by other helpful colleagues, who are not designated mentors and this is usually best for mutual on-the-spot support and feedback.

Using conferences for networking brings about direct learning to the employees. In addition, short courses ensure that formal continuous professional development courses take place. This is because attending short training courses is very important for employees at every stage in their career development. Even so, work-based learning is also crucial in developing the ability to use what has been learnt on off-the-job trainings. (Eraut 2008).

2.4.5 Organization Management Style

e-learning promises to transform the workplace setting by enhancing efficiency, effectiveness and accessibility of services within an organization. Despite having one of the most advanced telecommunications infrastructures in the world, adoption of e-learning in most multinational corporations has fallen far below expectations (Jawadi, 2006). It is essential that organizations first understand these attitudes so that programs are designed to meet the needs of employees and the needs of the organization.

According to Jan (2012), this in turn will allow employees to appreciate the usefulness and ease of use that e-learning programs present. From the organizations’ view, the feedback from employees can be used to create a community of e-learners and hence assist in creating realistic expectations. This will also help in identifying what type of e-
learning initiatives it wants to invest in so as to enhance employee knowledge and skills in delivering on the organization’s mandate. Moreover, managers can also boost employees’ morale by providing success stories of e-learning experiences from high profile employees to promote the adoption of e-learning.

2.5 Chapter Summary

This chapter covered a review of literature in line with the research objectives. The first section highlighted the perception towards understanding e-learning and how it affects the adoption of e-learning programs at the workplace. The second section examined some of the challenges organizations face in introducing and implementing e-learning initiatives at the workplace. Lastly, the literature review outlined some of the major influencing factors towards adoption of e-learning programs. The next chapter outlines the research methodology including the research design, procedures and data analysis methods and presentation.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlined the overall methodology used to carry out this research study. This included the research design, population and sample, sampling design and sample size, data collection method, research procedures, data analysis methods and lastly the chapter summary.

3.2 Research Design

This research adopted the descriptive survey design which was used to investigate e-learning at UNEP. The descriptive survey design is concerned with studying subjects that have already been exposed to the independent factor and those who have not. On the other hand, the descriptive technique helps in measuring who, what where, when, or how much of an activity. The research design adopted in this study used both quantitative (use of graphs & charts) and qualitative techniques to aid in accomplishing the set objectives. Quantitative approach in this sense was designed to come up with numerical data and results (Mugenda and Mugenda, 2003).

The collected data were analyzed using both quantitative and qualitative approaches. Quantitative data from the questionnaire were analyzed with the help of SPSS and presented using descriptive statistics. Qualitative data collected was analyzed using content analysis approach and reported in a narrative form (Creswell, 2012). This mixed approach played a complimentary role and enriched the analysis and presentation of the findings of the study. As noted by Mugenda and Mugenda (2003), direct observation is conducted where the required behaviour is observed in a particular setting. Other areas of concern in qualitative approach include individual views of the respondents and human phenomena such as attitudes and emotions.
3.3 Population and Sampling Design

3.3.1 Population

According to Cooper and Schindler (2003), a population is the total collection of elements whereby references have to be made. The population in this study consisted of top management and employees at United Nations Environmental Program in various departments across its six divisions.

3.3.2 Sampling Design

A sample is a subset of the population being studied. It represents the larger population and is used to draw inferences about that population.

3.3.2.1 Sampling Frame

A sampling frame as described by Cooper and Schindler (2003) is a list of elements from which the sample is taken and closely related to the population. The sample was drawn from the different divisions of UNEP mostly concentrating on the administration and programmatic departments.

3.3.2.2 Sampling Techniques

To ensure fair representation and generalization of the findings to the sample population, purposeful and cluster sampling technique was adopted in this study. Both top management and support staff were given questionnaires to get a general feel of their perception on e-learning.

The advantage of the cluster method is that it increases efficiency of the statistical data and provides data for analysis of the various sub-populations. The purposeful sampling technique ensured that the respondents provided requisite information to address the specific research objectives thereby enhancing the credibility and reliability of the findings of this study.

3.3.2.3 Sample Size

The sample size was a smaller set of the larger population. Out of the sample frame of 250 employees a sample size of 80 was selected. Questionnaires were sent to 62 regular
employees together with top level managers. To determine the number of study participants, the statistical sampling table in the appendix was used to select the 80 participants from 250 employees of various departments of UNEP-10 directors and top managers of 10 departments and 60 regular employees.

Table 3.1: Sample Size

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>TOTAL POPULATION</th>
<th>SAMPLE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Management</td>
<td>10</td>
<td>12.5%</td>
</tr>
<tr>
<td>Administration</td>
<td>22</td>
<td>27.5%</td>
</tr>
<tr>
<td>Human Resource</td>
<td>14</td>
<td>17.5%</td>
</tr>
<tr>
<td>Programme Management</td>
<td>14</td>
<td>17.5%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>12</td>
<td>15%</td>
</tr>
<tr>
<td>Finance</td>
<td>8</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

3.4 Data Collection Method

The study used primary data which was collected by use of a structured questionnaire. Cooper and Schindler (2003), defines primary data as original search where data being collected is designed specifically to answer the research objectives.

Data was collected using a questionnaire which was developed by the researcher drawn from the three research objectives. The questionnaire comprised of both open ended and closed ended questions. It was divided into two sections; section one comprised of general questions which assisted the researcher to get general information on the respondent while section two had closed ended questions with multiple choice options for the respondent to select from.

3.5 Research Procedure

A Pilot test involving sampling the questionnaire was carried out to evaluate precision, completeness, accuracy and clarity of interview questions. This was done with 10 selected respondents to ensure that the data collected from the study would be reliable. The
questionnaire was self-administered and was shared to respondents in two different ways. One was by hand delivery and the secondly online through emails.

The researcher ensured that confidentiality was maintained and the respondents were not expected to reveal their identity while filling in the questionnaires. When collecting data, the researcher checked for completeness of the questionnaires from the various respondents to ensure a smooth data entry process in Statistical Package for Social Sciences (SPSS). The entire exercise took approximately four weeks. Follow up reminders, phone calls and emails were used to ensure a 100% response on the questionnaires sent out.

3.6 Data Analysis Methods

Data analysis included both qualitative and quantitative techniques. Data was coded according to different variables of study for ease of data entry and interpretation. The data was analyzed using the SPSS software. Raw data was then transformed into charts, tables, with frequency distribution and percentages.

Under quantitative approach, data was presented in the form of tables, bar graphs and pie charts to give a clear picture of findings from the study. Qualitative approach complimented quantitative approach by explaining phenomena that were not quantifiable. This included the behaviors of the respondents, their attitudes and emotions.

3.7 Chapter Summary

This chapter covered the methods used in research design. It also captured the research methodologies that helped the researcher collect and analyze data with reference to research objectives that had been raised in the first chapter and outlined the research procedure to be used.

Data was collected from 80 respondents in UNEP offices in Nairobi. Questionnaires were developed and be used for purposes of collecting data which was analyzed by use of SPSS. The methodologies mentioned above facilitated the presentation of the research findings in form of charts and graphs. The next chapter presents the findings of the research.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the results and findings of the study on the research objectives with regards to the data collected from the respondents with respect to employees of United Nations Environmental Program (UNEP). The first section covers the general information and the results are divided into three broad categories in accordance with the research objectives. Out of these, sixty (60) were regular employees, ten (10) were directors and ten (10) top managers of departments. Eleven (11) questionnaires were never returned, while seven (7) were spoilt making the total number of questionnaires 62 that were used.

4.1.1 Participant Profile

A total of 62 employees of UNEP in Gigiri participated in the survey which represented a 75% response rate. Table 1 below shows a sample composition, provided by the frequency distribution of the sub-groups, as well as the relative percentages of each. Female participants had a high representation of 55% while male participants were 45%. In terms of work period, 34% had worked for the United Nations for 9 years and above while 12% had worked for between 6-8 years as shown in table 4.1.

Table 4.1: Participant Profile

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>28</td>
<td>45%</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>55%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work period</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>11</td>
<td>18%</td>
</tr>
<tr>
<td>2-3 Years</td>
<td>11</td>
<td>18%</td>
</tr>
<tr>
<td>4-5 Years</td>
<td>11</td>
<td>18%</td>
</tr>
<tr>
<td>6-8 Years</td>
<td>8</td>
<td>12%</td>
</tr>
<tr>
<td>9 Years and above</td>
<td>21</td>
<td>34%</td>
</tr>
</tbody>
</table>

Total 62
4.1.2 Access to Computer

The study sought to find out whether the respondents had access to a computer. Figure 4.1 revealed that 100% of the respondents said that they have access to a computer.

![Computer Access](image)

Figure 4.1: Computer Access

4.2 Understanding of e-learning and Perceptions Towards e-learning Initiatives

4.2.1 Effectiveness of e-learning

The study sought to establish the effectiveness of e-learning. Findings displayed on figure 4.2 revealed that 56% of the employees indicated that they somewhat agreed that e-learning is the most effective training tool for an organization, 34% is the respondents said that they strongly agreed while 5% said that they neither agreed nor disagreed while 5% said that they somewhat disagreed that e-learning is not effective.

![e-learning Effectiveness](image)

Figure 4.2: e-learning Effectiveness
4.2.2 Dominance of Technology-oriented Approaches

The study sought to establish whether technology had an impact on e-learning practices. Findings displayed on figure 4.3 revealed that 45% of the respondents indicated that they agreed that dominance of technology-oriented approaches made e-learning practices less user-friendly. Further findings showed that 31% of the respondents said that they disagreed while 19% said that they were neutral and neither agreed or disagreed as to whether technology influenced e-learning programs, while 5% said that they totally disagreed.

Figure 4.3: Dominance of Technology

4.2.3 Impacting of e-learning to Technical Knowledge and Organizational Issues

The researcher sought to establish the impact of e-learning on technical knowledge and organizational issues. Figure 4.4 indicates that 58% of the respondents indicated that they felt that e-learning practices are not just geared towards impacting technical knowledge while ignoring organizational issues but that they are also necessary for effective e-learning programs to address, while 42% of the respondents said that they disagreed.
4.2.4 Staff's Personal Career Progression and Work Environment

The study sought to establish whether e-learning had an impact on staff personal career progression or work environment. A majority of the respondents (77%) indicated that they were of the view that e-learning programs should not be tailor-made for staffs’ personal career progression but rather they should be designed for the work environment context of use and application, as depicted in figure 4.5. However on the flip-side, 23% of the respondents said that they did not agree with this notion.
4.2.5 Importance of e-learning Tools at the Workplace

The researcher sought to establish the importance of e-learning tools at the workplace. Findings displayed on figure 4.6 indicated that 44% of the respondents said that they rated e-learning programs as very important in the day-to-day work activities of the organization, 39% indicated that it was moderately important, 10% said that they felt it was strongly important while 5% indicated that it was not important while 3% said that they had no idea.

![Importance of e-learning in Daily Work Activities](image)

Figure 4.6: Importance of e-learning in Daily Work Activities

4.2.6 Eligibility to Participate in e-learning Programs

The study sought to establish whether all staff members at UNEP are eligible to participate in e-learning programs. As shown in the figure 4.7, the study found that 77% of the respondents said that they felt that they were eligible to participate in various e-learning programs initiated by the organization, while 23% said that they felt that they were not eligible at all.
4.2.7 Preferred Method of Learning and Training

The study sought to establish the respondents’ most preferred method of learning and training at UNEP. Findings shown in figure 4.8 established that 60% of the respondents indicated that they preferred classroom training as opposed to on-line training while 40% said that they preferred on-line training.

<table>
<thead>
<tr>
<th></th>
<th>Classroom</th>
<th>On-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series1</td>
<td>60%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Figure 4.8: Preferred Mode of Training

4.2.8 Suitability of On-line Courses

The researcher sought to find out whether on-line courses are ideal for on-the-job training. Findings displayed on table 4.2 indicate that 85% of the sample interviewed which comprised for women who have worked with the United Nations for over 6 years, said that on-line courses are ideal for on-the-job training.
Further analysis indicated that 71% of the male counterparts who have worked with the organization for over 9 years felt that on-line courses were equally ideal.

**Table 4.2: On-line Courses Ideal for On-the-Job Training**

<table>
<thead>
<tr>
<th>Gender</th>
<th>How long have you worked with the United Nations</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 1 year</td>
<td>2-3 Years</td>
</tr>
<tr>
<td>Male</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>28</td>
</tr>
</tbody>
</table>

**4.2.8 Management Support of Implementation of e-learning Programs**

The study sought to establish whether UNEP supports the implementation of e-learning programs. Table 4.3 shows that 77% of the staff members said that they agreed that the organization supports best practices in e-learning initiatives, while 23% indicated that they disagreed. Further analysis showed that 82% of the male counterparts with over 6 years working experience with UNEP revealed that they felt that the organization supports the implementation of e-learning programs.

**Table 4.3: Management Support of e-learning Initiatives**

<table>
<thead>
<tr>
<th>Gender</th>
<th>How long have you worked with the United Nations</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 1 year</td>
<td>2-3 Years</td>
</tr>
<tr>
<td>Male</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>28</td>
</tr>
</tbody>
</table>

**4.2.9 Blended Learning**

The study sought to establish whether blending learning is a good learning experience. Findings revealed that, 95% of the respondents indicated that they felt that blended learning (face-to-face learning mixed with on-line elements) is a good learning experience, as shown in figure 4.9 while 5% of the respondents said that they disagreed.
4.2.10 Number of e-learning Programs Undertaken by Staff Members at UNEP

The study sought to establish the number of e-learning programs undertaken by staff members at UNEP. Table 4.4 shows that a majority (44%) of the respondents said that they had participated in three to five programs, 27% said less than three programs while 15% said they had participated in six to ten and so were those with ten programs. Looking across the different categories of gender and period worked in UN, majority (67%) of the respondents who have been working with the UN for over 9 years said that they have participated in three to five e-learning programs. In terms of gender, 50% of male respondents said that they had participated in three to five e-learning programs.

Table 4.4: Number of e-learning Programs Undertaken

<table>
<thead>
<tr>
<th>How long have you worked with the United Nations</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>62</td>
<td>28</td>
<td>34</td>
</tr>
<tr>
<td>2-3 Years</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>4-5 Years</td>
<td>11</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>6-8 Years</td>
<td>21</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>9 Years and above</td>
<td>19</td>
<td>18</td>
<td>22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How long have you worked with the United Nations</th>
<th>Less than 3</th>
<th>3-5</th>
<th>6-10</th>
<th>More than 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>27%</td>
<td>44%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Female</td>
<td>25%</td>
<td>50%</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td>How long have you worked with the United Nations</td>
<td>29%</td>
<td>38%</td>
<td>15%</td>
<td>18%</td>
</tr>
<tr>
<td>Male</td>
<td>55%</td>
<td>36%</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td>Female</td>
<td>18%</td>
<td>36%</td>
<td>36%</td>
<td>18%</td>
</tr>
<tr>
<td>How long have you worked with the United Nations</td>
<td>18%</td>
<td>18%</td>
<td>36%</td>
<td>0%</td>
</tr>
<tr>
<td>Male</td>
<td>38%</td>
<td>36%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Female</td>
<td>19%</td>
<td>67%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>How long have you worked with the United Nations</td>
<td>19%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Male</td>
<td>27%</td>
<td>27%</td>
<td>25%</td>
<td>14%</td>
</tr>
<tr>
<td>Female</td>
<td>38%</td>
<td>36%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>How long have you worked with the United Nations</td>
<td>67%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Male</td>
<td>67%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Female</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>How long have you worked with the United Nations</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Male</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Female</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
4.2.11 Incorporation of Both Face-to-Face Learning and e-learning

The researcher sought to establish whether staff members liked a fusion of face-to-face learning and e-learning. Findings revealed that 82% of the staff members said that management is keen to ensure that a mix of both face to face learning and e-learning is incorporated in its training development program as shown in figure 10, while 18% said that they disagreed.

![Figure 4.10: Incorporation of Both Face-to-Face Learning and e-learning](image)

4.3 Organizational Challenges Faced in Adopting and Using of e-learning

4.3.1 e-learning Practices

The study sought to establish some of the organizational challenges faced in adopting and using e-learning. Table 4.5 shows that 65% of the employees indicated that they agreed that e-learning practices are a common phenomenon at their office while 35% said they were not. Looking across the groups, female (68%) employees said that they agreed compared to their male (61%) counterparts. On the other hand, 82% of employees who had worked for 2–3 years said that they were in agreement followed by 4 – 5 years’ service (73%), while 50% of the employees who had worked for 6 – 8 years said that they least agreed that e-learning practices are a common phenomenon at their office.
Table 4.5: e-learning Practices Common at the Workplace

<table>
<thead>
<tr>
<th>Total</th>
<th>Gender</th>
<th>How long have you worked with the United Nations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>62</td>
<td>28</td>
<td>34</td>
</tr>
<tr>
<td>No</td>
<td>35%</td>
<td>39%</td>
</tr>
<tr>
<td>Yes</td>
<td>65%</td>
<td>61%</td>
</tr>
</tbody>
</table>

4.3.2 e-learning as a Primary Training Medium

The study sought to find out whether e-learning is used as a primary training medium at the place of work. Findings displayed on table 4.6 revealed that 39% of the respondents said that they somewhat agreed that the management of UNEP should embrace e-learning as their primary training medium, 35% said they strongly agreed, 16% said they somewhat disagreed while 10% said they neither agreed nor disagreed. In terms of gender, more female (41%) said they somewhat agreed compared to their male counterparts (36%).

Looking further across the years of service, the highest agreement (64%) was from those with 4-5 years of service, 45% from those with 2-3 years of service, 38% from those with 6-8 years, 36% from those with less than 1 year, 24% from those with 9 years of service and above said that they supported embracement of e-learning as a training medium.

Table 4.6: e-learning as a Primary Training Medium

<table>
<thead>
<tr>
<th>Total</th>
<th>Gender</th>
<th>How long have you worked with the United Nations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>62</td>
<td>28</td>
<td>34</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>39%</td>
<td>36%</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>35%</td>
<td>36%</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>16%</td>
<td>18%</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
<td>10%</td>
<td>11%</td>
</tr>
</tbody>
</table>
4.3.3 Work place e-learning applications

The study sought to investigate the application of e-learning at the work place. As depicted in the findings displayed on figure 4.11, 55% of the respondents said that work place e-learning applications failed to meet the needs of learners hence not motivating employees to learn, while 45% said that they disagreed.

![Pie Chart: e-learning Application]

**Figure 4.11: e-learning Application**

4.3.4 Benefits and Drawbacks of e-learning

The researcher wanted to establish the advantages and disadvantages of e-learning so as to gauge their perception of the e-learning programs currently been offered at UNEP. Table 4.7 establishes that 76% of the respondents said that they felt that e-learning cuts on the social and cultural interaction of people while 81% indicated that they did not agree that e-learning should be replaced by human instructors.

**Table 4.7: Benefits and Drawbacks of e-learning**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-learning cuts on the social</td>
<td>47</td>
<td>76</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>and cultural interaction of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>people</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e-learning should be replaced</td>
<td>12</td>
<td>19</td>
<td>50</td>
<td>81</td>
</tr>
<tr>
<td>by human instructors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.3.5 Recognition of e-learning Programs

The researcher sought to find out whether staff members were able to identify a quality e-learning program for themselves. Figure 4.12 reveals that 39% of the respondents interviewed indicated that they somewhat agreed that it is not easy to recognize or select a quality e-learning program while 23% indicated that they strongly agreed. Additional findings showed that 23% of the respondents indicated that they somewhat disagreed while 16% said that they were neutral and neither agreed nor disagreed.

Figure 4.12: Recognition of A Quality e- learning Program

4.3.6 Effectiveness of e-learning Programs at UNEP

The study sought to establish the effectiveness of e-learning programs at UNEP. Findings revealed that 42% of the respondents indicated that they felt that e-learning is indeed a cost effective learning platform that cuts on instructors’ salaries, travel costs, meeting room rentals and should be embraced by the organization while 32% strongly agreed, as indicated in figure 4.13. Further analysis showed that 13% said that they were neutral and neither agreed or disagreed while another 13% indicated that they somewhat disagreed.
4.3.5 Barriers to e-learning Adoption

The study sought to investigate where e-learning programs should be integrated as part of employees’ daily tasks and not as a separate tool for learning and training. Findings displayed on figure 4.14 acknowledges that 81% of the respondents said that they agreed that e-learning should be incorporated in the day-to-day activities at the workplace while 19% said that they disagreed.

Figure 4.13: Effectiveness of e-learning Platforms

Figure 4.14: Integration of e-learning in Work Activities
4.3.7 Impact of Information Technology Revolution on e-learning

The researcher sought to find out whether the revolution of information technology had an impact on e-learning programs. Findings on figure 4.15 revealed that 58% of the respondents said that they strongly agreed that the revolution of information technology has heightened the need for organizations to embrace e-learning programs to improve on staff capabilities and 35% somewhat agreed whereas 7% said that they neither agreed nor disagreed.

![Figure 4.15: The Impact of IT Revolution on e-learning Programs](image)

4.4 Factors Mostly Influencing Adoption of e-learning

4.4.1 Learner Resistance to workplace e-learning

The study sought to find out some of the reasons affecting learner resistance to workplace e-learning. Findings presented on figure 4.16 established that 53% of the employees interviewed attributed resistance to change as the single-most important factor to overcome learner resistance to workplace e-learning. Further analysis showed that 23% of the respondents said that perceived lack of interactivity was another major factor influencing e-learning adoption at UNEP; 18% of the respondents indicated that computer anxiety was another factor while only 6% attributed assumed poor quality irrelevance as being a factor influencing adoption of e-learning.
4.4.2 Technology Costs

The researcher sought to find out whether the financial implications of initiating an e-learning program for an organization made it cost prohibitive. Figure 4.17 indicates that 65% of the staff members said that they agreed that initiating e-learning programs is an expensive affair which has financial implications on the organization. 19% indicated that they somewhat disagreed while 16% said that they were neutral and neither agreed nor disagreed.
4.4.3 Technology Acceptance

The researcher sought to establish how technology affects competition. Figure 4.18 shows that 55% of the respondents said that they felt that if the organization does not effectively utilize e-learning it cannot remain competitive in today’s ever-changing global workforce. In addition, 32% of the respondents said that they were not sure whether competitive advantage plays an important role while 6% said that they disagreed and another 6% said that they strongly disagreed.

![Figure 4.18: Competitive Advantage of e-learning]

4.4.4 Organization Management Style

The study sought to assess the impact of e-learning in the work environment. Table 4.8 a majority of the respondents (53%) said that management had put in place moderate measures, 24% said minimal, 19% said none while only 3% said major measures were in place. Across the groups, findings revealed that 82% of the employees who had worked in the organization for between 2-3 years were of the view that management had put in place moderate measures to assess the impact of e-learning in the work environment.

In addition looking across gender, more female (59%) said that the organization had put in place moderate measures to assess of the impact of e-learning compared to (46%) of the male respondents.
Table 4.8: Management Assessment of Impact of e-learning

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>How long have you worked with the United Nations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Less than 1 year</td>
</tr>
<tr>
<td>None</td>
<td>62</td>
<td>28</td>
<td>34</td>
<td>11</td>
</tr>
<tr>
<td>Minimal</td>
<td>24%</td>
<td>18%</td>
<td>29%</td>
<td>18%</td>
</tr>
<tr>
<td>Moderate</td>
<td>53%</td>
<td>46%</td>
<td>59%</td>
<td>27%</td>
</tr>
<tr>
<td>Major</td>
<td>3%</td>
<td>7%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

4.4.5 Group Work Dynamics

The study sought to establish how the working environment affects work performance. Findings displayed on figure 4.19 revealed that 68% of the respondents indicated that they strongly agreed and 29% somewhat agreed that group dynamics plays a crucial role in team work and can in turn affect the performance of the group in working towards achieving organizational goals, while 3% said that they neither agreed nor disagreed.

Figure 4.19: Group Performance in Achieving Organizational Goals

4.4.6 Integration of e-learning Activities and Impact of IT Revolution

The correlation (r = -0.29, p-value =0.824) between integration of e-learning work activities and impact of IT revolution was low, negative and statistically insignificant as shown in table 4.9 below. This indicates that as integration of e-learning work activities
decreases, the revolution of IT heightening the need for organizations to embrace e-learning programs to improve on their staff capabilities increases though this is relationship is not statistically significant.

**Table 4.9: Integration of e-learning Activities and Impact of IT Revolution**

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>e-learning programs should be integrated as part of employees daily tasks and not as separate tool/technique for learning / training</th>
<th>The revolution of information Technology has heightened the need for organizations to embrace e-learning programs to improve on their staff capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.824</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>62</td>
</tr>
</tbody>
</table>

**4.4.7 Relationship between Gender and Learner Resistance to Workplace e-learning**

There is a weak non-significant negative correlation ($r = -0.128$, p-value= .321) between gender and learner resistance to workplace e-learning. A further analysis on chi-square ($\chi^2 = 3.386$, p-value= .336) show that there is statistical significant between gender and learner resistance to workplace e-learning as indicated in table 4.10. Thus gender doesn’t determine or affect learner resistance to workplace e-learning.
Table 4.10: Relationship between Gender and Learner Resistance to Workplace e-learning

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>Gender</th>
<th>Correlation Coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
<th>The single most important factor to overcome in learner resistance to workplace e-learning is:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1.000</td>
<td></td>
<td>62</td>
<td>- .128</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-.128</td>
<td>.321</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.000</td>
<td></td>
<td>62</td>
<td></td>
</tr>
</tbody>
</table>

4.5 Chapter Summary

This chapter presented a report of findings on e-learning practices at the workplace. The study investigated 250 employees working at the UN offices in Gigiri. The findings were presented according to the study’s research objectives. In respect to effectiveness of e-learning, (90%) of the employees interviewed indicated that they agreed that e-learning is the most effective training tool for an organization. A majority of the respondents (77%) indicated that they were of the view that e-learning programs should be designed with the organizations’ needs in mind, that is for work use and application as opposed to aiding personal career progression of the employees.

Another (74%) of the respondents agreed that the management at UNEP should embrace e-learning as their primary training medium. Generally, this goes to show that more than half of the respondents (58%) felt that e-learning should be geared towards addressing organizational issues while another (44%) indicated that they rated e-learning programs are very important tools in the day-to-day activities of the organization. However, on the flipside, (65%) of the respondents said that they felt that there is a huge financial impact on e-learning implementation hence the resistance to adopting it at the workplace.
Regarding technology being a hindrance, (45%) of the respondents said that they agreed that dominance of technology-oriented approaches has made e-learning practices less user-friendly. Another deterrent is the management style of an organization where (55%) of the respondents said that they felt that if the organization does not effectively utilize e-learning it cannot remain competitive in today’s global workforce. This is further backed by the fact that e-learning promises to transform the workplace setting by enhancing efficiency, effectiveness and accessibility of various services within an organization. The next chapter reviews and discusses the results and findings of the study.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter reviews the results and findings of the study presented in the previous chapter. The purpose of the study, the research objectives and the research method used have been highlighted and explained. More specifically, the study population, the sample size, the data collection method and the research procedure have also been discussed. A summary of the study has been presented with the three research objectives serving as a hallmark through which the investigation of e-learning initiatives was conducted to gauge their effectiveness in use and application at the workplace. This is finally followed by discussions, conclusions and recommendations for further improvement have been proposed.

5.2 Summary

The purpose of the study was to investigate the adoption and use of e-learning at the workplace with a focus on UNEP staff members working in Gigiri. The study addressed the following objectives. Identify the perceptions towards e-learning initiatives; highlight the organizational challenges faced in adopting and using of e-learning practices and finally identify factors that mostly influence the adoption of e-learning in work places.

The research design used was descriptive survey in nature where the total population was 250 out of which a sample size of 80 respondents was drawn to participate in this research. The probability method was used to select the employees from senior management, administration, finance, human resource, programme management and information technology departments across the organization. A stratified sampling technique was used to come up with categories as indicated above. Questionnaires specifically designed for the employees were adopted for data collection. A total of eighty (80) questionnaires were dispatched and sixty two (62) responses were received, giving a response rate of 75%.

This research adopted the descriptive survey design which was used to investigate e-learning at UNEP. The descriptive survey design is concerned with studying subjects
that have already been exposed to the independent factor and those who have not. On the other hand, the descriptive technique helps in measuring who, what where, when, or how much of an activity. The research design adopted in this study used both quantitative (use of graphs & charts) and qualitative techniques to aid in accomplishing the set objectives. Quantitative approach in this sense was designed to come up with numerical data and results.

The findings regarding the first research objective on the assessment of perceptions towards e-learning initiatives indicated that (90%) of the interviewed employees said that they agreed that e-learning is the most effective tool for undertaking training and development programmes for the organization. (58%) of the respondents felt that e-learning practices should be designed to cater for organizational issues that e-learning could address while another 54% of the respondents rated e-learning programs as very important in in the day-to-day work activities of the organization, (39%) indicated that they felt that it was moderately important while 5% indicated that it was not important.

The findings regarding the second research objective on organizational challenges facing the adoption and use of e-learning practices revealed that (55%) of the respondents were of the view that work place e-learning applications fail to meet the needs of learners hence not motivating employees to learn, while 45% disagreed. Regarding people interaction (76%) of the respondents said that they felt that e-learning cuts on the social and cultural interaction of people while another (81%) did not agree that e-learning should be replaced by human instructors.

Regarding factors mostly influencing the adoption of e-learning in work places, the findings showed that 53% of the employees interviewed attributed the lack of interactivity as the single-most important factor to overcome learner resistance to workplace e-learning, while only 6% attributed the same to assumed poor quality irrelevance. Concerning financial implications of implementing e-learning practices, 65% of the staff members said that they agreed that initiating e-learning programs is an expensive affair which has financial implications on the organization.
5.3 Discussion

This section interprets the results and findings of the study in respect to investigating the perceptions towards e-learning programs at the workplace. The study explores some of the pertinent issues in the discussion of e-learning initiatives among staff members at UNEP, highlighting problems and gaps in existing research and recommending areas for further research theoretical development and field development.

5.3.1 Perceptions Towards e-learning Initiatives

The findings on employee’s perceptions towards e-learning initiatives revealed that e-learning is the most effective workplace training tool for an organization. This finding is in line with Rosenberg (2005), who argues that e-learning is emerging as a popular approach for learning in organizations or workplace settings. In addition, the study revealed that 81% of the respondents indicated that they agreed that e-learning should be incorporated in the day-to-day activities at the workplace while 19% disagreed.

The finding reviewed that dominance of technology-oriented approaches made e-learning practices less user-friendly. This is supported by Tynjala and Hakkinen (2005), who supports that e-learning current development tends focus on technical issues of design and ignores pedagogical and organizational issues that are necessary for effective e-learning programs to address. In addition he notes that the dominance of technology-oriented approaches has made e-learning practices less goal effective, and they are therefore perceived to be poor in quality and design.

Information technology infrastructure and organizational support were proven to be key determinants of the instructor characteristics as a critical success factor of hybrid e-learning acceptance by learners. The study revealed that 45% of the employees indicated that they agreed that dominance of technology-oriented approaches made e-learning practices less user-friendly.

Concerning whether e-learning should be focused on impacting technical knowledge or designed to address organizational issues, 58% of the respondents indicated that they felt that e-learning practices are not just geared towards impacting technical knowledge while ignoring organizational issues but that they are also necessary for effective e-learning
programs to address, while 42% of the respondents indicated that they disagreed with this.

The findings also indicated that a majority of the e-learning programs should not be tailor-made for staffs’ personal career progression but rather for the work environment context of use and application. In addition, learning in the work environment takes place in the context of use and application, and as a result is often embedded in work practices. In support of this World Bank (2011), revealed that learning is more collaborative in workplace settings, where sharing individual knowledge with co-workers is an important part of the learning practice.

In addition, the study revealed that a majority of the respondents 77% were of the view that e-learning programs should not be tailor-made for staffs’ personal career progression but rather they should be designed for the work environment context of use and application, as depicted by figure5 below. On the flip-side, 23% of the respondents indicated that they did not agree with this notion.

5.3.2 Organizational Challenges in Adopting and Using of e-learning Practices

The findings on e-learning application failing to meet the needs of learners is in line with Scott and Carrington, (2011), who points out that, despite the ever-increasing practice of using e-learning in the workplace, most of the applications perform poorly in motivating employees to learn as most workplace e-learning applications fail to meet the needs of learners and ultimately fail to serve the organization’s quest for success.

Maglajlic (2010), adds that the problems of identifying the fundamental elements of the workplace learning environment and their relationships can result to the discovery that workplace e-learning should align individual and organizational learning needs, connect learning and work performance, and support social interaction among individuals. In this regard the study revealed that 62% of the respondents interviewed strongly felt that is it not easy to recognize or select a quality e-learning program.

The study finding on whether e-learning should be replaced by human instructors affirms the argument by Alkharang and Ghinea, (2013), who argue that, despite the fact that e-
learning has received much acclamation, it remains that human instructors will never be replaced completely by computer systems. The study further revealed that 76% of the respondents said that they felt that e-learning cuts on the social and cultural interaction of people while another 81% did not agree that e-learning should be replaced by human instructors.

The findings on the cost effectiveness of the e-learning platform agrees with Gill, (2000); Roy, Potter, and Yarrow, (2008) who argues that establishing the benefits achievable through e-learning is important since it is recognized that some of the key benefits include; reduction of overall cost (instructors’ salaries, travel costs, and meeting room rentals), access to quality education, provision of convenience and flexibility, a reduced environmental impact through lower paper use, energy consumption, and higher retention. In this regard, findings revealed that 74% of the respondents indicated that they felt that e-learning is indeed a cost effective learning platform that cuts on instructors’ salaries, travel costs, meeting room rentals and should be embraced by the organization.

The findings revealed that e-learning has to be integrated as part of daily tasks for employees and managers, thus it should not to be seen as a separate tool or technique for learning and training. In addition, according to Magalhaes (2004), e-learning has to become a strategic advantage that participates in the realization of the organizational strategic plan. In addition, 81% of the respondents indicated that they agreed that e-learning should be incorporated in the day-to-day activities at the workplace while 19% disagreed.

The study then makes a case for modern and globalized view of technology surrounding e-learning programs and suggests that employees’ work experience is mediated by a host of internal and external factors that are part of work environment. It calls for greater attention in understanding employees’ work experience in terms of service delivery and efficiency. Principally, it assets the need for research, policy and programmatic interventions that UNEP as an organization needs to careful review in order to improve the performance of employees in regards to e-learning programs.

The study indicated that the revolution trends in the information and technology sphere have heighten ned the need for organizations to embrace e-learning programs which assist
improve staff capabilities. This affirms the argument by Rosenberg (2005) who says that revolutionized technology has put increased pressure on organizations to utilize information technology to improve their capacity to respond to learning needs and this is where e-learning emerges as the most ideal tool. In addition to this, the study also showed that 93% of the respondents said that they agreed that the revolution of information technology has heightened the need for organizations to embrace e-learning programs to improve on staff capabilities.

5.3.3 Factors that Mostly Influence the Adoption of e-learning in Work Places

The study observed that there are certain factors that contribute to learner resistance towards e-learning initiatives. One of these factors is the technology-based where Jawadi (2006) argues that in today’s globalized society, internet-based learning systems are being used by many organizations however, their adoption requires a thorough understanding of the user’s capabilities. This is further backed by Abbad (2011) who states that it is crucial for organizations to advocate for their employees to keep abreast of emerging new software technologies and have a good understanding and knowledge of them. The study showed that 100% of the respondents said that they have access to a computer and that e-learning implementation would become an easy endeavor for the organization to undertake.

Lee (2006) emphasizes that e-learning programs should be basic and include content that is of quality. The programs should be simple and operate within an easy-to-use system which will enhance employees’ computer self-efficacy. Secondly, the adoption of e-learning practices at the workplace can be popularized; that is, promotion of the e-learning system should emphasize the popularity of the system and its future products and services in order to create a bandwagon effect.

According to Eraut (2011) another factor that hinders the adoption of e-learning at the workplace is the working condition where employees are used to working alongside others which allows for full participation in work activities hence permits the learning of new practices and new perspectives. This study observed that staff members at UNEP have embraced group dynamics which plays a crucial role in enhancing team work and in turn affects the group performance towards achieving organizational goals.
This is further coupled by the research exposing that 97% of the respondents indicated that they agreed that group dynamics plays a crucial role in team work and can in turn affect the performance of the group in working towards achieving organizational goals. Islam (2003) suggests that management should undertake a needs assessment driven by confirmation, perceived system quality, perceived usefulness, perceived work compatibility and perceived support. These are all core determinants of e-learning satisfaction practices at the workplace.

The study also highlighted another key factor influencing the adoption of e-learning at the workplace is the financial implication of implementing e-learning programs which have made it prohibitive to many departments which cannot afford running such programs. Sixty five percent of the staff members said that they agreed that initiating e-learning programs is an expensive affair which has a huge financial implication on the organization.

5.4 Conclusions

5.4.1 Perceptions Towards e-learning Initiatives

Technology orientation was found to be highly significant in the adoption of e-learning practices in UNEP. Hence it can be concluded in this study that technology influences the adoption of e-learning in organizations. This therefore confirms that technology is indeed a critical factor in the adoption and implementation of e-learning initiatives.

Additionally, the study found out women were more strongly influenced by perceptions of computer self-efficacy and ease of use, and that men's usage decisions were more significantly influenced by their perception of usefulness of e-learning. These findings also suggest that managers should take into consideration factors of gender in the development of e-learning programs (Ong, 2006). Managers moreover, should realize that e-learning may be perceived differently by women and men.

The finding on the perceptions towards understanding e-learning initiatives also revealed a number of other conclusions. These include; e-learning has become a trendy approach for learning in workplace settings, therefore staff members are required to keep abreast with the latest technology trends. The study has also shown that much of e-learning research is based on formal courses in educational institutions and majority of the e-
learning programs are tailor-made for staffs’ personal career progression rather than for the work environment context use and application. Therefore, it can be concluded that e-learning programs are very goal-oriented and require appropriate execution.

5.4.2 Organizational Challenges in Adopting and Using of e-learning Practices

The study revealed some of the challenges that have contributed to slow adoption of e-learning practices at the workplace. The findings have shown that e-learning should align individual and organizational learning needs. This means that organizations should ensure that they met both the personal development goals of the employees as well as goals of the organization at large. This will ensure that there is a right balance and mix in e-learning meeting the needs of both staff members and organization.

The study has also revealed that e-learning should connect learning and work performance, and support social interaction among individuals. This can be made by first ensuring that employees apply what they learn during e-learning platforms to the actual job that they perform on a day-to-day basis. Such practice will cater for the social interaction among individuals and help develop a team spirit effort towards achieving the organization’s objectives.

5.4.3 Factors that Mostly Influence the Adoption of e-learning in Work Places

A number of factors have been linked to influencing the adoption of e-learning at the workplace. Some of these include the dominance of technology given the explosive growth of IT and the internet which prove to be quite cumbersome to some individuals at the workplace.

Additionally, technology adoption is a complex, inherently social, developmental process whereby individuals construct unique perceptions of technology that influence their adoption decisions (Straub, 2009). Thus, management must ensure that successful technology adoption must address cognitive, emotional, and contextual concerns.

The study discovered that many of the employees at UNEP are comfortable with the status quo posed by management of the organization and are therefore they are not too keen to utilize any new programs and applications that are not the norm. Employees are
comfortable performing their tasks and duties by way of consultation or team work which has its own limitations but is seen as the most favourable.

The findings also revealed that despite the increased use of e-learning practices at the workplace, most of these applications fail in motivating employees to learn. This is attested to the failure of e-learning platforms to meet the needs of learners and eventually fail to meet the organizations objectives. A look at the social context and the relationship this has to the learning context and to the learner’s perception is indeed a key driver in enhancing the use and adoption of e-learning at the workplace.

5.5 Recommendations

5.5.1 Recommendation for Improvement

From the results of this study there are several proposed improvements that can be undertaken to boost the adoption of e-learning practices at the workplace.

5.5.1.1 Perceptions Towards e-learning Initiatives

The study acknowledges the importance of using e-learning in the workplace as such; it recommends the following to the organisation on the perceptions of e-learning initiatives; future development of e-learning programs should focus not only on technical issues of design but also on organizational issues. The study also recommends that the e-learning research should be based on the context of use and application at workplace instead of formal courses in educational institutions.

5.5.1.2 Organizational Challenges in Adopting and Using of e-learning Practices

Resistance from the employees, technological incompatibility and lack of incentives for adopting new work practices by management are identified as major barriers in the implementation of e-learning practices. In general, the implementation is found to require a process of evolution, where implementers and learners gradually develop an understanding of how the technology can support the organizational needs. A look at self-directed e-learning system will be good for the improvement on the efficiency of the e-learning process and will be beneficial to get more achievements on learning for learners.
In addressing some of these challenges, UNEP can then seek to maximize the consistency and efficacy of delivering on UN projects as part of its efforts to implement the Millennium Development Goals (MDGs). e-learning at this point can be benchmarked at the preferred tool to advocate for these MDGs and demand that the UN development system increases coherence and effectiveness of its operations in different countries. The end goal will be to work towards developing a UN e-learning system that delivers efficiently and provides more for its poorest and most disadvantaged.

5.5.1.3 Factors that Mostly Influence the Adoption of e-learning in Work Places

To address some of these major influence factors, there is a need to examine what workplace e-learning requires and how workplace e-learning systems should be developed in line with those requirements. A look at the fundamental elements of the workplace learning environment including the learner, organization, learning content and social context, and their relationships must be examined to identify the underlying issues.

Since e-learning systems are widely used for education and training in organizations because of their electronic course content access and virtual classroom participation, finding suitable e-learning programs has become a very difficult and complicated task for online learners to achieve better performance. Therefore, there is need for management to assist learners find and choose the right learning materials suitable to their field of interest as it has proved to be time-consuming for learners to find contents they really want to and need to study.

By agreeing to address some of these factors, the organization will then be in a position to gather and share their collective training resources across the organization and shift towards technology supported learning. Such initiatives will help UN agencies abolish duplicative activities that chew into the organizations budget hence reduce costs and reach a wider client base.

5.5.2 Recommendations for Further Research

The researcher recommends that there is need to have additional studies from other non-governmental organizations conducted in this area. The following areas are suggested for
further studies. The researcher recommends that an exploratory research on the concept of major influence factors influencing the adoption of e-learning be conducted at a deeper level. Research on e-learning should include a mix of both quantitative and qualitative methods and levels of analysis on e-learning applications. This can be achieved by undertaking an exhaustive stock taking exercise and should be initiated to identify quality-assured training resources from across agencies in the UN system.

Research should explore how organizational culture influences knowledge management practices. This can be realized by developing and hosting an on-line community of practice that will bring together a pool of experts and develop capacity in various sectors of the organization. Further research can explore whether financial capital is a real hindrance to the implementation of e-learning programs by management and seek ways of fundraising and motivating senior management to get their buy-in.
REFERENCES


Myers, M. D. & D. Avison, Qualitative Research in Information Systems–autofilled–. 2002.


APPENDICES

Appendix A: Introductory Letter

To Whom It May Concern

Dear Sir/Madam,

I am pleased to inform you that I am a graduate student at United States International University pursuing an Executive Masters in Organizational Development. As partial fulfillment of the Masters degree, I am conducting a research seeking to investigate e-learning perceptions at the workplace using a case study of staff members at the United Nations Environmental Program.

Please note that any information you give will be treated with confidentiality and at no instance will it be used for any other purpose other than for this project. Your assistance will be highly appreciated.

I look forward to your prompt response.

Yours Faithfully,

Nyokabi Mwangi
Appendix B: Questionnaire

SECTION I: GENERAL INFORMATION
Kindly answer all the questions by ticking in the relevant box or answer.

1. Gender? Male □ Female □

2. How old are you? □

3. Do you have access to a computer?
   Yes □
   No □

4. How long have you worked with the United Nations?
   a. Less than 1 year
   b. 2-3 Years
   c. 4-5 Years
   d. 6-8 Years
   e. 9 Years and Above

SECTION II:
Understanding of e-learning & Perceptions Towards e-learning Initiatives

2.2.1 The e-learning platform

5. E-Learning is the most effective workplace training tool for an organization.
   □ Strongly agree
   □ Somewhat agree
   □ Neither agree nor disagree
   □ Somewhat disagree

6. In your view, do you think that the dominance of technology-oriented approaches has made e-learning practices less user-friendly?
   □ Strongly agree
   □ Somewhat agree
   □ Neither agree nor disagree
   □ Somewhat disagree
7. Do you feel that e-learning practices are geared towards impacting technical knowledge and ignore organizational issues that are necessary for effective e-learning programs to address?

   Yes  [ ]       No  [ ]

8. Do you think that e-learning programs should be tailor-made for a staff’s personal career progression or the work environment context of use and application? Please tick one.

   Personal career  [ ]       Work use and application  [ ]

2.2.2 A brief history of workplace learning

9. How would you rate the importance of e-learning programs in work/business environment of your organization?

   1- No idea   2- Weak   3- Moderate   4. Strong   5. Very Strong

10. Are all staff members of your agency eligible to participate in any e-learning programs initiated by the organization?

   Yes  [ ]       No  [ ]

11. How many staff members does your agency hold?

   Less than 500  [ ]   501-1000  [ ]   1001-2000  [ ]   2001-5000  [ ]

2.2.3 Classroom Training

12. Which mode of teaching do you prefer, classroom training or on-line training? Please tick one?

   Classroom  [ ]       On-line  [ ]
13. The fact that students have to be present at the same time and move at the same pace in a classroom setting for learning to occur is a huge disadvantage in this 21st century age.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree

14. Do you think that instructors/trainers in the classroom setting provide an equal learning opportunity for all students?

Yes [ ] No [ ]

2.2.4 e-Learning

15. In your view, do you think that on-line courses are ideal for on-the-job training?

Yes [ ] No [ ]

16. e-learning presents a limitation in the sense that internet connectivity must be available for any kind of training to proceed.

True [ ] False [ ]

17. Does your organization support best practices in e-learning initiatives?

Yes [ ] No [ ]

2.2.5 Blended Learning

18. In your opinion do you think blended learning (face-to-face learning mixed with on-line elements) is a good learning experience?

Yes [ ] No [ ]

19. Approximately, how many e-learning programs have you participated in?

Less than 3 [ ] 3-5 [ ] 6-10 [ ] More than 10 [ ]

20. Is management involved in formulation of e-learning programs for staff?

Yes [ ] No [ ]
21. Is management keen to ensure that a mix of both face-to-face learning and e-learning is incorporated in its training and development programme?

Yes [ ] No [ ]

6. Organizational Challenges Faced in Adopting and Using of e-Learning

2.3.1 e-Learning practices

22. Are e-learning practices a common phenomenon at your office?

Yes [ ] No [ ]

23. The management of UNEP should embrace e-learning as their primary training medium.

☐ Strongly agree
☐ Somewhat agree
☐ Neither agree nor disagree
☐ Somewhat disagree

24. Is it true that most workplace e-learning applications fail to meet the needs of learners hence not motivating employees to learn?

True [ ] False [ ]

2.3.2 Benefits and Drawbacks of e-Learning

25. Do you feel that e-learning cuts on the social and cultural interaction of people?

Yes [ ] No [ ]

26. In this globalization age, do you feel that e-learning should be replaced by human instructors?

Yes [ ] No [ ]

27. It is easy to recognize/select a quality e-learning program.

☐ Strongly agree
☐ Somewhat agree
☐ Neither agree nor disagree
☐ Somewhat disagree
28. E-learning is a cost effective learning platform that cuts on instructors’ salaries, travel costs, meeting room rentals and should be embraced by your organization.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree

2.3.3 Barriers to e-Learning Adoption

29. E-learning programs should be integrated as part of employees daily tasks and not as a separate tool/technique for learning and training

- True
- False

30. The revolution of Information Technology has heightened the need for organizations to embrace e-learning programs to improve on their staff capabilities.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree

2.3.4 Existing educational structures

31. In your view, how does e-learning empower you with skills for your work and social life?

*Using the grid below, please tick in the appropriate column which best expresses your view*

**Strongly Agree 5, Agree 4, Not sure 3, Disagree 2, Strongly disagree 1**

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<td>Exposure to challenges in the learning process produced skills for inventiveness in me</td>
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<td>The guidance from inspiring facilitators, Professional Advisors and Mentors inspired vision in me in the process of my learning</td>
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<td>Exposure unlocked inherent creativity skills that were not necessarily taught in the classroom.</td>
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<td>The practical experiential involvements were very important for my success in the process of the formal learning</td>
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<td>I believe calling upon inherent originality and creativity in any professional skills learning built innovative learning.</td>
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<td>I was able to connect learning to real life experiences and situations</td>
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<td>I got more motivated to learn once I got to know how I was learning as a e-learner</td>
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7. Factors mostly influencing adoption of e-learning

2.5.1 Major Influence Factors

32. The single-most important factor to overcome in learner resistance to workplace e-learning is:

- Perceived lack of interactivity
- Computer anxiety
- Resistance to change
- Assumed poor quality irrelevance

33. The financial implications of initiating an e-learning program for an organization make it cost prohibitive.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree

34. Is the e-learning programme formulation continuously reviewed and re-engineered in your organization?

- Yes
- No
- No idea

2.5.2 Participation in Group Processes

35. Is your office keen on developing team/group cohesion as part of its staff training and development strategy?

- Yes
- No
- No idea

36. An organization that does not effectively use e-technology cannot remain competitive in an ever-changing global workforce.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree

37. Has management put in place any measures to assess the impact of e-learning in the work environment?

- None
- Minimal
- Moderate
- Major
2.5.3 Working Along-side Others

38. Learning Management Systems are the most effective workplace e-learning systems.

☐ Strongly agree  
☐ Somewhat agree  
☐ Neither agree nor disagree  
☐ Somewhat disagree

39. Learning by listening to what is being said and observing what is being done is more employee-friendly as opposed to using on-line platforms.

True  □  False  □

2.5.4 Consultations

40. Group dynamics plays a crucial role in team work and can in turn affect the performance of the group in achieving the organizational goals.

☐ Strongly agree  
☐ Somewhat agree  
☐ Neither agree nor disagree  
☐ Somewhat disagree

41. On-the-job learning is an essential tool that can be used to increase the adoption of e-learning.

☐ Strongly agree  
☐ Somewhat agree  
☐ Neither agree nor disagree  
☐ Somewhat disagree
APPENDIX III:
ZERO-BASED ACCEPTANCE SAMPLING PLAN

"A Indicates that the Entire Lot Must be Inspected"

Acceptable Quality Level (AQL)

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