A SURVEY OF FACTORS THAT INFLUENCE THE CHOICE OF INFORMATION AND COMMUNICATION TECHNOLOGY TRAINER:

CASE OF FIRMS LISTED ON THE NAIROBI STOCK EXCHANGE

BY

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DECLARATION

This research project is my original work and has not been presented for a degree programme in any other university.

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LIST OF ACRONYMS

AIMS	Alternative Investments Market Segment
CRM	Client Relationship Management
CT	Corporate Training
DIT	Directorate of Industrial Training
DSS	Decision Support System
ERP	Enterprise Resource Planning
EUT	End User Training
FISMS	Fixed Income Securities Market
GDP	Gross Domestic Product
HR	Human Resource
HRD	Human Resource Development
ICT	Information and Communication Technology
IS	Information Systems
ISP	Internet Service Provider
IT	Information Technology
ITAA	Information Technology Association of America
JIT	Job Instruction Training
KRA	Kenya Revenue Authority
LCD	Liquid Crystal Display
OAS	Office Automation Software
OJT	On the Job Training
PIM	Personal Information Managers
MIMS	Main Investments Market Segment
MIS	Management Information Systems
NSE	Nairobi Stock Exchange
SAP	Systems, Applications and Products
SCM	Supply Chain Management
TFT	Thin Film Transistor
TNA	Training Needs Assessment

ABSTRACT

The study examined the factors that influence the choice of information and communication technology (ICT) trainer among firms listed on the Nairobi Stock Exchange. The need for the study arose from the fact that companies are continuously seeking to improve ICT skills among their employees by sending them for training in various ICT training institutions and consultancy firms. The objectives of the study were to determine the critical factors that organizations consider when selecting ICT training institutions for their workforce, and to establish the different types of ICT training being sought by organizations listed on the Nairobi Stock Exchange.

A survey design was used and data were collected using questionnaires, which were administered using a "drop and pick later" method. The respondents were HR managers or heads of training in 41 firms. Data was analyzed using descriptive statistics, cross tabulation and factor analysis.

Analysis revealed that the critical factors that influence an organization's choice of an ICT training provider include the profile and stability of the college, the certificates offered, the flexibility of the courses offered in terms of course timing, how frequently each new intake occurs, the ability of the college to offer tailor-made courses and offer the courses in-house, the location of the college, the number of computers and how modern the ICT equipment are, the ICT trainers' academic profile, legal and financial considerations. DIT registration was found to be an important factor in selecting an ICT trainer.

Organizations seek ICT training in both technical and non technical course comprising end user training in office productivity software such as word processors, spreadsheets, databases, desktop publishing, programming, networking and systems administration. From the findings of this study, firms seeking training for their staff are advised to look out for the above critical factors when evaluating potential ICT trainers. ICT Training institutions are urged evaluate themselves against the critical factors identified in the study in order to be highly ranked among corporations seeking ICT training.

CHAPTER ONE
INTRODUCTION

This chapter highlights the background of the study, ICT adoption in Kenya, the statement of the problem and the research objectives.

1.1 Background

Information Systems (IS) have become a vital component of successful business firms and other organizations. Today, ICT is part of the mainstream business strategy and has basically reshaped the basics of business. Customer service, operations, product, marketing and distribution strategies are heavily or sometimes even entirely dependent on ICT. According to O'Brien (2006), ICT has become an everyday part of business. Companies in the public and private sector have invested heavily in ICT equipment, technologies and ICT training for their workforce.

Information Technology (IT) is broadly defined as hardware, software, telecommunications, database management and other information processing technologies used in computer-based information systems (O'Brien 1997). The Information Technology Association of America (ITAA) defines IT as the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware. In general, IT encompasses application of computer hardware and software technology to the management, processing and dissemination of information. In particular, IT deals with the use of electronic computers and computer software to convert, store, protect, process, transmit and retrieve information (Schultheis et al, 1999).

Information systems (IS) on the other hand are defined as a set of people, procedures and resources that collect, transform and disseminate information in an organization using the resources of hardware, software and people to perform input, processing, output, storage and control activities which transform data resources into information products (O'Brien 2006). IS are purposefully designed systems that bring data, computer procedures and

people together to manage information important to an organization's mission (Schultheis et al, 1999).

Information and Communications Technology (ICT) merges computing with high speed communications links carrying data, sound and video (Spencer, 1992). Thus the term ICT refers to the convergence of IT with telecommunications technology. Telecommunications technology consists of electromagnetic devices and systems for communicating over distances for example, telephone, radio, broadcast television and cable television (Williams et al, 1999).

According to O'Brien (2006), IT plays three fundamental roles in business. Firstly, IS are used to support business processes and operations for example, recording customer purchases, keeping track of inventory, managing payroll, stock control and evaluating sales trends. Secondly, IS play a vital role in supporting decision making in business enterprises for example decisions on what lines of merchandise need to be added or discontinued, or what kinds of investment they require. Thirdly, IS are used to support a business' competitive advantage through the innovative use of ICT for example through innovations that attract new customers and build customer loyalty.

IS therefore play a vital role in the business success of an enterprise by providing the information a business needs for efficient operation, effective management and competitive advantage. O'Brien (2006) states that the IS function in an organization represents a major functional area of the business that is as important to the business as the functions of accounting, finance, operations management, marketing and human resources. It also represents an important factor affecting operational efficiency, employee productivity, staff morale, customer service and satisfaction. Furthermore, IS represents a vital dynamic and challenging career opportunity for millions of men and women (Turban et al, 2001). Less than ten years ago ICT was confined to IT managers, systems engineers and IT support staff. However, ICT is today being used in all business areas by all cadres of staff. If organizations are to reap the benefits and strategic uses of

ICT, they need employees who are computer literate. There is therefore a need to train both technical and non technical employees in ICT and thus enhance their productivity.

1.2 ICT adoption in Kenya

In order to use information and communication technologies effectively to enhance productivity in Kenya, IT literacy needs to be strengthened across all sectors and professional qualifications (Kenya National ICT Policy, 2005). This will also stimulate growth and employment for the country as a whole. The Kenyan Government has recognized the role of ICT in the social and economic development of the nation and has promulgated a national ICT Policy based on the Economic Recovery Strategy for Wealth and Employment Creation (2003-2007). As per the National Information and Communications Technology (ICT) Policy, the Government's vision is to make Kenya 'A prosperous ICT-driven society'. The Kenya's national ICT paper provides a recipe for the realization of the full benefits of using ICT in all sectors of the economy. In the national ICT policy the use of ICT as an empowerment tool, its role in social, cultural, and environmental issues, poverty eradication, government and the general welfare of the population is recognized.

Many large firms in Kenya view ICT as being potentially capable of bringing in some benefits. This is evidenced by the high rate at which organizations are investing in ICT technologies, the growing number of ICT firms dealing with direct hardware and software sales as well as provision of ICT services such as those provided by ISPs, Network Companies and ICT Consultants. In their studies, Kinyanjui (2001), Abwao (2002), Kipng'etich (1991), Nyandiere (2002) and Wachira (2001) gave the main reasons for adoption of ICT by Kenyan companies as: increased efficiency of internal operations, increased speed of transaction processes, increased efficiency in accounting, data storage and retrieval and the need to improve customer service in order to meet and exceed the increasing customer expectations. According to Abwao (2002), Kenyan companies are also adopting ICT as a result of demands by financiers mainly banks, donors and microfinance institutions to implement technology in operations and to reduce the complexity of transactions especially in accounting and book keeping. In his study on

the extent of use of ICT on firms listed on the Nairobi Stock Exchange(NSE), Taneja (2006), established that extent of ICT usage in firms listed on the NSE is quite high with most firms having a dedicated ICT department. He argued that ICT has been adopted by firms listed on the NSE for purposes of gaining competitive advantage and hence increasing the shareholder value.

1.2.1 ICT and Companies Listed in the Nairobi Stock Exchange

The Nairobi Stock Exchange (NSE) deals in the exchange of securities issued by publicly quoted companies and the Government in Kenya. The NSE started in the 1920s when the country was still a British colony. The Kenyan capital market is organized into three independent market segments: the Main Investments Market Segment (MIMS), Alternative Investments Market Segment (AIMS), and Fixed Income Securities Market (FISMS). Companies listed on the MIMS are further classified into four sectors namely: agricultural, commercial and services, finance and investments, and lastly, industrial and allied.

Companies listed in the stock exchange form significant sectors in most world economies and therefore their development is regarded as an important issue for most governments and economies. The companies listed in the Nairobi Stock Exchange account for more than 50% of manufacturing gross domestic product (GDP) and it is estimated that they account for 60% to 70% of the national income (Daniels and Mead, 1998). The extent of ICT use amongst these companies varies and is determined by industry practice and other socio-economic factors. In his study on the extent of use of ICT among firms listed on the NSE, Taneja (2006) established that majority of the firms listed on the NSE have adopted ICT and that this has resulted in free flow of information, shorter manufacturing time for products, improvements in customer service and efficiency in business operations. The findings of this study indicate that ICT is an essential component of competitive strategies among the firms listed on the NSE. For firms to achieve competitiveness through ICT, they must invest in training their employees in ICT.

1.2.2 ICT Training for Organizations in Kenya

ICT literacy among employees can be achieved through training. Training refers to the art of imparting knowledge and skill (Khanka, 2003). Computer literacy is the knowledge and ability to use computers and technology efficiently. According to O'Brien (2006), Computer literacy does not deal with how the computer works (digital circuits), but it implies having knowledge of how the computer does its work for example, calculate, compare and copy. A computer literate user needs to have hands-on ability to work with the operating systems such as Windows, Mac and Linux and other common applications including spreadsheets, word processors, database programs, personal information managers (PIMs), e-mail programs and Web browsers(Schultheis et al, 1999).

Training for organizations in Kenya is regulated by the Directorate of Industrial Training (DIT). DIT is a government department within the Ministry of Labour and Human Resource Development that was established in 1971 after the Government amended the Industrial Training Act to make provision for the regulation of training of persons engaged in industry (Industrial Training Act, 1983). DIT's mission is to secure the greatest possible improvement in the quality and efficiency of Industrial Training and ensure an adequate supply of properly trained manpower at all levels in industry by working in partnership with industry, trainers, educational institutions, employers and workers' organizations and other relevant local and international bodies. Training institutions and consultancy firms that offer or facilitate training are required to register with DIT. Employers pay a training levy to DIT as a statutory requirement. Previously, DIT mainly regulated the delivery of non ICT courses such as safety in the workplace, motor vehicle mechanics, laboratory technicians, textile and electronics among many other technical and management courses. However, more focus has been laid on ICT training in the recent years.

Most government organizations and corporate bodies select ICT trainers who are registered with DIT, who in turn ensure that the training providers meet training standards. DIT also develops curriculum for employers on generic courses for different

levels of staff in the organizations. A list of trainers registered by DIT and generic courses for senior and middle level managers and supervisors is appended at the end of this report as Appendix III and IV respectively.

The institutions registered with DIT offer different programs targeted at different levels of users in organizations. While some of the institutions specialize in technical courses only, others offer non technical courses aimed at improving the ICT literacy of their students such as use of word processors, database programs, spreadsheet, email applications and desktop publishing software.

1.3 Statement of the Problem

The benefits of ICT to organizations are enormous. As a result, companies have invested and continue to invest heavily in hardware and software technologies. To reap the benefits of ICT, organizations require a workforce with the relevant technical and hands-on skills to operate and work with ICT equipment hence the different training packages from which to choose.

In their quest to have productive employees, many organizations that are using ICT technologies have had to recruit employees with computer skills irrespective of their level of training in specific professions, for example accounting, audit, banking, customer service among many others. Further, a large number of advertised vacancies in the local dailies require proficiency in the use of computers.

Some organizations have a dedicated IT training section that conducts in-house ICT training and ICT refresher courses. Other organizations sponsor their staff as corporate students to attend various ICT training programs available in colleges in order to improve the ICT skills of their workforce.

In response to the high demand for computer literacy, many colleges and ICT training firms have sprung up within the city and its environs, each offering various ICT training programs based on local or international curriculum and each priced differently. The

challenge for most organizations is to select an ICT training provider for their employees. This challenge is further compounded by the numerous consultancy firms and training providers offering ICT training, the large number of ICT courses available in the market and the different costs charged for the courses. Therefore, the questions that this study seeks to address are: What types of ICT training are being sought by organizations listed on the NSE and what are the critical factors to consider when selecting an ICT training institution?

1.4 Research Objectives

The objectives of the study were:

1. To determine the critical factors that organizations consider when selecting ICT training institutions for their workforce.
2. To establish different types of ICT training being sought by organizations listed on the Nairobi Stock Exchange.

1.5 Importance of the Study

The study will be important to a range of interest groups. Employers seeking to improve the IT skills of their staff will be enlightened on factors that they should consider when selecting ICT institutions to sponsor their employees into.

ICT Training institutions can use the research work to determine how they can respond to specific needs of their clients. From the findings of this research, such institutions will also get insight into programs that are most sought after for corporate training.

Directorate of Industrial Training (DIT) can benefit from the findings of this research in establishing courses that are sought after by organizations and the government, through DIT can use the findings of this research for policy making.

For the academics, the findings of the study will provide basic information for further research in ICT training practices and how ICT literacy can be improved.

CHAPTER TWO
LITERATURE REVIEW

This chapter discusses the concepts of training, staff development, education and computer literacy. The training strategies that may be adopted by firms and the factors that may influence the choice of an ICT training provider are also discussed in this chapter.

2.1 Training, Development and Education

In the context of Human resource development, training is defined as the process of teaching new or present employees the basic skills they need to effectively perform their jobs (Flippo, 1984). It is the act of increasing the knowledge and skill of employees to enable them to do their jobs. According to Khanka (2003), training refers to the acquisition of knowledge, skills, and attitudes as a result of the teaching of vocational or practical skills and knowledge that relates to specific useful skills. It includes all the teaching and learning activities carried on for the purpose of helping members of an organization to acquire and also to apply the required knowledge, skills and attitudes to perform their jobs effectively. Training is the systematic modification of behavior through learning which occurs as a result of education, instruction, development and planned experience (Armstrong, 1992). Khanka (2003) argues that training is a process that tries to improve skills or add to the existing level of knowledge so that employees are better equipped to do their present job, or to mould them for a higher job involving higher responsibilities. Training and development in organizational context of human resource is the field concerned with workplace learning to improve performance.

Human Resource Development (HRD) on the other hand has a broader scope than training and aims to develop people in all aspects. Development of an individual at the workplace has been associated with the realization of potential through activities and supporting processes which position people more effectively for medium and longer term opportunities (Walton, 1999). According to Khanka (2003) development not only covers activities or skills which improve job performance but also those activities which bring about growth of personality and help individuals progress towards maturity and

actualization of their potential. Development is an ongoing continuous process while training is a one-off deal. Education is also wider in scope and broader in purpose when compared to training. It is a life-long process of increasing the general knowledge and understanding of the people about a subject or theme or environment.

Training and development is seen to be critical to the satisfaction and performance of employees. Herzberg (1959) refers to training opportunities as 'motivational factors' and satisfiers. They are occasions in the job that inspire people to feel good about who they are and where they are. According to Bruce (1992), a motivator is essential to acquiring and maintaining skills for optimal job performance. Dessler (2004) concurs by adding that training and development has long been seen as a way not only to ensure highly skilled staff but also to increase self esteem, commitment, motivation and embed a learning culture.

In a study on the relationship between training and job satisfaction for different categories of staff in microfinance institutions, Agala (2002) found that the higher the per capita expenditure on training, the higher the level of job satisfaction among employees. Azegele (2005) concurred that training improves job satisfaction among employees and established that the main training and development programs undertaken in the hotel industry in Kenya are customer care, leadership skills, computer packages and hospitality training.

The major issue affecting training in Kenya is lack of adequate allocation of resources to training in organizations. In their studies on various aspects of training in parastatals, central government of Kenya and private organizations in Kenya, Agala(2002), Mwangi (2002), Olunga(2004), Lutomia (2004), revealed that the budgetary allocation to training is minimal and that when there is a need to cut costs, the training budget is affected considerably. On issues affecting training, Agala (2002) further revealed that most training programs fail due to lack of personal upward mobility of trainees in their respective organizations. Mwangi (2002) found that training programs are not effective due to the inadequate analysis of training needs. In his study on deploying trained

personnel for improved job satisfaction, Mududa (1983) observed that the performance of those trained improves considerably where training needs are identified.

Computer based IS can only have a significant impact on an organization if the firm provides adequate training for all levels of end users (Kiprono, 2006). Furthermore, lack of training reduces the employees' performance and exposes them to errors that pose risks to the organization. Training is therefore essential to minimize risks during the employees' interaction with the systems (Brown et al, 1994). The effective use of ICT now demands computer literacy not just in computer service departments but also throughout the organization (Senker, 1992).

2.2 Computer Literacy

Computer literacy has been defined as an understanding of computer characteristics, capabilities, applications and having the ability to implement this knowledge in the skillful, productive use of computer applications suitable to individual roles in society (Simonson et al, 1987). This includes having a basic understanding of the file management processes such as formatting a disk and how to save, copy, delete, open, and print documents. It also involves using computer applications software to perform personal or job -related tasks, using web browsers and search engines online, and being able to use email.

Computer literacy does not deal with the digital circuitry of how the computer works, but it implies knowledge of how the computer does its work for example, calculate, compare and copy. It also implies hands-on ability to work with application programs such as word processors, spreadsheets, databases, presentation, communication software and operating system such as Windows, Mac, Linux and common applications such personal information managers (PIMs), e-mail programs and Web browsers (Schultheis et al, 1999). Computer literacy therefore refer to the comfort level someone has with using computer programs and other applications that are associated with computers.

Laudon (2006) asserts that computer literacy refers to knowledge about information technology focusing on understanding how computer based technologies work. Computer literacy is further described as the set of knowledge and skills needed to use information technology at a level appropriate to a person's position, work environment and discipline and the ability to continue to develop them into the future. Aspects of computer literacy include: plugging in and turning the computer on, composing, editing and printing documents and the ability to communicate with others using computers through electronic mail (email) or instant messaging services. Proficiency in the use of the World Wide Web including locating information on the web and having an understanding of social issues related to computers and the web including intellectual property, privacy and security, and legal issues related to computers and the Internet are also important concepts for computer and Internet users in organizations to appreciate. This level of computer literacy can be acquired through training.

Today's corporations look for IT savvy professionals and with good reason. This is because information is the lifeblood of any organization and is essential to sound problem solving and decision making, upon which business success is built. According to Oz (2006), a professional who does not stay informed is of diminishing value to an organization. Therefore he argues that all knowledge workers, professionals, scientists, managers and others who create new information and knowledge in their work must be familiar with ICT.

Managers must at all times maintain a clear picture of their organizations and the outside business environment. They must know what resources are available to them and their competitors. ICTs provide excellent tools for collecting, storing, disseminating and presenting facts (O'Brien, 2006). But to be truly effective, those facts must be manipulated into useful information that indicates the best allocation of various resources including personnel, time, money, equipment and other assets (Oz, 2006). In order to take advantage of the capabilities of ICTs, managers therefore need to be computer literate.

Managers must be able to define information requirements effectively and have an understanding of decision support tools, such as query languages, report writers, spreadsheets and financial planning systems (Laudon, 2006). According to Oz (2006), managers need an appreciation of how ICTs impact their company's business operations and management. They also need to know which ICTs are available to their organizations and how they might be developed in the future. O 'Brien (2006) asserts that training is a vital implementation of any IS activity, and both managers and end users should be educated on the ICT technology implemented in their organization and how it impacts the organization. This knowledge should be supplemented by training programs for any new hardware devices, software packages, and their use for specific work activities.

2.3 Training Strategies

In the organizational context, training is seen as subset of human resource development. Kenney and Reid (1988) identified five major training strategies.

The first strategy is training on the job, which may take the form of coaching and advice from immediate superiors and colleagues. The main methods under this strategy include on the job training (OJT) and Job Instruction Training (JIT). On the job training is a common training approach whereby a new employee is placed on a job and taught the skills necessary to perform it. A trainer or superior teaches the employee who learns by observing and copying (Khanka, 2003). With job instruction training, a trainer or supervisor gives instructions to an employee on how to perform his job. This method of training is appropriate for imparting computer literacy among employees for example how to create and format a word-processed document.

The second strategy discussed by Kenney and Reid (1998) is the planned organization experience, which includes exposing employees to a planned experience into other departments, assignment of special responsibilities and special projects.

The third strategy is through in-house courses that are likely to transfer learning from internal rather than external courses. For example following the installation of a new ERP system, an organization may organize a user training session for all employees in the affected departments.

A fourth strategy identified by Kenney and Reid (1998) is planned experiences outside the organization which involve seconding employees to other organizations which supply services to the organization or are customer organizations so that they may learn a new concept or experience another way of doing things.

Lastly the organization may also employ the training strategy of sponsoring employees to external courses run by consultants, colleges and universities. Such courses typically lead to a qualification external to the organization. Most organizations have a training policy that determines the method of training used uniformly across the organization.

Kenney and Reid (1998) argue that there are four decision criteria to use in determining the appropriate training strategy. The first criterion is compatibility with objectives arising from training needs analysis. Secondly, management may also consider the estimated likelihood of transfer of learning to the workplace. An important factor to consider is available resources and lastly trainee related factors such as family commitments.

The organization needs to select its training strategy or mix of strategies depending on factors such as the purpose of training, nature of contents, relevance to the participants, level of trainee competence, competence of trainers and cost; which may also influence the organization's choice of an ICT training provider.

2.4 Factors that Influence the Choice of ICT Training Provider

The decision of which ICT training provider or institution to select for corporate training is more complex for an organization than for an individual looking for ICT training. The selection process may involve large sums of money, complex technical and economic

considerations, and interactions among many people at many levels of the organization (Kotler, 2006).

The major factors that may influence an organization's choice of a ICT training provider include financial resources, profile of the training institution, the training institutions ICT infrastructure, the location of the training institution, the profile of trainer or course facilitator, availability of learning resources, course evaluation, quality of training, advertising and flexibility in course timings and venue.

2.4.1 Financial Considerations

A major factor that will influence an organization's choice of ICT training is the availability of funds. Organizations are likely to prefer institutions that offer ICT courses at cost that is affordable according to the organization's available resources (Kenney et al, 1998).

According to Oz (2006), the budget is the main factor limiting the services and information that computers can provide within an organization. Laudon (2006) expounds that the cost of owning ICT technology resources includes training for information systems specialists and end users and further stresses that hardware and software acquisition costs account for only twenty percent of the total cost of ownership of technology assets while training, support, maintenance, infrastructure, space and energy account for the remaining eighty percent of the total cost of ownership of ICTs. In an organization, the cost of sending employees to attend training includes not only the monetary cost of training but also the opportunity cost, where the employee would have been involved in his/her daily duties thus a replacement may have to be found during the time that the employee is absent (Khanka, 2003). Monetary costs include the amount of money paid for registration into the institution, tuition fees, stationery and other costs that may arise such as cost of refreshments and meals depending on the training contract between the training institution and the organization.

In his study on the relationship between training practices and performance of publicly quoted companies, Gakuru (2006) found that most firms consider the cost of training when choosing a company trainer. Research on training in parastatals and private companies in Kenya (Olunga 2004, Lutomia 2004) reveal that the budgetary allocation for training in most organizations is minimal. Therefore, training institutions that charge unreasonably high fees may tend to loose corporate clients whereas those which charge reasonable will tend to attract large number of clients.

2.4.2 The Organization's Decision Making Process

The selection of an ICT training college is a typical decision that an organization's management needs to make. In an organization's decision making process, Kotler (2006) identifies major players who play a role in the organizational buying process as users, influencers, buyers, deciders and gatekeepers. Users are members of the organization who will use the product or service, in this case employees who are to undergo ICT training. Kenney and Reid (1998) argue that trainee related factors, in this case, the users, are one of the four decision criteria that firms use in determining the appropriate training strategy. In some organizations it is the employees who initiate training by requesting for ICT training (Khanka, 2003) and they may bear in mind trainee related factors such as family commitments. In the selection process, influencers, mainly technical personnel often help to define specifications and also provide information for evaluating alternatives. In this case, technical personnel and IS specialists may recommend ICT training programs for themselves and for end users (O'Brien 2005). The major role of selecting vendors and negotiating is played by buyers who have the formal authority to arrange terms of purchase may help shape product specifications. Deciders, in this case, managers have formal or informal power to select or approve the final supplies, in this case training institutions and lastly gatekeepers, for example secretaries and human resource officers and assistants control the flow of information to all the parties involved in the decision making process (Kotler, 2006).

The decision making process on which trainer or institution to select to offer ICT training involves participants who are influenced by environmental, organizational, interpersonal

and individual factors (Ivancevich et al, 2006). Environmental factors relate to the economic outlook, cost of money; technological, political and competitive developments in the environment. According to Kotler (2006), each organization has its own objectives, policies, procedures, structure and systems which play a crucial role in organizational buying behaviour. As part of the organization policies and procedures, training needs assessments (TNA) may be used to guide the selection of ICT courses to be offered and subsequently the ICT training institution to contract. Kenney and Reid (1998) argue that compatibility with objectives arising from TNA is a major decision criterion that firms use in determining the appropriate training strategy and this may be part of an organization's decision making process (Ivancevich et al, 2006). Firms may also consider the estimated likelihood of transfer of learning to the workplace as part of the decision criteria. Interpersonal factors relate to participants in the buying process who influence the selection process because they control rewards and punishments, have special expertise or have a special relationship with other important participants. Kotler (2006) argues that interpersonal factors are very subtle. Each participant in the decision process also brings in personal motives, perceptions and preferences that are affected by personal characteristics such as age, income, education, professional identification, personality and attitudes towards risk and all these factors may play a role in the choice of an ICT training provider.

2.4.3 Profile of the Training Institution

In selecting an ICT training provider, an organization is likely to asses the profile of the institution including its reputation, how long it has been in existence in the market, its experience in other similar undertakings, the organizations goals and objectives, area of specialization, other certifications or standards used, business partners, achievements and awards, legality, future and level of modernity (Lientz et al, 1999).

2.4.4 Reputation of the Institution

One fairly sustainable basis for differentiating an institution is its civil character, institutions image tends to persist for long (Kanter, 1960). Reputation plays a great role in the marketability of the institution. This is in line with value of past activities performed

by the institution as perceived by the customers and the public as a whole. An ICT institution's reputation may influence the number of enrolment in its training programs or course. Highly reputable institutions tend to attract very large numbers off applicants compared to those of low reputation institutions. Prospective clients seek information about the quality of lecturers an institution has from published information such as from newspapers, journals, periodicals. In an organization such information may be acquired from employees who have previously been enrolled in such institutions.

2.4.5 Future of the Institution

The organization of the future is an ultimately adaptable organism (Miller, 1979). For an institution to have a future its shape and appearance will have to change as its environment changes. The institution must adapt to the new realities every day. It should anticipate changes in the environment in which it operates (Hitt et al, 2004). No rational person would continue attending an institution whose going concern seems questionable or doubtful. Prospective students before joining these institutions evaluate their past and tremendous improvement the institution has under gone through and can from his or her findings assess the going concern of it. Likewise, corporations will select those institutions whose ability to continue offering services is not questionable.

2.4.6 Legality of the Institution

Changes in government policy can be expected to have an effect on the education sector. Political forecasts are usually seen to have an impact on both economic and technological variables, which may in turn have an influence on the institutions operation (Pearce, 2002.)

The government has a mechanism through which it regulates the learning institutions in Kenya. Training for organizations is governed through the Industrial Training Act (1983) under which the Directorate for Industrial Training DIT) was established. The government, through its regulatory bodies therefore has a substantial control over the operations training institutions. Many government bodies and organizations follow a tendering process for the provision of training services and for a training institution to be

awarded the tender, they have to be registered with the registrar of companies and produce a tax compliance certificate.

2.4.7 Modernity

Firms that do not adapt to technological advancements in their environment are likely to lose their market share to their competitors (Kotler, 2006). ICT training institutions which invest in the latest computers and other modern ICT peripherals such as projectors, flat screen monitors, LCD screens and laptops are likely to attract more clients as they are perceived to be more modern.

Customers demand the most modern and recent technology and therefore institutions which have not adapted to the required level of technological advancement stand to loose their market share as they can not compete adequately with those institutions which offer ICT training services using modern technology (Wiggins, 2002).

2.4.8 College Area of Specialization

The area of specialization is a critical consideration in establishing the span of control at all levels of management. It is generally accepted that every person has his or her position in a particular passion (Gibson et al, 1994).

Specialization enhances both the qualified competency of an institution's services. This is because the institution is able to concentrate and put more effort and emphasis on what it can deliver best to its clients (Cusick, 1992). Colleges and consultancy firms are perceived to specialize in certain ICT areas such as web design, programming, end user training (EUT), desktop publishing (DTP), enterprise resource planning (ERPs), database management (DBMS), systems administration and networking among others. Likewise a training institution may offer diverse courses related to a firm's operations and functional area such as accounting, human resources, production, procurement and project management. In selecting an ICT training institution, management may consider the college area of specialization alongside other training programs that are available.

2.4.9 Profile of the Trainer

The profile of the trainer is an important factor in as far it has an effect on the trainer's ability to effectively deliver the course and also affects the institution's corporate image. Trainers who are qualified perform better thus satisfying their clients (Bruce, 1992).

In a study on the relationship between training practices and performance in publicly quoted companies in Kenya, Gakuru (2006) found that firms consider the ability to speak well, ability to convince, and ability to inspire as some of the factors considered when choosing a company trainer. The trainer or facilitator who delivers the programs brings with him or her individual and interpersonal factors that may have an effect on the trainees' attitudes and therefore choice of training institution (Kotler, 2006).

Employees who interact with customers, have individual characteristics such as age, education, personality and attitudes all of which affect the way the organization is perceived by its corporate clients(Olins & Wally, 1990).

2.4.10 Advertising

Kotler (2006) defines advertising as any paid form of non-personal presentation and promotion of ideas, goods and services through mass media such as newspapers, magazines, television or radio by an identified sponsor. Advertising is carried out with the objective of informing, reminding or persuading customers about products or services availability (Kotler, 2006). In their quest to improve sales, training institutions are increasingly using various advertising media such as radio, television, billboards and newspapers to inform potential corporate clients of their existence. In their search for a corporate trainer, organizations may obtain information from several sources including advertising, sales people and recommendations from other companies (Kibera, 1988).

2.5 Types of ICT Training

Training is a vital implementation activity in ICT. End users, management and ICT specialists must be trained on every new business system or its implementation will fail

(O'Brien, 2005). In a study on challenges facing users of computer based systems, Kiprono (2006) argued that IS can only have a significant impact on an organization if the firm provides adequate training for all levels of end users. According to O'Brien (2005), training may involve only activities such as data entry, or it may also involve all aspects of the proper use of a new system. He asserts that managers and end users must be educated in how the new technology impacts the company's business operations and management. This knowledge should be supplemented by training programs for any new hardware devices, software packages, and their use for specific work activities. In a study on deploying trained personnel, Mududa (1983) established that the performance of those trained improved considerably where the training needs were identified.

The Directorate Training Institute (DIT) in Kenya depicts two categories of training as: ICT courses for senior and middle level managers, and ICT courses for the supervisory level staff. The list of courses offered for each group is annexed in Appendix IV. However most of the training institutions listed in Appendix III of this report categorize the types of training they offer into either technical or non technical courses.

The non technical courses are geared towards enhancing computer literacy. These courses improve the end user's hands-on capability to work with application programs such as word processors, spreadsheets, databases, presentation, communication software and the basics of operating system such as Windows, Mac, Linux and common applications such personal information managers (PIMs), e-mail programs and Web browsers (Schultheis et al, 1999) and are mainly targeted towards other professionals in areas not directly related to ICT. Training for these courses is widely referred to as End User Training (EUT) amongst training institutions and colleges.

In addition to having computer literacy as a skill set, ICT professionals require specialized ICT technical skills. The ICT trade is made up of people engaged in a variety of activities (Oz, 2006) and a wide range of specialists from systems analysts and programmers, database administrators, network administrators, webmasters, IT security officers, information officers to user support professionals, are on high demand in firms that have adopted ICT (O'Brien, 2005).

Systems analysts and programmers require skills in analyzing business needs and setting up business applications and IS for the organization (O'Brien, 2005). Training in the software development environment and tools is necessary for these professionals to perform their work effectively. The development, acquisition and management of organizations' databases as well as deciding how organizations' data will be used is a specialty for database administrators (Oz, 2006) who need technical training in specific database platforms in use their organizations such Oracle, SQL and other Database Management software.

Oz (2006) argues that among the many IT areas, networking and telecommunications has seen the most exciting development in recent years and also the greatest increase in corporate allocation of IT resources in many organizations. Network administrators therefore need to be well versed in the emerging new technologies such as fiber optics, Voice over IP (VoIP), Wireless Communication and the Wi-Fi standards as they are responsible for acquiring, implementing, managing, maintaining and troubleshooting networks in the organization (Laudon, 2006).

According to Oz (2006), webmasters who are responsible for creating and maintaining organizations' websites, intranet and extranet pages are becoming increasingly involved in creatively deciding how to present the organization on the web. He mainatains that training for web specialists should include elements of marketing and graphic design as well as concepts of ecommerce. Since many organizations use the Web for commerce, Webmasters must also be well versed in Web transaction software, payment processing software and security software. Oz (2006) therefore argues that the demand for Webmasters is expected to grow as long as corporate use of the Web continues to grow.

Due to the large amounts of information, data and resources they hold, Information Systems and computer networks are vulnerable to many kinds of threats (Laudon 2006). The potential for unauthorized access, abuse or fraud is not limited to a single location but can occur at any access point in the network. Therefore security officers in

organizations require training in IT security management and control (Oz, 2006) and a number of ICT courses available in the market address security management.

Organizations have realized the strategic roles of ICT and are increasingly embracing ICT as an integral component of business processes, products, and services to help them gain a competitive advantage in the global marketplace (O'Brien 2006). The role of information officers in organizations reflects the importance that companies are placing on IS as a strategic resource. They are charged with the responsibility of integrating the IS strategic plan into the organization's overall strategic plan. Information officers require business knowledge, technical understanding of current and developing ICTs and how different technologies can improve business processes or aid the creation of new products or services (Oz, 2006). Specific training programs targeted towards top managers and information officers in organizations focus on the strategic uses of ICT.

User support professionals man organizations' help desks and require technical skills in hardware and software. This category of staff requires technical skills in hardware and software troubleshooting as well as systems administration skills which can be acquired through training (Oz, 2006).

O'Brien (2005) concludes by stressing that training is a vital activity and that the ICT knowledge of employees at all levels in the organization should be supplemented by training programs for any new hardware devices, software and technology.

2.6 Conclusion

A number of factors may influence management when selecting an ICT training college or ICT consultancy firm to conduct training for its employees. Such factors include financial considerations, the decision maker's perception of the profile of the training institution, the ICT training institution's area of specialization, the use of modern ICT equipment, the number of computers, the reputation of the ICT training institution, ICT trainers'/facilitators' academic background, the ability of the training institution to offer in-house and tailor-made ICT courses and advertising.

CHAPTER THREE
RESEARCH METHODOLOGY

The research design, data collection method and data analysis are discussed in this chapter.

3.1 Research Design.

The study used primary data which was collected through questionnaires. A survey of all the firms listed and trading on the Nairobi Stock Exchange in June 2007 in the Main Investment Market Segment (MIMS) was carried out. The total number amounted to 41 firms excluding those firms whose trading on the NSE was suspended. Four of the companies are classified in the agricultural sector, nine in the commercial and services sector, twelve in the finance and investment sector and sixteen in the Industrial and Allied Sector. Appendix II lists the companies trading on the NSE MIMS as per June 2007.

3.2 Data Collection Method

A structured questionnaire (see Appendix I) was used to collect the relevant data. The questionnaire contained three sections. Section A captured information pertaining to the company profile and its classification on the NSE. Section B captured specific information pertaining to types of ICT training sought by organizations and how the training is organized while Section C concerned the factors that influence the selection of an ICT training provider. The questionnaires were administered to the heads of training or HR managers using "drop and pick later" method. Follow up was done through telephone, personal visits and email.

3.3 Data Analysis

Before entering the data into the computer, the filled in questionnaires were checked for completeness and consistency. This ensured that the questionnaires were completed as

required (Schindler, 2006). Data was coded and entered into the computer using Statistical Package for Social Science.

Data from Section A and B was analyzed using percentages, descriptive statistics and cross tabulation. Tables, graphs and charts were used to display the results. Graphs and tables were used to display the results in order to identify trends and patterns. The data from Section C of the questionnaire was analyzed using factor analysis to identify critical factors and to establish if there was a relationship among factors that influence ICT training in companies listed on the NSE.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

This chapter presents analysis and findings of the study.

4.1 Profile of Respondents

Out of the 41 copies of questionnaires distributed, only 26 were filled in and returned, constituting a 63% response rate. The firms, from which respondents were drawn, were analyzed in terms of the sectors of the NSE. Table 1 shows that the Industrial and Allied sector most had the highest representation of 69%.

Table 1: Respondents' Response Rate According to Classification on the NSE

Sector	No. of Respondents	Total No. of Companies in the Sector	Percentage
Agricultural	2	4	50%
Commercial and Services	6	9	67%
Finance and Investment	7	12	58%
Industrial and Allied	11	16	69%
Total	26	41	

4.2 Distribution of Respondents by Number of Employees

From the firms that responded, 81% had over 200 employees. Table 2 shows the distribution of respondents on the NSE by the number of employees.

Table 2: Distribution of Respondents on the NSE by Number of Employees

Number of employees	Number of Respondents	Percent	Cumulative Percent
Over 400	9	34.6	34.6
301 to 400	1	3.8	38.4
201 to 300	11	42.3	80.7
101 to 200	2	7.7	88.4
51 to 100	3	11.5	99.9

4.3 The Tendering Process and the Training Mode

The tendering process may affect the decision making process concerning which ICT training provider to contract. Only 9 out of the 26 respondents use an elaborate tendering process for the selection of ICT trainers. This constitutes 35% of the respondents. The remaining 65% indicated that they do not go through an elaborate tendering process in the selection of ICT trainers. External training appears to be the most commonly used mode of training at 62% compared to in-house training at 38%. Table 3 shows the responses with regard to companies' preference for in-house or external training.

Table 3: In-house versus External Training

Classification	In house training		External training		Total Responses
	Responses	Percentage	Responses	Percentage	
Agricultural	1	50%	1	50%	2
Commercial and Services	2	33%	4	66%	6
Finance and Investment	4	57%	3	43%	7
Industrial and Allied	3	27%	8	73%	11
TOTAL	10	38%	16	62%	26

As indicated in Table 3, 62% of the firms mainly use external training in comparison to 38% of the firms which prefer internal training (38%). In-house training is prevalent among firms listed in the Agricultural (50%) and Finance and Investment sectors (57%). Firms in the Industrial and Allied and Commercial and Services sectors mainly practice external training at 73% and 66% respectively.

4.4 Course Session Timings

Table 4 shows the training session timings that are preferred by firms. According to the data, majority of the companies (50%) send their staff for full time training, while 23% of the firms send their staff to train during the morning hours (8.00 am to 12.00 Noon) and 4% send staff for ICT training in the afternoon.

Table 4: Course Session Timing

Session Timings	Frequency	Percent
Full time(8.00 am -5.00 pm)	13	50.0%
Morning hours(8.00 am-12.00 noon)	6	23.1%
Afternoon (2.00 pm -5.00 pm)	1	3.8%
Evenings (After 5.00 pm)	5	19.2%
Lunch hour (12.00noon – 2.00pm)	1	3.8%
Total	26	100.0%

4.4.1 Comparison of Session Timings and Classification on the NSE

A comparison of the course timings against the number of employees reveals that firms with over 400 employees opt for full time training sessions. Majority of the respondents training staff on full time basis were listed in the Industrial and Allied Sector. Table 5 compares the findings across the four categories of firms on the NSE.

Table 5: Comparison of Preferred Session Timings Across Firms on the NSE

	Agricultural	Commercial & Services	Finance & Investment	Industrial & Allied	Total
Full time (8.00 am-5.00pm)	1(7%)	3(23%)	3(23%)	6(46%)	13(50%)
Morning(8.00am-12.00noon)			4(66%)	2(33%)	6(23%)
Afternoon (2.00pm-5.00pm)		1(100%)			1(3%)
Evenings (After 5.00pm)		2(40%)		3(60%)	5(19%)
Lunch hour (12.00noon-2.00pm)	1(100%)				1(3%)

As indicated in Table 5, most of the firms that sponsor their staff into full time training sessions are classified in the Industrial and Allied sector (46%). Firms in the Commercial and Services and Financial and Services sectors each indicated a 23% preference for full time training sessions. Morning sessions (8.00a.m to 12.00 Noon) are prevalent among firms in the Finance and Investment (66%) as well as Industrial and Allied sectors (33%). Only agricultural firms indicated a preference for training during lunch hour sessions (12.00 noon to 2.00p.m).

4.5 DIT Registered Trainers and Generic Courses

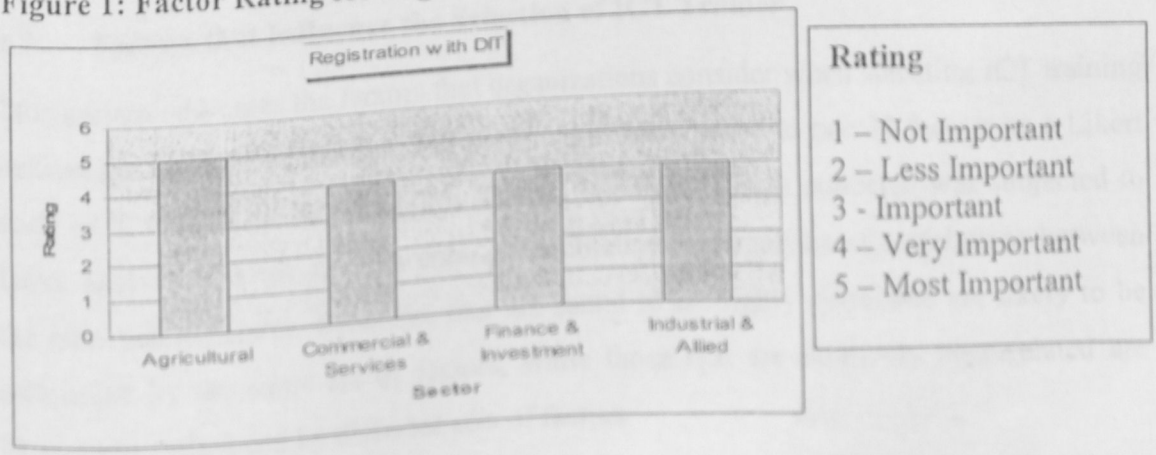
Appendix III of this report lists 30 ICT training institutions that had been registered by the Directorate of Industrial Training (DIT) as ICT training institutions as per June 2007. Out of the 30 firms, 18 were cited in the questionnaires as having been used by the respondents, representing 60% of the firms registered by DIT as institutions that have offered ICT training to the respondents. The respondents were further required to indicate how they learnt about the particular ICT trainer they had used for ICT training in their firms. Table 6 shows how the respondents learnt about the ICT training institutions.

Table 6: Source of Information About ICT Training Institution

Source of Information	No of Responses	Percentage
Advertisement	12	31%
Door to door marketing	3	8%
Through employees	6	15%
Industry	2	5%
Long association with institute	3	8%
Pre-qualification of suppliers	2	5%
During the supply of ICT equipment	4	10%
Word of Mouth	7	18%

In the analysis for factors that influence the choice of a company's ICT trainer, DIT registration, as a factor that influences the choice of a training provider scored a mean of 4, rating as a 'very important factor. Figure 1 shows how firms rated DIT registration as a factor in influencing their choice of ICT trainer.

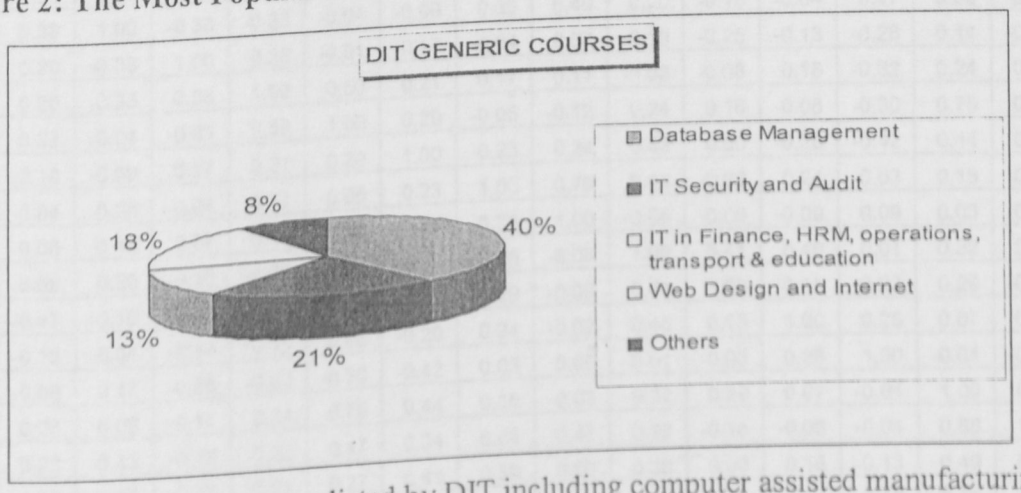
Figure 1: Factor Rating for Registration with DIT



4.6 Types of ICT Courses Offered

The findings indicate that 95% of the companies train their employees in office productivity software including Ms Word, Ms Excel, Ms Access, Ms Outlook, and Ms PowerPoint. Apart from training staff in office productivity software, all the respondents had sponsored some of their staff for technical and other non-technical ICT courses that are recognized by DIT. The generic courses listed by DIT are listed in Appendix IV of this report. The respondents indicated that they had trained their staff in 85% of the generic ICT courses listed by DIT. Figure 2 shows the most popular DIT generic courses.

Figure 2: The Most Popular DIT Generic Courses



Other generic courses that are listed by DIT including computer assisted manufacturing, desktop publishing, IT in project management, specialized IT systems in agriculture, health and education, computer aided design, programming and software development have been trained among fewer respondents.

4.7 Factors that Influence the Selection of ICT Trainer

This section addresses the factors that organizations consider when selecting ICT training institutions for their workforce. The respondents were asked to rate 30 factors on a Likert scale of 5, with 1(Not Important) to 5(Most Important). Data collected was subjected to factor analysis. Factor analysis entails examination and analysis of correlations between the observed measures. Measures that are found to be highly correlated are likely to be influenced by the same set of factors, while those that are relatively uncorrelated are likely to be influenced by different sets of factors.

4.7.1 Correlation Matrix

A correlation matrix was generated from the data. This is a matrix which returns the values of correlations between all pairs of a data set. In a correlation matrix of variables, the existence of clusters of large correlation coefficients between subsets of the variables suggests that the variables could be measuring aspects of the same underlying dimension or factors. Table 7 shows the correlation matrix of factors that influence the selection of an ICT trainer.

Table 7: Correlation Matrix

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15
F1	1.00	0.39	0.26	0.20	0.33	-0.18	-0.04	0.08	0.09	-0.47	-0.13	-0.08	0.08	0.28	0.39
F2	0.39	1.00	-0.38	-0.33	-0.04	-0.09	0.39	0.49	0.20	-0.18	-0.04	0.47	0.00	0.43	0.38
F3	0.26	-0.38	1.00	0.28	-0.01	-0.17	-0.04	0.07	-0.19	-0.25	-0.13	-0.28	-0.14	-0.12	-0.17
F4	0.20	-0.33	0.28	1.00	0.50	0.21	0.17	0.11	-0.08	-0.08	0.15	-0.62	0.24	0.22	0.31
F5	0.33	-0.04	-0.01	0.50	1.00	0.29	-0.05	-0.12	0.24	0.16	0.08	-0.30	0.75	0.47	0.27
F6	-0.18	-0.09	-0.17	0.21	0.29	1.00	0.23	0.24	0.43	0.50	-0.20	-0.42	0.44	0.34	0.41
F7	-0.04	0.39	-0.04	0.17	-0.05	0.23	1.00	0.76	0.05	-0.29	0.24	0.03	0.15	0.64	0.59
F8	0.08	0.49	0.07	0.11	-0.12	0.24	0.76	1.00	-0.08	-0.09	-0.09	0.09	0.03	0.47	0.60
F9	0.09	0.20	-0.19	-0.08	0.24	0.43	0.05	-0.08	1.00	0.41	0.40	0.01	0.32	0.22	0.30
F10	-0.47	-0.18	-0.25	-0.08	0.16	0.50	-0.29	-0.09	0.41	1.00	0.15	-0.03	0.29	-0.16	0.00
F11	-0.13	-0.04	-0.13	0.15	0.08	-0.20	0.24	-0.09	0.40	0.15	1.00	0.26	0.07	-0.05	0.16
F12	-0.08	0.47	-0.28	-0.62	-0.30	-0.42	0.03	0.09	0.01	-0.03	0.26	1.00	-0.04	-0.04	-0.13
F13	0.08	0.00	-0.14	0.24	0.75	0.44	0.15	0.03	0.32	0.29	0.07	-0.04	1.00	0.68	0.49
F14	0.28	0.43	-0.12	0.22	0.47	0.34	0.64	0.47	0.22	-0.16	-0.05	-0.04	0.68	1.00	0.64
F15	0.39	0.38	-0.17	0.31	0.27	0.41	0.59	0.60	0.30	0.00	0.16	-0.13	0.49	0.64	1.00
F16	0.15	0.31	-0.13	0.30	0.11	0.44	0.63	0.75	0.23	0.18	0.24	-0.18	0.19	0.37	0.86
F17	-0.38	0.02	-0.17	-0.07	-0.15	0.02	0.52	0.02	0.05	-0.05	0.46	0.32	0.28	0.35	0.15
F18	0.00	-0.14	-0.26	-0.11	0.34	-0.08	-0.45	-0.50	-0.15	0.04	-0.23	-0.35	-0.06	-0.28	-0.34
F19	0.08	-0.09	-0.15	0.02	0.17	0.46	0.17	0.31	0.23	0.17	-0.07	-0.33	0.27	0.17	0.59
F20	0.04	0.14	-0.26	-0.08	0.19	0.44	0.08	-0.04	0.80	0.49	0.37	-0.27	0.12	0.11	0.34
F21	-0.20	0.13	-0.33	-0.09	0.33	0.22	0.42	0.45	-0.02	0.19	0.16	0.22	0.51	0.46	0.42
F22	0.49	0.25	0.12	-0.11	0.07	0.33	0.34	0.27	0.45	-0.12	-0.06	-0.12	0.28	0.58	0.58
F23	0.35	0.21	-0.19	0.20	-0.02	-0.03	0.30	0.13	0.32	-0.39	0.11	-0.17	0.12	0.44	0.53
F24	0.07	0.37	-0.18	0.05	-0.19	-0.29	0.34	0.26	0.14	-0.41	0.06	-0.04	-0.18	0.24	0.20
F25	0.47	0.23	-0.15	-0.09	0.13	0.00	-0.41	-0.29	0.25	0.13	-0.19	-0.24	-0.18	-0.01	-0.05
F26	0.43	-0.14	0.23	0.25	0.49	0.33	-0.29	-0.16	0.34	0.36	-0.01	-0.51	0.13	0.01	0.12
F27	0.79	0.23	0.32	0.25	0.33	-0.08	0.07	0.21	0.06	-0.20	-0.08	-0.36	0.10	0.34	0.48
F28	0.52	0.18	-0.07	0.18	0.07	0.05	0.33	0.28	0.17	-0.31	0.13	-0.01	0.31	0.53	0.74
F29	0.09	0.08	-0.20	0.15	-0.03	-0.14	0.31	0.10	0.48	-0.05	0.69	0.02	0.03	0.16	0.45
F30	0.30	-0.18	0.30	0.28	0.16	-0.30	-0.48	-0.26	-0.05	-0.28	-0.12	-0.06	-0.16	-0.41	-0.30

Table 7: Correlation Matrix (Cont.)

	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26	F27	F28	F29	F30
F1	0.15	-0.38	0.00	0.08	0.04	-0.20	0.49	0.35	0.07	0.47	0.43	0.79	0.52	0.09	0.30
F2	0.31	0.02	-0.14	-0.09	0.14	0.13	0.25	0.21	0.37	0.23	-0.14	0.23	0.18	0.08	-0.18
F3	-0.13	-0.17	-0.26	-0.15	-0.26	-0.33	0.12	-0.19	-0.18	-0.15	0.23	0.32	-0.07	-0.20	0.30
F4	0.30	-0.07	-0.11	0.02	-0.08	-0.09	-0.11	0.20	0.05	-0.09	0.25	0.25	0.18	0.15	0.28
F5	0.11	-0.15	0.34	0.17	0.19	0.33	0.07	-0.02	-0.19	0.13	0.49	0.33	0.07	-0.03	0.16
F6	0.44	0.02	-0.08	0.46	0.44	0.22	0.33	-0.03	-0.29	0.00	0.33	-0.08	0.05	-0.14	-0.30
F7	0.63	0.52	-0.45	0.17	0.08	0.42	0.34	0.30	0.34	-0.41	-0.29	0.07	0.33	0.31	-0.48
F8	0.75	0.02	-0.50	0.31	-0.04	0.45	0.27	0.13	0.26	-0.29	-0.16	0.21	0.28	0.10	-0.26
F9	0.23	0.05	-0.15	0.23	0.80	-0.02	0.45	0.32	0.14	0.25	0.34	0.06	0.17	0.48	-0.05
F10	0.18	-0.05	0.04	0.17	0.49	0.19	-0.12	-0.39	-0.41	0.13	0.36	-0.20	-0.31	-0.05	-0.28
F11	0.24	0.46	-0.23	-0.07	0.37	0.16	-0.06	0.11	0.06	-0.19	-0.01	-0.08	0.13	0.69	-0.12
F12	-0.18	0.32	-0.35	-0.33	-0.27	0.22	-0.12	-0.17	-0.04	-0.24	-0.51	-0.36	-0.01	0.02	-0.06
F13	0.19	0.28	-0.06	0.27	0.12	0.51	0.28	0.12	-0.18	-0.18	0.13	0.10	0.31	0.03	-0.16
F14	0.37	0.35	-0.28	0.17	0.11	0.46	0.58	0.44	0.24	-0.01	0.01	0.34	0.53	0.16	-0.41
F15	0.86	0.15	-0.34	0.59	0.34	0.42	0.58	0.53	0.20	-0.05	0.12	0.48	0.74	0.45	-0.30
F16	1.00	0.01	-0.28	0.61	0.42	0.46	0.35	0.25	0.14	-0.11	0.18	0.37	0.44	0.42	-0.32
F17	0.01	1.00	-0.44	-0.29	-0.08	0.16	0.07	0.08	-0.03	-0.49	-0.50	-0.40	0.13	0.16	-0.57
F18	-0.28	-0.44	1.00	0.14	0.18	0.01	-0.29	-0.24	-0.08	0.38	0.34	0.10	-0.40	-0.24	0.14
F19	0.61	-0.29	0.14	1.00	0.43	0.57	0.47	0.32	0.07	-0.02	0.26	0.32	0.49	0.36	-0.12
F20	0.42	-0.08	0.18	0.43	1.00	0.09	0.47	0.22	0.08	0.48	0.60	0.31	0.12	0.49	-0.34
F21	0.46	0.16	0.01	0.57	0.09	1.00	0.17	-0.01	-0.05	-0.32	-0.08	0.03	0.29	0.21	-0.38
F22	0.35	0.07	-0.29	0.47	0.47	0.17	1.00	0.53	0.09	0.33	0.36	0.60	0.71	0.33	-0.39
F23	0.25	0.08	-0.24	0.32	0.22	-0.01	0.53	1.00	0.75	0.16	-0.13	0.34	0.78	0.72	0.02
F24	0.14	-0.03	-0.08	0.07	0.08	-0.05	0.09	0.75	1.00	0.01	-0.38	0.12	0.28	0.57	0.14
F25	-0.11	-0.49	0.38	-0.02	0.48	-0.32	0.33	0.16	0.01	1.00	0.69	0.57	0.08	0.03	-0.09
F26	0.18	-0.50	0.34	0.26	0.60	-0.08	0.36	-0.13	-0.38	0.69	1.00	0.66	0.03	-0.01	-0.04
F27	0.37	-0.40	0.10	0.32	0.31	0.03	0.60	0.34	0.12	0.57	0.66	1.00	0.51	0.23	-0.06
F28	0.44	0.13	-0.40	0.49	0.12	0.29	0.71	0.78	0.28	0.08	0.03	0.51	1.00	0.59	-0.15
F29	0.42	0.16	-0.24	0.36	0.49	0.21	0.33	0.72	0.57	0.03	-0.01	0.23	0.59	1.00	-0.06
F30	-0.32	-0.57	0.14	-0.12	-0.34	-0.38	-0.39	0.02	0.14	-0.09	-0.04	-0.06	-0.15	-0.06	1.00

4.7.2 The Communalities

Communality is the proportion of variance that each item has in common with other items. The proportion of variance that is unique to each item is the respective item's total variance. Table 8 shows the communalities calculated. The extraction method used was the principal component analysis.

Table 8: Communalities

	Initial	Extraction
Factor	1	0.947
Accessibility	1	0.984
Social Amenities	1	0.817
Relevance to job performance		

Table 8: Communalities (Cont.)

Factor	Initial	Extraction
Training Cost	1	0.918
Credit facilities	1	0.983
Other types of training	1	0.948
In house training	1	0.931
Tailor made courses	1	0.972
Promotional material	1	0.939
Evaluation by other managers	1	0.84
Feedback from employees	1	0.987
Other organizations	1	0.991
Trainers academic profile	1	0.956
Workbooks/course material	1	0.963
No. of computers	1	0.895
Flexibility of timings	1	0.957
Modern Equipment	1	0.966
DIT registration	1	0.924
Registered with Registrar of Companies	1	0.977
Duration in the Market	1	0.964
Financial Statements	1	0.923
Size of Institution	1	0.965
Courteous staff	1	0.988
Tax compliance certificate	1	0.893
Area of Specialization	1	0.918
International Certificates	1	0.988
Local Certificates	1	0.965
Frequency of Intakes	1	0.929
Duration of the course	1	0.985
Reputation of Institution	1	0.98

A large number of the factors extracted a higher communality above 0.9 indicating that these factors are important in measuring the underlying concept.

4.7.3 Factor Extraction

Table 9 represents the total variance of all the factors. From the factors, 10 components were extracted using the Eigen values. These ten factors account for 94.6% of the initial eigenvalues. However, the components with Eigen values of less than one were left out according to the rule of the thumb that only factors with Eigen values of greater than one

should be considered (Schindler, 2006). Eigen values indicate the relative importance of each component in accounting for a particular set.

Table 9: Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.344	24.481	24.481	7.344	24.481	24.481
2	4.634	15.445	39.927	4.634	15.445	39.927
3	3.673	12.243	52.17	3.673	12.243	52.17
4	2.83	9.433	61.603	2.83	9.433	61.603
5	2.285	7.617	69.22	2.285	7.617	69.22
6	1.94	6.465	75.685	1.94	6.465	75.685
7	1.76	5.866	81.551	1.76	5.866	81.551
8	1.428	4.76	86.311	1.428	4.76	86.311
9	1.308	4.359	90.67	1.308	4.359	90.67
10	1.191	3.971	94.641	1.191	3.971	94.641
11	0.747	2.489	97.13			
12	0.546	1.819	98.949			
13	0.303	1.011	99.96			
14	1.21E-02	4.03E-02	100			
15	1.12E-15	3.73E-15	100			
16	7.09E-16	2.37E-15	100			
17	4.23E-16	1.41E-15	100			
18	3.71E-16	1.24E-15	100			
19	2.75E-16	9.16E-16	100			
20	1.88E-16	6.25E-16	100			
21	8.46E-17	2.82E-16	100			
22	3.83E-17	1.28E-16	100			
23	-1.74E-17	-5.80E-17	100			
24	-1.40E-16	-4.66E-16	100			
25	-1.54E-16	-5.14E-16	100			
26	-2.86E-16	-9.52E-16	100			
27	-4.12E-16	-1.37E-15	100			
28	-7.32E-16	-2.44E-15	100			
29	-8.13E-16	-2.71E-15	100			
30	-1.94E-15	-6.47E-15	100			

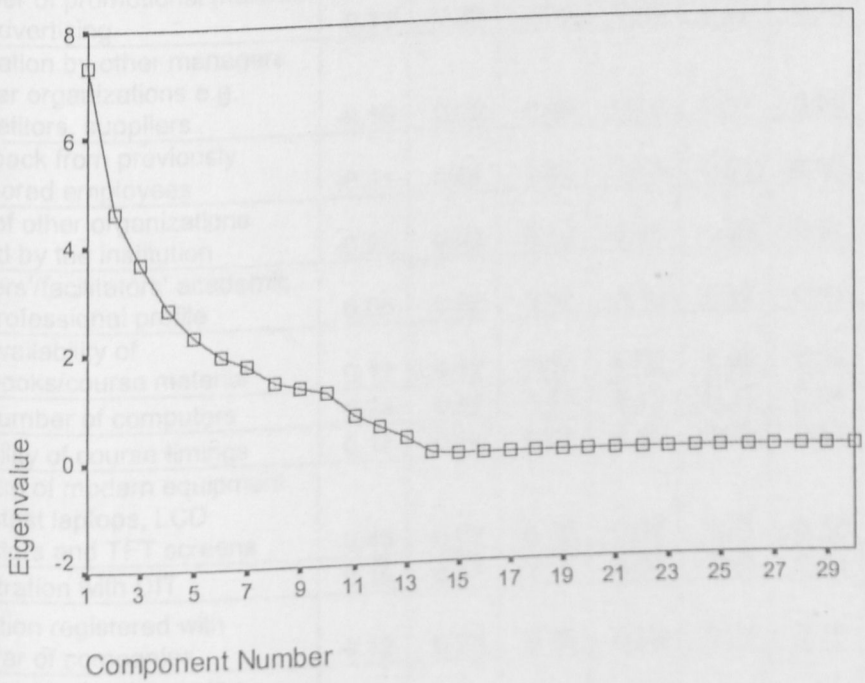
Extraction Method: Principal Component Analysis.

Therefore, according to Table 9, only 10 components were considered significant for our analysis as they had Eigen values that were greater than one and were therefore considered to be important in measuring the underlying concept. This is supported further by the Scree plot in Figure 3.

4.7.4 The Scree Plot

This is a plot of the factor Eigen values against the component numbers. According to Scree plot in Figure 3, only ten components should be considered because the curve tends to flatten out from component 10 onwards, due to the relatively low factor Eigen values of less than one.

Figure 3: Scree Plot



4.7.5 Rotated Component Matrix

The rotated component matrix was used to determine which factors loaded onto the extracted components. The variables with highest factor loadings on each extracted component were grouped together as the determining factors for each component. Table 10 shows the rotated component matrix that was generated from the data.

Table 10: Rotated Component Matrix

	Component									
	1	2	3	4	5	6	7	8	9	10
Accessibility through public transport	0.83	0.09	0.23	-0.17	0.22	-0.08	-0.28	-0.06	-0.04	0.19
Availability of social amenities e.g. hotels hospitals, cyber cafes	0.27	0.54	0.26	0.06	0.08	-0.65	0.02	-0.29	-0.10	-0.17
Relevance of the ICT course to job performance	0.28	-0.03	-0.26	-0.30	-0.15	0.41	-0.17	-0.11	-0.02	0.59
Training cost	0.74	0.22	0.09	-0.09	0.35	0.78	-0.24	-0.15	0.19	0.09
Ability of the training Institution to offer credit facilities	0.26	-0.01	-0.14	0.10	0.85	0.25	-0.19	0.01	0.09	-0.24
Other types of training offered	-0.13	0.27	-0.14	0.66	0.30	0.31	0.16	0.20	-0.39	0.08
Ability of the training Institution to offer in-house training	-0.14	0.77	0.27	-0.10	0.13	0.06	0.44	-0.03	0.12	0.13
Ability of the training Institution to offer tailor- made courses	-0.01	0.95	0.05	-0.08	-0.03	-0.08	0.03	0.14	-0.12	0.17
Number of promotional material e.g. advertising	0.12	-0.02	0.24	0.86	0.20	-0.13	-0.05	-0.04	0.22	0.15
Evaluation by other managers in other organizations e.g. competitors, suppliers	-0.18	-0.03	-0.49	0.72	0.07	0.00	0.03	0.15	0.08	-0.13
Feedback from previously sponsored employees	-0.11	0.04	0.04	0.18	0.05	-0.03	0.10	-0.05	0.96	0.07
Lists of other organizations trained by the institution	-0.22	0.02	-0.10	-0.15	0.00	-0.91	-0.01	-0.09	0.23	0.17
Trainers'/facilitators' academic and professional profile	-0.05	0.02	-0.02	0.19	0.93	0.01	0.11	0.20	-0.01	0.09
The availability of workbooks/course material	0.17	0.42	0.33	0.01	0.68	-0.04	0.39	-0.03	-0.15	0.09
The number of computers	0.24	0.62	0.32	0.19	0.37	0.04	0.12	0.34	0.10	0.17
Flexibility of course timings	0.13	0.82	0.07	0.26	0.05	0.14	0.04	0.35	0.19	0.02
The use of modern equipment e.g. latest laptops, LCD projectors and TFT screens	-0.45	0.03	0.10	-0.07	0.23	-0.12	0.69	-0.19	0.31	0.28
Registration with DIT	0.19	-0.37	-0.14	-0.04	0.02	0.14	-0.10	0.11	-0.13	-0.82
Institution registered with registrar of companies	0.12	0.25	0.16	0.25	0.07	0.15	-0.05	0.88	-0.08	-0.09
The college duration in the Market	0.33	0.07	0.11	0.81	-0.05	0.07	0.19	0.14	0.26	-0.21
The institution's financial Statements	-0.16	0.38	-0.12	-0.07	0.42	-0.22	0.20	0.63	0.15	-0.22
Size of Institution	0.56	0.13	0.34	0.27	0.14	-0.08	0.39	0.30	-0.15	0.40
Courteous staff	0.17	0.06	0.94	0.07	0.09	0.07	0.05	0.15	0.07	0.13
The institution has a tax compliance certificate	-0.07	0.24	0.85	-0.07	-0.16	-0.02	-0.12	-0.11	0.07	-0.19
The college area of specialization	0.76	-0.24	0.09	0.33	-0.14	-0.04	0.05	-0.15	-0.14	-0.31
International certificates offered	0.74	-0.09	-0.33	0.42	0.09	0.34	-0.04	0.09	0.03	-0.10
Local certificates offered	0.91	0.21	0.13	-0.08	0.09	0.17	0.00	0.16	0.05	0.01
Frequency of course intakes	0.34	0.16	0.58	-0.07	0.25	-0.06	0.15	0.45	0.12	0.37

Table 10: Rotated Component Matrix (Contd.)

	Component									
	1	2	3	4	5	6	7	8	9	10
Duration of the course	0.07	0.12	0.62	0.23	-0.06	0.02	0.02	0.26	0.67	0.04
Reputation of Institution	-0.02	-0.25	0.11	-0.18	0.01	0.11	-0.92	-0.12	-0.01	0.08

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

4.7.6 Factor Isolation

Factor isolation was carried out to isolate each of the variable factors from the rotated component matrix and group them according their factor loadings on each component. By considering the highest loadings for each component in the rotated matrix, the factors were grouped as follows in Table 11.

Table 11: Isolation of Factors

COMPONENT GROUP	VARIABLES
Component 1	1. Accessibility 2. Local certificates 3. College area of specialization 4. International certificates 5. Size of Institution 6. Registration with DIT
Component 2	1. Ability to offer tailor-made courses 2. Flexibility of timings 3. Ability to offer in-house training 4. Number of computers 5. Frequency of course intakes 6. Social Amenities
Component 3	1. Courtesy of staff 2. Tax compliance certificate 3. The reputation of the institution
Component 4	1. Number of Promotional material e.g. advertisements in the media 2. Duration in the market 3. Evaluation by other managers 4. Other types of training offered
Component 5	1. Trainers'/facilitators academic profile 2. Credit facilities 3. Availability of workbooks/course material

Table 11: Isolation of Factors (Contd.)

COMPONENT GROUP	VARIABLES
Component 6	1. Training cost 2. Reputation of the institution
Component 7	1. The use of modern equipment e.g. latest laptops, LCD projectors and TFT screens
Component 8	1. Institution registered with registrar of companies 2. Financial statements
Component 9	1. Feedback from the organization's previously sponsored employees 2. Duration of the course 3. Lists of other organizations trained
Component 10	1. Relevance of the course to job performance

Extracted component one consisted of the accessibility of the training institution, local and international certificates offered, the size of the institution, the college area of specialization and registration with DIT. The factors in this component point to certification, the location of the training institution and the profile of the college.

The loading factors on component two included the ability of the college to offer in-house training and tailor-made courses, the flexibility of session timings and the number of computers. A closer look at these factors shows that they relate to the course in terms of whether it can be tailor-made, offered in-house, and flexible in terms of timings and frequent intakes. The number computers and availability of social amenities are also contributing factors in this component.

Group factors in component 3 include the courtesy of staff, whether the college has a tax compliance certificate and the reputation of the training institution. Tax compliance points to the legality of the institution while the courtesy of staff could be a key factor contributing to the reputation of the institution.

The fourth component addresses how well known an ICT training institution is in the market as it comprises of the number of promotional material, the college's duration in

the market, how it is evaluated by other managers and other types of training offered in the training institution.

The trainer's academic profile, ability of the college to give credit and the availability of workbooks/course material are the group factors for component five. The availability of credit facilities points to financial considerations while the trainers' academic profile and availability of workbooks and course material each stand out as important factors.

Component six relates to the cost of training and the reputation of the institution. The reputation of the training institution contributes equally to both component three and component six. The cost of training points to financial considerations.
Modernity is the single underlying factor in component seven. The level of modernity is measured by the college's use of modern equipment such as the most recent laptops, LCD projectors and TFT screens.

Component eight addresses the financial statements of the ICT training institution and whether it is registered with the registrar of companies. These factors dwell on the legality and stability of the ICT training institution.

Group factors for component nine include feedback from the organization's previously sponsored employees, lists of other organizations trained by the ICT training institution and the duration of the course.

Component ten relates to the relevance of ICT course to job performance.

From the analysis, the critical factors relate to certificates offered, the location, profile and stability of the college, the flexibility of the courses offered in terms of course timing, frequency of intakes, the course being tailor made and offered in-house, the number and level of modernity of computers and other ICT equipment, the ICT trainers' academic profile, the courtesy of staff, legal and financial considerations.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the findings, conclusions, recommendations and limitations to this study along with suggestions for further research.

5.1 Summary of findings

5.1.1 Profile of Respondents

The highest numbers of respondents were from the Industrial and Allied sector (39%) of the NSE. The response rate for the Industrial and Allied sector was the highest at (69%) followed by the Commercial and Services sector (58%), Finance and Investment (58%) and lastly Agricultural Sector (50%).

Majority of the firms (81%) employed over 200 employees and all firms indicated that they had conducted ICT training for their staff in the last three years. The number of staff employed in the organization may impact whether training is offered in-house or externally and may also determine whether firms are willing to sponsor staff into full time ICT courses. From the findings, majority of the firms (50%) sponsored their staff into full time courses, while the rest of the firms sponsored staff into half day sessions (23%) and evening sessions (19%) respectively. The findings also show that majority of the respondents (62%) prefer external training compared to in-house training (38%).

An elaborate tendering process is used in the decision making process on which ICT training programs to train staff and ICT training institutions to contract in 35% of the firms. The rest of the respondents (65%) do not go through an elaborate tendering process. Most of the firms learnt about ICT training institutions through advertisement (31%) followed by Word of Mouth (18%) and by enquiring from their staff on the best ICT trainers (15%). From the findings, firms also learn about ICT training institution through recommendations from the suppliers of ICT equipment.

5.1.2 Critical Factors in the Selection of an ICT Trainer

This section addresses the first objective of the study which was to determine the critical factors that organizations consider when selecting ICT training institutions for their workforce. From the findings, several factors were found to have high correlations with each other and greatly impact a firm's selection of an ICT trainer and these include the accessibility of the college, local and international certificates, the size of the institution and registration with DIT. The college's ability to offer in-house training, flexibility in terms of course timings, frequency of intakes, tailor-made courses are also seen to be critical factors alongside the modernity of computers and other ICT equipment such as laptops and LCD projectors, financial and legal considerations.

Other factors that are significant include advertising, an ICT training institution's duration in the market, reputation, college area of specialization and the types of ICT training offered, evaluation by other managers and the trainer/facilitator's academic profile.

5.1.3 Types of Training

The findings indicate that firms train their staff in both technical and non technical ICT courses. Non technical courses are mainly targeted towards end users who use ICT in their work while the technical courses are targeted towards ICT professionals. From the data, 95% of the companies train their employees in the use of office productivity software including word processors, spreadsheets, communication software, database software and desktop publishing. Technical courses are also widely sought, mainly for ICT professionals. From the findings, all the respondents sponsor their staff for technical courses that are recognized by DIT such as Database Management, IT Security and Audit, Web design, Programming and Software Development. Specialized IT courses such as Computer Assisted Manufacturing, IT in Finance, HRM, Operations, Project Management and education are also offered for some of the organizations.

5.2 Conclusions

This study reveals the critical factors that influence an organization's choice of an ICT training institution provider as; certification offered after training, the location, profile and stability of the college, the flexibility of the course in terms of course timing, frequency of intakes, tailor made and offered in-house, the number and level of modernity of computers and other ICT equipment, the courtesy of staff and the ICT trainers' academic profile. Financial and legal considerations are also important determining factors in the choice of an ICT trainer.

From the analysis, firms train their staff in both technical areas of ICT as well as general office productivity software. Most firms (95%) train their staff in general office productivity software such as word processors, spreadsheets, presentation, desktop publishing, communication and database management software. Generic ICT courses that are registered by DIT are widely pursued by organizations in the NSE. Firms also consider registration with DIT to be a very important factor when choosing an ICT training institution. Based on this finding, it could be concluded that a DIT registration plays an important role in determining which ICT institution will be selected by a firm.

5.3 Recommendation to Decision Makers

5.3.1 Firms Seeking ICT Training

Decision makers of firms seeking ICT training should evaluate ICT training institution based on the factors identified in this study. In addition to considering the relevance of the training to job performance and financial issues, they should also consider the location of the college, the certificates that are offered, flexibility of the course, the number computers and the level of modernity, the availability of workbooks/course material, legality, the trainers' academic profile, and the reputation of the college. Managers could use a checklist against the important factors raised in this study to help them evaluate effectiveness of training of training providers.

5.3.2 ICT Training Institutions

ICT training institutions can enlarge their market share by ensuring that they meet the critical factors under their influence. Training providers should pay attention to the academic profile of ICT trainers, the availability of workbooks and course material, flexibility of course timings, certifications offered and the reputation of the institution.

From the study, it can be concluded that word of mouth and advertising play an important role in informing potential clients about possible ICT training institutions. However, advertising alone is not considered as a critical factor in selecting an ICT training institution. In addition to advertising, ICT training institutions should provide quality training because word of mouth, feedback from other employees who have been trained, the relevance of the training on the job and evaluation by managers of other institutions are all considered to be important factors in selecting an ICT training institution.

5.3.3 Recommendation to Scholars

The study reveals critical factors in the selection of ICT trainers as certificates, the location of the college, the profile of the college, the flexibility of the course in terms of course timing, frequency of intakes, tailor made and offered in-house, the number of computers, the level of modernity, legal considerations, the ICT trainers' academic profile and financial considerations. It may be prudent to investigate to what extent these critical factors influence the selection of an ICT trainer.

It may also be necessary to investigate the role of advertising in influencing the choice of an ICT trainer. There is also a need to investigate other additional factors that influence the choice of ICT trainers.

5.4 Limitations of the Study

Since the response rate of the study was just above average at 63%, it may be necessary to do a study with a larger population and also involve other organizations outside the stock exchange in order to generalize the findings across the different sectors. A number

of the targeted respondents could not provide information as their company policies do not allow them to participate in such studies resulting in a lower response rate.

Questionnaires did not allow for probing to get further information. Face to face interviews could be considered for future studies

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APPENDICES

APPENDIX I: INTRODUCTION LETTER AND QUESTIONNAIRE

Anne Muhu
P.O. Box 5428-00200
Nairobi

[Date]

[Respondent's address]

Dear Sir/Madam,

RE: RESEARCH INFORMATION FOR AN MBA PROJECT

I am postgraduate student undertaking a Master of Business Administration (MBA) degree at the School of Business, University of Nairobi. As partial fulfillment of the requirements for the award of the MBA degree, I am conducting a survey on **"ICT training in the firms listed on the Nairobi Stock Exchange".** Your firm is one of them and I would like to kindly request for information regarding ICT training practice in your firm.

The information you provide in this study will not be used for any other purpose apart from its intended academic use. I hereby undertake not to make any reference to your name or that of your organization in any presentation or report hitherto the study.

I am aware that filling the questionnaire is time consuming and I will greatly appreciate your assistance. Any additional information in form of suggestions and comments that you deem necessary to make my research findings more conclusive, relevant and reflective of the study area will be highly appreciated.

Thank you in advance.

Yours faithfully,

Anne Muhu
MBA Student

QUESTIONNAIRE

The information provided here is for academic purposes only and will be treated with maximum confidentiality.

SECTION A (GENERAL INFORMATION)

NAME (Optional) Use Surname & Initials

DATE

NAME OF THE COMPANY :

1. COMPANY CLASSIFICATION ON THE NSE TICK

Agricultural	[ ]
Commercial and Services	[ ]
Finance and Investment	[ ]
Industrial and Allied	[ ]

2. Has your organization conducted ICT training or sponsored staff into ICT training in the last 5 years?

☐ Yes ☐ No

If answer to Question 2 is yes, please proceed to section B

SECTION B

1. Total Number of employees in your organization

☐ 0 - 50 ☐ 201 - 300

☐ 51 – 100 ☐ 301 -400

☐ 101-200 ☐ Over 400

2. Does your organization use a tendering process for training services?

☐ Yes ☐ No

3. Please indicate the most commonly used mode of ICT training that has been conducted for your staff in the last five years

☐ In-house ☐ External

4. Has your organization trained its staff with any of the following colleges in the last five years? *(Please tick all applicable)*

Adaptive Management Consultants

College of Insurance

Computer Consultants Ltd

Computer Learning Center

Computer Pride Ltd.

Computerways

Consultants for Effective Management

Data Centre Limited

Dataline International Limited

DevData Ltd.

Diju Investments Ltd.

Focus Business Institute

Graffins college

Impact by Design Ltd.

Infotech Training Institute

Institute of Advanced Technology

Institute of Certified Public Accountants of Kenya (Kenya College of Accountancy)

Institute of Computer Education

Institute of Personnel Management

Kenya School of Monetary Studies

Kenya school of Professional Studies

Sheer Logic Management

SKF Kenya Ltd.

Strathmore University

Techno Brain Ltd.(New Horizon)

United States International University(USIU)

Universal Group of Colleges

Vision Institute of Professionals

Zenith Management Consultants (ZMC)

Any other (Please Specify) _____

_____

_____

_____

_____

5. How did you learn about the existence of your selected institutions in question 3 above? *(List the college and source of information e.g. advertisements, word of mouth, employees, e.t.c)*

_____

_____

_____

_____

_____

_____

6. Which of the following application packages has your company trained employees in during the last five years?*(Tick each that applies)*

☐ Ms Word ☐ Ms Access

☐ Ms Excel ☐ Ms Outlook

☐ Ms PowerPoint

Any Others (Please list) _____

_____

_____

_____

_____

7. Which specific type of ICT courses has your organization trained employees in during the last five years?*(Please tick all that apply)*

E-Business/Commerce/E-Government
Development and trends in IT
IT Security and Audit
Use of IT for non-technical managers/ IT program for executives
Enterprise Resource Planning (ERP) systems e.g. SAP, BAAN
Customer Relationship Management(CRM) systems
Organizational IT policy formulation
Decision Support Systems(DSS)
IT in Finance, HRM, Marketing, Operations, Transportation etc
IT in Knowledge Management
Managing business and trade information services
Information systems development and implementation
IT in project management
Computerized Purchasing and Supply Chain Management
Specialized IT systems in Agriculture, Health, Environment and Education
Database Management
Business Process Operations and Call Centers
Document Management
Business IT Assets Management
Computerized Record Management
IT in crime investigation and management
Use of Computer in marketing and sales management
Web design and Internet
Web programming
Computer networking and administration
Computer Aided Design (CAD)
Computer Assisted Manufacturing (CAM)
Computer programming and software development
Desktop publishing
ANY OTHER(Please specify below)

8. When sponsoring employees for ICT training, what are the usual course timings *(Tick the session timings during which employees attend the course)*

☐ Full time (8 am-5 pm)

☐ Morning hours (8 am– 12 pm)

☐ Afternoon(2pm-5pm)

☐ Evenings(After 5 pm)

☐ Weekends

☐ Any Other (*Specify)*_____

9. What is the frequency of attendance for the course *(Tick each applicable option)*

☐ Monday

☐ Thursday

☐ Tuesday

☐ Friday

☐ Wednesday

☐ Saturday

☐ _____

SECTION C

10. How do you rate each of the following factors when selecting an ICT Training institution/trainer? (Tick as appropriate)

	FACTORS	Most Important	Very Important	Important	Less Important	Not Important
1.	Accessibility through public transport					
2.	Availability of other social amenities e.g. hotels, hospitals, cyber cafes					
3.	Relevance of the ICT course to job performance					
4.	Cost of training					
5.	Ability of the institution to give credit facilities					
6.	Ability of the college to offer other types of training apart from ICT courses					
7.	Ability to offer in house training					
8.	Ability to offer to tailor made courses					
9.	Number of promotional material e.g. advertising through the mass media					
10.	Evaluation of the college by other managers in other organizations e.g. competitors, suppliers and partner organizations					
11.	Feedback from your organization's previously sponsored employees					

	FACTORS	Most Important	Very Important	Important	Less Important	Not Important
12.	List(s) of other organizations using the ICT trainer/College for their staff ICT training					
13.	Trainer/facilitator's academic and professional profile					
14.	Availability of workbooks/course material					
15.	The number of computers in the institution					
16.	Flexibility of the course timings					
17.	Use of modern equipment e.g. LCD projectors, laptops and flat screens(TFT)					
18.	Registration with Directorate of Industrial Training					
19.	College/Institution registered with the Registrar of companies					
20.	How long the ICT training institution has been in the market					
21.	The Financial statements e.g. balance sheet of the ICT training institution					
22.	Size of institution					
23.	Courteous Sales staff, receptionist and lecturers					
24.	Company has a tax compliance certificate					

	FACTORS	Most Important	Very Important	Important	Less Important	Not Important
25.	College area of specialization					
26.	International certificates offered					
27.	Local certificates offered					
28.	Frequency of intake					
29.	Duration of course					
30.	Reputation of institution					
	Any Others(Please Specify)					

11. What recommendations would you make to ICT training providers/Trainers to improve the quality of ICT training?

_____

_____

_____

_____

_____

_____

THANK YOU

APPENDIX II: LIST OF FIRMS REGISTERED AT THE NAIROBI STOCK EXCHANGE

Industrial and Allied

Athi River Mining
Bamburi Cement
British American Tobacco (BAT)
Crown Berger
East African Cables
East African Portland Cement
East African Breweries
Eveready East Africa
Kenya Oil
Kenya Power and Lighting Company
Kengen
Mumias Sugar
Olympia Capital
Sameer Africa
Total Kenya
Unga Group

Agricultural

Unilever Tea
Kakuzi Ltd
Rea Vipingo Plantations
Sasini Tea and Coffee

Finance and Investments

Barclays Bank
CFC Bank
Diamond Trust Bank
Equity Bank
Housing Finance
ICDC Investments
Jubilee Holdings
Kenya Commercial Bank
National Bank of Kenya
NIC Bank
Pan Africa Insurance
Standard Chartered Bank

Commercial and Allied

Car and General
CMC holdings
Hutchings Biemer
Kenya Airways
Marshalls (E.A)
Nation Media Group
ScanGroup
Standard Group
TPS EA (Serena)

APPENDIX III: ICT TRAINING INSTITUTIONS REGISTERED BY DIT

- Adaptive Management Consultants
- College of Insurance
- Computer Consultants Ltd
- Computer Learning Centre
- Computer Pride Ltd.
- Computerways
- Consultants for Effective Management
- Data Centre Limited
- Dataline International Limited
- DevData Ltd.
- Diju Investments Ltd.
- Focus Business Institute
- Graffins college
- Impact by Design Ltd.
- Infotech Training Institute
- Institute of Advanced Technology
- Institute of Certified Public Accountants of Kenya (Kenya College of Accountancy)
- Institute of Computer Education
- Institute of Personnel Management
- Kenya School of Monetary Studies
- Kenya school of Professional Studies
- Petroleum Institute of East Africa
- Sheer Logic Management
- SKF Kenya Ltd.
- Strathmore University
- Techno Brain Ltd.
- United States International University
- Universal Group of Colleges
- Vision Institute of Professionals
- Zenith Management Consultants (ZMC)

APPENDIX IV: GENERIC COMPUTER COURSES LISTED BY DIT

SENIOR AND MIDDLE LEVEL MANAGERS

- E-Business/Commerce/E-Government
- Development and trends in IT
- IT Security and Audit
- Network Administration
- Use of IT for non-technical managers
- Enterprise Resource Planning (ERP, CRM, SCM) systems
- Organizational IT policy formulation
- Decision Support Systems
- IT in Finance, HRM, Marketing, Operations, Transportation etc
- IT in knowledge management
- IT program for executives
- Managing business and trade information services
- Information systems development and implementation
- IT in project management
- Advanced web programming
- Computerized Purchasing and Supply Chain Management
- Specialized IT systems and programmes in manufacturing, Agriculture, Health, Environment, Education, Crime Detection etc
- Emerging issues in IT
- Database Management
- Business Process Operations and Call Centers
- Document Management

SUPERVISORY LEVEL

- IT Security and Audit
- Business IT Assets Management
- Computerized Record Management
- IT in Finance, HRM, Marketing, Operations, Transportation etc
- IT in crime investigation and management
- Use of Computer in marketing and sales management
- Computer application to data management systems
- Web design and Internet
- Computer networking and administration
- Computer Aided Design (CAD)
- Computer programming and software development
- Desktop publishing
- Computer Assisted Manufacturing (CAM)
- Specialized IT systems and programmes in Agriculture, Health, Environment, Education etc
- Project Management
- Business Process Operations and Call Centers
- Emerging issues in IT