INWARD FOREIGN DIRECT INVESTMENTS AND TRANSFER OF TECHNOLOGY BY INFORMATION TECHNOLOGY MULTINATIONAL CORPORATIONS IN KENYA

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DECLARATION

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

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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

I dedicate this work to all current and future scholars.

ABSTRACT

The purpose of this study was to determine the effect of inward foreign direct investments by information technology multinational corporations in Kenya & investigate on the transfer of technology by these corporations.

The study adopted cross sectional and descriptive survey methods aimed at establishing the inward foreign direct investments and transfer of technology by information technology multinational corporations in Kenya.

The study found found that the use of tax breaks by the government directly affects foreign direct investments into the country. This study also established that the determinants of foreign direct investments into Kenya are Market in Kenya and neighboring countries, political stability, absence of maximum retail price, stable and growing economy, human resource availability and strategic infrastructure.

It is noteworthy also that the impediments to foreign direct investments into Kenya include Delays in licenses and work permits, corruption, political instability, and unreliable infrastructure.

The study recommends that the Ministry of Trade exercises the use of tax breaks, and the use of import duty concessions to attract the desired level of foreign direct investments into the country in the IT industry. Moreover, the same ministry should review the licensing and work permits procedures (which were termed as impediments) if it is to attract FDI in IT in Kenya.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

It is argued that inward foreign direct investment (FDI) can help improve the economic prospects of most African countries in several ways. First, FDI, being a non-debt source of development finance, helps to fund investment projects in the economy. Second, FDI increases the level of technical progress in the host country, which, in turn, can play a decisive role in the process of economic development. Third, technology transferred to developing countries via FDI tends to be newer than that transferred via licensing (Findlay, 2008; Mansfield and Romeo, 2000), Apart from being an important source of development finance and a channel for technology transfer, FDI has a number of proven attributes. It improves managerial knowledge and skills, increases efficiency and productivity, and provides a wide array of goods and services to the economy.

The underlying premise is that multinational corporations possess superior intangible assets including technology, managerial skills, export contacts, and reputation and good will. As such, they are able to undertake competitive investment ventures abroad and compete more favorably than local firms (Mansfield and Romeo, 2000), Since multinational corporations possess these intangible assets and can transfer them to their subsidiaries located abroad and subsequently to local firms through technology spillover effects, then technology spillover is expected to raise productivity and efficiency at firm and sector level. Of these beneficial aspects of inward FDI, technology transfer is often singled out as of greater relevance to developing countries.

According to Mwega and Ngugi (2007), MNCs significant contribution is in the field of technology transfer which it offers to host countries. In developing countries, low intensity of technology restricts investment and competitive development. Technology is essential to generate capital and advancement in developing economies. Technology and innovation are measures of competitive strength for the organization of the developing countries. For example, China has developed its competence for technology and innovation through FDI by MNC spillovers. Technology could be transferred through the strategies of linkage, leverage, and learning i.e. MNCs backward and forward linkages with host firms is through partnerships and joint ventures, leverage as transnational network, or worldwide web of inter-firm connections and learning through imitation by learning by watching and repeated involvement in linkage and leverage. Technology transfers are based on direct and indirect impact of MNCs on technological development of host industry. The direct transfer is received by inducing capital goods, innovative processing practices, new products, technological licensing, international seminars, conferences and interchange of technical documents and management skills. The indirect transfers contain MNCs spillovers which take in demonstrations, backward and forward linkages, competition effects and trained personnel migration.

The absorptive capability of host country plays a key role in technology transfer and gaining potential benefits from FDI. Absorptive capability is the firm's ability to recognize the external information. For example, inappropriate technology for host industry makes it unable to compete with the global market. Local organizations have to make investments to benefit from technological inflows (Rasiah and Gachino, 2005), Technology transfer follows Subsidiary Driven model where its existence depends on

intensity in industry i.e. whether it is capital intensive or labor intensive industry. Capital intensive industry includes crude oil extraction, organic chemicals, pharmaceutical products, synthetic fibers, automobiles, computers and aerospace. Labor intensive includes coal extraction, canned food, cotton, silk and woolen textiles, paper processing, and toys. For example in China though the inward FDI defer a negative effect due to strong market power and crowding out effects but majority of MNC investment went to labor-intensive industries for export. Therefore, negative effect didn't decline the domestic productivity. The capital intensive industries are more absorptive capable as local R&D is required to capture technological distribution. Thus the size of spillover is larger in capital intensive and is more responsive to FDI inflows

1.1.1 Foreign Direct Investments

Caves (1974), defines FDI as an investment made to acquire lasting interest in enterprises operating outside of the economy of the investor. Further, in cases of FDI, the investor's purpose is to gain an effective voice in the management of the enterprise. Some degree of equity ownership is almost always considered to be associated with an effective voice in the management of an enterprise. Foreign direct investments differ substantially from indirect investments such as portfolio flows, wherein overseas institutions invest in equities listed on a nation's stock exchange. Entities making direct investments typically have a significant degree of influence and control over the company into which the investment is made. Open economies with skilled workforces and good growth prospects tend to attract larger amounts of foreign direct investment than closed, highly regulated economies.

Foreign direct investments, involves the flow of capital from one country to another solely for investment purposes. It involves some significant degree of influence by the foreign investor on the management of the enterprise in the host country. It may be undertaken by individuals or business entities (Rweyemamu, 1987), FDI has three components Initial capital/Equity capital; this is the investor's purchase of shares in the host country. It also includes initial investment in plants and equipment. Re-invested earnings are the investor's share of earnings, which are not distributed but are re-invested. Intra-company loans/debt transactions: This refers to borrowing and lending of funds between the parent companies and affiliate enterprises

The flow of capital to African countries has led to the growth in domestic investments, creation of employment opportunities and transfer of managerial skills and technology. FDI has assumed increasing importance overtime, becoming a prime concern for policymakers and a debaTable topic for economists and financier alike. The debate on FDI has several facets of particular importance to policymakers in capital starved counties are the determinants of FDI inflows as discussed by Moosa and Cardak (2003),

1.1.2 Technology Transfer

According to Aitken and Harrison (1999), Technology transfer is the processes by which technological knowledge moves within or between organizations. International technology transfer refers to the way in which this occurs between countries. The technological knowledge that is transferred can assume various forms. It can be embodied in goods (including physical goods, plant and animal organisms), services and people, and organizational arrangements, or codified in blueprints, designs, technical documents, and the content of innumerable types of training. Alternatively it can be

communicated through flows of tacit knowledge – i.e. knowledge that has not been fully codified, and remains embodied in the skills of people.

Technology transfer is also positively associated with the size of the firm, the average education level of employees, a firm's perceived competition intensity, and a firm's informal contact with foreign businesses. In the empirical analysis that follows, we attempt to empirically analyze the relations among these different activities carried out by the Chinese firms. If a firm has experienced technology transfer, it indicates whether this firm exports at the time when technology transfer began. If a firm does not report technology inflow from foreign sources, it indicates whether this firm exports in 1980 (the first year reported in the survey) or the beginning of the firm's operation (if the firm was established after 1980),

Technology transfer is an important means by which developing countries gain access to technologies that are new to them. For example, the acquisition of foreign technologies by East Asian newly industrialized countries, coupled with domestic 'technological learning' – efforts to accumulate the capability to change technologies – have been key factors in their rapid technological and economic development (Shane, 1994),

1.1.3 Foreign Direct Investments and Technology Transfer

Foreign direct investment indeed contributes to local firms' exports and growth through technology transfer. The results also indicate that the effects of foreign direct investment are carried out through both direct technology transfer and indirect knowledge diffusion. That means both MNCs. local affiliates and other domestic firms benefit. Through analyzing contributing factors to foreign knowledge, we find that domestic competition is

an important element in promoting technology transfer. Foreign technology transfer increases the probability that a firm will export in the subsequent years. It also tends to increase the amount of total export. In addition, the higher export following foreign knowledge inflow is likely resulted from higher production rather than diverting domestic sale to export (Rasiah and Gachino, 2005),

Technology transfer from foreign sources to their local subsidiaries has several important outcomes. Foreign knowledge inflow is important to promote domestic firms in engaging in export activities. Specifically, firms that received foreign technology not only are more likely to export, but export a larger amount as well. More importantly, it is likely that firms achieve this outcome through production expansion rather than market redistribution between domestic and international market. Further studies on the firm's employment and production confirm that that firms will employ more people and produce more following the inflow of foreign knowledge. The growth rates of employment and production increase for firms that receive foreign knowledge, at least within a short period of time. In addition to the direct positive effect related to foreign knowledge, we also find evidence supporting the spillover assumption on technology transfer. Domestic firms can benefit from foreign participation even when they are not directly associated with foreign businesses.

1.1.4 Information Technology Multinational Corporations in Kenya

According to Opolot, Mutenyo, and Kalio (2008), Multinational corporations (MNCs) operate in a global environment unfamiliar in political, economic, social, cultural, technological and legal aspects. Increased competition among multinational corporations and the entry of other players in the Kenyan market necessitate the design of competitive

strategies that guarantee performance. Creating strategies for coping with competition is the heart of strategic management which is critical for the long term survival of any organization.

In Kenya, the drive to deregulate and liberalize the market has led to attempts at more precise economic definitions of what constitutes a natural monopoly: taking cost as exogenous. This has led to the opening of these markets, which previously were thought to be natural monopolies, to competition. Major ways of introducing competition into regulated utilities with different competitive potential, at each stage, was to separate the monopolistic and competitive components as different units. This approach has overcome, but not very effectively, the problem of a monopolist extending his monopoly power in the whole industry (Rasiah and Gachino, 2005), However, this approach hinders realization of economies of scope and that of density (in telephony industry) that might be available for a firm undertaking several connected activities. Telecommunications policy statement was issued in 1997 that set out the government vision on telecommunications development to the year 2015. The challenge at that time was to transform the existing policy structure from one designed for a monopoly to a policy managing a liberalized telecommunication market. The government separated the functions and management of the sector. This clarified roles for the policy, regulatory and operational responsibilities with the government and specifically the Ministry of Transport and Communications retaining policy guidance.

The market structure in Kenya is competitive and the licensing framework is converged and technology-neutral with concentration in fixed and mobile segments. The regulatory framework was improved to allow for a technology-neutral and horizontal licensing

framework (Mwega and Ngugi, 2007), The mergers and acquisitions in ICT Sector are regarded as horizontal mergers simply because of the reason that the entities going for merger or acquisition are operating in the same industry that is telecommunications industry. In the majority of the developed and developing countries around the world, mergers and acquisitions in the telecommunications sector have become a necessity. This kind of mergers also assists in creation of jobs. Both transnational and domestic telecommunications services providers are keen to try merger and acquisition options because this will help them in many ways. They can cut down on their expenses, achieve greater market share and accomplish market control.

Many factors influence the competitiveness of companies and their products. These can for example be financial aspects, complexity, supply chain management, quality, education of the employees, engineering capacity, networking or corporate culture. Further factors can be marketing, a product strategy, sensitivity to weak signals and the ability to be innovative on all company levels. There is no clear boundary for the natural monopoly in telecoms. It must be drawn, pragmatically, at the place where the efficiency gains of increased competition outweigh the benefits of integration. This varies with the size, sophistication, range of services (broadband vs. voice), and the rate of expansion of the system, as well as on regulatory constraints on the range of services that may be provided, degree of cross-subsidization required and so on. Therefore, network operation and construction may be naturally monopolistic to a degree (Mwega and Ngugi, 2007),

1.2 Research Problem

The rapidly rising level of economic integration, stimulated by advances in Information and Communication Technology (ICT), renders technology adoption, coming from

foreign developed countries, a matter of great importance for economic growth and productivity improvement. As economic theory suggests, learning through international economic activity might be particularly important for all countries, especially for those lagging behind the most developed ones. Foreign Direct Investment (FDI) is considered, among others, an important channel for technology diffusion, which in turn raises the host country's productivity growth. On the other hand, the new 'information economy' of the past decades is associated with increased transfer of ICTs, which are expected to deliver higher productivity gains and enhanced growth.

To transfer technology the MNCs invest in raw materials, labor and marketing and through technological expertise, advanced production skills and utilization of local labor help in transfer of technology to the developing countries. R&D of the host country assists MNCs to develop superior products and encourages competition in the host country, thereby, putting an end to the domestic monopoly. Barriers to technology transfer occur due to organizational structures which reduce the flow of communication between firms, lack of information to the employees and cultural biased firms in the host country (Rasiah and Gachino, 2005), The challenges faced by the host countries could be legal, economical and political elements of business environment which may include labor supply, security matter and employment implications. For instance, no improvement has occurred in the technology transfer in Poland due to the barriers such as lack of cooperation by the R&D institutions, incompetent corporate innovation, lack of financial resources, and lack of innovative culture and approach of employees. The barriers can be overcome by generating cross-organizational partnerships,

increasing exposure towards technology, and promoting people and corporation in favor of technology transfer.

Most empirical studies in the FDI and ICT growth literature have been conducted at the firm or industry level with mixed evidence regarding their relationship with economic growth and productivity. Barrell and Pain (1997) suggest that there is evidence for significant spillovers and increased export performance from the presence of inward FDI. In a related work, Borensztein et al (1998), using a panel of 69 developing countries in the 1970s and 1980s, found a positive and significant FDI effect on growth, only for countries holding a minimum threshold stock of human capital. Fewer studies have been conducted on inward foreign direct investments and transfer of technology by information technology multinational corporations in Kenya.

1.3 Research objectives

The objectives of this study were:

i. To determine the effect of inward foreign direct investments of information technology multinational corporations in Kenya
ii. To investigate on the transfer of technology of information technology multinational corporations in Kenya.

1.4 Value of the Study

The findings from the study are particularly useful in providing additional knowledge to existing and future institutions on FDI inflow into the economy is very crucial because it serves as a source of capital. In addition it is equally important in the sense that FDI stimulates domestic investment, promotes economic growth, creates employment

opportunities and promotes technology transfer. The trends in FDI raise important issues concerning the factors that motivate these flows and their effect on the performance of developing countries to potential and current scholars in Kenya. This will expand their knowledge on inward foreign direct investments and transfer of technology by information technology multinational corporations in Kenya. The study will be a source of reference material for future researchers on other related topics; it will also help other academicians who undertake the same topic in their studies. The study also highlights other important relationships that require further research.

The debate on the use of research results for policy decision-making and implementation processes is not new and the issue has gained greater prominence in recent decades. This follows the major processes of world change that increasingly call for concrete evidence to support on inward foreign direct investments and transfer of technology by information technology multinational corporations in Kenya. The research study can be valuable tool to the government in understanding inward foreign direct investments and transfer of technology by information technology multinational corporations in Kenya.

Most importantly the findings of this study can help in enlightening the key decision makers in information technology multinational corporations toward policies formulation. The study will in addition to the above, be useful to policy makers to create a business friendly environment in order to attract not only more but higher quality FDI with strong links to the domestic economy

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter shall review the literature available on inward foreign direct investments and transfer of technology by information technology multinational corporations in Kenya. This chapter will present the Trends in foreign direct investment in Kenya, Determinants of Foreign Direct Investment, and finally on Transfer of Technology by Multinational Corporations in Kenya. Empirical studies in these areas shall also be reviewed.

2.2 Foreign Direct Investment

According to Dunning (1994), foreign direct investment (FDI) refers to long term participation by a country into another country. It usually involves participation in management, joint-venture, transfer of technology and expertise. There are two types of FDI: inward foreign direct investment and outward foreign direct investment, resulting in a net FDI inflow (positive or negative), FDIs require a business relationship between a parent company and its foreign subsidiary. Foreign direct business relationships give rise to multinational corporations. For an investment to be regarded as an FDI, the parent firm needs to have at least 10% of the ordinary shares of its foreign affiliates. The investing firm may also qualify for an FDI if it owns voting power in a business enterprise operating in a foreign country.

The increasingly significant role of FDI in the growth dynamics of countries has created much research interest among scholars and much research has been focused on the

determinants of FDI and has generally identified the following factors namely comparative labor costs, country size, economic openness nature of exchange rate regime return on investment and political factors. Many of the studies include primarily developed countries in their sample and most of those which include substantial numbers of less developed countries (Schneider and Frey, 1985)

Many studies in literature have dealt with the issue of FDI and their potential benefits for developing countries in terms of job creation opportunities, technology transfers, and growth and development. There have also been several studies on the determinants of FDI in developed countries and developing countries although all developed countries or all developing countries cannot be grouped together given their different economic conditions. There are quite a few studies that concentrate on a region and yet very few on the African region. To close this gap in existing literature, the aim of this study is to analyze the various potential determinants of FDI for a sample of African economies.

Artige and Nicolini (2005) analyze the determinants of FDI (foreign direct investment) inflows for a group of European regions. The originality of their approach lies in the use of disaggregated regional data. First, they develop a qualitative description of their database and discuss the importance of the macroeconomic determinants in attracting FDI. Then, they provide an econometric exercise to identify the potential determinants of FDI. In spite of choosing regions presenting economic similarities, they show that regional FDI inflows rely on a combination of factors that differs from one region to another.

In Kenya, FDIs have been accelerated by the low requirements in the licensing of the investments. Licensing agreements allow companies to take full advantage of new and

exciting technologies while limiting their overall risk to royalty payments until a particular technology is fully developed and thus ready to put new products into the manufacturing pipeline. With some help from a variety of government agencies in the form of grants for R&D as well as other financial assistance for such things as incubator programs, once timid college researchers are now stepping out and becoming cutting edge entrepreneurs (Albaum, 2002), Kenya has attracted foreign direct investment (FDI) as a result of her abundant natural resources and size of domestic markets. Improved access to foreign markets for Kenyan products through negotiations and agreements with partners and improving the quality of Kenyan processed products to meet required standards in those markets has led to increased foreign direct investments.

Financial markets play a significant role in allowing spillovers and linkages associated with FDI in Kenya. Furthermore, to the extent that significant FDI arrives through mergers and acquisitions, it is not just easy availability of loans but also well-functioning stock markets that matter. Well-functioning stock markets, by increasing the spectrum of sources of finance for entrepreneurs, play an important role in creating linkages between domestic and foreign investors.

Finally most of the countries have entered into international governing arrangements to increase their attractiveness for more investment Sound investment climate is crucial for economic growth. Microeconomic reforms aimed at simplifying business regulations, strengthening property rights, improving labor market flexibility, and increasing firms' access to finance are necessary for raising living standards and reducing poverty in a country. Reform is necessary for creating an investment-oriented climate. Reform management matters as investment climate reforms are done politically. They often favor

unorganized over organized groups and the benefits tend to accrue only in the long term, while costs are felt up front. Political decisions play a significant role in this context. Each and every country over the globe are stepping forward to change the climate for attracting more investment. Opening up of doors by most of the nations have compelled them for adopting reforms (Albaum, 2002),

2.3 Determinants of Foreign Direct Investment

In the past decade, FDI has come to play a major role in the internationalization of business. Reacting to changes in technology, growing liberalization of the national regulatory framework governing investment in enterprises, and changes in capital markets profound changes have occurred in the size, scope and methods of FDI. New information technology systems, decline in global communication costs have made management of foreign investments far easier than in the past. The sea change in trade and investment policies and the regulatory environment globally in the past decade, including trade policy and tariff liberalization, easing of restrictions on foreign investment and acquisition in many nations, and the deregulation and privatization of many industries, has probably been the most significant catalyst for FDI's expanded role (Barrel and Pain, 1996),

Opolot, Mutenyo and Kalio, (2008), posts that foreign direct investment (FDI) plays an extraordinary and growing role in global business. It can provide a firm with new markets and marketing channels, cheaper production facilities, access to new technology, products, skills and financing. For a host country or the foreign firm which receives the investment, it can provide a source of new technologies, capital, processes, products,

organizational technologies and management skills, and as such can provide a strong impetus to economic development.

According to Phillips and Obwana (2000), FDI is an important vehicle for the transfer of technology, contributing relatively more to growth than domestic investment. However, the higher productivity of FDI holds only when the host country has a minimum threshold stock of human capital. The local firms benefit from the investment by the foreign countries through provision of support services to these sectors. The investment by the foreign countries avails linkages and spillovers to the local firms in that the students in these universities consume the services and products of the local firms.

While many highlight FDI's positive effects, others blame FDI for "crowding out" domestic investment and lowering certain regulatory standards. The effects of FDI can sometimes barely be perceived, while other times they can be absolutely transformative. While FDI's impact depends on many conditions, well-developed and implemented policies can help maximize its gains. One of the negative effects of foreign direct investment in education by the foreign countries includes the loss of market share for local institutions.

Another negative effect of foreign direct investment is that profits are perceived to bypass local economies, and instead flow back entirely to the multinational's home economy. Critics contrast this to local industries whose profits are seen to flow back entirely into the domestic economy.

Access to technology has been regarded as an influencing factor in investment location and specifically the ownership level of the investing firm, as mentioned previously

(Mwega and Ndung'u, 2002), Phillips and Obwana (2000), warns that even if a country has a high level of research and development expenditure, this may not be due to a high level of technological dynamism across the board but rather the result of a structural leaning towards industries with high research intensities. This bias will be mitigated only to the extent that industry structures between advanced countries tend to be fairly similar.

2.4 Foreign Direct Investments and Technology Transfer

Technology transfer can be defined as the process that allows techniques, knowledge as well as products and organization/management practices (that embody technology) to flow from one entity or locus (a firm, region or country) to another entity. Technology transfer can either be through formal or informal methods (Aduda and Kaane, 1999), Formal means of technology transfer include acquisition of capital equipment and machinery through trade, licensing (and/or franchising or distribution) agreements through which skills, ideas and technical information are transferred and through movement of experts and skilled labor. Informal technology transfer occurs mainly through nonmarket transactions via technology spillovers (demonstration-imitation effects, competition or labor turnover), printed information, and observations during visits to foreign plants and so on.

In the recent literature on international economics and economic growth, the link between technology transfers and foreign direct investment (FDI) made by multinational corporations (MNCs) seems to have been prominent (Haan, 1999), Theoretically, there is a widely shared view that technology may be transferred to host developing economies through MNCs' backward and forward linkages with indigenous firms and customers; imitation of domestic firms by "learning by watching" in the presence of MNCs;

induction of trained workers and managers by MNCs; and relocation of MNCs' R&D activities to host economies. On the other hand, however, it is sometimes suggested that MNCs may restrict diffusion of technology (especially advanced ones) to their subsidiaries abroad; transfer technologies that are inappropriate for the host country's factor proportions; prefer imports of key components/parts from parent factories to local suppliers, reducing linkage effects; and maintain their technological advantage by forcing host economies to follow strict rules of intellectual property rights. Although further theoretical insights would be valuable, empirical analyses of the issue are needed as well for a better understanding of relationship between FDI and technology transfers.

FDI has several advantages over other types of capital flows, in particular its greater stability and the fact that it would not create obligations for the host country. In addition to being a source of capital, FDI has other potential benefits to host countries which include technology transfer, new management skills, market know how and job creation. FDI can also be potentially harmful to host economies if results in resource exploitation, pollution, abuse of market power among other problems. Negative consequences of FDI can be avoided with proper regulation. Although estimating the extent of technology transfer, especially through informal sources, is difficult, there is evidence that MNCs are continually engaged in adapting industrial equipment for their own use and self constructing tools and equipment (Haan, 1999), One of the main methods used for technology choice in MSEs is through simple Limitation based on observation (Ngahu, 1995; Haan, 1999),

Manufacturing MSEs source their technology either from local sources or from abroad (Moyi, 2001 and Ngahu, 1995), although firms on the lower end of the size spectrum tend to rely more on locally available technologies than firms on the upper end of the size spectrum. Usually, the local sources of technology are limited in several ways. Evidence indicates that over 60 percent MSEs are dissatisfied with the technology they use and about 90 percent are desirous to enhance their innovative capacity (Aduda and Kaane, 1999),

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methods that were adopted by the study in obtaining information that was expedient in achieving the study's objectives. The chapter is structured into research design, target population, sample and sampling techniques, data collection and data analysis.

3.2 Research Design

The research design that was used in this study was both cross sectional and descriptive survey method aimed at establishing the inward foreign direct investments and transfer of technology by information technology multinational corporations in Kenya. These methods were preferred because they allow for prudent comparison of the research findings. A cross sectional and descriptive survey attempts to describe or define a subject often by creating a profile of a group of problems, people or events through the collection of data and tabulation of the frequencies on research variables or their interaction as indicated.

According to Ghauri and Gronhaug (2005), descriptive research is used when the problem is structured i.e. it gives answers to who, where, what, how and when questions. It is used to make clear the distinctiveness of a population or an observed fact. Therefore descriptive research studies are based on some previous understating of the nature of the research problem.

3.3 Target Population

According to Mugenda and Mugenda (2003), a population can be defined as an entire set of relevant units of analysis or data. Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions. The target population usually has varying characteristics and it is also known as the theoretical population. The target population of this study consisted of all the 125 information technology multinational corporations in Kenya

3.4 Sample and Sampling Procedure

The study used stratified random sampling technique to select a sample of 40 multinational corporations from a population of 125 information technology multinational corporations in Kenya. The goal of stratified random sampling was to achieve the desired representation from various sub-groups in the population. Mugenda and Mugenda, (2003), states that a sample of 30% is considered representative for a population less 500. The sample size is justified by 40% since it will minimize the duplicity and redundancy of the data to be obtained and the size is large enough to ensure collection of comprehensive data.

3.5 Data Collection

The study heavily relied on primary data which was collected through administering structured questionnaire comprising of closed and open-ended questions. These questionnaires were administered to some selected corporation representatives where by one respondent from each selected information technology multinational corporations was asked to fill in the questionnaire

The research instrument was divided into three parts where Part A covered general demographic data of the respondents, part B and C consisted of questions focusing on inward foreign direct investments and transfer of technology by information technology multinational corporations in Kenya. These questions are addressed using Likert 1-5.

3.6 Data Analysis

The process of data analysis involved several stages; the completed questionnaires were edited for completeness and consistency, checked for errors and omissions and then coded. A statistical analysis and descriptive analysis was employed. Descriptive statistics involving percentages mean and standard deviations were used to determine inward foreign direct investments and transfer of technology by information technology multinational corporations in Kenya. A Likert scale and the use of Statistical Package for Social Sciences (SPSS version 18) was employed. Tables were used as appropriate to present the data collected for ease of understanding and analysis of inward foreign direct investments and transfer of technology by information technology multinational corporations in Kenya.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis of the study findings according to the data collected from the field. It provides general information on inward foreign direct investments and transfer of technology by Information Technology multinational corporations in Kenya. It begins with instrument return rate, demographic data of the respondents, while the other sections are based on the research questions of the study.

4.2 Instrument return rate

Questionnaires were used to collect data from employees of Information & Communication Technology MNCs. A total of 100 questionnaires were distributed while 40 were returned giving a response rate of 40% which was deemed to be sufficient for data analysis. The respondents were quite cooperative and the data collected was taken to be a true representation of the respondents' views due to the independence of the questionnaire method of data collection.

4.3 Demographic information on respondents

The study sought to find out the demographic information of the employees respective of their gender, age, academic background, designation and work experience, The purpose of this information was to find out if the respondents understood the dynamics of inward foreign direct investments and transfer of information technology.

4.4 Gender Analysis

To determine the distribution, the respondents were asked to indicate their sex. Their responses were as shown in Table 4.1

Table 4.1 Distribution of respondents by gender

Gender	Frequency	Percent
Male	27	61
Female	17	39
Total	**44**	**100**

Source: Research Findings

As shown in Table 4.1, the study observed that 61 percent of the respondents were males while 39 percent were females. This suggested that administrative experience positions within the industry were dominated by males which could be as a result of the heavy travel required within the industry. However it was noted that the current debate on gender mainstreaming has been appreciated and implemented in the industry since either gender had met a minimum representation of 30 percent as recommended by the government policy which requires having at least a third of employees from either gender. Results on the age distribution were as shown in Table 4.2.

Table 4.2 Distribution of respondents by age

Age in years	Frequency	Percent
21-30	15	34

31- 40	27	61
41 and above	2	5
Total	**44**	**100**

Source: Research Findings

The study found out that 61 percent of the respondents were aged between 31 and 40 years of age suggesting that most of the administrative experience positions within the industry were dominated by people within this age bracket. Only a small percentage of them were above 40 years of age suggesting that the dynamic nature of the industry did not allow people to age in the profession. The respondents were further asked to indicate their academic background. The results were as shown in Table 4.3

Table 4.3 Distribution of respondents by educational background

Education level	**Frequency**	**Percent**
Diploma	2	5
Undergraduate	15	34
Postgraduate	27	61
Total	**44**	**100**

Source: Research Findings

The study found out that 61 percent of the respondents held post graduate level of education implying that most of the administrative experience positions within the industry demanded high level of educational exposure. This was a positive attribute of the respondents to this study because the more one was exposed to further studies the more

they were likely to understand issues surrounding foreign direct investment and the development of information technology industry in Kenya. Only a small percentage of them (5%) held college diplomas probably because they were just proxies of the owners of the respective businesses. The study further sought to know for how long the respondents worked in the information technology industry. The results were as shown in Table 4.4

Table 4.4 Distribution of respondents by industry experience

Duration in years	Frequency	Percent
1-2yrs	1	2
3-5yrs	8	18
6-10yrs	22	50
10-15yrs	13	30
Total	**44**	**100**

Source: Research Findings

The study found out that 80 percent of the respondents had worked in the industry for at least six years confirming that they were quite knowledgeable on industrial matters and understood their industry's environment. Their responses to the study questions would therefore be credible enough to draw conclusions from. To reinforce this finding the study further enquired on the duration they worked in their present work stations. The results were as tabulated in Table 4.5.

Table 4.5 Duration respondents stayed at their current work stations

Duration in years	Frequency	Percent
3-5 yrs	7	16
6-8 yrs	28	64
Over 8 yrs	9	21
Total	**44**	**100**

Source: Research Findings

Table 4.5 confirmed that 64 percent of the respondents had worked in the current station for at least six years confirming that they were quite knowledgeable about the operational aspects of their respective organizations. Their responses therefore would be credible enough for this study.

Effect of inward foreign direct investments of multinational corporations in IT in Kenya

Having ascertained the background information, the study enquired on the inward foreign direct investments of multinational corporations in IT in Kenya. Several questions were posed to the respondents regarding tax breaks, subsidization, concessions, land utilities, profit guarantees and EPZ packages. The purpose of this information was to assess the trend in foreign direct investments within the organizations. The respondents were to indicate to what extent they agreed what extent the provision of these facilities influenced foreign direct investments in Kenya. On the effect of tax breaks, the results were as shown in Table 4.6

Table 4.6 Effect of tax breaks on foreign direct investment

Effect	Frequency	Percent
Neutral	11	25.0
Moderate Extent	25	56.8
Great Extent	8	18.2
Total	**44**	**100.0**

Source: Research Findings

Findings show that the use of tax breaks by the government directly affects foreign direct investments into the country. This was confirmed by the majority of the respondents where 57 percent believed the effect was moderate while 18 percent believed that the effect was to a great extent as shown in Table 4.6. This finding implies that the government should consider tax breaks as an incentive to attract foreign direct investment in IT. On the effect of government subsides, the results were as shown in Table 4.7

Table 4.7 Effect of government subsidies on foreign direct investment

	Frequency	
Neutral	28	64
Moderate extent	16	36
Total	**44**	**100**

Source: Research Findings

The respondents were indifferent on the use of subsides by the government to attract foreign direct investments into the country. This was confirmed by the majority of the respondents where 64 percent were neutral while only 36 percent believed the effect was moderate as shown in Table 4.7. On the effect of import duty concessions, the results were as shown in Table 4.8.

Table 4.8 Effect of import duty concessions on foreign direct investment

Effect	Frequency	Percent
Low extent	18	41
Moderate extent	1	2
Great extent	25	57
Total	**44**	**100**

Source: Research Findings

Findings show that there was indifference in the use of import duty concessions by the government in attracting foreign direct investments. This was confirmed by the majority of the respondents where 57 percent believed the effect was to a great extent while 40 percent believed that the effect was to a little extent as shown in Table 4.8. This finding implies that the government should consider import duty concession as an incentive to attract foreign direct investment in IT. On the effect of reduction of land rents, the results were as shown in Table 4.9

Table 4.9 Effect of reduction of land rents on foreign direct investment

Effect	Frequency	Percent
Least extent	5	11
Low extent	27	61
Moderate extent	12	27
Total	**44**	**100**

Source: Research Findings

It was established that reduction of land rents and utilities by the government in attracting foreign direct investments would achieve very little effect. This could probably be as a result of similar costs of land rents in other competing countries with similar conditions as Kenya. This was confirmed by the majority of the respondents where 73 percent believed the effect was of low and least extent as shown in Table 4.9. Only 27 percent of the respondents believed that reduction of land rates was to a moderate extent. Results on guarantee of profit and repatriation were as shown in Table 4.10

Table 4.10 Effect of guarantee of profit and repatriation on foreign direct investment

Effect	Frequency	Percent
Low extent	12	27
Moderate extent	32	73
Total	**44**	**100**

Source: Research Findings

It was established that promises of guarantee of profit and repatriation of profits by the government in attracting foreign direct investments would also achieve little effect in attracting foreign direct investment. This could probably be as a result of existence of healthy competition among the IT firms in Kenya suggesting that such an offer would not significantly attract additional entrants into the IT market. This was confirmed by the majority of the respondents where 73 percent believed the effect was of moderate extent as shown in Table 4.10. Only 27 percent of the respondents believed that guarantee of profits was of a moderate extent. On import duty concessions, the results were as shown in Table 4.11

Table 4.11 Effect of import duty concessions on foreign direct investment

Effect	**Frequency**	**Percent**
Low extent	17	39
Moderate extent	27	61
Total	**44**	**100**

Source: Research Findings

It was found out that EPZ packages offered by the government in attracting foreign direct investments would also achieve little effect in attracting foreign direct investment. This could probably be because most of the existing IT multinational corporations in Kenya do not engage in manufacturing activities to warrant them claim exporting benefits. Rather they heavily invest in service delivery and in the event of equipment requirements, they would rather import from their parent companies or subsidiaries abroad. This therefore implies that EPZ offers would not significantly attract manufacturing entrants into the IT

market. This was confirmed by the majority of the respondents where 61 percent believed the effect was of moderate extent as shown in Table 4.11. Only 39 percent of the respondents believed that EPZ was of a moderate effect.

Determinants of foreign direct investment

The respondents were further asked questions on the determinants of foreign direct investments were supposed to respond to questions on Kenyan market, climate, political stability, Liberalization cost of production bilateral trade agreements, maximum retail prices, human resource availability, stability of the economy, competition, Kenya's popularity, entrepreneurship in Kenya, licensing, raw materials, infrastructure, beauty and financial systems. The purpose of this information was to establish the determinants of foreign direct investments in Kenya. The respondents were to indicate to what extent they agreed that the variables determined the inflow of foreign direct investment into Kenya. To establish the determinants, descriptive statistics were generated for the variables and the results were as shown in Table 4.12.

Table 4.12 Determinants of foreign direct investment

Determinants	N	Min.	Max	Mean	Std. Dev.
Market in Kenya and neighboring countries	44	5	5	5.00	0
Political stability/ economic	44	3	5	4.75	0.488
Absence of max retail price	44	3	5	4.75	0.488

Stable and growing economy	44	3	5	4.43	0.789
Human resource availability	44	2	5	4.14	1.069
Strategic infra structure	44	4	4	4.00	0
Cheap labour and cost of production	44	3	4	3.18	0.39
Existence of similar businesses	44	1	4	3.18	1.352
Favourable climate	44	1	4	3.11	1.385
Kenya's popularity worldwide	44	3	3	3.00	0
Liberalization of the economy	44	1	4	2.89	1.061
Financial systems	44	1	3	2.73	0.694
Resources and raw material availability	44	1	3	2.45	0.901
Easy process of acquiring licenses	44	1	3	2.18	0.995
Bilateral trade agreement	44	1	4	2.02	0.821
Entrepreneurial spirit in Kenya	44	1	3	1.59	0.595
Beauty of people	44	1	3	1.07	0.334

Source: Research Findings

Table 4.12 presents the findings on the determinants of foreign direct investments. The respondents had five options to choose from namely least extent (coded 1), low extent (2), neutral (3), moderate extent (4), and great extent (5), From the analysis, a mean of 4 and above indicated that the respondents believed to large extent that the variable was a determinant while a mean of 3 indicated that the respondents were not sure about the variable being a determinant of foreign direct investment into Kenya. A mean of 2 and below implied that the variables were not determinants at all to foreign direct investment. Table 4.12 therefore confirms that the determinant of foreign direct investments into

Kenya are: Market in Kenya and neighboring countries; political stability; absence of maximum retail price; stable and growing economy; human resource availability and strategic infrastructure.

Impediments to foreign direct investment

To establish the Impediments to foreign direct investment in information technology Multinational Corporations investing in Kenya, the respondents were further asked questions on impediments. They were to respond to respond to questions on political instability, crime and insecurity, climate change, competition, unreliable infrastructure, delays in licenses and work permits, weak legal infrastructure, lack of knowledge on regional blocks, corruption, lack of clear policies and regulatory impediments, currency risks, economic growth, high cost of production, and cost of financing. The respondents were again to indicate to what extent they agreed that the variables were impediments to inflow of foreign direct investment to Kenya. To achieve this, descriptive statistics were generated for the variables and the results were as shown in Table 4.13.

Table 4.13 Impediments to foreign direct investment

Impediment	N	Min	Max	Mean	Std. Dev
Delays in licenses and work permits	44	5	5	5.00	0
corruption	44	4	5	4.39	0.493
political instability	44	3	5	4.14	0.462
unreliable infrastructure	44	4	4	4.00	0

Lack of clear policies and regulatory impediments	44	3	4	3.80	0.408
Exchange rate volatility/ currency risk	44	1	5	3.48	1.303
Lack of law enforcement/weak legal infrastructure	44	2	4	2.98	0.792
Lack of skilled Labour/ high cost of production	44	2	4	2.55	0.901
Cost of financing	44	1	3	2.45	0.901
Crime and insecurity	44	2	3	2.39	0.493
Lack of proper knowledge of regional blocks	44	1	3	2.02	0.628
Competition	44	1	2	1.86	0.347
Economic growth	44	1	3	1.05	0.302
Climate change	44	1	2	1.02	0.151
Valid N (list wise)	44				

Source: Research Findings

As shown in Table 4.13, presents, the respondents had five options to choose from namely; least extent (coded as 1), low extent (2), neutral (3), moderate extent (4), and great extent (5), From the analysis, a mean of 4 and above indicated that the respondents believed to large extent that the variable was an impediment while a mean of 3 indicated that the respondents were not sure about the variable being an impediment of foreign direct investment into Kenya. A mean of 2 and below implied that the variables were not impediments at all to foreign direct investment. From the analysis, the impediments of foreign direct investments into Kenya are: Delays in licenses and work permits; corruption; political instability; and unreliable infrastructure. They all had means of 4.0 and above.

Table 4.14 Transfer of technology of IT multinational corporations

To assess the transfer of technology the respondents were asked to identify the extent of technological transfer to which a multinational subsidiary buying from plants that belong to the same business group influence its labour productivity. The results were as shown in Table 4.14

Extent	Frequency	Percent
Low extent	1	2
Neutral	17	39
Moderate extent	14	32
Great extent	12	27
Total	44	100

Source: Research Findings

Findings show that 2 percent believe the influence of this kind of purchase was weak. Whereas 39 percent of the respondents were not sure whether this influence existed. 59 percent of the respondents believed that the influence was quite significant.

The study further enquired on the extent to which foreign subsidiaries of information technology multinational corporations are substitution investments in R&D by purchases of technological services from other companies of the group. The results were as shown in Table 4.15

Table 4.15 Substitution of investment in R&D with foreign purchases

Extent of Substitution	Frequency	Percent
Moderate extent	32	72.7
Great extent	12	27.3
Total	44	100.0

Source: Research Findings

Findings show that foreign subsidiaries of information technology multinational corporations are substituting investments in R&D by purchases of technological services from other companies of the group as shown in Table 4.14, 73 percent of the respondents unanimously agreed that the substitution effect was of a moderate extent while 27 percent believed that the substitution effect is at a great extent.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter deals with the summary, conclusions and recommendations of the study. The general objective of the study was to investigate inward foreign direct investments and transfer of technology by information technology multinational corporations in Kenya

5.2 Summary of the study

The researcher developed two research objectives from which research questions were drawn to be answered by the study. Related literature on foreign direct investments and transfer of technology was reviewed. Theoretical and conceptual frameworks were provided.

The study targeted all the 125 information technology multinational corporations in Kenya. The study employed stratified random sampling method to get 100 respondents. A Questionnaires tool was used to collect the required information. The number of questionnaires returned was 40 and the return rate was 40%. Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 17.0 to process the frequencies, percentages and descriptive statistics which were used to discuss the findings. The following were the findings of the study.

5.3 Summary of findings

On the effect of inward foreign direct investments of multinational corporations in IT in Kenya it was found out that the use of tax breaks by the government directly affects foreign direct investments into the country. It was also found out that the use of subsidies by the government to attract foreign direct investments into the country would be indifferent as far as the IT sector was concerned since majority of the respondents were neutral about it. Most of the respondents also believed that import duty concessions would attract more foreign direct investment in the country. This is because most of the technology equipment used locally is imported and a decrease in importation charges would greatly boost this kind of industry.

Reduction of land rents and utilities by the government in attracting foreign direct investments would achieve very little effect. This is because similar or higher costs of land rents in other competing countries with similar conditions as Kenya made the cost of land rent a non issue in the industry. Promises of guarantee of profit and repatriation of profits by the government in attracting foreign direct investments would also achieve little effect in attracting foreign direct investment in this industry because of the existence of stiff competition among the IT firms in Kenya. Such an offer would not significantly attract additional entrants into the IT market.

The study also established that EPZ packages offered by the government in attracting foreign direct investments would achieve little effect in attracting foreign direct investment. This is because most of the existing IT multinational corporations in Kenya do not engage in manufacturing activities to warrant them claim export processing

benefits. Rather they heavily invest in service delivery and in the event of IT equipment requirements, they would rather import from their parent companies or subsidiaries abroad than manufacture locally.

The study established that the determinants of foreign direct investments into Kenya are Market in Kenya and neighboring countries, political stability, absence of maximum retail price, stable and growing economy, human resource availability and strategic infrastructure. Consequently, the impediments to foreign direct investments into Kenya include Delays in licenses and work permits, corruption, political instability, and unreliable infrastructure.

On the extent to which foreign subsidiaries of information technology multinational corporations are substitution investments in R&D by purchases of technological services from other companies of the group, the study established that foreign subsidiaries of information technology multinational corporations are substituting investments in R&D by purchases of technological services from other companies of the group to a great extent.

5.4 Conclusion

The study established that the use of tax breaks by the government, and the use of import duty concessions directly affects foreign direct investments into the country in the IT industry. The determinants of foreign direct investments into Kenya are Market availability in Kenya and neighboring countries, political stability, absence of maximum

retail price, stable and growing economy, human resource availability and strategic infrastructure. The impediments to foreign direct investments into Kenya include Delays in licenses and work permits, corruption, political instability, and unreliable infrastructure. Foreign subsidiaries of information technology multinational corporations are substituting investments in R&D by purchases of technological services from other companies of the group to a great extent.

5.5 Recommendations

Following the findings of this study, the following recommendations are made:-

i. That the Ministry of Trade reviews exercises the use of tax breaks, and the use of import duty concessions to attract the desired level of foreign direct investments into the country in the IT industry. The study established that tax breaks by the government, and the use of import duty concessions directly affects foreign direct investments in IT in Kenya.

ii. That the Ministry of Trade encourages market regulation, political stability, absence of maximum retail price, stable and growing economy, human resource availability and strategic infrastructure to regulate the desired level of FDI in IT as these were found to be the determinant of FDI in IT industry in Kenya.

iii. That the Ministry of Trade reviews the licensing and work permits procedures if it is to attract FDI in IT in Kenya. The government in the process should address corruption, political stability and infrastructure. This is because the study established that the impediments to foreign direct investments into

Kenya include delays in licenses and work permits, corruption, political instability, and unreliable infrastructure.

5.6 Suggestions for further research

The study recommends that similar studies be conducted in the other industries with a view of establishing whether the same dynamics exists in those industries.

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UNIVERSITY LETTER OF INTRODUCTION

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

Telephone 020-2059162
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P.O. Box 30197
Nairobi, Kenya

DATE ....[illegible]....

TO WHOM IT MAY CONCERN

The bearer of this letter ....[illegible]....

Registration No. ....[illegible]....

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
27 AUG 2012
MBA OFFICE
P.O. Box 30197 – 00100, NAIROBI

IMMACULATE OMANO
MBA ADMINISTRATOR
MBA OFFICE, AMBANK HOUSE

STUDENT LETTER OF INTRODUCTION

Mwenda K. Reuben
P.O Box 30088- 00100
Nairobi, Kenya
Tel. 0723 500 380

September 3rd 2012

TO WHOM IT MAY CONCERN

Dear Sir/ Madam,

RE: DATA COLLECTION FOR MBA RESEARCH PROJECT

I am currently studying for masters of business administration with the University of Nairobi, and am expected to conduct a research study as a requirement for award of the degree.

The topic for my research is "**INWARD FOREIGN DIRECT INVESTMENTS AND TRANSFER OF TECHNOLOGY BY INFORMATION TECHNOLOGY MULTINATIONAL CORPORATIONS IN KENYA**". Your company being one of the Information Technology Multinational Corporations in Kenya, I hereby therefore request your permission to perform data collection in your esteemed organization.

I intend to use questionnaires to collect the data. These may be delivered via email filled and sent back to myself

Yours faithfully

Mwenda Reuben

APPENDIX 1

QUESTIONNAIRE

Please answer the following questions as truthfully as you can. Your responses will be treated in strict confidence and are to be used for research purposes only. The questionnaire below has two parts; please answer all questions. Thank you.

PART A: GENERAL INFORMATION

1) Name of the Company .....

2) What is your gender? (tick one)

   Male ( )

   Female ( )

3) Age(tick one)

   20 -30 ( )

   21 -30 ( )

   31- 40 ( )

   40 and above ( )

4) What is your academic background

   Certificate ( )

   Diploma ( )

   Undergraduate ( )

   Postgraduate ( )

5) What is your designation? .....

6) How long have you been working in your present capacity?

Less than 3 years ( )

3 to 5 years ( )

5 to 7 years ( )

Over 7 years ( )

7) How long have you worked for the industry?

1 – 2 years ( )

3 – 5 years ( )

6 – 10 years ( )

10 – 15 years ( )

Over15year ( )

PART B: INWARD FOREIGN DIRECT INVESTMENTS AND TRANSFER OF TECHNOLOGY

TRENDS IN FOREIGN DIRECT INVESTMENT IN KENYA

8) What is the extent to which the government assists transfer of technology by information technology multinational corporations in Kenya. Rank by placing a tick in the appropriate place. 1= Least extent, 2= Low extent, 3= Neutral, 4= Moderate extent and 5= Great extent

	Least extent	**Low extent**	**Neutral**	**Moderate extent**	**Great extent**
Tax Breaks/Holidays					
Subsidies/Cash Payments					
Import duty concessions					
Reduction of land rents/Utilities					

Guarantee of profit and repatriation					
EPZ Packages					
Others					

DETERMINANTS OF FOREIGN DIRECT INVESTMENT

9) What are the reasons for information technology multinational corporations companies investing in Kenya? Rank by placing a tick in the appropriate place. 1= Least extent, 2= Low extent, 3= Neutral, 4= Moderate extent and 5= Great extent

	Least extent	Low extent	Neutral	Moderate extent	Great extent
Market in Kenya and Neighboring countries					
Favorable Climate					
Political Stability/Economic					
Liberalization of the economy					
cheap labor and cost of production					
Bilateral trade agreements					
Absence of Maximum retail price					
Human resource availability					
Stable and growing economy					
Existence of similar businesses					
Kenya's popularity world wide					
Entrepreneurial spirit in Kenya					
Easy process of acquiring licenses					

Resources and Raw material availability					
Strategic infrastructure e.g. port					
Beauty of the people					
Financial systems					

10) What are the Main impediments to foreign direct investment in information technology multinational corporations companies investing in Kenya? Rank by placing a tick in the appropriate place. 1= Least extent, 2= Low extent, 3= Neutral, 4= Moderate extent and 5= Great extent

	Least extent	Low extent	Neutral	Moderate extent	Great extent
Political instability and its neighbors					
Crime and Insecurity					
Climate change					
Competition					
Unreliable infrastructure					
Delays in licenses & Work permits					
Lack of law enforcement/weak legal infrastructure					
Lack of proper knowledge of regional blocks					
corruption					
Lack of clear policies and regulatory					

impediments					
Exchange rate volatility/Currency risk					
Economic growth					
Lack of skilled labor/High cost of production					
Cost of financing					

TRANSFER OF TECHNOLOGY BY MULTINATIONAL CORPORATIONS IN KENYA

11) To what extent of technological transfer does a multinational subsidiary buying from plants that belong to the same business group influence its labor productivity

Least extent ( )

Low extent ( )

Neutral ( )

Moderate extent ( )

Great extent ( )

12) Foreign subsidiaries of information technology multinational corporations are substituting investments in R&D by purchases of technological services from other companies of the group

Least extent ( )

Low extent ( )

Neutral ( )

Moderate extent ( )

Great extent ( )

APPENDIX II

LIST OF ICT MUTINATIONAL CORPORATION IN KENYA

1. Adoraview Makakopy
2. Africa Online Kenya Limited
3. African Desktop Ltd
4. Alldean Satellite Networks Ltd
5. Allwonders Softwares
6. Alternative Technology Supplies
7. Amazon.com
8. Ameritech
9. Ameritrade Holding Corporation
10. Analysts International
11. Azicon Engineering Ltd
12. Bell Atlantic Communication Limited
13. BellSouth
14. BestWebs Systems
15. Bewa Computer Systems
16. Bloomerg Limited
17. Blue Violet Interactive
18. BMC Software
19. Break Through Technologies
20. British Telecommunications
21. Broadband Access Limited

22. Cable & Wireless

23. Cadence Design Systems

24. Centurion Systems

25. Century Telephone Ents.

26. China Telecom

27. CIBER

28. Cincinnati Bell

29. Cisco Systems

30. Compaq

31. Compuware Corporation

32. Dell Computer

33. DoubleClick

34. EarthLink Network

35. Electronic Arts Online, EA Online

36. EMC

37. Ericsson

38. Everex Technologies

39. Excel Communications.

40. Excite

41. Google

42. HP Kenya

43. Huawei

44. Hyper Centre

45. IBM Corporation

46. Infoseek

47. Ingram Micro

48. Intel Corporation

49. Intermedia Communications

50. International E-commerce

51. International House Business Centre

52. Internet Solutions Kenya

53. Ivolga

54. L-3 Communications Corporation

55. Lanco Global Systems

56. Lastar Datacomm Solutions

57. Lenovo

58. Lexmark International Group

59. Linksoft Communication Systems

60. Logisol Africa Limited

61. Loral Space & Communications

62. Lucent Technologies

63. Lycos

64. Mac More Solutions

65. Maxim Integrated Products

66. McKesson HBOC

67. Microsoft Corporation

68. MindSpring Enterprises

69. MISys, Manufacturing Informations System

70. Mitel Corpotation

71. Network Solutions

72. Neural Soft

73. Nextel Communications

74. Nexus Networx

75. Nidec America Corporation

76. Nokia

77. One World Technology

78. Oracle Corporation

79. Pacific Communications

80. Pacific Gateway Exchange

81. PanAmSat Corporation

82. PC World

83. Pegrume Limited

84. Prime Wood Ltd

85. Quality Computer Services

86. Sai Office Supplies Limited

87. SAP AG, Sap Solutions

88. Satellite Data Networks Ltd

89. SBC Communications

90. Silex Technologies

91. Singapore Telecom

92. SK Web Graphic

93. Smartlink Technologies

94. Softbank Technology Corp.

95. Solectron

96. Sony Corporation

97. Sprint Communications

98. Sterling Software

99. Storage Tek

100. Sun Microsystems

101. SunGard Data Systems

102. Swift Global (K) Ltd.

103. Swiftweb International

104. Symbiotic Media Consortium

105. Symbol Technologies

106. Tech Data

107. Technology Today

108. Teldata Communication Ltd

109. Teleglobe Communications Corporation

110. Tellabs

111. The Internet Lost and Found

112. Touchline Technologies Ltd

113. Trans-Business Machines Ltd. Nairobi

114. Vanguard Cellular Systems

115. VGL softech Ltd

116. Virtual media solutions

117. Vodafone

118. Vox Vision

119. Wananchi Online Ltd. Nairobi

120. Web Host Africa Ltd

121. Weblink Creations

122. WebSoft Development

123. WebSpaceKenya IT Solutions

124. Yahoo!

125. Zuku Fibre Services