

**INTELLECTUAL PROPERTY RIGHTS AS A STRATEGIC
TOOL FOR ACHIEVING COMPETITIVE ADVANTAGE
BY SAFARICOM KENYA LIMITED**

FREDERICK OTIENO ODONGO

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DECLARATION

This research project is my original work and has not been presented for the award of degree in any other university or institution of higher learning for examination /academic purposes

Signed: _____ Date _____

FREDERICK OTIENO ODONGO

D61/67467/2011

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

Signed: _____ Date _____

DR.JOHN YABS

LECTURER

DEPARTMENT OF BUSINESS ADMINISTRATION

SCHOOL OF BUSINESS

UNIVERSITY OF NAIROBI

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DEDICATION

This project is dedicated to all those who believe in the richness of learning.

ABSTRACT

The research to date indicates that management attention across the life cycle of a product must focus on exploiting IP as a strategic tool for creating competitive advantage through resource management and intellectual property right strategy. Safaricom Kenya limited has been able to keep pace with the global mobile telecommunications market by having strategic business associations, developing unique financial transfer product such as MPESA. The advent of technological advancement has seen an increase in innovation creations notably among the telecommunication companies in Kenya. Comprehensive and aggressive IP right strategies are adopted by telecommunication companies to manage strategic joint development alliances and return on technology with the aim of transferring specifications and information from inventors to partners through patent and other IP licensing. The objective of the study was to determine how Safaricom has used Intellectual Property Rights as a tool for achieving competitive advantage in Safaricom Kenya Limited. The study used case study as it involved a careful and complete observation of social units. Primary data was collected using interview guides. The data which was qualitative in nature was analyzed using conceptual content analysis which is best suited method of analysis. The study revealed that Safaricom Kenya Limited used intellectual property rights. The study concluded that intellectual property rights had influenced Safaricom Kenya Limited in achieving market leadership in the market as the company patented innovative products. The study concluded that Intellectual property right adopted by Safaricom achieved higher profitability level, as the company was able to provide unique communication products and services attracting high customers and that increasing number of Safaricom subscribers had a positive influence on the company's profitability as the company's turnover rose. The study recommend that company should invest in intellectual property rights as this would influence achieving market leadership in the market as the company patented innovative products such which would make the company to increase market share , attract and retain large number of customers, continue offering quality innovative software systems for its customers increasing customer satisfaction hence maintaining high number of customers earning high proportion of profits than its rivals in the market. The study also recommended that Intellectual property right adopted firms would influence achievement of higher profitability level, as the company was able to provide unique products and services attracting high customers and revenue growth was driven by intellectual property rights which had led to company customer acquisition, improve cost savings and increased in customer spending achieving competitive advantage.

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ABBREVIATIONS

ARIPO African Region Intellectual Property Organisation

EDGE Enhanced Data rates for GSM evolution

EU European Union

GPRS General Packet Radio Service

ICT Information Communication and Technology

IP Intellectual Property

IPRs Intellectual property rights

GOK Government of Kenya

KIPI Kenya Industrial Property Institute

RBV Resourced based View

R&D Research and Development

SMS Short Message Text Service

TRIPS Trade –Related Intellectual Property Rights

US United States

WIPO World Intellectual Property Organisation

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In the emerging knowledge-based economy where competencies in speed-to-market and market intelligence are considered prerequisites for market leadership (Bean and Radford 2000), innovation has become the primary factor influencing competitive differentiation and stakeholder value creation (Janszen 2000). In a context where creative thinking determines competitive advantage and where the nature of products and services is increasingly more complex knowledge creation and protection mechanisms also promote sustainable organizational leadership with intellectual property (IP) and knowledge management in product development serving as factors for differentiation by team, rather than by product (Bean & Radford, 2000).

The research to date indicates that management attention across the life cycle of a product must focus on exploiting IP as a strategic tool for creating competitive advantage through resource management and intellectual property right strategy (Bean, & Radford, 2000). Han, Kim and Kim (2001) distinguish distribution access controlled by trademarks from proprietary assets controlled by copyright and patent law and identify these as types of entry barriers that are effective deterrents and enablers or inhibitors of innovativeness. Janszen, (2000) indicated multinational companies tend to innovate, originate and develop rather than administer, emulate and maintain and for this reason the leaders are best able to exploit IP as a strategic lever to protect their organizational competitive

positioning and create additional competitive advantages generated from the knowledge creation activities (Katz, 2003). Employing IP as a strategic tool in product development warrants an IP Product Protection Matrix' approach (Coade, 1997).

With the global trend being one where IP rights are deemed increasingly valuable assets by the market, IP rights are being strongly enforced (Drahos and Braithwaite 2002). Maier and Spivak (1994) refers to the American (US) cases of Polaroid vs. Kodak, 229 USPQ 561 and Litton vs. Honeywell, where significant amounts US\$900 million and US\$1.2 billion respectively were awarded in damages to the aggrieved parties respectively for IP infringement. Since IP owners regard improvements in technology as increasingly important tools to police their IP rights for instance software development companies are now able to monitor client usage, automatically report instances of unauthorized copying or unlicensed usage via the Internet and take legal action where appropriate) (Drahos and Braithwaite 2002), employing an IP strategy that seeks to analyze and reduce infringement risks and build IP assets is justifiable, if not mandatory, in an information and knowledge-driven era (Maier and Spivak 1994).

Formulating new strategies that constantly redefine the rules of the competitive landscape ensures advantage and IP protection is a strategic tool that enables such leverage, being an essential component for the protection of innovation and sustainable development in telecommunication companies (Black & Lynch, 2003). It is therefore a core competency of those leading telecommunication companies that IPR as a stool for achieving competitive advantage. Safaricom limited has been able to keep pace with the global

mobile telecommunications market by having strategic business associations, developing unique financial transfer product such as MPESA. This has created a great motivation for competitions from telecommunication industry to seek similar model of money transfer model. This has influence Safaricom protecting it model by patenting it (Safaricom Ltd, 2010)

1.1.1 Competitive Advantage

A company has a competitive advantage whenever it has an edge over its rivals in securing customer and defending against competitive forces (Thompson and Strickland, 2002). Sustainable competitive advantage is attained out of core competencies that yield the long term benefit to the company. Competitive advantage is also defined as the strategic advantage one business entity has over its rival entities within its competitive industry. Achieving competitive advantage strengthens and positions a business better within the business environment. A company has a competitive advantage whenever it has an edge over its rivals in securing customer and defending against competitive forces (Thompson & Strickland, 2002). Prahaland and Hamel (1990) define a core competence as an area of specialized expertise that is the result of harmonizing complex streams of technology and work activity.

The intangible nature of financial services makes it difficult to envisage the use of specific services features as the basis for establishing a competitive advantage. Services cannot be patented, so service features generally can be copied with ease (Davison, Watkins and Wright, 1989). This leads to difficulty in trying to establish a lasting

competitive advantage using service features (Bharadwaj *et al.*, 1993). Basing competitive advantage on the organization as a whole rather than on specific offerings allows the organization to place considerable emphasis on trust and confidence to mitigate the doubts and uncertainties experienced by consumers in relation to the purchase of products which are complex and difficult to comprehend.

1.1.2 The concept of Intellectual Property Rights

Intellectual property refers to the protection of the products of human creativity that encompasses the 'originality of new products, the confidentiality of know-how and the distinctiveness of names, trademarks and get-up' (Spoor & Fisher 2001). Intellectual property rights (IPRs) are legal devices that protect creations of the mind which have commercial value, such as inventions. They grant exclusive rights to the creators (right-holders) to protect access to and use of their property from unauthorized use by third parties. The term 'intellectual property' (IP) has no universally agreed definition. Similarly TRIPS does not define the term 'intellectual property' as a concept, but instead refers to sections of the Agreement that address categories of IP. Subsequent to the 1967 WIPO Convention, the concept of IP has been stretched to include not only patents, copyright, industrial designs and trademarks but also trade secrets, plant breeder's rights, geographical indications and rights to layout designs of integrated circuits.

An organization's intellectual property can be considered as its specifically owned knowledge assets that are not owned by any other firm or organization. For firms that make investments in developing new products and services, processes, paradigms, or

specific market positions that are unique, a return on these investments is a reasonable expectation. There is risk in making these investments and shareholders and other stakeholders will expect a return that is at least commensurate with this risk. Wagman and Scofield (1999) have defined intellectual property as Physical manifestation of original thought in compliance with statutes, specifically patent, copyright or trademark statutes.

1.1.3 Intellectual Property Right in Kenya

Kenya has put in place legislation for protecting IPRs in line with the Western philosophy of property ownership. IPRs such as Patents, trademarks, industrial designs and copyright are protected. The Counterfeit Act can be seen as offering protection to IPRs. Attempts to protect traditional knowledge by using the Environmental Management and Coordination Act as well as copyright do not address the core issues in traditional knowledge. The Industrial Property Act domesticates both the Patent Convention Treaty and TRIPS. This Act provides for the protection of industrial designs at section 86(1).

The Act creates the Kenya Industrial Property Institute (KIPI), an institution for the administration of Patents, industrial designs and trade/ service marks. The Act provides for an annual fee payable in respect of patents. In the matter of Pfizer Inc v Cosmos Ltd, 25 the applicant alleged infringement by the respondent of its patent for the drug azithromycin in, registered by ARIPO on 27th July 1989. Such patents apply to Kenya. The respondent denied infringing the patent or that the applicant had a valid patent for the product in the period 2005-2007 as it had lapsed in Kenya and the US patent had expired.

The issue was whether the patent was valid in Kenya at the time of the alleged infringement certificates for renewal during the period were signed late by ARIPO. It was observed that ARIPO had a procedure for late payment and for removal of patents from its register. No evidence was adduced to show that the subject patent had been removed from the register of ARIPO. It was noted that KIPi has no powers to remove such a patent from its register. The Copyright Act 2001 attempts to domesticate both the Berne Convention and TRIPS. The Act confers copyright upon an author whose work may or may not be registered under the Act.

1.1.4 Industry in Kenya

The Telecommunication industry comprises of telephone communication, Communication through the internet, audio and visual media, postal communications and fax. The mobile industry has grown tremendously over the last decade, rising from a few thousand in the 1990s to over 14 million subscribers currently. The types of mobile phones and services available have also changed drastically. In Kenya, though there are few service providers, there is stiff competition and rivalry in this industry hence a careful analysis for and current prospective investor is necessary for success.

The telecom sector in Kenya is well developed having two major players Safaricom and Telkom Kenya. Safaricom is the clear market leader in the mobile services segment while Telkom Kenya is the major player in the fixed line telecom segment (GOK, 2014). The Kenyan telecom industry experienced strong growth in the year 2012 and the same is likely to continue over till 2017. With increasing subscribers for both mobile and fixed

line sectors, the Kenyan telecom industry is anticipated to post healthy growth rates in the coming years. The telecommunication companies have strived to development of new products like Safaricom had developed Mpesa due to advancement in technology. The relevance of KIPi in the protection of intellectual property in Kenya is critical as the country is experiencing an innovation revolution in the technology, creative and performing arts industries. The rapid diffusion of technological innovations within a short period of time has led to a knowledge-driven and competitive technological telecommunication environment (Moraa, 2012).

1.1.5 Overview of Safaricom limited

Safaricom limited is the leading mobile phone operator in Kenya with a 16.9 million (76.7) followed by Airtel Kenya with 4.4 million (20%) market share, Orange with 0.7 million (3%), and Yu 1.1million (5) (Safaricom Report, 2010). It was formed in 1997 as a fully owned subsidiary of Telkom Kenya. In May 2000, Vodafone group PLC, the world's largest Telecommunication company acquired a 40% stake and management responsibility for the company. Safaricom's aim is to remain the leading Mobile Network Operator in Kenya. With the growing subscriber base, the company has employed over 2300 employees and opened 10 retail shops in Nairobi, Mombasa, Nakuru and Kisumu. The firm has a wide dealer network of over 152 dealers countrywide. The company has developed a broad of services to meet the needs of the over 13.3 million subscribers. The increasing number of subscribers has had a positive influence on the company's profitability. The company's turnover rose from US\$280 million in 2004-2005 to US\$875million in 2008-2009 (Safaricom Report, 2010).

In the modern world of globalization, Safaricom limited has been able to keep pace with the global mobile telecommunications market by having strategic business associations, which help in meeting the dynamic challenges of the modern mobile telecommunications world (Kenya Telecommunications Report, 2010). Its strategic association with the world leaders in mobile telephony has created a niche in the Kenyan market. Safaricom limited announced net profits of \$220million in the last financial year (Safaricom Report, 2010).

Safaricom limited has a variety of services that it offers to its clients. These include; wireless phone services, internet services, electronic money transfers and mobile phones. Apart from the voice product and services, Safaricom limited also has data services. Using the short message text service (SMS), consumers are able to communicate more cheaply and efficiently. The current M-Pesa license fee is based on Vodafone recouping the capital investment and operating expenditure incurred in the development and running of the M-Pesa platform on behalf of Safaricom, plus a fee for the intellectual property which belongs to Vodafone. As reported in the Kenya Telecommunications Report (2010), this product and service is widely used by all consumers, unlike in the west where it is a preserve of the young consumers. On top of this Safaricom limited introduced the Black Berry; a wireless handheld device which supports push e-mail, mobile telephony, text messaging, internet faxing, web browsing and other wireless information services. It delivers information over the wireless data networks (currently GPRS and EDGE) of mobile phone service companies.

1.2 Research Problem

These trends imply that knowledge is being locked up within the IP system, where the dissemination of knowledge is exchanged for exclusive rights, which in turn become the primary motivators for companies to invest in when seeking and discovering new knowledge (Dickinson 2000). While the IP system arguably functions as an entry barrier into the market, with the height of the barrier varying with the nature of the IP and market structure (Drahos and Braithwaite 2002). Telecommunication Corporation in US were found to use Intellectual Property Rights to block potential competitors from copying designs and trademarks as well as marketing tools and strategies significantly influence corporation's competitiveness in the market as well as matching an IP strategy to the competitive threats (LIPP Project 2003).

ECDGE (2012) carried a survey to determine the influence of intellectual property right, patents, trademarks and other informal tools on competitiveness of ICT enterprises and found that IPR was a significant driver of innovation and enhance achieving competitive advantage. Park and Lippoldt (2003) examined the role played by IPRs in attracting customers and improving performance of companies. Effective management of IP rights act as an essential foundation for creating core competence and corporations in Kenya to promote business development through effective technology exploitation and knowledge transfer.

The advent of technological advancement has seen an increase in innovation creations notably among the telecommunication companies in Kenya. A comprehensive and

aggressive IP Right strategy are adopted by telecommunication companies to manage strategic joint development alliances and return on technology with the aim of transferring specifications and information from inventors to partners through patent and other IP licensing. Safaricom Kenya Limited M-PESA is an innovative mobile transfer solution that enables customers to transfer money launched by Safaricom Limited in 2007. Customers use M-Pesa account to access services such as M-PESA Prepay Safari Card ,Deposit cash to bank account., Transfer money to bank accounts or to other agents, withdraw money from bank., buy Safaricom airtime, pay bills., shopping through M-PESA, purchase M-TICKETING, pay school fees through Lipa Karo na M-PESA. The company has patented the MPESA with other products (www.safaricom.co.ke).

Previous local studies have focussed on how competitive advantage has been achieved through innovation strategy and Information Communication Technology. For instance Gathaiya (2011) carried out the research on how innovation strategies has been used in achieving competitive advantage in banks focusing on UBA Bank Limited. Mbigura (2011) carried out a study on the relationship between Information Communication Technology and competitive advantage of Commercial Banks in Kenya and found commercial banks that had adopted ICT had generally higher profit margins compared to rivals. However, the study did not conduct an in-depth analysis of a particular bank to ascertain the extent to which the adoption of specific intellectual property rights has resulted to competitive advantage within the commercial banks. This study sought to fill the existing knowledge gap by establishing the extent to which Intellectual Property Rights are used as a strategic tool for achieving competitive advantage in Safaricom

Company Limited in Kenya. The study sought to answer the question to what extent does Intellectual Property Rights influence the achieving of competitive advantage in Safaricom Limited Company?

1.3 Objectives of the Study

The objective of the study was to determine how Safaricom has used Intellectual Property Rights as a tool for achieving competitive advantage in Safaricom Kenya Limited

1.4 Value of the Study

The findings of the study will be significant to management of Safaricom Kenya Limited who will gain insight on the extent to which intellectual property right as a strategic tool influence achieving of competitive advantage. This study will outline the facets of IP, encompassing trademarks, copyright, design and patent law, as essential strategic tool for management and product developers, influence of IPR on innovativeness of products or services and the extent to which its influence achieving of competitive advantage.

The findings and recommendation that will be drawn from the study will be significant to government and policy makers who will gain insight on how intellectual property right as a strategic tool influence achieving competitive advantage and seek to formulate effective policies that will enhance IP right evolution and utilization as a strategic tool in organizations.

The results of this study will also be valuable to researchers and scholars, as it will form a basis for further research. The students and academics will use this study as a basis for

discussions on Intellectual property Rights as a strategic tool for achieving competitive advantage.

The study will form a foundation where further research will be carried out in expounding the research on influence of Intellectual Property Rights in achieving competitive advantage in organizations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews both theoretical and empirical literature related to the study. The theories reviews are resource based theory and theory of competency model of Human Resource. The chapter also presents overview on intellectual property rights and competitive advantage.

2.2 Theoretical Foundation of the Study

2.2.1 Theory of Dynamic Capabilities.

According to this theory , the Sustainability of competitive advantage for firm in turbulent environment often lies on the firms ability to reconfigure its resource base in order to fit into new environment

As such, the focal concern for strategist is how to develop dynamic capabilities within his organisation that will enable it to adjust to environment challenges efficiently and effectively

According to Teece et al.,(1997), dynamic capabilities of a firm refer to its ability to reconfigure external and internal competencies so as to address the rapid changing environment . This includes the capability within the organisation that will enable it to purposefully create , extend or modify its resource base. He identified three unique

dynamic capabilities that are necessary to enable an organisation meet new challenges . One is that the organisation and employees need capabilities to learn quickly to develop new strategic assets. Second is that the newly developed assets such as technology and customer feedback must be integrated into the company system . Thirdly, the existing strategic assets within the company must be transformed and reconfigured

According to this theory , a competitive advantage of firms is seen to be residing on its distinctive processes shaped by the firms specific asset position and the evolutionary path the firm has adopted (Teece et al.,1997).Teece also proposes that wealth creation in the regime of rapid technological changes depends in large measure on honing internal technological , organisation and managerial processes inside the firm .As such, since the theory emphasises the development of management capabilities and difficult to imitate combination of organisational function and technological skills. It encourages the use of product and process development , technology transfer, manufacturing human resources and organisational learning as areas around which successful companies can be built

2.2.2 Resource-Based View

Developing a property rights theory of the firm enables strategic management's primary theory that is resource-based theory to expand the concept of sustainable competitive advantage based on whether resources are valuable, rare, inimitable and non-substitutable beyond a shareholder wealth perspective (Porter, 2008). The commonality of property rights theory and resource-based theory is that both theories rely on market frictions.

According to the resource-based view, in order to develop a competitive advantage the firm must have resources and capabilities that are superior to those of its competitors. IP act as resource that a firm owns are not the physical resources but rather are the property rights. The firm is viewed as a method of property tenure in which each stakeholder has certain property rights for example managers may have stock options and decision rights over organizational resources, and workers may have property rights concerning severance payments and pension benefits. They should also explore how they can access and capitalize on those resources in order to improve their business performance and stay competitive in the marketplace. The relevance of resources varies according to industry, time and space and may also depend on external industry conditions (Keeton, 2001).

A pure competitive advantage with respect to an individual company is linked to main generic strategies and can take the form of either low-cost or differentiated products that are sold at premium prices as well as the form of focus or niche market strategy. A competitive advantage resource-based view looks at the company resources and on their impact on competitiveness (Barney 1991). Cost efficiency remains a necessary condition for the creation of profit; however, so-called non price or intangible factors are those that add most of the value to a product. Porter, (1985) explains that competitive advantage grows fundamentally out of the value a firm is able to create for its buyers that exceeds the firm's cost of creating it. In this sense, value is what buyers are willing to pay, and superior value stems from offering lower prices than competitive price for equivalent benefits or providing unique benefits that more than offset a higher price (Dickinson, 2000).

2.3 Intellectual Property Rights in Telecommunication Firms

A system of IPRs is often necessary to ensure that individuals or companies will carry out innovative activities. Without IPRs to knowledge resulting from an invention, imitation by reverse engineering of products will erode the inventor's profit rate, and hence lower the incentive for inventive activities. An IPR, such as a patent, grants the inventor a legal monopoly to the commercial exploitation of the invention. An IPR holder is insulated from market competition and on the same hand seen as a promoter for innovation. IPRs play a crucial role in the potential tension between IPRs and standards. Essential IPRs are defined as protected knowledge that is indispensable for a product that has to comply with that standard (Mukherjee, Nath, & Pal, 2003).

Rights protecting electronic watermarking, fingerprinting and anti-circumvention devices have now been placed alongside copyright law. These measures can be used in collaborative work to determine who has contributed a discrete item of information to the collaborative project. As the utilization of these devices is likely to increase, so is the inherent conflict between copyright exceptions and limitations and freedom of speech. Here again there is a difference in approach in the US and the EU in respect of IPR liberties based on freedom of speech and freedom of access to information.

Alternative business models involving a shift from product to service support, e.g. in software markets, indicate that IPR is not the necessary or preferred basis for the capture of market position. Contract can often even substitute for IPR. Treatment of problems arising from the doctrine of privity of contract and whether virtual click-through contracts

are valid will vary from jurisdiction to jurisdiction. Terms of contractual licences may enhance or even substitute for IPR in the business environment. The standardized system is updated as a result of unexpected technological problems or the need for new functions (Mittal, 2008)

2.5 IPR and Competitive Advantage in the Telecommunication Industry

Within the realm of the product life-cycle, research indicates that corporate disposition and knowledge management are the new determinants of success and leadership in the knowledge-economy, which requires a management strategy and stance that seeks to promote competencies in IP creation to establish long-term competitive advantages. Effective management of IP rights must be recognized as an essential foundation for creating core competence and South African businesses need to develop competencies in this regard to promote business development through effective technology exploitation and knowledge transfer (Lamprecht 2004). IBM is an example of a company that has successfully exploited its technology and IP rights globally has over 30000 patents worldwide contributing to the success of the company. Other IP assets included 8500 trademarks, and a vast portfolio of technology and software (Ehrlickman 2000). From a strategic product development perspective, companies successfully established linkages between its patent portfolio, its strategic technology, its business and its licensing requirements, coupled with the protection of leadership technology as the company sought to strengthen its competitive positioning through innovation and patent protection (Ehrlickman 2000).

A comprehensive and aggressive IP licensing strategy was adopted to manage strategic joint development alliances, manufacturing joint ventures, return on technology, etc., with the aim of transferring specifications and information from inventors to partners through patent and other IP licensing. IBM's business philosophy in regard to its IP portfolio was to properly value and leverages its IP assets to maximize return (Ehrlickman 2000).

R&D is an expensive activity. Moreover IP protection issues applicable during development have further extended the development complexity and costs, with the result that only corporates, universities and state-sponsored institutions have primarily engaged in R&D. This has impacted directly on the innovation capability of South African companies with limited resources, in a scenario where the economy comprises many small-scale technology companies developing niche products ((Ehrlickman 2000). Despite this, IP is a mechanism that also promotes creativity and product innovation in South Africa through the public disclosure of new knowledge while affording IP owners a period of exclusivity and protection to that knowledge (Lamprecht 2004).

IP management typically encompasses teamwork between the legal team driving IP protection and the engineering team responsible for innovation because managing the stakeholder involvement and ownership of IP requires a specific technology/IP strategy that is integrated with the company's technology strategy and which seeks to encompass the technology management life-cycle (Lamprecht, 2004). The technology strategy should encompass the mechanisms by which IP generated during the R&D process may

be used for long-term commercial benefit. Within the R&D process, companies must consider the benefits of IP secrecy as against public disclosure and take steps to manage its knowledge appropriately. IP management typically encompasses teamwork between the legal team driving IP protection and the engineering team responsible for innovation because managing the stakeholder involvement and ownership of IP requires a specific technology/IP strategy that is integrated with the company's technology strategy and which seeks to encompass the technology management life-cycle.

Within IP rights, patents are recognized as one of the most effective knowledge protection mechanisms (Norman 2001). Barrier building or entry deterrence as a concept is based on the principle that the creation of an array of structural characteristics may impose conditions that are adverse to market entry for potential competitors, thus limiting the number and intensity of competition (Karakaya and Stahl 1989). Such barriers discourage market entry to varying degrees and control and limit access to distribution and advertising and R&D and IP protection become the mechanisms for market control. Raffi and Kampas (2002) state that IP protection is a mechanism that enables main market entry, particularly when insurgents face high barriers to entry, ultimately allowing access to suppliers and channels, capital investment and availability of venture capital. IP licensing therefore becomes an additional strategic lever that companies must exploit effectively to recuperate costs and create leadership positions (Krebsbach, 2004). Han, Kim and Kim (2001) illustrate that ever since the first known patent, in 1421 in the Republic of Florence, there has been a strong connection between intellectual property, innovation strategy and business strategy, and its profitability outcomes.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out various stages and phases that were followed in completing the study. It involves a blueprint for the collection, measurement and analysis of data. In this section the researcher identified the procedures and techniques that were used in the collection, processing and analysis of data. Specifically the chapter has the following subsections which include, research design, target population, data collection and finally data analysis.

3.2 Research Design

The study used case study as it involved a careful and complete observation of social units. It is a method of study in depth rather than breadth and places more emphasis on the full analysis of a limited number of events or conditions and other interrelations. The design is deemed fit to portray clear pictures of extent to which use of intellectual property rights as a strategic tool has led to achieving competitive advantage in Safaricom Kenya Limited. This case study aims at getting detailed information regarding the use of intellectual property rights as a strategic tool for achieving competitive advantage in Safaricom Kenya Limited. According to Mugenda and Mugenda, (2003), a case study allows an investigation to retain the holistic and meaningful characteristics of real life events.

3.3 Data Collection

The study collected primary data. Primary data was collected using interview guides. The interview guides consist of open-ended questions. The open-ended questions enabled the researcher to collect qualitative data. This was used in order to gain a better understanding and possibly enable better and more insightful information. The interview guides comprised of two sections. The interviewees of this study were the 10 senior staffs head of department, business development and business managers working at Safaricom Kenya Limited

3.4 Data Analysis

The data which was qualitative in nature was analyzed using conceptual content analysis which is best suited method of analysis. Content analysis is defined by Ngechu (2006) as a technique for making inferences by systematically and objectively identifying specific characteristic of messages and using the same approach to relate trends. The main purpose of content analysis was the study existing information in order to determine factors that explain a specific phenomenon. The content analysis was used to analyse the qualitative data that was collected using interview guide on extent to which use of intellectual property rights as a strategic tool has led to achieving competitive advantage in Safaricom Kenya Limited

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents the discussions, data analysis and interpretations of findings of the study. The primary data was collected using interview guide and analysis through content analysis to determine how Safaricom has used Intellectual Property Rights as a tool for achieving competitive advantage in Safaricom Kenya Limited

4.2 Intellectual Property Rights

The interviewees were requested to indicate whether Safaricom Limited had intellectual property rights which included patent, copyright, trade marks trade secrets. From the findings, Safaricom was found to have used intellectual property rights for example trade marks such as M-pesa, Mshwari and Safaricom Bonga Point loyalty and use of trade secrets in operation of Mpesa transaction.

Use of Intellectual Property in Safaricom.Kenya Limited

The interviewees were requested to explain the extent to which Safaricom Kenya Limited has used intellectual property (IP) in Product protection. As indicated Safaricom Kenya Limited used intellectual property in production of its products and services especially when it developed an innovative product of services such as Mshwari. The interviewees indicated that the company used intellectual property rights to ensure its product were not imitated by rival in the markets, avoid threats of new entry in the markets, to protect

access to and use of their property from unauthorized use by third parties and to gain sustainable competitive advantage. The findings concurred with Drahos and Braithwaite (2002) who found out that Telecommunication Corporation in US were found to use Intellectual Property Rights to block potential competitors from copying designs and trademarks as well as marketing tools and strategies that significantly influence corporation's competitiveness in the market as well as matching an IP strategy to the competitive threats.

4.2 Influence of Technology on Use of Intellectual Property Rights

On how advance in technological development has influenced Safaricom Kenya Limited to use intellectual property rights , the interviewees indicated that the advent of technological advancement had resulted into increase in innovation creations which led to development and management of strategic joint alliances and transferring specifications and information from inventors to partners through patent and other IP licensing. The interviewees indicated that Safaricom Kenya Limited had used advance in technology to produce innovative mobile transfer solution such as Mshawri and M-pesa that enables customers to transfer money easily using their mobile phones.

Legal Framework Influencing Adoption of Intellectual Property

On how legal framework influence adoption of property rights, the interviewees indicated that Safaricom Kenya Limited was using IP legal framework due to improvements in technology as a tool to protect their IP rights for instance money transfer software development which the company was using to monitor client usage, automatically report

instances of unauthorized copying or unlicensed usage via the Internet and take legal action where appropriate. The findings support Drahos and Braithwaite (2002) who revealed that employing legal approach in an IP strategy reduces infringement risks and build IP assets for the Safaricom Kenya Limited.

Influence of Competition on use of Intellectual Property Rights at Safaricom Kenya Limited

The interviewees were requested to indicate how competition in the market has influence Safaricom Kenya limited to use intellectual property rights. From the findings, the interviewees indicated that stiff competition and rivalry for Safaricom Kenya Limited led to increase use in intellectual property rights as the company sought to protect its products and services from being imitated, protect its innovative products from rival to increase market, to continue developing creative and innovative products due to rapid diffusion of technological innovations in telecommunication industry. The findings were similar to Lamprecht (2004) who found out that IP was a mechanism that also promoted creativity and product innovation in South Africa through the public disclosure of new knowledge while affording IP owners a period of exclusivity and protection to that was knowledgeable.

4.3 IPR and Competitive Advantage in the Safaricom Kenya Limited

The interviewees were requested to indicate the how use of intellectual property rights had influence Safaricom Kenya Limited in achieving market leadership in the market. From the findings, the interviewees indicated that Safaricom Kenya Limited had patented

innovative products such as Mpesa and Mshwari and Safaricom 4G LTE which had been made easily and freely available to the customer to increase market share, attract and retain large number of customers, continue offering quality innovative software systems for its customers increasing customer satisfaction hence maintaining high number of customers earning high proportion of profits than its rivals in the market such as Airtel and Orange. The interviewees further explained that use of IP had led to protecting company competencies in speed-to-market and market intelligence which were prerequisites for market leadership for the company which improve innovation leading to achieving competitive differentiation and value creation (Janszen, 2000). The findings concurred with Bean & Radford, (2000) who established that IP influence company attaining market share and gaining of competitive advantage and where the nature of products and services increased due to complex knowledge creation and protection mechanisms promoting sustainable organizational leadership with intellectual property (IP) and knowledge management in product development.

4.3.1 Intellectual property rights has influence achieving higher profitability

On how Intellectual property right had influence Safaricom achieving higher profitability level, the interviewees revealed that through intellectual property rights, Safaricom were able to provide unique communication products and services attracting high customers earning high profit level. The interviewees further explained that the increasing number of Safaricom subscribers has had a positive influence on the company's profitability as the company's turnover rose from US\$280 million in 2004-2005 to US\$875million in 2008-2009 (Safaricom Report, 2010) as Safaricom's earnings before interest, tax,

depreciation and amortisation (EBITDA) rose to Sh71.2 billion in profit from 2014 to Sh163.4 billion in 2015. The interviewees explained that revenue growth was driven by intellectual property rights which had led to company customer acquisition, improve cost savings and increased in customer spending on data, M-Pesa and SMS cemented Safaricom's position as Kenya's most profitable company, having widened the profitability gap with its closest follower to Sh14.7 billion from Sh8.7 billion the previous year . Han, Kim and Kim (2001) indicated that a strong connection between intellectual property and innovation strategy and business strategy led to high profitability outcomes for the company.

4.3.2 Success due to usage of intellectual property rights

The interviewee was requested to explain whether Safaricom has achieved success due to usage of intellectual property rights. From the findings, interviewees indicated that through Intellectual Property rights, Safaricom registered high profit level, attract high number of customers, improve strategic alliances, increase business partners, and earn high revenue on money transfer, SMS and Data, increase innovativeness and production of quality communication software such as Lipa na M-Pesa product enabling the company to be a market leaders in the market.

Intellectual Property Right and Achieving Competitive Advantage

The interviewees also explained that Safaricom Limited Company had also used licensing of its products through dealers of its products which had reduced company's transaction costs which improve profitability level of the company. The interviewees indicated

opined that through a comprehensive and aggressive IP licensing strategy the company effectively manages strategic joint development alliances increasing return on technology as its transferring specifications and information from inventors to partners through patent and other IP licensing

R&D is an expensive activity. Moreover IP protection issues applicable during development have further extended the development complexity and costs, with the result that only corporates, universities and state-sponsored institutions have primarily engaged in R&D. From a strategic product development perspective, companies successfully established linkages between its patent portfolio, its strategic technology, its business and its licensing requirements, coupled with the protection of leadership technology as the company sought to strengthen its competitive positioning through innovation and patent protection (Ehrlickman 2000).

4.3.3 Use of Intellectual Property Right in Creating Core Competencies

The interviewees further indicated that Safaricom has use intellectual property rights in creating core competencies through technology advancement where the company continue offering effective communication services, improving its network coverage, developing efficient communication channels, offering of data, rewarding of customer through loyalties earning such as Bonga Point, reducing call rates, developing communication partnership with joint partners and improve effectiveness in communication . The interviewees indicated this influence company achieving high financial returns as the companies attract more customers, earning more revenue from

call and data usage . The findings concurred with Lamprecht (2004) who found that effective management of IP rights must be recognized as an essential foundation for creating core competence and South African businesses need to develop competencies in this regard to promote business development through effective technology exploitation and knowledge transfer

4.3.4 Influence of IP licensing strategy in achieving competitive advantage

The interviewee explained that through IP licensing strategy in Safaricom Company had achieved competitive advantage as the company increases its operating partners and strategic joint development which has enable the company to effectively penetrate the market, reduce operation cost, improve risks sharing and improve on quality of service delivery. This had enable the company outperformed its rival to a great extent.

4.3.4 Intellectual Property Rights and developing Strategic Alliances

The interviewees were requested to explain how intellectual property rights had influence achieving of competitive advantage at Safaricom Company. The interviewees indicated that Intellectual property rights had enable Safaricom to form an alliance with commercial banks such as Kenya Commercial Banks and Commercial Bank of Africa offering Biashara smart and Mshwari respectively which the company has used to increase it customer base, expand its market , decreasing the risk of market entry, influence international expansion, improve on its research and development and reducing

high competition improving company profitability level as compared to rival, gain competitive edge and improve on growth .

Forming strategic alliances with an established company with a good reputation can help create favourable brand image and efficient distribution networks. Even established reputable companies need to introduce new brands to market. Most times smaller companies can achieve speed to market quicker than bigger, more established companies. Leveraging off the alliance will help to capture the shelf space which is vital for the Success of any brand

4.3.5 Intellectual Property Right influence innovativeness in development of products.

On how intellectual property right had influence Safaricom Kenya Limited innovativeness, the interviewees indicated that the company had been in a position of using advance in technology and high knowledgeable level and competencies to develop unique softwares such as Mshwari, Mpesa Platform, Lipa and Mpesa as well as forming success financial partnership with banks and transferring companies like Kopa Kopa to enable the company to gain revenue, more customer, increase market share and increase company financial returns. The interviewees stressed that without IPRs to knowledge resulting from an invention; imitation by reverse engineering of products would erode the inventor's profit rate, and hence lower the incentive for inventive activities.

4.3.6 Patents rights has influence achieving of competitive advantage in Safaricom Kenya Limited

On how patent right had influence achieving competitive advantage, the interviewees explained that through IP patent protection, Safaricom Kenya Limited achieved ease of market entry, particularly when insurgents face high barriers to entry, ultimately allowing Safaricom access to suppliers and channels, increase company capital investment and availability of venture capital recuperating costs and create leadership positions improving Safaricom Profitability level . The interviewees indicated that through patent, Safaricom has a legal monopoly to the commercial exploitation of the invention. The findings concurred with Kim and Kim (2001) who indicated that through patent in 1421 in the Republic of Florence, there had been a strong connection between intellectual property, innovation strategy and business strategy, and its profitability outcomes.

4.3.7 Trade Secrets and Achieving Competitive Advantage

The interviewees indicated that trade secrets had enable the company to continue offering unique communication products and services that could not be imitated by rivals and also act as a control strategy.IP protection act as mechanism that enables main market entry, particularly when insurgents face high barriers to entry, ultimately allowing access to suppliers and channels, capital investment and availability of venture capital enabling company to exploit effectively to recuperate costs and create leadership positions.

4.4 Challenges Facing Use of Intellectual Property Rights

The interviewees indicated that challenges facing use of Intellectual Property rights in Safaricom Kenya Limited included advancement in technology development. In global economy many fear that technological advances creates opportunities for corporate spying and theft of intellectual capital This concurred with Nasheri, (2005).The rapid developments in digital technology led to changing the way firm operates and communicate with each other . The interviewees further explained that IP rights violations due to the fact state of IP protection in certain emerging market jurisdictions can be extremely difficult. The interviewees also indicated that the other challenges facing intellectual property rights was the risk of IP theft increases in companies operating globally and locating their production facilities in other countries. The finding concurred with PWC (2007) which indicated that 63 per cent of the executives believe that IP protection in emerging markets was inadequate as IP protection in certain emerging market jurisdictions can be extremely difficult. As an executive for a large European technology engineering company explains certain countries may be attractive for manufacturing but they remain severe offenders in terms of IP rights.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presented discussion, conclusions and recommendations of the study basing on the objectives of the study which was to establish the how Safaricom Kenya Limited has used intellectual property rights as a strategic tool for achieving competitive advantage.

5.2 Summary of the findings

The study revealed that Safaricom Kenya Limited had adopted intellectual property rights for example trade marks such as M-pesa trade, Mshwari and Safaricom Bonga Point loyalty and use of trade secrets in operation of Mpesa transaction. The findings established that Safaricom Kenya Limited Company has used intellectual property (IP) in Product protection. The company also used intellectual property in production of its products and services especially when it developed an innovative product of services such as Mshwari. The interviewees indicated that the company used intellectual property rights to ensure its product were not imitated by rival in the markets, avoid threats of new entry in the markets, to protect access to and use of their property from unauthorized use by third parties and to gain competitive advantage.

The study revealed that the advent of technological advancement had resulted into increase in innovation creations which led to development and management of strategic joint alliances and transferring specifications and information from inventors to partners through patent and

other IP licensing. The interviewees indicated that Safaricom Kenya Limited had used advance in technology to produce innovative mobile transfer solution such as Mshwari and Mpesa that enables customers to transfer.

The study established that Safaricom Kenya Limited was using IP legal framework due to improvements in technology as a tool to protect their IP rights, for instance money transfer software development which the company was using to monitor client usage, automatically report instances of unauthorized copying or unlicensed usage via the Internet and take legal action where appropriate.

The study further revealed that stiff competition and rivalry for Safaricom Kenya Limited had increased use in intellectual property rights as the company sought to protect its products and services from being imitated, protect its innovative product from rival to increase market, to continue developing creative and innovative products due to rapid diffusion of technological innovations in telecommunication industry.

The findings revealed that intellectual property rights has influenced Safaricom Kenya Limited in achieving market leadership in the market as the company patented innovative products such as Mpesa and Mshwari and Safaricom 4G LTE which had made free and readily available to Safaricom customer to increase market share , attract and retain large number of customers, continue offering quality innovative software systems for its customers increasing customer satisfaction hence maintaining high number of customers earning high proportion of profits than its rivals in the market such Airtel and Orange. The use of IP had led to protecting company competencies in speed-to-market and market

intelligence which were prerequisites for market leadership for the company which improve innovation leading to achieving competitive differentiation and value creation (Janszen, 2000). The findings concurred with Bean & Radford, (2000) who established that IP influence company attaining market share and gaining of competitive advantage and where the nature of products and services increased due to complex knowledge creation and protection mechanisms promoting sustainable organizational leadership with intellectual property (IP) and knowledge management in product development.

The study also revealed that through Intellectual property right Safaricom achieved higher profitability level, as the company was able to provide unique communication products and services attracting high customers and that increasing number of Safaricom subscribers had a positive influence on the company's profitability as the company's turnover rose .Te company revenue growth was driven by intellectual property rights which had led to company customer acquisition, improve cost savings and increased in customer spending on data, M-Pesa and SMS cemented Safaricom's position as Kenya's most profitable company, having widened the profitability gap with its rivals.

The findings also established that through Intellectual Property rights, Safaricom registered high profit level, attract high number of customers, improve strategic alliances, increase business partners, and earn high revenue on money transfer, SMs and Data, increase innovativeness and production of quality communication software such as Lipa na M-Pesa product enabling the company to be a market leaders in the market.

The findings revealed that used licensing of Safaricom products through dealers of its products which had reduced company's transaction costs which improve profitability level of the company as company comprehensive and aggressive IP licensing strategy the influence effective management of strategic joint development alliances increasing return on technology.

The findings further revealed that Safaricom had use intellectual property rights in creating core competencies through technology advancement where the company continue offering effective communication services, improving its network coverage, developing efficient communication channels, offering of data, rewarding of customer through loyalties earning such as Bonga Point, reducing call rates, developing communication partnership with joint partners and improve effectiveness in communication improving high financial returns as the companies attract more customers, earning more revenue from call and data usage . The finding further revealed that through IP licensing strategy in Safaricom Company had achieved competitive advantage as the company increases its operating partners and strategic joint development which has enable the company to effectively penetrate the market, reduce operation cost, improve risks sharing and improve on quality of service delivery. This had enable the company outperformed its rival to a great extent.

The study revealed that Intellectual property rights had enable Safaricom to form an alliance with commercial banks such as Kenya Commercial Banks and Commercial Bank of Africa offering Mshwari which the company had use to increase it customer base,

expand its market , decreasing the risk of market entry, influence international expansion, improve on its research and development and reducing high competition improving company profitability level as compared to rival, gain competitive edge and improve on growth . Forming strategic alliances with an established company with a good reputation can help create favourable brand image and efficient distribution networks. Even established reputable companies need to introduce new brands to market. Most times smaller companies can achieve speed to market quicker than bigger, more established companies. Leveraging off the alliance will help to capture the shelf space which is vital for the Success of any brand

The finding also revealed that company had been in a position of using advance in technology and high knowledgeable level and competencies to develop unique software such as Mshwari, Mpesa Platform, Lipa and Mpesa as well as forming success financial partnership with banks and transferring companies like Kopa Kopa enable the company to gain revenue, more customer, increase market share and increase company financial returns.

The findings revealed that through IP patent protection enable the Safaricom company to achieve ease of market entry particularly when insurgents face high barriers to entry, ultimately allowing Safaricom access to suppliers and channels, increase company capital investment and availability of venture capital recuperating costs and create leadership positions improving Safaricom Profitability level. The interviewees indicated that through patent, grants the Safaricom a legal monopoly to the commercial exploitation of

the invention. As the company was insulated from market competition and promoting company innovativeness.

The study revealed that trade secrets had enable the company to continue offering unique communication products and services that could not be imitated by rivals and also act as a control strategy as IP protection act as mechanism that enables main market entry, particularly when insurgents face high barriers to entry, ultimately allowing access to suppliers and channels, capital investment and availability of venture capital enabling company to exploit effectively to recuperate costs and create leadership positions.

On challenges facing use of Intellectual Property rights in Safaricom Limited the findings revealed that advancement in technology development as the global economy many fear that technological advances creates opportunities for corporate spying, theft of intellectual capital easier and cheaper, IP rights violations due to the fact state of IP protection in certain emerging market jurisdictions can be extremely difficult and risk of IP theft increases in companies operating globally and locating their production facilities in other countries.

5.3 Conclusions

The study concluded that intellectual property rights had influence Safaricom Company in achieving market leadership in the market as the company patented innovative products such as Mpesa and Mshwari and Safaricom 4G LTE which had made the company to increase market share , attract and retain large number of customers, continue

offering quality innovative software systems for its customers increasing customer satisfaction hence maintaining high number of customers earning high proportion of profits than its rivals in the market such as Airtel and Orange.

The study concluded that Intellectual property right adopted by Safaricom achieved higher profitability level, as the company was able to provide unique communication products and services attracting high customers and that increasing number of Safaricom subscribers had a positive influence on the company's profitability as the company's turnover rose. The company revenue growth was driven by intellectual property rights which had led to company customer acquisition, improve cost savings and increased in customer spending on data, M-Pesa and SMS cemented Safaricom's position as Kenya's most profitable company, having widened the profitability gap with its rivals.

The study concluded that Intellectual Property rights, Safaricom registered high profit level, attract high number of customers, improve strategic alliances, increase business partners, and earn high revenue on money transfer, SMS and Data, increase innovativeness and production of quality communication software such as Lipa na M-Pesa product enabling the company to be a market leaders in the market.

From the findings, the study concluded that used licensing of Safaricom products through dealers of its products which had reduced company's transaction costs which improve profitability level of the company as company comprehensive and aggressive IP licensing strategy the influence effective management of strategic joint development alliances increasing return on technology.

The study also concluded that Safaricom used intellectual property rights in creating core competencies through technology advancement where the company continue offering effective communication services, improving its network coverage, developing efficient communication channels, offering of data, rewarding of customer through loyalties earning such as Bonga Point, reducing call rates, developing communication partnership with joint partners and improve effectiveness in communication improving high financial returns as the companies attract more customers, earning more revenue from call and data usage .

The study concluded that Intellectual property rights had enable Safaricom to form an alliance with commercial banks such as Kenya Commercial Banks and Commercial Bank of Africa offering Mshwari which the company had use to increase its customer base, expand its market, decreasing the risk of market entry, influence international expansion, improve on its research and development and reducing high competition improving company profitability level as compared to rival, gain competitive edge and improve on growth . Forming strategic alliances with an established company with a good reputation can help create favorable brand image and efficient distribution networks. Even established reputable companies need to introduce new brands to market.

The study concluded that IP patent protection enable the Safaricom company to achieve ease of market entry particularly when insurgents face high barriers to entry, ultimately allowing Safaricom access to suppliers and channels, increase company capital investment and availability of venture capital recuperating costs and create leadership

positions improving Safaricom Profitability level. Trade secrets had enable the company to continue offering unique communication products and services that could not be imitated by rivals and also act as a control strategy as IP protection act as mechanism that enables main market entry, particularly when insurgents face high barriers to entry, ultimately allowing access to suppliers and channels, capital investment and availability of venture capital enabling company to exploit effectively to recuperate costs and create leadership positions.

5.4 Recommendation of the Study

The study recommend that company should invest in intellectual property rights as this would influence achieving market leadership in the market as the company patented innovative products such which would make the company to increase market share , attract and retain large number of customers, continue offering quality innovative software systems for its customers increasing customer satisfaction hence maintaining high number of customers earning high proportion of profits than its rivals in the market.

The study recommend that Intellectual property right adopted firm would influence achievement of higher profitability level, as the company was able to provide unique products and services attracting high customers and revenue growth was driven by intellectual property rights which had led to company customer acquisition, improve cost savings and increased in customer spending achieving competitive advantage . The study also recommend that companies should used licensing of its products to reduce company's transaction costs, improve innovativeness and effective management of

strategic joint development alliances increasing return on technology which improve profitability level of the company as company comprehensive .

Companies should also be motivated to used intellectual property rights so as to creates core competencies through technology advancement where the company continue offering quality products , improve its network coverage, developing efficient products channels, rewarding of customer through loyalties earning , developing partnership with joint partners and improve effectiveness in communication improving high financial returns as the companies attract more customers, earning more revenue and gaining competitive advantage.

From the findings, the study recommend that companies should invest in Intellectual property rights had enable companies to form an alliance increase its customer base, expand its market, decreasing the risk of market entry, influence international expansion, improve on its research and development and reducing high competition improving company profitability level as compared to rival, gain competitive edge and improve on growth.

From the findings, the study recommend that companies should adopt IP patent and trade secrets protection as this would enable company to achieve ease of market entry particularly when insurgents face high barriers to entry, ultimately allowing company access to suppliers and channels, increase company capital investment and availability of venture capital recuperating costs, offering unique products entry to new markets and

create leadership positions improving company Profitability level, create leadership positions and achieving competitive advantage .

5.5 Limitation of the Study

A limitation for the purpose of this study was considered as any condition that affected the achievement of the study objectives. Some of the limitations included difficulty in collecting all the data given the short time the interviewee set for the interviewer. Busy managers with strict schedule hence making it difficult to have an elaborate interview session to overcome this limitation, the researcher arranged for the telephone interview after working hours to follow up on what had not been well explained

In some instances, the meeting had to be rescheduled owing to the tight schedules that some managers operated and some never had time for the interview

Another limitation for the study included the confidentiality nature of the information sought. Given the nature of the company operation, the target managers were not quite comfortable with revealing all the information during the interview

5.6 Policy Recommendations

IP production is the core business of the firm that, as happens in the software market, depends completely for its results on sales of IP. In order to protect its IP, the firm has chosen to invest in all available IP protection methods. IP protection, via patents, copyright and trademarks is strategic for companies, and in order to be efficient, the firm has dedicated efforts to the best management of IPR to achieve competitive advantage.

The study recommends that use of IPR is defensive and internal and intended to build the value of the firm around its knowledge and inventions. With the expected growth of its

portfolio of patents and new sources of revenues from a different use of patents the firm can hope to enter in process of licensing businesses and/or cross-licensing. Having dealt with patents from the beginning, company would develop internal experience and skills on how to apply appropriately, hence IPRs act as a tool for achieving competitive advantage over other firms in the market and new entrants.

5.7 Recommendation for Further Study.

The study determines intellectual property rights as a strategic tool for achieving competitive advantage in telecommunication companies by Safaricom Kenya Limited. A further study should be carried to determine challenge facing adoption of intellectual property strategy in company. A further study could also be used in determining influence Intellectual Property and Competitiveness in organizations.

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APPENDICES

Appendix I: Interview Guide

1. Explain whether Safaricom has used the following intellectual property rights
 - Patents
 - Copyrights
 - Trademarks
 - Trade secrets
2. Explain the extent to which your company has used intellectual property (IP) in Product protection
3. Explain how advance in technological development has influence Safaricom Company Limited to use intellectual property rights
4. Explain how Legal framework has influence Safaricom Company Limited to use intellectual property rights
5. Explain how Competition in the market has influence Safaricom Company Limited to use intellectual property rights

IPR and Competitive Advantage in the Safaricom

6. Explain how use of intellectual property rights has influence Safaricom Company in achieving market leadership in the market
7. Explain how use of intellectual property rights has influence Safaricom Company in achieving higher profitability level than its rival in the market
8. Explain whether the Safaricom has experience success in due to usage of intellectual property rights
9. Describe how the following of intellectual property rights have been used by Safaricom Limited to achieve Competitive Advantage
10. Explain how Safaricom has use intellectual property rights in creating core competencies.
11. Explain how to IP licensing strategy in Safaricom Company has influence achieving competitive advantage

12. Explain how intellectual property rights has influence developing strategic Alliances
13. Explain how intellectual property right have influence achievement of innovativeness in development of products
14. Explain how use of Patents rights has influence achieving of competitive advantage in Safaricom
15. Explain how use of Trade secrets has influence achieving of market leadership in Safaricom
16. Discuss how use of strategic technologies has influence achieving of production of quality products and service
17. In your own opinion, what are other challenges facing use of Intellectual Property rights in Safaricom Limited

18. Explain measures that Safaricom Company Limited adopt to overcome challenges facing in usage of Intellectual Property rights

Appendix II: List of Telecommunication Companies in Kenya

1. Safaricom Company
2. Airtel Company Ltd
3. Orange Company