

**THE IMPACT OF INNOVATIVE ENTREPRENEURSHIP AND
INTELLECTUAL PROPERTY ON FIRM GROWTH: A CASE STUDY
OF SAFARICOM PLC FIRM IN KENYA**

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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.

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

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DEDICATION

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ABBREVIATIONS AND ACRONYMS

Huduma Centre	This are designated places where most of Kenya Government services are provided under one roof.
ICT	Information and communication technology
IP	Intellectual Property
Linda Jami	Swahili terminology meaning take care of the family.
M-Pesa	Swahili Terminology for Mobile Money
PLC	Public Limited Liability Company
SACCO	Savings and credit corporative organization
Safaricom	Mobile Telephone Service Provider
USPTO	United States Patent and Trademarks Office
WIPO	World Intellectual Property Organization

ABSTRACT

Innovative entrepreneurship and intellectual property have been separately lauded as being integral part of firm growth system. This study therefore intended to establish the impact these variables have on firm growth. Innovative entrepreneurship and intellectual property are important to firm growth. The variables overlap each other to bring about firm growth thus the variables significantly depending on each other. The variables should be considered in totality. The study found out that the variables impact on firm growth positively. To establish the impact, interview questionnaire guide was administered to seven senior managers out of the ten during the case study at Safaricom PLC. Additional secondary data was gathered to corroborate what the managers said. The data collected was summarized and analyzed by the researcher using content analysis method. At the end, the researcher came to one conclusion that innovative entrepreneurship and intellectual property synergize to impact positively on firm growth.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

To create, protect and commercialize viable ideas, it requires the understanding, internalization and utilization of innovative entrepreneurship and intellectual property dynamics (Chesbrough, 2006). Entrepreneurship and innovation are ingredients of firm growth (Dahlstrand & Stevenson, 2010). Globally the academia, industry, governments and society in general, are now more than ever preoccupied with the discussions around matters of innovative entrepreneurship and IP (Faltin, 2001).

Innovative entrepreneurship allows new and improved ideas to emerge and to be exploited economically; intellectual property protects the rights in the innovations (Helfer, 2008). Normally information generates ideas, which can lead to invention and innovations. Firm growth is therefore possible through revenue generated from innovations (Gassmann, 2006). Innovative entrepreneurship and IP has therefore become a serious global debate that cannot be ignored by firms, leaders and economists globally (Baumol, 2010). This strategic positioning assures the firm of sustainable growth.

This study is anchored on four theories. First, Innovative entrepreneurship theory, which assumes that innovations are commercialized by effort and activities of entrepreneurs (Baumol, 2010). This will explain how firms gradually introduce innovations to the market. Secondly, the just culture theory of IP. This assumes that society needs to respect the IP rights of others (Fisher, 2001).

This theory will help the researcher to explain matters of IP. Thirdly, the theory of firm growth, which assumes that there are dynamics of firm growth, much apart from the dynamics of firm size, there are extent to growth but not extent to size. This theory will help the researcher to expand on firm growth dynamics (Penrose, 1959). Lastly, the quadruple helix innovation theory, which states that innovation for economic value is best achieved with the efforts between academia, industry, civil society and government.

Safaricom could disaggregate products and obtain their embedded technologies through reverse engineering thus achieving massive firm growth (Pieterse, 2005). Often using propriety technology and IP protections, Safaricom M-Pesa mobile payment stands out precisely because of the rarity of its success and thereby posting huge revenue margins (Kobor, 2013). Safaricom has invested generally in innovation.

However, massive abuse of innovation rights necessitated the development of IP rights to protect the interest of inventors and innovators (Helfer, 2008). On other hand, it required great effort and special entrepreneurial skills to introduce innovations to the market and make business sense out of them (Zahra, 2011). This study therefore is motivated to interrogate and examine the impact of innovative entrepreneurship and IP, in addressing matters of idea generation, protection and commercialization to achieve predictable firm growth (Roberts, 2007).

1.1.1 Innovative Entrepreneurship

Innovative entrepreneurship is derived from two concepts of innovation and entrepreneurship (Szabo, 2012). It refers to the process of developing and transferring new or improved products and services to industry or market for appropriation. (Baumol, 2010). Furthermore, it is the core of knowledge creation, intelligent growth, diffusion and absorption of knowledge within the community (Romano, 2014).

Innovation studies have indicated that there is a connection between innovation, the underlying research and entrepreneurial efforts geared towards commercializing the products of R&D (OECD, 2012). Entrepreneur is an innovator who introduces new products and services to the market. Entrepreneurship is therefore a creative activity that can lead to creative destruction (Schumpeter, 1934).

Entrepreneur is a central actor in the innovation process through market push/pull, which can lead to creative destruction (Schumpeter, 1934). Incentive to innovate by domestic firms increases with robust IP rights (Chen, 2005). New or improved innovation that meets client expectations frequently offers an innovator new business in a specific market territory devoid of competition (WIPO, 2009). Intellectual property protection promotes division of labor and specialization amongst different qualified entrepreneurs, by sharpening skills on specific technology area (Autio & Acs, 2010).

1.1.2 Intellectual Property

IP refers to creation of the mind, which has been expressed, such as inventions, literary and artistic works, designs, symbols, names and images used in commerce (WIPO, 2009). It is a category of property, which includes intangible creations of the human intellect. IP therefore covers areas like patents, trade secrets, copyrights and related rights. IP also deals with industrial design, geographical indication, traditional knowledge (indigenous knowledge or folklore) and appellation of origin (Fisher, 2001). It is essential that IP be integrated into business and the business into IP (Hatcher, 2009).

Many firms are investing in IP and other intangible assets (Ellis, 2010). Strategic management of IP can enhance companies in many ways (Revette, 2000). Useful information, creativity and inventive mind are rapidly replacing historical tangible assets such as land space, labor and physical capital, (Kamil, 2003). Nowadays intangible assets dominate economies because of its advantages, IP are becoming more and more important in an information-minted economy (WIPO, 2009).

Licensing and agreements have form part of the revenue source where firms generate great income (WIPO, 2009). With time and has been demonstrated by various patent databases, USPTO has millions of inventions protected by different patent regimes but which has not been economically exploited (Jaffe, 2011). This is also true with other IP regimes, ranging from copyrights, trade secrets, industrial designs, and trademarks, entrepreneurs therefore have the duty to introduce the protected innovations to the market and profitably utilize them (Baltar, 2014). IP strategic management is thus important in creating revenue stream and giving the owner temporary monopoly and protection.

1.1.3 Firm Growth

Firm growth is defined as positive development of a firm from a low level to a high level (Hughes, 2007). Situating a firm in an area rich in knowledge resources has much impact on firm growth (Audrestsch, 2007). Firm growth needs many factors. Most areas of socio-economic, political and environmental development have witnessed immense growth due to enhanced innovations (Foss, 1997).

Innovations have been solution to problems in the past and present (Cooper, 2000). Innovative ideas have thus resulted in wealth creation, poverty reduction and alleviation of human suffering, hence solving many tough challenges (Chesbrough, 2006). If the innovation gains already achieved were to be reversed the world would suffer greatly.

Non-tangible resources at Safaricom including IP played key role in the firm's success (Karimi, 2010). Kenya largest cellular network Safaricom benefits from sharing knowledge and spillovers, licensing IP, launching spin-off companies and developing fusions and acquisitions (Rubalacaba, 2017). Mobile network operator Safaricom has put forth a mobile banking solution that digitizes most financial transactions in Kenya (Africa research bulletin, 2015). M-Pesa success is reaching low-income Kenyans, which are the majority (Mon'gare, 2016).

Firms that have embraced innovative entrepreneurship and intellectual property seem more strategically positioned to develop faster, (Santarelli, 2007). Firms with internal structures for development are likely to survive the storm of difficult times, adapt to changes, create uncontested markets, and render competition irrelevant(Kim, 2004).Innovation and entrepreneurship therefore give hope and surety to firm growth.

1.1.4 Safaricom PLC

Safaricom started operating in 1993 as a department of the former Kenya telecommunication corporation. In 1997, it commenced as Safaricom LTD, Having 40% share owned by Vodafone Kenya. In May2000, Vodafone Group PLC of the United Kingdom got 40% share and the management rights.

The company is growing rapidly and already has many products and services in the market. As at 2017 the company had about 5000 strong workforce of employees, 25.94 million subscribers, operating income of about KES 70,375 Billion and net income of about KES 48,444Billion. Safaricom has therefore beaten many odds from socio-economic to political challenges (www.safaricom.co.ke).

1.2 Research Problem

Assuming innovation has taken place successfully. Can firms stop at innovation without protecting their innovations? Even if innovations are protected to recoup investment, one needs to commercialize innovations. The demand for innovation could burst upon a company from numerous dimensions (Rigby, 2002).

Despite huge investment on management, time and money, innovation remains a frustrating pursuit in many companies. Innovation pursuits mostly flop and successful innovators find it difficult to sustain their achievement (Pisano, 2015). Innovations are the fruits of persistent effort by innovators, to undertake innovation activities. If an innovator is not given the IP rights then the motivation to channel resources to innovation is reduced, the society then cannot expect many new products and processes (Rapp, 1990). In order to solve the problem of under production of knowledge, and create an incentive to spur private agents, to devote resources to innovation activities, assurance of a temporary “monopoly power” was necessary (Schumpeter, 1942).

By encouraging and facilitating scientists, inventors and artists to enjoy property rights over their creative work, a regime rewards the effort of time and money required to introduce ideas to the market (Gollin, 2010). Many ideas are created or generated, but most of these die miserable death, never seeing the light of commercial success (Brandt, 2002). Many other innovations have occurred, but their significance has been forgotten along with most of their inventors, but efforts by few inspired entrepreneurs have changed the society (Saleemi, 2009).

This debate did not escape the attention of Adam Smith in his famous statement of invisible hand (Harrison, 2011) and wealth of nations (Smith, 1776). Some America founding fathers including Alexander Hamilton, James Madison, Thomas Jefferson and George Washington also took up this line of debate touching on innovative entrepreneurship and intellectual property (Bode & Foster, 2010).

Through investing on research, leading to great innovations protected by various IP regimes supported by aggressive entrepreneurs, America and many developed countries firms have remain the global leaders (Zhang, 2001).

The debate rages on. Civilization, science and technology are thus great ingredient of firm development. High performing firms in developed world have done so just based on sound innovative and intellectual property strategies. Innovation and entrepreneurship positively relates and synergize to help firm to grow (Schumpeter, 1942). This study is interrogating the impact of innovative entrepreneurship and intellectual property on firm growth in totality.

Previously many researchers have tried to link firm growth with innovation. More attempts have also linked IP to firm growth. Equally, entrepreneurship has also been associated with firm growth. Without innovations, there is a slow generation of new ideas in the market (Coad & Rao, 2008).The absence of innovation ownership ignites the trade war and business loses. The Great role played by innovative entrepreneurship and intellectual property to firm growth can be ignored.

Without innovation, the firm cannot solve many problems and has nothing to protect. Innovation alone without protection of innovative ideas means that the ideas are badly exposed and can be utilized by competitors without any form of compensation hence disadvantaging the firm, which originally invested on innovation (Laursen & Salter, 2006).

This therefore calls for the services of intellectual property. However, protected innovations still need entrepreneurial skills to act as a vehicle for commercializing the innovative ideas without which there is no return on investment used in innovation and protection, meaning no revenue and ability to further innovate.

Innovative entrepreneurship and IP assist firms to grow (Puttitanun, 2005). There is also impact between IP and entrepreneurship on firm growth (Autio & Acs, 2010). Innovation and entrepreneurship therefore synergize to bring firm growth (Schumpeter, 1934). Previous researchers have not addressed the comprehensive approach to the biggest problem of trying to innovate and allowing missing link of either protection or commercialization of the ideas. Stolen innovation is a big mess to the firm (Rice, Leifer, & O'Connor, 2002).

On the other hand, many innovations, which are not, commercialized means very little to the firm. This study therefore seeks to establish the impact of innovative entrepreneurship and intellectual property on firm growth. How do the variables solve the problem always created by the gap or missing link, which always exist when one of the variables of innovation, Intellectual property or entrepreneurship is left out in the process of firm growth? What is the possible mitigation and solution to the problem?

1.3 Research Objective

To establish the impact of innovative entrepreneurship and intellectual property on firm Growth.

1.4 Value of the Study

First, the study could help in the formation of policies. Address matters related to innovations, IP and entrepreneurial activities of the firms at various levels from company, government and other institutions (Baumol, 2010). Governments could be persuaded to have robust integrated policy framework touching on innovation, IP, entrepreneurship. Also, further recognizing the role of researchers within the firms (Gary & Teece, 2007).

This study may influence future policy amendments touching on firm innovations. It can influence policy matters on appraisals, promotions, grants and scholarships, (Ncube, Abrahams & Akinsanmi, 2014). Secondly, this research may benefit researchers, scholars in future research on firm growth (Afonzo, 2010).

It is now possible to start interlinking and relate innovative entrepreneurship, IP and firm growth. It may open an area for future research and debate (Baumol, 2010). While triple helix model only concentrated on academia, it is now possible to consider firms as great source of knowledge and innovations (Benner & Sandstrom, 2000). Academia impact on firm growth should be stronger, enhanced and well-funded.

Finally, the study may help the stakeholders in innovation, IP and entrepreneurship especially firm managers to identify the missing link, bridge the gap and lead firms to growth. It may be possible for them to see how the three when combined can uniquely contribute to firm growth (Penrose, 1959). Grasp innovation process, see the challenges and how to overcome them.

Develop appetite for innovative entrepreneurship as strategies towards firm growth (Afonso, 2010). These kinds of firms are open to opportunities they tactfully, strategically and timely grab any chance that come their way, converting even challenges into business.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter, the researcher discusses literature consistent with the study objectives (George, 2018). Three theories have been reviewed. Empirical review is also done pertaining the impact between innovative entrepreneurship, IP and firm growth (Davidsson & Wiklund, 2006).

2.2 Theoretical Foundation

In this section, review of past literature is carried out to allow the researcher to have in-depth understanding on the subject matter. This study considered four theories, first the theory of Innovative entrepreneurship. It is anchored on the principle that innovations are facilitated and appropriated by entrepreneurs (Baumol, 2010). It therefore explains how firms gradually introduce innovations to the market and gradual acceptance. Secondly, the quadruple helix innovation theory is founded on the principle that academia, government, industry and civil society synergize to bring economic growth by extension firm growth (Afonzo, 2010). This theory will explain the environment under which innovation can take place and stakeholders involved.

Thirdly the just culture theory of IP, this theory holds that IP works well in society govern by the rule of law. It assumes that societies need to respect the IP rights of others (Fisher, 2001). This encourages hard work and innovativeness. This theory will therefore explain how IP right works within the firm and the larger society through available laws and policies to contribute to firm growth.

Lastly, the theory of firm growth assumes that there are dynamics of firm growth, quite apart from any dynamics of firm size, there are limitations to growth but not limitation to size and entrepreneurial activities play central role in firm growth (Penrose, 1995). This theory is therefore used expound on the dynamics of firm growth and it justifies the researcher attempt to introduce innovative entrepreneurship and IP as some of the economies of growth within the firm.

2.2.1 Innovative Entrepreneurship Theory

This theory originates from the theory of price, which is also the theory of land, labor and capital. The theory can thus fit well with those of land, labor and capital. William Baumol in developing the theory of innovative entrepreneurship borrowed from the works of J.A. Schumpeter (Baumol, 2010). The theory has therefore brought into formal perspective the Schumpeterian model.

This theory assumes that innovative entrepreneur is one who brings up new ideas and appropriates them while replicative entrepreneur is one who establishes business venture irrespective of whether such enterprise already exists. Innovative entrepreneur therefore impact positively in economic life. The theory is more concerned with how the prices of the final product created or marketed by the innovative entrepreneur is determined. Innovative entrepreneurs have contributed greatly to the general development by stimulating unimaginable long-term growth.

This theory is very useful in understanding how innovation and entrepreneurship synergize towards firm growth. It has also differentiated innovative and replicative entrepreneur. It has brought the Schumpeterian views on entrepreneur as innovator into formal perspective. However, the theory has not addressed matters to do with protection of ideas that can undermine the good work of innovative entrepreneur. It therefore means that there is still more room to study how innovative entrepreneurship can be integrated with IP to bring firm growth. Every firm correctly believes that innovation is critical and they value the ideas generated in their firms (Doroch, 2005). The problem is in the fact that only few established companies know how maneuver around their innovation ambitions, set aside turning it into profit.

There is need to also innovate channel for marketing (Chesbrough, 2010). Actually numerous innovations that established firms attempt fail to take off (Heidenreich & Speith, 2013). This theory therefore highlights how innovation adopted overtime, from idea conception, prototype and finally products and services through innovative entrepreneurship. Innovation needs careful planning and strategy. It unravels the confusion, diffusion and innovation (Eyestone, 1977).

2.2.2 Just Culture Theory of Intellectual Property

This theory originates just society from political science. It can be traced back to the times of the just city envisioned by Pilato 427-347B.C, Ferrari G.R.F (2007) and which has now been advanced to address many issues (Fainstein, 2010). It became famous in 1960s and is the best suited to explain matters of culture, value and behavior within the society (Shweder & Robert, 1984).

According to William Fisher, just culture theory seeks to go beyond social welfare to a broader vision of society served by IP. This theory assumes that generally property rights and IP rights in particular can be shaped to help in achievement of just and attractive culture where people benefit from their sweat and everybody is given opportunity to do good for the society (Fisher, 2001). This theory has highlighted serious matters to do with IP. The issues raised are also of sound legal doctrines and law. The theory is also well presented and articulated. However, the theory is more concern with the protection of ideas and therefore limited in explaining how ideas can be generated before protection. The theory also does not deal with what happens to the protected ideas and many grey area aspects (Bently & Ginsburg, 2008).

Idea generation is a matter that cut across and most of the time done even by common people. However the theory has always inclined to law with legal technicalities making it difficult for ordinary people to comprehend (May, 2015).It is with this in mind that this study will explore the theory limitations. IP refers to legal doctrines that control the use of different sorts of ideas and insignia. Copyright law protects originality of expressions from novels, movies, musical composition and computer software programs (WIPO, 2009).

Law of patent protects inventions and some kinds of new discoveries. Trademark law protects words and symbols that identify for the consumer goods and services. Which are particularly offered in the market (Nard & Port, 2011). Trade secrete protect commercially viable information like soft drink formulas (Bone, 1998).

Confidential marketing and strategies that companies put measures to conceal from their competitors. Publicity right protects celebrity's interests in their image and identities (Westfall & Landau, 2005). IP is a key recommendation for firm growth. Notably, America has accused China publicly for stealing their intellectual property sparking the biggest debate around IP, (Zeng, 2004). Many court cases have also been filed over intellectual property infringements fines leading to losses on one party.

2.2.3 The Theory of the Growth of The firm

This theory is a result of research by Edith Penrose. It covers virtually many areas of firm growth, making it appropriate for this study (Foss, 1997). This theory holds that there are dynamics of growth, very different from the dynamics of size. There is limited extent to which a firm can grow, but not size. In advancing this position, Penrose argued that firms have resources within internal jurisdiction, for production of goods and services, which are commercialized for positive revenue generation (Penrose, 1995).

There exists a well-defined boundary being the area of coordination and administrative functions. Firms are unique from markets in that transactions within markets occur outside administrative jurisdiction (Barney, 1986). The theory has covered many issues dealing with firm growth and in detail. The development of this theory was because of serious research and findings. The issues raised in the theory are more practical and applicable. This theory covers so many issues on firm growth that it is not easy to tell what mattered to Penrose (Spender & Groen, 2010).

It is only possible to apply the ideas in this theory in an organized, well managed and established firms it is not easy to be applied in informal, infant and disorganized firms, which are just starting. The theory also does not address matters of IP protection while addressing firm growth issues (Penrose & Penrose, 2009).

There is therefore the need to initiate study that will address the gaps. Entrepreneurs are ambitious to increase their total gain for the sake of the firm and for the purpose of extra profit through expansion (Schumpeter, 1934). This leads to firm stability and sustainability. Managerial resources are necessary because expansion needs planning and management of resources, which are specific to the firm and cannot be available in the market (Penrose & Penrose, 2009).

Experience renders managerial services unique to the firm and unused resources do exist, which are availed after the expansion. This is created through experience and emerging knowledge (Zhang, 2008). How flexible the firm control new resources that can be absorbed affect firm growth. Anew technological regime requires the firm to sharpen their skills, talent and competence in certain different area of technology to create a business advantage and competitive edge (Penrose, 1995).

This theory in a great deal contributes to the understanding of firm growth dynamics. Firms must therefore assess the risk and take decision that can benefit the firm holistically in the long term. It is evidently clear that firm growth does not only take one dimension but also involve combination of dimensions (Zahra & Garvis, 2000).

2.2.4 Quadruple Helix Model of Innovation Theory

This theory has borrowed heavily from triple helix model of innovation. Triple helix model of innovation has been recognized as the complex impact between academia, industry and governments, to achieve economic development through innovative entrepreneurship (Etzkowitz & Leydesdoff, 1995). Quadruple helix model of innovation added the fourth pillar in the impact, which is general community, or society. That is concentrating on talented and productive people, in the pursuit of innovative entrepreneurship through involving the society (Afonso, 2010).

According to Afonso, the demand for innovation come from the general society whether as market push or pull. The Industry then attempt to provide solution to any societal problem by firms linking with academia for research and development. The government then comes in to provide the necessary legal framework, environment and incentives to promote energize the system.

Universities in this arrangement have been referred to as entrepreneurial university or university of the future and the future university. In this arrangement academia, utilize innovative entrepreneurship and IP to achieve firm growth (Clark, 1998). This theory has highlighted the basics tenets of innovative entrepreneurship and IP. It has also touched issues related to firm growth. It has also succeeded in explaining how the quadruple innovation model system works in a more simple and easy to understand way (Afonso, 2010).

However, the theory does not deal with innovations that happen outside quadruple innovation model arrangement. The theory also has not presented the impact between the variables. This has then given us a perfect opportunity to conduct a study that will fill this gap and enlarge or introduce this theory to areas previously not covered by the theory (Baumol, 2010).

2.3 Innovative Entrepreneurship and Firm growth

Idea generation is the lifeline and the future of any serious business without which many business are destroyed (Schumpeter, 1934). Many things we see around technological advancement. Solutions of many problems, products and services are the product of innovation that ultimately leads to great firm growth, revenue and profitability. However, without commercialization, you cannot recoup your investment (Schumpeter, 1942).

Business models, products and services are realized through great minds that have been applied in the innovation process. Never the less this must be protected from infringement (Dorroch, 2005). Many firms have secured business opportunities and growth just based on innovations. Innovations however must be commercialized aggressively through innovative entrepreneurship (Baumol, 2010). Combined with IP, the result impressive and can propel firms to unimaginable heights.

Firms therefore register enormous growth based on business opportunity. Business competitive edge is presented by the uniqueness of the business and makes business to stand out and beat competition (Saleemi, 2009). Firm therefore remains the market leader thereby gaining Customer loyalty and satisfaction (Baumol, 2010).

Most of firm growth can therefore be attributed to great support from loyal and satisfied internal and external clients. Innovative entrepreneurship should therefore target most clients, trying to satisfy the client ever-changing needs and appetite. Globally people are now craving for products and services, which are efficient, fast and reliable. Modernity, westernization and globalization are first changing lifestyle of people globally.

2.4 Intellectual Property and Firm Growth

Ownership of the IP rights is critical to any meaningful firm growth but the IP need to be innovative (Rapp & Rozek, 1990). Unless you have legal ownership of your rights, you cannot lay any claim over them. Your rights can be infringed and at times, you can easily loose the right to use your IP. Trading the IP rights is fundamental and has always been another income generation stream. The rights can only be marketed through entrepreneurial strategies (Gollin, 2010).

Robust IP management system is therefore essential for firm growth (Kamil, 2002).Firms with good brands tend to have good trademark recognition. Best industrial designs for example on vehicles also tend to be beneficial to firm growth and this applies to other rights (Westfall & Landau, 2005).Litigation matters can be both detrimental and advantageous to firm growth. When firm is sued for infringe others rights this can sometimes drain firm resources (Zeng, 2004).

However, the firm can be rewarded heavily if it wins the case. Firms should therefore manage IP issues properly and strategically. Firms must guard their rights and refrain from infringing others rights (Bone, 1998). Value of the firm tends to go up with proper IP management system.

During valuation or merger companies with strong IP rights tend to be rated high. In developed nations, banks are considering IP as collateral in offering loans. In developing nations, this is slow but steadily picking up (WIPO, 2009). Soon it will be the economic powerhouse.

2.5 Innovative Entrepreneurship and Intellectual Property

Since innovations cost huge resources in terms of money, time and personnel, a demand to protect innovations and to establish ownership is therefore necessary and IP rights can best do this (Chen, 2005). If innovations were not protected massive copying, counterfeit goods, piracy and innovation stagnation would have followed. Economic development world over could have been chaotic, disorderly and unpredictable (Schumpeter, 1942). Innovative entrepreneur comes up with new ideas and put them into practice through entrepreneurial skills (Baumol, 2010). Innovative entrepreneurship is presented as driver for the achievement of the regional intelligent growth (Romano, 2014).

On the other hand IP rights are critical policy mechanism for encouraging innovative ideas to thrive and contribute to economic growth (BIAC, 2003) appetite for and steps on creativity and inventiveness is the sure way to finding solutions for a sustainable future, and IP rights are important tools for championing creativity, innovation and economic development (Gurry, 2009).

Efforts of promoting IP in developing countries have resulted in dramatic increase in foreign direct investment, which is contributing greatly to economic growth (Maskus, 2002). Innovations can be infringed at any time leading to lose of revenue.

IP is predicted to be the next viable international tradable commodity (WIPO, 2009). Strategic approach to firm growth therefore requires a well combination of innovative entrepreneurship and intellectual property aspects (Peng & Heath, 1996).

Firms and countries that have robust innovative entrepreneurship and IP strategies have good performance, sustainable growth and future prospect (Hart & Milstein, 2003). It is emerging that most of countries that did well in innovation through strong IP strategies also did well in entrepreneurial activities and posted good result in terms of gross domestic product (Hitt, Ireland & Lee, 2000).

Most of these countries have also fast growing firms' scattered all over the world and taking back huge revenue back home. Firm growth is closely linked to innovative entrepreneurship and IP. Entrepreneurs manage IP, create innovations and strategize for firm growth. This triad connection is therefore a complex whole and should be given attention in totality not in parts (Kamil, 2002). Innovations are products of careful planning but can sometimes arise spontaneously (Keeley, & Quinn, 2013).

One innovation process can also split or result in different product and services that were not intended leading to serendipity innovations (Salminen, 2008). Information leads to ideas, inventions and innovations. The incubated innovations can be converted to start ups, spin offs, companies, organizations hence firm growth and expansion (Varis & Littunen, 2010). Developing firms can benefit from developed firms expired IP rights.

2.6 Summary of Literature and Research Gaps

The four theories that have been presented have highlighted compelling firm growth dimensions that need to be taken seriously. Many scholars have argued that innovative entrepreneurship and IP is not only necessary but also critical to firm growth. The role of IP on firm growth was found to be of great importance to firm growth and generally economic (Baumol, 2010). Interestingly innovative entrepreneurship also uniquely combined with IP to bring about firm growth with positive impact and promising results. Innovation, IP, entrepreneurship and firm growth is a complex whole. It is important to devote labor, funding, and enough time to both areas to achieve firm growth.

Both variables depend on each other hence the complex impact. Performance of one area affects the performance of the rest (Afonso, 2010). Information technology revolution based economy, the increasing global pace have brought the intellectual property into proper context. This has become subject of discussion, consideration in government policy-making and corporate strategic planning (Kamil, 2002). Innovations generate exploitable viable ideas. IP rights then protect ideas, the protected innovations are commercialized through entrepreneurial activities leading to firm growth (Schumpeter, 1934).

IP can be traded or licensed just like any other commodity hence increasing the value of the firm. One weakness in any of the variables can be cured by the strength in the other variables. Attention need to be given to each variable in terms of funding, personnel and time (Branscomb & Auerswald, 2002).

There is a gap in understanding how innovative entrepreneurship and IP synergize to bring firm growth. Still when planning for one variable you must plan for the whole system (Smith & Tushman, 2005). The Culture of innovative entrepreneurship need to be cultivated throughout the organization system and voluntarily accepted (Smith, Busi, Ball & Meer, 2008). One firm innovation specialization can complement the other firm innovative ambitions (Caloghirou, Kastelli & Tsakanikas, 2004).

Innovations sometimes render the previous technology inefficient, outdated and unfashionable (Lehtonen, 2003) .Innovation can benefit one party without ruining the other, ruin the other or benefit both (Poulin, 2008). For this system to work it needs time, money and personnel who are focused, committed, knowledgeable and motivated to generate, protect and commercialized ideas (Kamil, 2002).

2.7 Conceptual Framework

Innovative entrepreneurship and IP synergize to bring firm growth. Both variables are needed to complete the holistic firm growth path. Cross sectional commitment from firm stakeholders is necessary in terms of resources including dedicated experienced workforce, time and funding.

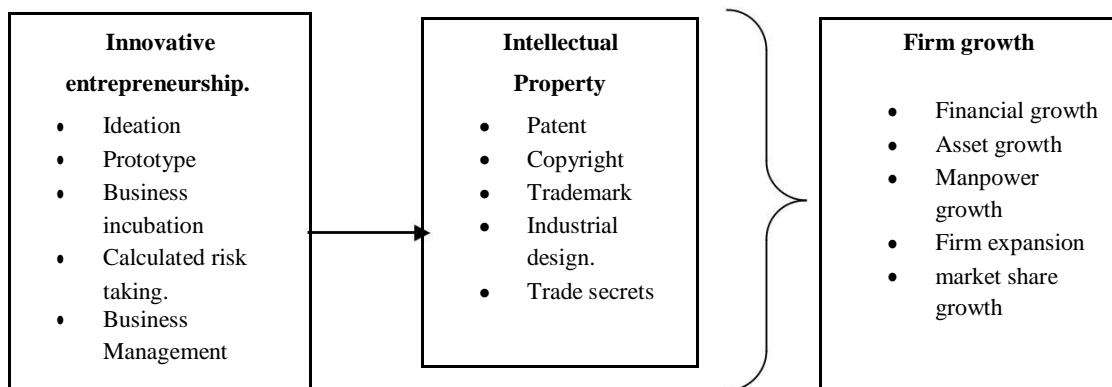


Figure 2.1: Conceptual Framework
Source: Research Findings (2018)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This is a chapter dealing with the methodology that was adopted in the study. The areas were covered were research design, research instruments, data collection, data processing and analysis. Research is the original contribution to the existing body of knowledge leading to knowledge advancement. Case study method approach was used in data collection since it is suitable and most preferred in qualitative research and is widely recognized in many social science studies (Zainal, 2007).

A case study is important and best suited for analyzing information in a sequential manner to come up to some useful conclusions (Mugenda & Mugenda, 1999). This case study was limited to Safaricom PLC. Authorization was secured first by getting a letter from the University of Nairobi introducing the researcher to Safaricom PLC. The researcher later presented the same to Safaricom PLC to be authorized to conduct research within the firm.

3.2 Research Design

Research design is therefore defined as the roadmap and a careful plan of how a research study is to be carried out (Neuman, 2006). Research design is the general strategy in corporate in different areas of the study in a sequential and logical way, to find answers to the research problem (Labaree, 2009). Research design acts as the glue or spark that holds the research project together (Trochim, 2005). This was a case study under qualitative method.

The researcher used interview questionnaire guide to collect the data from respondents. The researcher also collected secondary data from accredited public offices and publications. The collected data was organized by putting the information in different categories and groups. The data was edited for possible errors, analyzed, and data verified through observation and interviewing managers on the information collected. Finally, the data was presented using tables and figures depending on the information gathered. At the end, the data was summarized and the researcher drew conclusions. The researcher has presented detailed information as possible covering all the areas under the study.

3.3 Data Collection

Data collection refers to the activities of collecting information from relevant sources to address the research problem, test the hypothesis and properly evaluate the outcomes (Gill, 2008). In this research, the researcher collected data by interviewing the respondents to complement the secondary data collected from publications and offices. Observation method by visiting Safaricom shops, offices, premises and agents was also used during data collection. The information gathered was finally collated and summarized. Data collection was done through Safaricom official website, publications, research papers, journals, newsletters, Safaricom brochures, posters. The researcher also reviewed financial performance of Safaricom PLC for the past five years 2013-2017.

3.4 Data Analysis

Data analysis is to look into the status and the trends of matter being investigated during research (Hsu, 2005). Data analysis requires the art of observation and detailed description of different aspects of the study. The detailed description of different aspects can be in terms of items or phenomena that constitute the study sample (Mugenda & Mugenda, 1996).

The data collected was organized, edited, summarized and analyzed using content analysis. Content analysis was suitable for this case study since it give the researcher room to analyze many aspects of the research outcomes. It also allowed the researcher to articulate and clarify the salient features of the research outcome. The researcher harmonized the data to be more articulate, comprehensive and informative.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis of study finding on the utilization of innovative and intellectual property in relation to Safaricom PLC Kenya firm growth. It presents the analyses of the variables used by Safaricom to achieve firm growth as has been derived from the previous chapters. The researcher interviewed seven (7) senior managers out of the ten (10), which is a good representation (Hsu, 2005).

4.1.1 Presentations of Research Findings

The study sought to analyze how the concept of innovative entrepreneurship and intellectual property is utilized or applied at Safaricom PLC Kenya to achieve firm growth. These therefore give the researcher better understanding and in-depth knowledge to the study (Zainal, 2007).

4.1.2 Summary of the findings

On Innovation majority of the respondents were positive that innovation is important for Safaricom firm growth and innovation has impacted positively on the firm. Majority of the respondents responded that entrepreneurship was important for Safaricom firm growth, with positive impact (Gill, 2008). Majority of the respondents also submitted that IP is important for Safaricom firm growth. It can safely be argued that innovative entrepreneurship and IP Impact positively on firm growth (Mugenda & Mugenda, 1996).

On the role of innovation, most managers were of the opinion that innovation has assisted the company in idea generation, service development, service diversification and differentiation. Similarly, they viewed technological advancement, efficient business incubation, start-ups and spin-offs as some of the products of innovation. According to most managers, Safaricom has majored in two areas of innovation, which are technology innovation and social innovation.

Technology innovation mostly target Safaricom growth and individual empowerment while social innovations seek to transform lives of Kenyans within the Safaricom philosophy of growing together while transforming lives of Kenyans. The study also found out that the firm protects its innovations mostly through trade secrets, trademarks and copyrights. It was the view of most managers that innovation generates viable economic ideas, which are protected by intellectual property and commercialized through the efforts of intrapreneurs. They therefore agreed that there is impact between innovation, entrepreneurship and intellectual property on Safaricom firm growth.

The study also found that the variables are very important during business merger, when forming partnerships, during firm valuation and when using IP as collateral. According to the managers interviewed, intrapreneurship is key to the success of Safaricom PLC and intrapreneurs within the firm are responsible for the great achievement the firm has registered over the years. The study also found that the intrapreneurs worked tirelessly on areas like innovation, management, business planning, strategic direction, operations and marketing.

The managers were also very keen on partnerships, advertisement and corporate social responsibility. Intellectual property was found to be the simplest way of protecting innovations, the legal way of having ownership of over Safaricom innovations. The managers also agreed that Safaricom consistently sensitize employees on intellectual property matters, register its IP with various government departments and has fully functioning legal department, which among other things handle intellectual property matters. Majority of the managers interviewed therefore were of the opinion that IP and IP awareness was critical to the firm to prevent any form of infringement and loss. The respondents were firm that through innovative entrepreneurship and IP Safaricom has achieved milestone in firm growth.

Some of the areas that the managers highlighted included, accumulation of company assets, building of huge capital base and having many customers. Safaricom also has big market share, strong network within wide coverage and many innovations with a strong workforce. Most managers also believed that Safaricom is within world-class operations and has set a good example that can be emulated locally and internationally. Safaricom therefore file returns as required by the law and clean records can be found at communications authority of Kenya. Other information on copyright and trademark can be found at Kenya copyright board of Kenya and Kenya industrial property institute respectively. Most managers also believed that the Safaricom official website www.safaricom.co.ke contains accurate information that can assist any person who wants to know more about Safaricom PLC. Other managers also thought that a lot of scholarly studies have been done on Safaricom and good information about Safaricom exists in some trusted accredited information search engines.

4.2 Innovation at Safaricom PLC

The study sought to establish how innovative entrepreneurship is applied at Safaricom PLC and how it influences firm growth. The researcher gathered a detailed data in this area. Innovation is central to Safaricom achieving their strategic objectives, maintaining their competitive edge and ensuring continuous improvement towards firm growth. Safaricom value technological advancement and constant innovation in order to keep in touch with clients' needs thereby gaining loyalty and increasing revenue through more market share. Safaricom innovation policy is crafted towards investing in the future, working towards technology creation that impact in the society to better their lives. This has been achieved by various innovations in products and services (Salminen, 2008).

Chief Technology manager admits that Safaricom academy is part of Safaricom innovation strategy. The academy offers a two-year master's degree in collaboration with Strathmore university .the degree is focused on mobile technology and innovation, equipping innovators with necessary skills. According to chief special program manager, Appwiz challenge is designed to identify developers with interest in mobile ICT. It focuses in mentoring, incubating ICT ideas and allowing the developers to move from prototype to start-ups before entering the market. The selected innovators are connected to entrepreneurship gurus who assist them to penetrate their ideas into the market. The challenge is lucrative as winner get 1.5million prize, runners up 1million and category winner 200,000.

App star challenge is innovation around coding for big firms like Android, Blackberry, Symbian, Java or ios. The challenge includes local and international competitors. Innovative ideas are generated, winners are handsomely rewarded.(Lehtonen, 2003).Linda Jamii is another comprehensive innovative health cover where minimum of three members come together and pay some premium and in return, they are covered and their family for many issues. Britam insurance company offers the cover while Safaricom provide the platform.

M-Tiba is another innovative service where money can be locked on the phone and only be used for the purpose of accessing medical services and purchasing medicine at medical facilities who has registered for M-Tiba services. The funds stored in M-Tibais managed by UAP insurance. Zindua Cafe is an idea submission portal where registered users submit their ideas, application or prototype to be considered for full product development. It is amazing how through a click of a baton on a simple phone one can be able to accesses numerous Safaricom services just from a tiny sim card (Varis & Littunen, 2010).

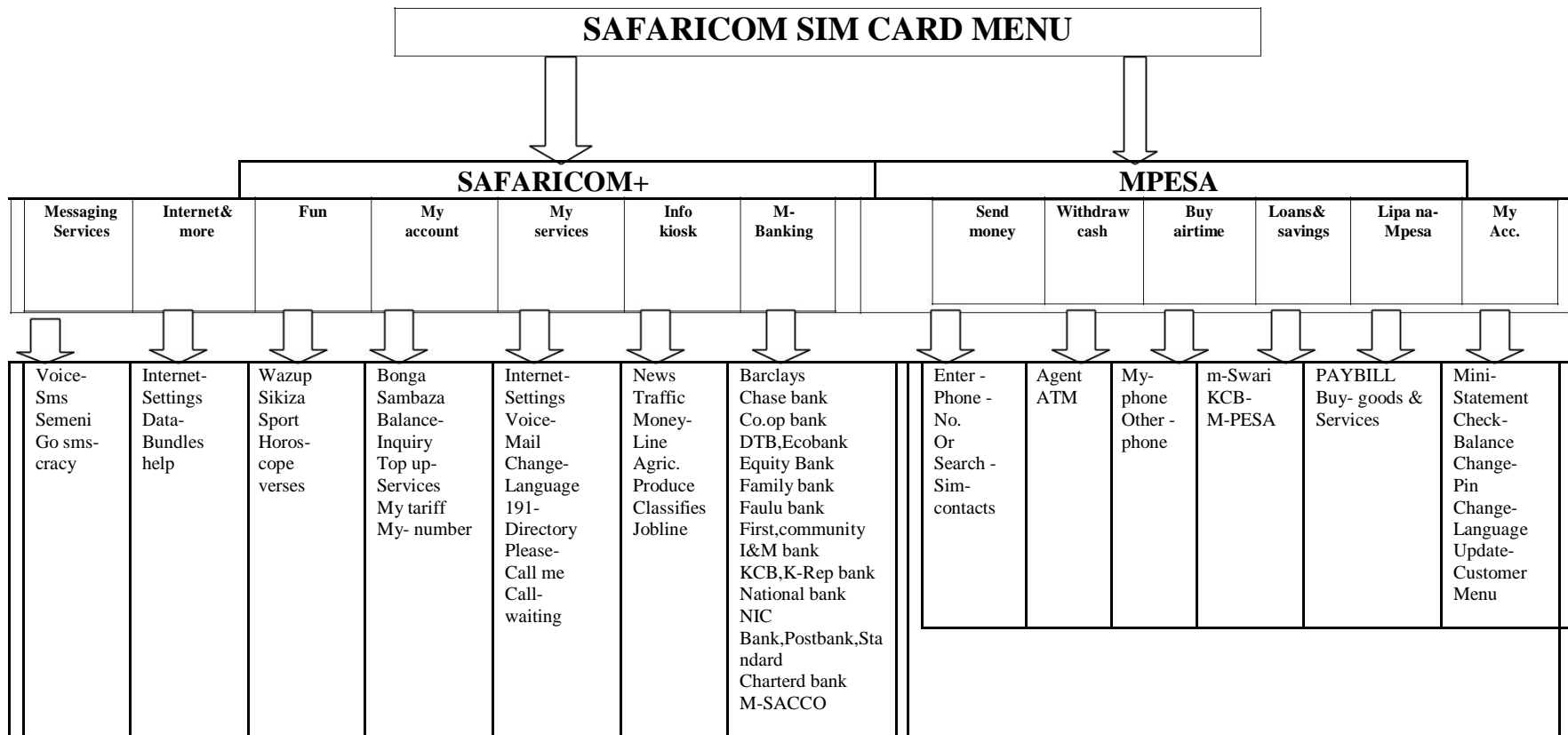


Figure 4.1: Safaricom Sim Card Menu

Source: Research Findings (2018)

Table 4.1: Safaricom PLC Innovation Areas

SAFARICOM INNOVATIONS	
Technology innovations	
ZINDUA CAFE	Is a platform for submitting ideas, applications or prototypes to be used for possible development of products and services. Idea is assessed and if found viable, is accepted and non-disclosure agreement and commercial contract is signed for idea implementation
M-PESA API	Is a second-generation platform known as G2 with the capability of managing automated payment receipt processing, automated payment disbursements and automated payment reversal. This platform can be used to integrate various financial needs, business ideas and collaborations
Social innovations	
Safaricom Academy	Is a campus that offer a two year master's degree course in mobile telecommunication and innovation in collaboration with Strathmore University, Talented mobile application developers and graduates are further given opportunity to explore their inventions and skills through start-ups and business incubation training. The students are also developed in leadership skills and entrepreneurial spirit.
Safaricom Appstore	Is a platform that allows for downloading of both locally and internationally developed and globally recognized applications regardless of mobile platform. The Appstore contain both free and charged applications
Appwiz Challenge	This an innovation that identifies developers with interest in mobile ICT. It entails mentorship, training and idea incubation to allow start-ups further develop their prototype solutions before entering the market.
App Star Challenge	This a platform that involves coding contest and getting prizes and awards for companies like Ideos, Java etc
Spark Fund	The Fund is a venture capital fund that aims to support the smooth growth and development of viable mobile technology start-ups in Kenya. This is done through investment, business development and technical knowledge support. By taking advantage of Safaricom unique capabilities infrastructure and market positioning.
M-Tiba	This innovation allows for setting aside funds for healthcare in collaboration with UAP insurance
Lida Jamii	This is an innovative, comprehensive and affordable family healthcare plan offered by Safaricom in collaboration with Britam and Changamka insurance service providers.

Source: Research findings (2018)

Generally, innovation process at Safaricom can be traced in seven stages Ideation which is the process of generating ideas. This followed by researching on the idea, planning for the idea and then prototyping. If prototype is successful, business incubation and spin-off then follows. The business is then launched, taking care of intellectual property rights. Innovative entrepreneurship is then applied in order to achieve firm growth. This has blended well with the innovative entrepreneurship theory (Baumol, 2010)

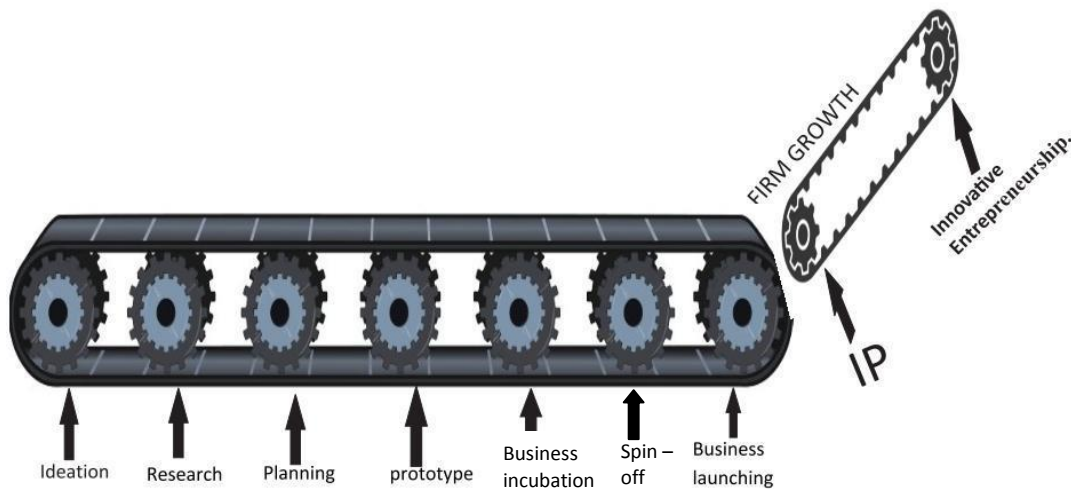


Figure 4.2: Innovation Conveyor belt

Source: Research findings, 2018

4.3 Intellectual Property at Safaricom PLC

M-Pesa is the engine that is driving Safaricom plc. Safaricom should therefore taken all necessary steps to protect patents related to M-Pesa and ensure that M-Pesa ownership clearly remain to the firm. Though M-Pesa patent protection locally remains a trade secret, internationally there are some patents very close or similar to Safaricom M-Pesa and Safaricom or M- Pesa has been repeatedly mentioned in different areas of the publications (Fisher, 2001).

Table 4.2: Filed patents similar to Safaricom PLC M-Pesa services

PAT.NO	TITLE	INVENTOR	DATE FILED	ASSIGNEE
9,973,579	Methods and system for remote management of access to appliances	Ricke: Douglas James (Saragota, CA)	2/3/2016	Pay joy (San Francisco, CA)
9,858,568	Transaction processing and remote activation	Moore: Jesse Barton (Nairobi, KE) Hughes: Nicholas (Alresford, GB)	14/7/2014	M-KOPA IPR,LLC (Wilmington, DE)
9,727,911	Systems ,method and computer-accessible mediums for providing secure paper transactions using paper fiber identifiers	Sharma: Ashlesh (Redmond, WA),Subramanian: Lakshminarayanan (New York, NY) Brewer; Erick(Mill Valley, CA)	13/11/2013	New York University(New York, NY)
9,563,888	Mobile transactions	Reeve:Gregory:Newbury,G B),Cornforth:Peter(Newbury,GB),Downing:Jason(Newbury,GB)	24/11/2011	Vodafone IP Licensing LTD(Newbury, Berkshire, GB)
9,552,573	Interoperable financial transactions via mobile devices	Kulpati: Ashish (Gurgaon, IN)Cooper: Joseph Gordon(Singapore, SG),Baker: Ginger (San Francisco, CA)	11/4/2012	Visa International Service Association(San Francisco, CA)
9,536,239	Transaction processing and remote activation	Moore: Jesse Keith Barton(Nairobi, KE), Hughes: Nicholas (Alresford, GB)	10/5/2011	M-KOPA IPR,LLC(Wilmington, DE)
9,489,673	Payment system and methods	Randazza: Joseph R.(Boca Raton, FL)	10/4/2015	National payment Card association(Coconut creek, FL)
9,462,138	Cellular airtime management	Cornforth: Peter (Berkshire GB),Downing: Jason(Berkshire, GB)Reeve: Gregory(Berkshire)	19/7/2013	Vodafone IP Licensing LTD(Newbury, Berkshire, GB)
9,301,126	Determining multiple users of a network enabled device	Scarr: Kevin Tristan (London GB), Ignatyev : Oleksiy(Belmont CA), Scharf-Katz: Volkmar(San Francisco, CA)	20/6/2014	Vodafone IP Licensing LTD(Newbury, Berkshire, GB)
9,218,594	Social network-assisted electronic payments	Ramakrishna: Venkatraman(New Delhi, IN), Kumar: Apurva(Uttar Pradesh, IN)	9/11/2012	International Business Machines Corporation(Armonk, NY)

PAT.NO	TITLE	INVENTOR	DATE FILED	ASSIGNEE
9,089,011	Enablement period controlled lighting appliance	Steininger:John(Fort Collins,CO),Vilsack:Douglas(Denver,CO),Gelvin:David(Littleton,CO),Tillson:Timothy(Fort Collins, CO)	24/1/2013	SONOPRO Power & Light, INC (Fort Collins, CO)
9,064,257	Mobile device transaction using multi-factor authentication	Beigi:Hamayoon(Yorktown, NY)	2/11/2011	Beigi: Hamayoon (Yorktown, NY)
9,064,252	Payment system and methods	Randazza:Joseph R.(Boca Raton,FL)	30/6/2014	National payment Card association(Coconut, creek, FL)
8,833,644	Payment system and methods	Randazza: Joseph R.(Boca Raton, FL),Portal Danilo (Miamar, FL)	4/9/2013	National payment Card association(Coconut, creek, FL)
8,701,986	Payment system and methods	Randazza: Joseph R.(Boca Raton, FL) Portal: Danilo (Miamar, FL),	31/5/2013	National payment Card association(Coconut, creek, FL)
8,510,195	System and method for proving site-related weather insurance contract	Goslinga:Roselinde(Basel,BH),Brugger:Fritz(Mollis,C),Seuret:Eric(Freienbach,CH)	1/2/2010	Syngenta Foundation For Sustainable Agriculture (Basel, CH)
8,490,865	Payment system and methods	Randazza: Joseph R. (Boca Raton, FL) Portal: Danilo (Miamar, FL),	11/5/2012	National payment Card association(Coconut, creek, FL)
8,489,481	Transaction processing and remote activation	Moore: Jesse Keith Barton (Nairobi, KE), Hughes: Nicholas (Alresford, GB)	12/6/2012	M-KOPA IPR,LLC(Wilmington, DE)
8,205,791	Payment	Randazza: Joseph R. (Boca Raton, FL) Portal: Danilo (Miamar, FL),	17/6/2011	National payment Card association(Coconut, creek, FL)

Source: USPTO Database, www.uspto.gov as at July 2018

According to Kenya copyright Board records (Kecobo) has registered two categories of copyright being one audiovisual work and four artistic work totaling to five copyrights registered. The copyright registered has protected works like Blaze be your own boss (BYOB) Show, Blaze by Safaricom M-Pesa card, My Kenya and Safaricom M- Pesa Card. The rest include a design of chip and pin card. (Idris, 2002)

Table 4.3: Copyrighted works by Safaricom PLC

Copyright work title	Copyright category
Blaze be your own boss (BYOB) Show	Audio visual work
My Kenya	Artistic work
A design of chip and pin card.	Artistic work
Safaricom M- Pesa Card.	Artistic work
Blaze by Safaricom M-Pesa card	Artistic work

Source: Kenya copyright Board of Kenya database as at November (2018)

Safaricom has invested heavily in developing and protecting its trademarks. The firm has registered 22 trademarks with KIPi and in total has over 300 trademarks under the name of Safaricom. Trademark is important for the identification of products and services from a specific firm (Ellis, 2010).

Table 4.4: Trademarks registered by Safaricom PLC at KIPI

File No.	Classes	MARK NAME	Owner Name
MA/T/0001/063149	NCL(0) 163538	THE OPTION	SAFARICOM PLC(KE)
MA/T/0001/063149	NCL(0) 163538	NA/(IMAGE ONLY)	SAFARICOM PLC(KE)
MA/T/0001/063527	NCL(0) 163538	NA/(IMAGE ONLY)	SAFARICOM PLC(KE)
MA/T/0001/063523	NCL(0) 163538	NA/(IMAGE ONLY)	SAFARICOM PLC(KE)
MA/T/0001/063528	NCL(0) 163538	NA/(IMAGE ONLY)	SAFARICOM PLC(KE)
MA/T/0001/063521	NCL(0) 163538	NA/(IMAGE ONLY)	SAFARICOM PLC(KE)
MA/T/0001/063522	NCL(0) 163538	NA/(IMAGE ONLY)	SAFARICOM PLC(KE)
MA/T/0001/063529	NCL(0) 163538	NA/(IMAGE ONLY)	SAFARICOM PLC(KE)
MA/T/0001/063525	NCL(0) 163538	NA/(IMAGE ONLY)	SAFARICOM PLC(KE)
MA/T/0001/063524	NCL(0) 163538	NA/(IMAGE ONLY)	SAFARICOM PLC(KE)
MA/T/0001/063526	NCL(0) 163538	NA/(IMAGE ONLY)	SAFARICOM PLC(KE)
MA/T/0001/101803	NCL(10) 163538	BONGA BARAZA	SAFARICOM PLC(KE)
MA/T/0001/101805	NCL(10) 163538	BONGA BAHASHA	SAFARICOM PLC(KE)
MA/T/0001/101801	NCL(10) 163538	Bonga	SAFARICOM PLC(KE)
MA/T/0001/101804	NCL(10) 163538	BONGA BIASHARA	SAFARICOM PLC(KE)
MA/T/0001/101806	NCL(10) 163538	BONGA KAPU	SAFARICOM PLC(KE)
MA/T/0001/101802	NCL(10) 163538	BONGA SASA	SAFARICOM PLC(KE)
MA/T/0001/101800	NCL(10) 163538	Bonga	SAFARICOM PLC(KE)
MA/T/0001/101867	NCL(10) 163538	DIGISOKO	SAFARICOM PLC(KE)
MA/T/0001/102431	NCL(10) 163538	WOMEN IN BUSINESS	SAFARICOM PLC(KE)
MA/T/0001/103074	NCL(10) 163538	NEON LITE	SAFARICOM PLC(KE)
MA/T/0001/103075	NCL(10) 163538	NEON PLUS	SAFARICOM PLC(KE)
MA/T/0001/103974	NCL(11) 163538	Alpha SAFARICOM	SAFARICOM PLC(KE)

Source: Kenya Industrial Property Institute as at November (2018)

In conclusion the role of IP at Safaricom cannot be underestimated. Ideas created are protected through application to various authorities like KIPI, KECOBO and WIPO.

Around the globe and through various treaties and conventions people tend to respect intellectual property rights including copyrights and trademarks. Safaricom has thus capitalized on this to achieve successful business hence the firm growth. This is very much in line with the just culture of IP theory (Fisher, 2001)

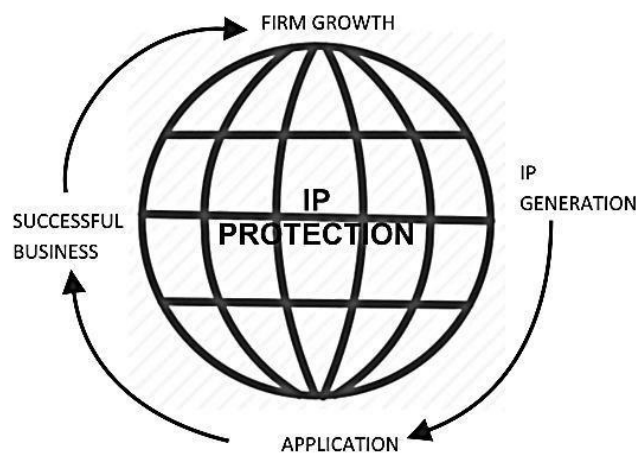


Figure 4.3: IP application on firm growth

Source: Research Findings (2018)

4.4 Entrepreneurship at Safaricom PLC

According to communications authority of Kenya third quarter statistic report 2017/2018 between 1st January to 31st March 2018. Safaricom plc recorded a market dominance of 67.0 percent in mobile subscription, had 29.5 million mobile subscriptions. With 28.4 million being prepaid and 1.1 million post-paid subscriptions. M-Pesa had some 156,534 agents, 23,647,293 active subscriptions and made a value transaction of Ksh 1,480,556,965,000. Safaricom also recorded M-Commerce transactions of 394,236,529 with a value of Ksh 998,044,535,200 (Communication Authority of Kenya (CA), July 2018).

On local mobile voice traffic by operator, Safaricom recorded 8,474,776,752 traffic flow representing 66.5 percent market share. Under domestic short messaging services (SMS) 14.2 billion messages passed through Safaricom network representing 94.9 percent during the quarter review. On mobile data/internet subscriptions, Safaricom remained the market leader registering 68.4 percent market share. Although Wananchi Companies (Kenya) Limited dominated fixed data/internet market with 34.4 percent (112,593 subscriptions) Safaricom came second position recording 19.4 percent (63,657 subscriptions). On Tariffs, Promotions and special offers out of the 6 tariffs Safaricom had 4 tariffs and out of the 15 promotions and special offers Safaricom had 13 of these (Communications Authority of Kenya (CA), July 2018).

Safaricom has innovative CSR activities. In terms of CSR Safaricom has majored in areas of health, arts and culture, water, disaster response, economic empowerment touching many lives. During their CSR outreach, they go to their customers and potential customers, readily armed with their brochures, posters and other handouts. Through this strategy, they reach many people with their marketing strategies. Safaricom on the other hand form partnerships with other entities with and firms who have many loyal customers. Since Safaricom products are rare to find elsewhere, those customers then at once become customers of Safaricom by extension. As those partners add customers, the numbers of Safaricom customers also continue swelling. In most cases, Safaricom extend their marketing strategies to the partner's premises, (Saleemi, 2009).

Advertisement is one of the areas where Safaricom has hugely invested on. Compared to other local players it has some attractive, strategically positioned and intimidating billboards. Many buildings are also well-decorated using Safaricom colors and logo. Most of the local television channels and radios also air Safaricom advertisements .Safaricom has exploited the opportunity to advertise on vehicles, aircrafts and many other magazines and newspapers. Safaricom also advertise through road show, giving out flyers and other publications (Saleemi, 2009).They also run some of the interesting promotions like the blaze. Safaricom has some of the cool music that is aired through mobile handset, radio and other strategic areas. Safaricom also do a lot of advertisement through mobile handset using the advantage of safaricom lines. Through their network, they send various information promoting Safaricom activities, products and services (Saleemi, 2009).

Safaricom has also perfected business diversification and product differentiation where they not only concentrate on mobile telecommunication but also venturing on other areas like opening M-Pesa Academy, offering other products and services including assisting the police in tracking criminals. Through money that is transacted on their platform and is not withdrawn immediately, Safaricom has a lot of money that can be invested to generate income-awaiting collection by the end users (Smith & Tushman, 2005). Money in the hands of Safaricom range from salaries, money borrowed from Saccos to money deposited on M-Pesa for various reasons. A number of Safaricom services are paid in advance ranging from prepaid airtime, prepaid bundles, locked savings, savings on M-Tiba and savings on M- Swari. They also have very strong network that has wider coverage than most of local operators.

This has made many people to prefer their services, hence selling massive airtime, data bundles modems and other products and services network related (www.safaricom.co.ke). Following calculated plan of reaching people, Safaricom has penetrated into Kenyan people lives that you try to remove Safaricom and lives immediately start to be affected from Hudumacentre, payments of bills, payment of goods and other communication systems and services. Safaricom has also learned the art of calculated risk taking, innovation and best practices in financial management. Michael Joseph centre is a place for hosting events related to CSR, arts and technology. It deals with events like music, concert, plays, exhibitions and business forums focused on enlighten entrepreneurs on how to do business. This centre is responsible for entrepreneurial growth internally and externally (www.safaricom.co.ke).

Safaricom foundation is a section, which deals with strategic matters of health, education and economic empowerment. M-pesa foundation integrates the use of mobile technology in its investment while focusing on areas of greatest priority and impact. M-pesa most prominent partners include, banks, saving and credit cooperatives, traders, government, socialites and the business community. Mpesa foundation academy is a state of art mixed boarding high school providing excellent Kenyan education while championing leadership, entrepreneurship, technology and innovation. The academy serves talented but economically disadvantaged students with exposable leadership potential (www.safaricom.co.ke).

In general most Safaricom shops have their logo and colors are very well displayed from outside. There is also cool music that is pleasant to the ears and very pulling to the crowd. There is presence of security personnel at the entrance and CCTV as assurance of security inside. After entering the shop, customers are directed to the token ticket area where they pick tickets. They then wait to be served sitting in comfortable chairs enjoying documentaries on the screen and music. There are also beautiful, smartly dressed and customer focused (Branscomb & Auerswald, 2002). The rooms are well decorated, well lit with good ventilation and air circulation. The customer service agents are many and quick with enough tools and equipment. Customers are given water and guided accordingly. The shop has different stands like M-kopa, M-solor and M-Pesa services.

Many mobile phone service providers are also given stands within the shop where they offer parallel services to the Safaricom customers this include Oppo, Nokia, Techno, Huawei, Infinix, Nokia and Samsung (www.safaricom.co.ke).The M-pesa agents are well trained vast with knowledge and can handle technical challenges associated with M-pesa operations. The agents are provided with books for accounting and record purposes. The agents shops are well decorated with Safaricom logo and colors.

They also have nice posters highlighting various issues including Safaricom offers. The agents are allowed to do their numerous normal businesses as they also go on with M-pesa transaction issues. The small shops are well protected by metal bars and can be found everywhere from small corridors, remote areas and affluent to poor areas within the city and rural areas. Many clients jam-up the queue to be served and the impression and services being offered are no different from those that can be found in a bank.

The firms also invest in a unique way of doing business through transforming lives (www.safaricom.co.ke). Suppliers are made to practice ethical standards, integrity and sign suppliers code of conduct .Through many innovative programs the firm has empowered the population economically. Safaricom tower at Kapedo also reduced cattle rustling and busted security in the area. Through M-pesa the population can be easily mobilized to donate for a noble purpose as was in the case of food donation at Kakuma.

In general, the firm has adopted sustainable development that does not leave Kenya behind. On the other hand Safaricom has adopted relevant solutions that transforms live data manager and refunds for call drops. The firm also grow with partners by innovating and providing platforms to meet different customer requirements. Several promotions like grove award, blaze, Chapa dimba, athletics services, Safaricom Jazz, our youth orchestra safaricom Marathon and Twaweza live has greatly transform lives of many.

Intrapreneurs at Safaricom are very keen on quadruple helix innovation model approach. Safaricom has realized that in 21st century and beyond academic institutions are going to drive most of innovations hence their investment in Safaricom Academy and Safaricom foundation academy. They have also collaborated with other institution including Strathmore and Kenyatta University. They use their expertise, equipments and infrastructure to develop, polish and operationalize the innovation coming from the academia. In this arrangement, the governments provide Safaricom with policy framework while the civil society is consulted for the appropriateness and suitability of the innovations. This finding is very much in harmony with Quadruple helix innovation theory (Afonzo, 2010).

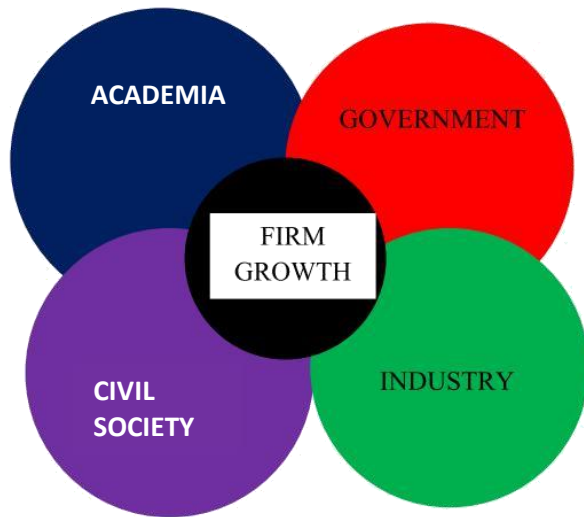


Figure 4.4: QHI application on firm growth

Source: Research Findings (2018)

4.5 Contribution of Innovative Entrepreneurship and IP to Safaricom PLC Firm Growth

Safaricom has developed many innovative products and services thereby expanding the business, gaining competitive edge and creating markets. Through technological innovation the firm has managed to have a large market share. The firm is also keen on matters related to intellectual property and has ensured that they own most of their IP rights and track their IP for any possible infringement (Fisher, 2001). With good knowledge on IP they are careful not to infringe on others intellectual property. Excitingly they have won most cases just based on their robust IP management system.

Interestingly they also trade their IP as another revenue-generating stream. The study found that marketing is one of the pillars in Safaricom successes. Various methods have been used to market Safaricom with more effort put in marketing through corporate social responsibility. Most of the entrepreneurial achievements are associated with the firm identifying experienced, talented and qualified strong workforce (Penrose, 1995).

On the other hand, the company ability and skills in taking calculated risk has also propelled the company to greater heights. Innovative ways of reaching clients has always been top agenda of the company yielding better result and performance. For the last five years from 2013-2017 the firm has posted some good performance result. The study also found that Safaricom had great business strategic plan and big budget to support the same. Safaricom had lean, qualified and experienced management system comprising of, directors, senior level managers, middle level managers and section supervisors (Research findings, 2018).

4.6 Safaricom PLC Performance

Between 2013 and 2017, a period of five years Safaricom has posted growth in many aspects including financial growth. This growth has led to huge profit margins.

The result being ability to acquire assets, reinvest the revenue generated and undertake other different business opportunities.

Table 4.5: Safaricom performance for 5yrs between 2013-2018

SAFARICOM PLC	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Mobile subscription	21,928,450	24,183,903	25,941,488	29,228,896	29,780,048
Number of active mobile money transfer subscriptions	19,776,056	21,338,328	17,120,278	22,624,298	23,946,174
Value of Transactions – Sending and Withdrawal (Ksh)	DNA	DNA	2,326,616,750,201	3,538,263,625,12	5,728,419,839,104
Local voice traffic (minutes)	23,914,983,890	24,887,933,059	31,472,604,249	35,694,006,619	34,687,587,874
Roaming Traffic (Roaming out voice traffic)	14,791,773	44,249,541	104,813,736	119,324,551	170,195,098
Domestic Short messaging services	23,502,513,431	25,474,439,617	30,466,715,822	53,976,676,381	63,977,551,193
Mobile data/internet subscriptions	9,973,461	12,587,207	17,065,742	22,767,731	28,373,856
Tariffs	DNA	DNA	15	10	13
Promotion & Special offer	DNA	DNA	16	37	53

Source: Communications Authority of Kenya Database (November, 2018)

**Table 4.6: Safaricom PLC five-year Historical Financial performance 2013-2017
Annual Report**

Income statement	FY13	FY14	FY15	FY16	FY17
Khs in millions					
Voice revenue	75,848	84,316	87,368	90,802	93,459
M-Pesa revenue	21,844	26,561	23,626	41,500	55,084
Mobile data revenue	6,611	9,314	14,823	21,154	20,289
Fixed data Revenue	2,113	2,571	3,128	3,815	5,242
SMS revenue	10,147	13,620	15,671	17,328	16,679
Other service revenue	1,489	1,980	2,631	3,185	4,356
Service revenue	118,051	138,361	156,247	177,784	204,109
Handset and other revenue	6,236	6,312	7,117	8,621	8,700
Construction revenue	-	-	-	9,280	76
Total revenue	124,288	144,672	163,304	195,685	212,885
Other income	-	127	576	232	2,511
Direct costs	(47,174)	(51,964)	(56,709)	(62,310)	(66,750)
Construction costs	-	-	-	(9,280)	(76)
Contribution margin	77,114	92,835	107,231	124,327	148,570
Operating expenses	(27,875)	(31,892)	(36,040)	(41,261)	(44,961)
EBITDA	49,239	60,943	71,191	83,066	103,610
Depreciation & amortization costs	(22,139)	(25,787)	(25,570)	(27,943)	(33,234)
EBIT	27,100	35,156	45,621	55,124	70,375
Net financial costs	(1,452)	(3,55)	2,19	504	297
Forex gain /loss	(188)	168	206	398	(59)
Share of associate profit/loss	(10)	15	(4)	104	19
Assets purchase bargain gain	-	-	108	-	-
Fare value loss on investment property	-	-	-	(367)	-
EBT	25,451	43,984	46,150	55,763	70,632
Taxation	(7,911)	(11,967)	(14,278)	(17,658)	(22,188)
Net income	17,540	23,018	31,871	38,104	48,444
Earnings per share(shs)	0.44	0.57	0.80	0.95	1.21
Free cash flow(shs. mn)	14,507	22,692	27,524	30,360	43,515
Ordinary dividend(paid/proposed)(shs. mn)	12,400	18,831	25,642	30,483	38,863
Ordinary dividend per share(shs)	0.31	0.47	0.64	0.76	0.97
Special dividend paid(shs. mn)				27,244	
Special dividend per share(shs)				0.68	

Source: www.safaricom.co.ke)

Safaricom beginning just as a small department within Kenya Posta and telecommunication and now has grown several times where it was form is quite amazing. The secret of Safaricom growth is not in the size of the firm but more on its innovations, entrepreneurial zeal and intellectual property rights. While Safaricom has the whole world to spread its business in terms of size the dynamics of growth like M-Pesa innovation can only be developed up to certain level. Safaricom started small and fragile with great need for constant care and much attention but now it can weather many socio-economic, political and environmental storms. This finding has upheld the theory of the growth of the firm (Penrose, 1959)



Figure 4.5: Firm growth analogy
Source: Research Findings (2018)

4.7 Discussion

The study found that innovative entrepreneurship positively impact firm growth, this largely agreed with the theory of innovative entrepreneurship (Baumol, 2010). The study also found that innovations need to be protected through intellectual property strategies thereby vindicating just culture theory of intellectual property (Fisher, 2001). This study agreed with the theory of firm growth, which holds that there are dynamics of growth, very different from dynamics of size (Penrose, 1959). The study confirmed that knowledge from academia can be pushed to industry to meet society demand with proper regulation from the government (Afonzo, 2010).

Safaricom PLC value innovation and currently has chief technology officer and chief special projects officer dealing with innovations and technology while being supported by other eight chief officers. Safaricom has protected its innovations through trade secret, registered its copyright at Kenya copyright board and filed its trademark at Kenya Industrial Property Institute. Safaricom is commercializing/ pushing its innovations through marketing, advertisement and CSR activities.

On the other hand Safaricom academy also offer a two year master's program in mobile telecommunications and innovation, many innovation and technology have come from this program through proper government regulation, further developed through Safaricom innovation system then taken to the society to solve challenging problems. Many scholars also do case study on Safaricom (Research findings, 2018). The study further generally found that there is positive impact between innovative entrepreneurship and intellectual property on firm growth (Research findings, 2018).

The managers interviewed and secondary data collected dominantly pointed to activities around innovative entrepreneurship and intellectual property as the key drivers of growth at Safaricom PLC (Research findings, 2018).

4.8 Summary

Success of a firm is embedded on innovations, which are improved continuously to keep competitive advantage and create uncontested markets. The unique and groundbreaking innovations are protected through intellectual property management. This ensures that the innovative firm is able to have temporary monopoly to enjoy the result of their investment (Baltar, 2014). It is not the stockpile of innovations that grow the firm but the commercialized or utilized innovations (Baumol, 2010). Entrepreneurship strategies derives innovations into the market (Schumpeter, 1934). Innovative entrepreneurship therefore uniquely combine with intellectual property to impact on firm growth, attempt to leave any of the three elements of firm growth out result in a gap or missing link, which can be detrimental to firm growth. Safaricom has thus utilized all the variables in their firm growth strategies (Jaffe, 2011).

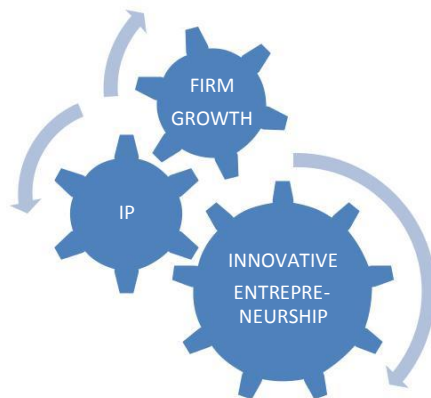


Figure 4.6: Innovative entrepreneurship and Intellectual property positively impact on firm growth.

Source: Research findings (2018)

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, summary, implications, limitation of the study and suggestions of further study is presented. In brief, the study found out that innovative entrepreneurship and intellectual property has positive impact on firm growth. Safaricom has achieved stable, sustainable and predictable growth just based on innovative entrepreneurship and intellectual property strategies.

5.2 Summary of The findings

The study established that innovative entrepreneurship and intellectual property are positively impact initiate, promote, and propel firm growth. A firm that embraces innovative entrepreneurship and intellectual property best practices tend to exhibit faster growth has competitive advantage and good return on investment (Baumol, 2010).

5.3 Conclusion

Based on the study findings, the study concludes that innovative entrepreneurship and IP strongly influence firm growth. The study found that good policy framework from the firm and government creates a good environment for innovative entrepreneurship hence firm growth. It also calls for positive innovative entrepreneurship culture from the firm, government and the general society to achieve firm growth. This also call for careful planning, strategy and financing championed from the top management and freely accepted by the whole firm, (Baumol, 2010).

In firm growth, there is underlying innovation on products and services that initiate promote and propel firm growth. Most of good innovations are the target of crafty business operators. Therefore, protection of these innovations is inevitable. Innovative entrepreneurship work well when it is championed from the top management cascaded down and accepted whole-heartedly by the rest of the firm (Fisher, 2010).

It was also found that from just one or few innovations, many new or improved ideas can arise leading business opportunities. Creating strong brand, competitive advantage and client loyalty to achieve firm growth were found to be products of innovative entrepreneurship. Innovative entrepreneurship and intellectual property are necessary for firm growth and is the complete path and roadmap towards firm growth. Leaving innovation, IP of entrepreneurship out of firm growth can therefore complicate the equation leading to a gap that can impair and hamper firm growth (Kamil, 2002).

5.4 Implication of the Study

The top management should champion innovative entrepreneurship. Otherwise, efforts by the junior staff can be overturned leading to demoralization, mistrust and less firm growth. Innovative entrepreneurship is not a simple affair and therefore firms need to engage the services of knowledgeable and experience experts in this field. For this to succeed a robust internal and external policy framework firm and government respectively is needed (Saleemi, 2009). Creation, protection and commercialization of viable ideas towards firm growth should be embraced in totality and not in parts. It is the internal growth system especially innovations of the firm that result and sustain the external manifestation of firm growth (Kamil, 2002).

5.5 Limitation of The study

The study only examined the impact of innovative entrepreneurship and intellectual property as key to firm growth. Which the researcher found to be crucial and generally accommodated many other issues associated with firm growth. However, there may exist other parameters, which should be equally studied.

The study only concentrated on Safaricom PLC since this was a case study, the same study can be replicated on other firms or through using multiple firms. Some potential respondents did not give information due to confidentiality (trade secrete) issues or were just reluctant to respond due to various issues. Equally getting some documents and access from Safaricom was not easy since three managers responsible had travelled out of the country.

5.6 Suggestion of Further Research

The researcher only dealt with Safaricom PLC, a mobile telecommunication service provider, another study should be conducted using other successful firms in different industries. The study relied heavily on content analysis another similar study should be conducted using different methods of analysis to further affirm and establish this impact. Innovative entrepreneurship and IP accommodated major variables and another study should be conducted to determine whether there were other issues left out that does not fall within the variables the researcher considered.

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APPENDICES

Appendix (i) Introduction Letter



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19 September 2018

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

INTRODUCTORY LETTER FOR RESEARCH
JERRY OUMA OMULO – REGISTRATION NO. D66/80326/2015

This is to confirm that the above named is a bona fide student in the Master of Science in Finance (Msc. Entrepreneurship & Innovations Management) option degree program in this University. He is conducting research on ***"The Relationship Between Innovative Entrepreneurship And Intellectual Property on Firm Growth: A Case Study of Safaricom PLC in Kenya"***.

The purpose of this letter is to kindly request you to assist and facilitate the student with necessary data which forms an integral part of the research project. The information and data required is needed for academic purposes only and will be treated in **Strict-Confidence**.

Your co-operation will be highly appreciated.

Thank you


Jane Muturi
For Msc. Human Resource Management Co-Ordinator,
School of Business

JK/jmo

Appendix(ii): Interview Questionnaire Guide

Dept.....

Section.....

Title.....

RESEARCH ON IMPACT OF INNOVATION, INTELLECTUAL PROPERTY AND ENTREPRENUERSHIP ON FIRM GROWTH.

(Your response will be generalized and only used for the purpose of the research)

1. What are the roles of Innovations at Safaricom PLC on firm growth?
.....
2. Which areas do Safaricom PLC practice innovation activities and how?
.....
3. How does Safaricom PLC protect its innovations?
.....
4. Do you think innovation activities at Safaricom PLC have any pact on Safaricom firm growth?
.....
5. Which areas do Safaricom PLC practice entrepreneurial activities and how?
.....
6. What is the impact of entrepreneurship at Safaricom?
.....
7. Which areas do Safaricom PLC practice IP matters and
.....
8. What is impact of Intellectual property on Safaricom PLC firm growth?
.....
9. How does Safaricom PLC manage and protects its IP rights?
.....
10. What can you consider as firm growth at Safaricom
.....
11. In summary where would a person interested to know more about Safaricom PLC get more information about its innovations, entrepreneurial activities and intellectual property.....
12. Do you have any other information that can be useful to this study or any questions?.....

Thank you for your time and response