

*iHub Research

Intellectual Property In Technological Innovations

Perceptions From Tech Startups In Kenyan ICT Hubs

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Abstract

ICT Hubs act as a meeting place for technology entrepreneurs where new ideas are discussed and inventions built. In such dynamic spaces, Intellectual Property (IP) could either protect young, nascent ideas or stifle innovation and collaboration. In order to better understand how tech startups working out of ICT Hubs view IP in their technological innovations; iHub Research conducted an exploratory research with 15 tech startups. Over half of those interviewed have registered their companies, with most having secured various domain names for their innovations. A number of respondents did not know where to go for IP services. None of those interviewed have filed for a patent and the majority have not copyrighted their technological innovations as they find the process costly and cumbersome. Research on competitors' IP as a protection tool did not seem of importance to a majority of them. The results suggest that at this stage, most start-ups are still validating their ideas and the IP process is confusing, takes too much time, and expensive for these start-ups. Most of the interviewed tech startups felt there should be more awareness raised about IP rights in Information Technology. Greater knowledge about IP will assist developers and tech startups to determine if IP suits them and if so, which aspects will be most relevant for them.

Keywords: Technological Innovations, Intellectual Property, Startups, ICT Hubs, Kenya

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Introduction

Intellectual property has been used to describe creations of the mind, such as artistic inventions, symbols and images used in commerce (Arvin Halkhores, 2010). Additionally, Intellectual Property Law gives the aforementioned creations legal efficacy, which means that legal systems accord certain rights and protections for owners of property. Rights and protections for owners of intellectual property are based on 3 kinds of patents (National patents, PCT patents designating Kenya, ARIPO patents designating Kenya,) trade marks and copyright laws; and state trade secret laws. These exclusive rights allow owners (creators) to benefit from the property they have created thereby providing a financial incentive.

Generally, patents protect inventions of tangible things; copyrights protect various forms of written and artistic expression; and trade marks protect a name or symbol that identifies the source of goods or services (Law mart-digital publishers: Copyright vs. Trade mark vs. Patent, 2012).

In the medieval era, property ownership became such a pivotal attribute that the above property regulations had to be introduced to govern and protect the trade industry as a whole. Property protection became such a contentious issue that prompted philosophy and Law to be called upon to clearly spell out the benefits and rights property has and the benefits its owner ought to derive from such. Two schools of thought were used to inform the societal approach to property ownership. The deontological approach proposed that an individual has a natural right to his creating irrespective of the consequences; therefore an inventor ought to reap benefits for his creation. Subsequently, the consequentiality approach put forward the rights placed on any creation of the mind are merely incentive to further technological development. (Copyright, Communication and culture: Towards a relational Theory of copyright Law, by Carys J. Craig, September 11, 2011).

The Trade marks Act in was enacted in 1957 as “**An Act of Parliament relating to the registration of trade marks**” as stated in its Preamble. The Act that relates to patents in Kenya is the **Industrial Property Act, 2001** while the law that relates to Copyrights in Kenya is the **Copyright Act, 2001**. This is before the same could be registered in the Registrar Generals Office in Kenya. Such a procedure rendered patenting a hopeless pursuit for an inventor mainly because the invention was likely to be copied and later patented by persons with easier access to the necessary patenting structures. It was therefore imperative that the government develop a means to protect invention which is easily accessible to inventors in Kenya; hence the establishment of Kenya Industrial Property Institute.

These ideologies have since been adopted into the Kenyan Constitution and enforced by

KIPI (Kenya Industrial Property Institute). The Institute was established on 2nd May 2002 upon the coming into force of the Industrial Property Act 2001. Previously the Institute existed under the Ministry of Trade and Industry. However the two (Trade and Industry) have since been split up and KIPI is currently under the Ministry of Industrialization.

The core functions of KIPI are to administer industrial property rights, provide technological information to the public and promote inventiveness and innovativeness in Kenya by providing training on industrial property. Between 1914 and 1989 the Registrar General, AG chambers, registered a total of 3,920 patents under the Patents and Designs Registration Act CAP 508. CAP 508 was repealed in 1989 upon enactment of Industrial Property Act CAP 509, which established KIPI, the predecessor of KIPI. CAP 509 was in turn repealed in 2001 when the current Industrial Property Act 2001 came into force. As from 2002 to 2010 KIPI has granted a total of 419 patents.

The relevance of KIPI in the protection of intellectual property in the country cannot be disputed as the country is experiencing an “innovation sprout” in the tech, 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 business environment. But different opinions persist amongst the inventors about the exact role of IP in relation to their technological innovations. On one hand, in theory, conducting IP in software is considered to be absolutely necessary to encourage creative intellectual endeavour and reducing risks for the players involved who may then be able to reap acceptable returns for their participation in the process. On the other hand, different people argue they are a waste of money and time.

In a statement delivered by Dr. Karanja Kibicho, the Permanent Secretary in the Ministry of Industrialization, at the 14th session of the United Nations Industrial Development Organization (UNIDO) general conference, held in Vienna, it was stated that the country is on the verge of developing a National Intellectual Property Policy and Strategy that will be executed by KIPI. He further reiterated that “IP policy is an important tool for promoting the generation, protection and commercialization of intellectual property. The anticipated policy would provide a mechanism, structure and framework that can be used to promote the generation, protection and commercialization of intellectual property.”

The endeavour for a national policy and strategy is driven by Kenya’s desire to industrialize and become a middle income economy by the Year 2030 and bring the country policy in tandem with its intellectual and international commitment under the World Trade Organization (WTO) on Trade Related Aspects of Intellectual Property Rights. Hence the need to understand and review how tech startups in Kenya view Intellectual Property in technological innovations taking into consideration an understanding of their current experiences, the structures they have put in place, their understanding of conducting IP and its benefits, as well as challenges they have faced and recommendations.

Methodology

In-depth interviews with a sample size of 15 entrepreneurs from two ICT Hubs (iHub

and iLabAfrica) were conducted, as well as a case study to understand the IP scenario in Kenya from KIPi. Observations were made at the hubs, and a thorough literature review on Intellectual Property rights of software in Kenya through online and manual archived materials was conducted. The data collection took a period of one month, followed by 2 weeks of analysis, design, and reporting.

Objectives of the study were to:

- Understand the trends of Intellectual Property process in technological innovations in Kenya;
- Understand intellectual property from the perspective of tech startups;
- Identify the challenges faced by tech startups and IP service providers around intellectual property rights in technological innovations;
- Document the recommendations and lessons learnt by the tech startups in the process of conducting the intellectual property for their technological innovations.



Trends of Intellectual Property of Software in Kenya

The advent of technological advancement has seen an increase in innovation and creations, notably around the Internet. Information Technology has now been christened as a fully-fledged industry with its own set of rules and regulations. Mobile applications, websites, and corporate outsourcing are being adopted into the Kenyan market as a way of commercializing the ideas. However, one conspicuous thing missing from the industry is the relevant regulations to protect the rising technological innovations and their creations from copycats. So, what is the difference between an idea/concept and an innovation? Are inventions and innovation the same? What can you protect? Can you patent a technological innovation? What is the role of IP in information technology?

Some of these questions were answered at an informative workshop hosted by Kenya Industrial Property Institute (KIPI) on Tuesday May 25, 2010 at the Kenya School of Monetary Studies. The workshop aimed at demystifying 'intellectual property rights' and demonstrating the benefits of IP rights on the economy and society. Some of the feedback that emerged was that ideas on their own are not patent material. However, if you have an idea and you can prove that the idea in question can work and most importantly, that it solves an existing problem—then one has an invention in your hands, or head. Inventions are eligible for patent. KIPI describes inventions as “new technology solutions that solve an existing problem.” An invention can be a product or process, but to patent it, it must be new. “If you believe you have come up with an invention, it is important to file for a patent as early as possible,” says Christopher M. Kalange, Christopher an IP Lawyer. According to KIPI, once you share your idea at a conference or publish it online, then you no longer have the right to patent the invention. Once it is in the public domain, it is no longer “new” and is therefore not patent material.

In addition to technological innovations, ICT Hubs in Kenya have also been on the rise. Currently there are at least 20 innovation spaces in Kenya. These innovation spaces are known as places where ideas are shared and discussed by technology entrepreneurs. Technological innovations springing from ICT Hubs often start out as ideas bounced off of colleagues and mentors who assist in the thought process behind the design of products or even business plans. Therefore, looking at Intellectual Property (IP) specifically within ICT Hubs is of special interest because of the very nature of ICT Hubs, which are built on principles of community, sharing, and collaboration.

Technological innovations may be classified in several ways: product vs. process, radical (basic or fundamental) vs. incremental (improvement), and disruptive vs. sustaining (sequential and/or complementary). Other important types of (non-technological) inno-

vations that do not result from scientific and/or technological R&D, but are often crucial for profitably marketing the products and services resulting from the investment made in R&D are: marketing innovation, institutional innovation, and complementary innovation (WIPO, 2012).

The booming rise of technological innovations in ICT Hubs might be a sign that structures need to be in place to protect these innovations. Alternatively, these innovations might be emerging because of the lack of IP structures. This research aims to better understand this dilemma between collaborative spaces and IP and to understand how technologists understand and use IP within ICT Hubs in Kenya.

Many of the tech startups that work from the various ICT Hubs lack structures that will ensure their ideas are protected legally to become long-term sustainable both locally and globally. According to Lyon Ben of KOPO KOPO, this problem will continue to plague the Kenyan market since startups take a significant amount of time to sprout. This leaves them vulnerable to witty copycats that merge and beat them out of the market.

A reoccurring issue raised during IP workshops held at ICT Hubs was that tech startups see the legal system as a toothless beast. Taking the IP processes to action is seen as challenging, expensive, a waste of time and hinders competition to the extent that it is often seen to be playing a negative role in innovation. Many of the tech startups are driven by the 'small company syndrome' mind-set and perceive the IP system a preserve of the 'big companies' that have huge financial backing and can afford to protect their ideas way beyond their local jurisdiction. The question many of these tech startups forget to ask themselves is: isn't their vision to scale and become successful like the 'big companies?' It is largely up to them to take the leap of faith and protect their innovations if they want to be successful in the long run.

Ben Lyon translates the perceptions to procrastination. According to Lyon, procrastination kills many tech startups despite the fact that the innovators plan to register and execute their idea; the ideas never take off too far. In line with Lyon's statements, Cisco's Senior Vice President, Howard Charney said, "Blame ought to be directed to African startups for patenting things that can easily be discovered by competitors and failing to keep them as trade secrets."

Key Take Aways from the IP workshop by KIPi

Inventions generally offer a solution to a specific problem in the field of technology. However, It is important to understand what kind of work/product/invention one is creating or inventing. Once this is known, the next step is to establish what kind of IP protection is best suited for the work/product/invention they have created.

This protection of Information Technology in IP rights by the law allows the owner of the IP to continue being innovative and provides them with peace of mind because they can continue working without the fear of infringement. However, in the event that infringe-

ment occurs, there are provisions in the law that would protect one's IP, provided one has successfully applied for and received the relevant registration.

Sadly, the software piracy law in Kenya appears to be lax. This provides a fertile ground for downloading of illegal software and applications without fear of judicial prosecution. A piracy study conducted in 2011 showed that 79% of Kenyans use pirated software. Kenya was ranked much higher than the countries in the Middle East, which averaged a usage of 58% respectively (CodeAmor Intelligence, May 2012).



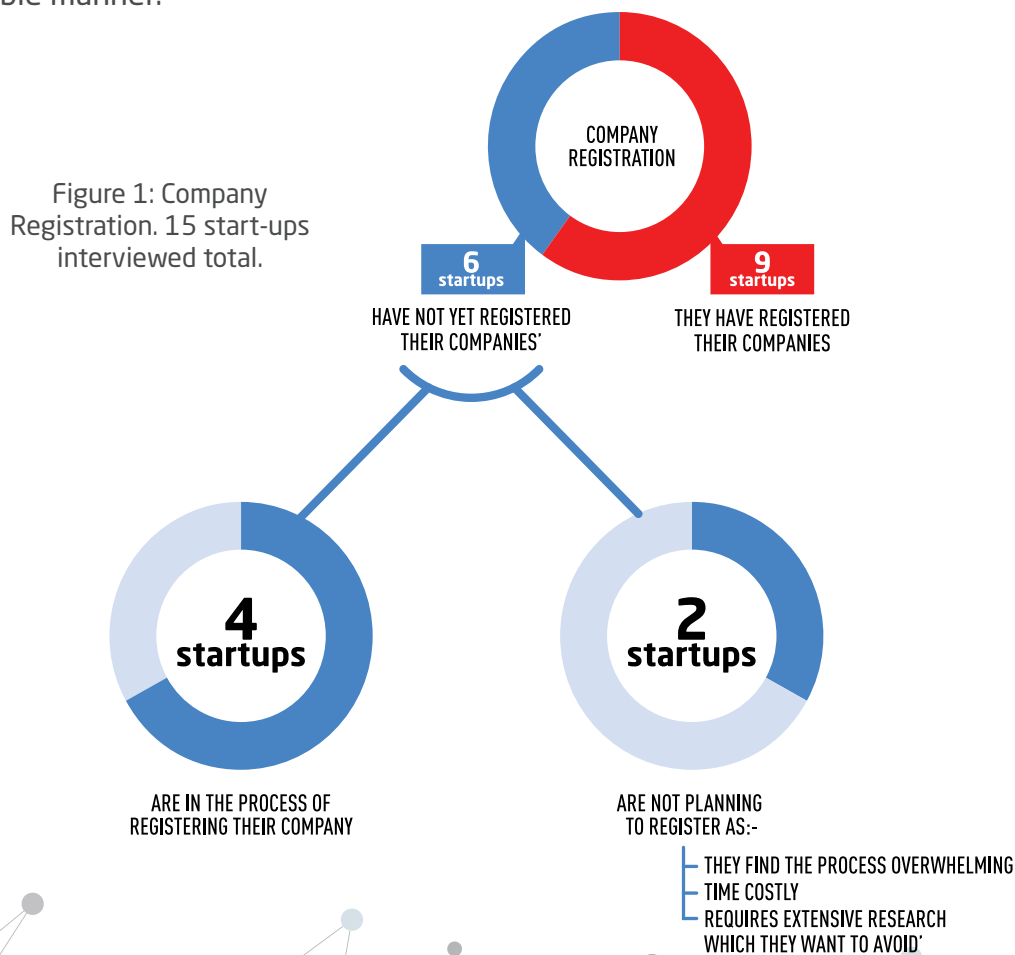
Findings from the Study

Company and Domain Registration

1. Company Registration

Out of the 15 startups that were interviewed from two Kenyan ICT Hubs, over half of them have registered their companies. This shows that many of the tech startups are thinking about the registration process as a “to do” on their checklist and are taking the step seriously.

Of the tech startups that have not yet registered, 4 are in the process of registration while 2 are not registered because there feel there are too many legal processes involved and find the process intimidating. Starting a new business seems to be an overwhelming process for many of the unregistered startups. What many of them do not realize is that company registration is very important. Conducting company registration creates a foundation for the tech startup and structure to define their brand in an organized and credible manner.



Company registration also ensures the government that the business is legal, which enables the tech entrepreneurs to get the necessary licenses they need to operate as well as get the tax forms they need to ensure successful trading with their clients. Even if an individual is still in the ideation stage of a start-up, registering a company name will be a step towards increasing credibility of the start-up endeavour. A company can have multiple products so one is not necessarily tied to an idea even if they register their company. Therefore, in relation to the low risk of registering a company, the benefits can be high.

The tech startups that have not registered should consult or seek out those who have for advice on the registration process. They can also browse various sites to get details or hire a professional who deals with the process to advise on the right procedures to follow.

2. Domain Name Registration

Domain names serve as an address which is used to access a website. Getting a domain name registered is like owning a company business card. A person makes a number of evaluations about a company on reading their business's card. Similarly registering a good domain name reveals so much about a company's image.

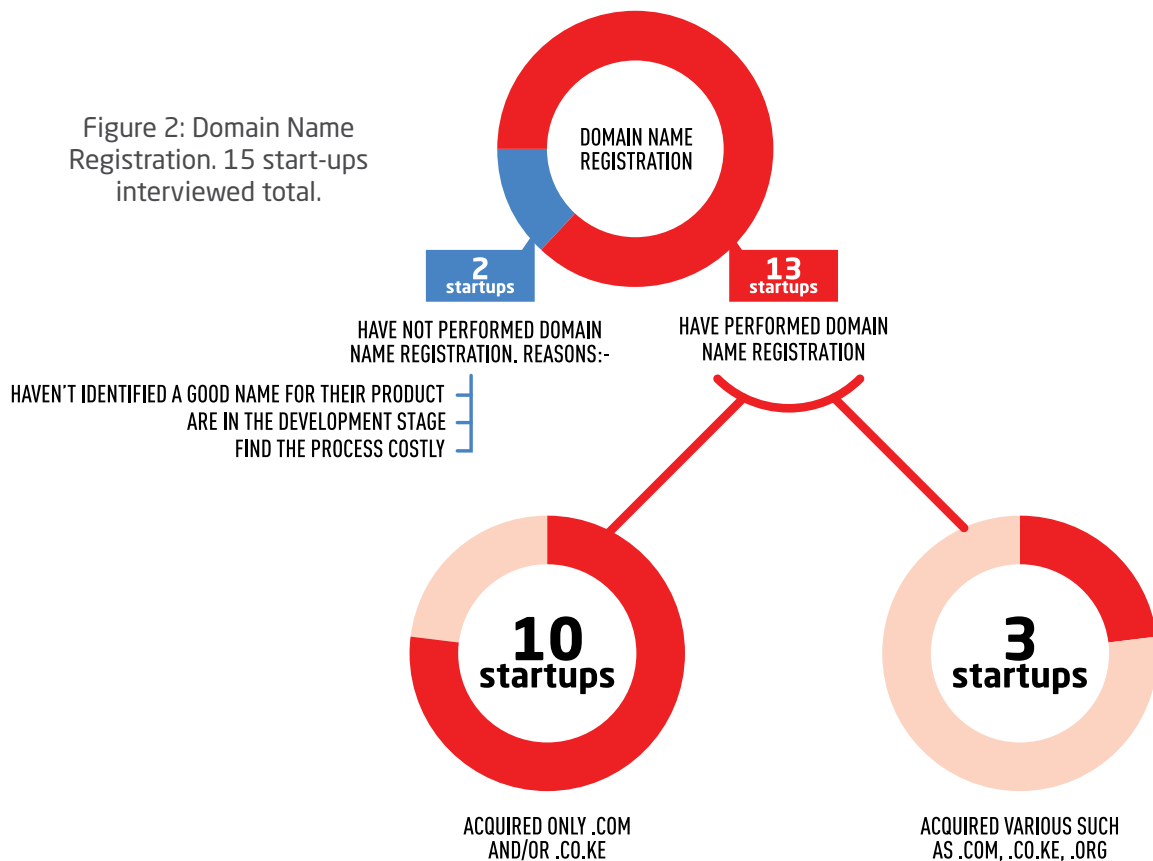
When we asked how many startups had secured all the domain names for their inventions, the majority had registered various domain names apart from two that had not registered any domain name for their inventions. Those that did not have a domain name gave the reason that they still have not have a good name for their software product.

There are different ways that tech startups can ensure they choose the right name for their product. This can be achieved through brainstorming with team members to identify keywords that uniquely describe what they are selling. Other ways might include outsourcing, using crowdsourcing tools to create a list of names. It is advisable that all members of the start-up team be part of this process in order to identify a name that everyone is comfortable with and describes the objectives of the business.

Secondly, involving other external people to assist in creativity and their input can be useful in helping the startups decide on the best name forward. More important, the tech startups need to do some research if the names they have chosen have been trade marked by another company, and if the names have a negative or positive connotation that may end up building or destroying their brand image.

Three (20%) have acquired numerous domain names. About half of the respondents only had one type of domain name, i.e. co.ke. They had not registered numerous domain names because they are either in the process of getting other domain names (i.e. .com) or are working on their product development before they create other domain names. One said that getting a .com domain is hard while the other one said setting up a co.ke would have taken longer, yet they needed a quick setup and that is why they opted for .com which is easier and faster to acquire.

Figure 2: Domain Name Registration. 15 start-ups interviewed total.



However, the majority of the tech startups interviewed do not conduct enough research to identify if their competitors have registered similar domain names or what similar domain names in other countries are being used for, as they might have a different meaning. This research step is vital to help them shape their brand and also optimize their domain name ranking.

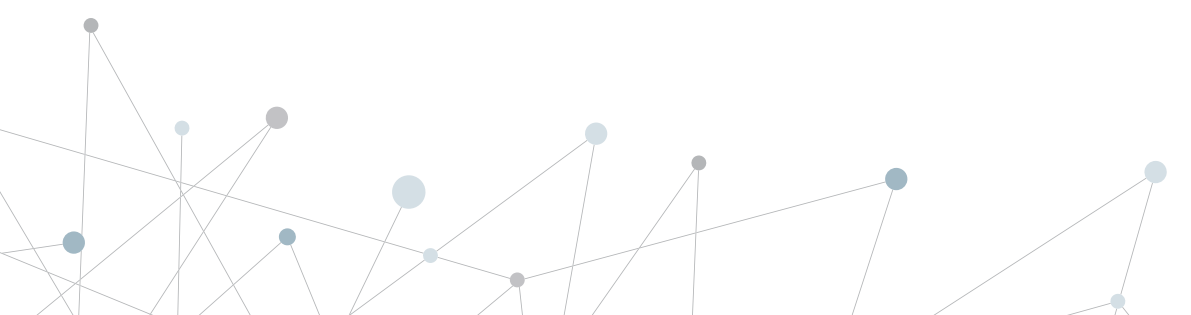
The process starts with identifying and selecting a good domain name. There are many companies online that provide domain name registration services. Startups can consult them to understand the domain name registration process, how it works, how to optimize it and benefits for it to avoid future problems.

The prices to register a domain name for a web site vary and some of the recommended companies with the best offers and quality services that first time startups can perform domain name registration include but are not limited to: SasaHost, Go Daddy, Jambonex and Africa registry among others. These recommendations were suggested by the 86% tech startups that have performed the process successfully before.

Below is a list of domain prices in Kenya as at June 2012. This price information can also be found on the websites of the domain service providers listed below:

Company name	Company website	Price (USD)
Go Daddy	http://www.godaddy.com	.co.ke- \$9.99 per year
		.com-\$9.99 per year
		.or.ke- \$6.99 per year
Jambonex	http://jambonex.com	.co.ke- \$ 23.53 per year
		.com-11\$ per year
		.or.ke-24\$ per year
Africa domain names	Africaregistry.com	(One time fee)
		.co.ke- \$10.00
		.com-\$56.9
		.or.ke- \$20.00

Despite the fact that majority of the tech startups (86%) are seriously thinking of registering domain names for their different products as a way to build an online presence uniquely and credibility, it is necessarily not a good thing. Registering multiple domain names may dilute the parent brand, also if a startup wishes to discontinue their services it may be hard to transfer the domain names.



Perceptions of Acquiring IP Rights in Information Technology in Kenya

In addition to understanding the process of company and domain name registration, it is equally important to understand the process of acquiring intellectual property rights in IT in Kenya. What does one do to protect their technological innovation? Out of the 15 interviewed, three (20%) respondents said that one goes to KIPi to get the IP services; of those three who go to KIPi, one said their understanding for patents is that they are for hardware, copyrights are for software, therefore they went to the Copyright Board to get software; the other two knew that they should go to KIPi but did not know the process. The rest of the interviewed members gave their perceptions as depicted in Figure 3 on the following page:

The feedback received from the respondents shows there are still some gaps especially on the startups understanding the whole process of intellectual property rights in IT. What do the processes entail? How do they apply to technological innovations? Why should they protect their tech innovations? How to protect them? Where can transparent information regarding Intellectual property rights in IT be found?

Intellectual property rights are at the foundation of the IT industry. The term in this context refers to a range of intangible rights of ownership in an asset such as a software program. Each intellectual property "right" is itself is an asset, a slice of the overall ownership pie.

The law provides different methods for protecting these rights of ownership based on their type (Eric S. Freibrun, Esq., Intellectual Property Rights in Software: What They Are and How the Law Protects Them,2010). The implementation of the Kenya Copyright Act, 2001, gave the software industry a new lease of life. For the first time, the copyright law contains the content of and specific limitations to a new form of literary copyright, namely, software copyright, mainly courtesy of World Intellectual Property Organization (WIPO and the Business Software Alliance's (BSA's) proposals. The law allows adaptation and creation of backup copies of computer programs under certain conditions. These conditions include cases where copying of a computer program is necessary to make copies of the program to the extent necessary to correct errors; or to make a backup copy; or for the purpose of testing a program to determine its suitability for the person's use; or for any purpose that is not prohibited under any license or agreement whereby the person is permitted to use the program.

Again, for the first time, the law prohibits and regulates anti-circumvention measures so that digital rights management systems (DRMs) or technological means employed to protect works are protected under copyright law. The Kenya Government has set some machinery in motion to implement the 2001 Act. The Attorney General appointed members of the Board on May 16, 2003 and reappointed most of them in 2006. He appointed the

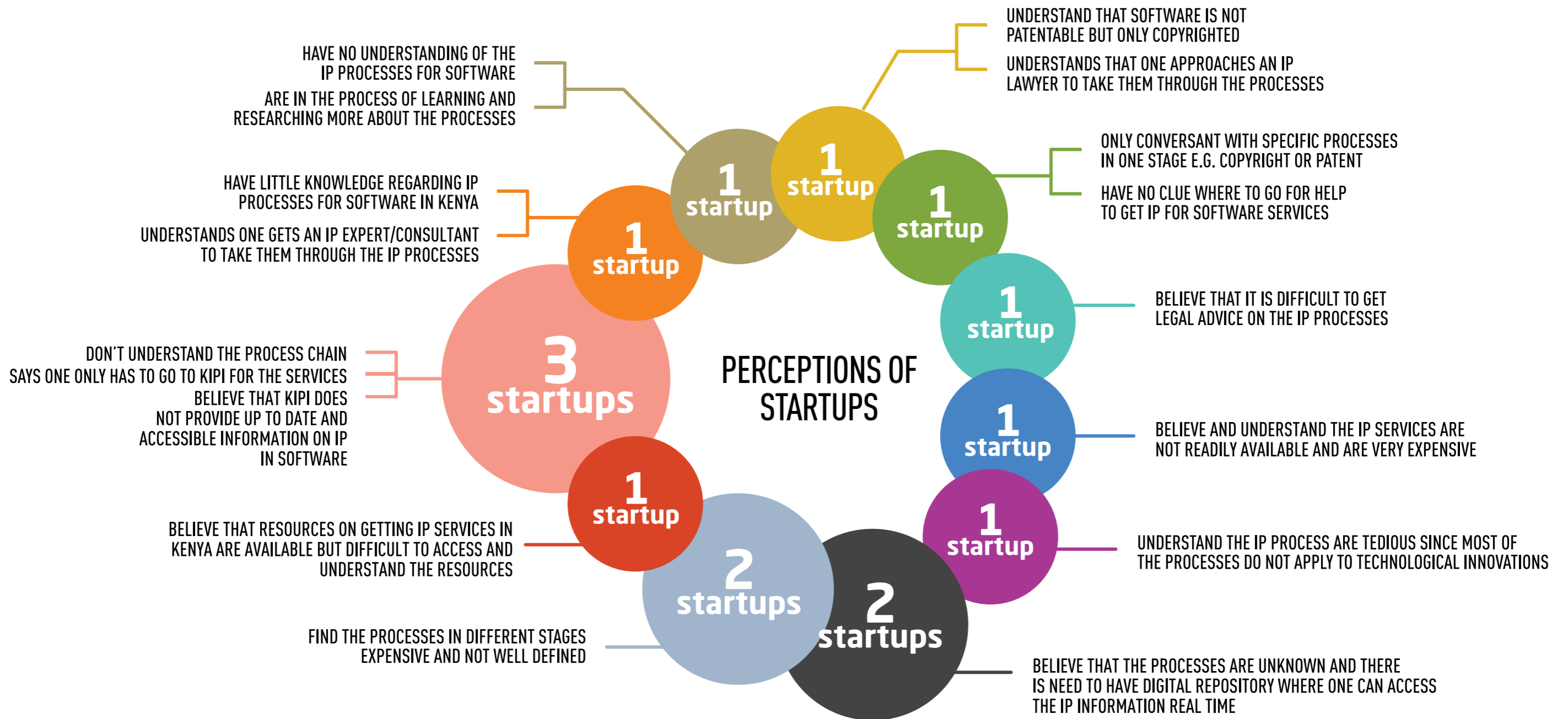


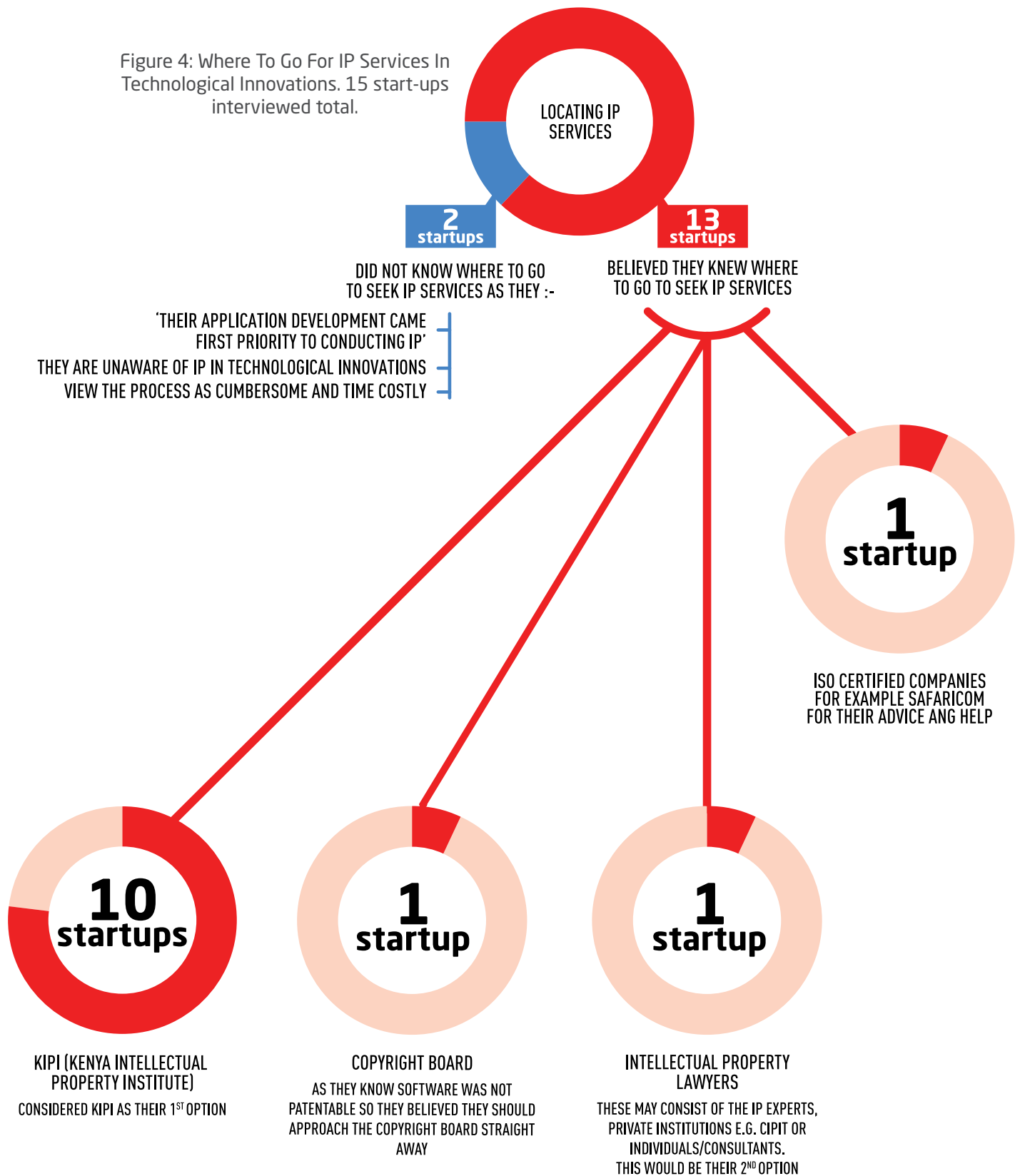
Figure 3. Perceptions Of Tech Startups In Acquiring IP Rights In Technological Innovations. 15 start-ups interviewed total.

Competent Authority (or Copyright Tribunal) on June 26th 2009. There have been mixed views on copyright implementation, management and administration. Some of the views are specifically on the role of the Kenya Copyright Board established under the 2001 Act, while others regard strict copyright enforcement as having a positive effect, or the actual or potential effect of reducing employment opportunities or blocking revenue streams, particularly among the infringers and pirates.

It was encouraging to know that 13 (87%) respondents knew where to get their technological innovations protected; 10 (67%) respondents of the 13 gave their first option as KIPi, followed by IP lawyers who can act as consultants, which 3(20%) respondents voiced. 1(7%) respondent mentioned that they would go directly to the Copyright Board, as they understand software is not patentable. One (7%) respondent mentioned they approached ISO certified large companies such as Safaricom, Seven seas technologies, or any other entity that commands a large influence in the tech industry in Kenya to learn how they went through the processes and what are the requirements. Those who did not know where to go to seek IP advice or help, did not bother to do so because selling their product came first. They believed that it is more important to sell their product before going through the IP process.



Figure 4: Where To Go For IP Services In Technological Innovations. 15 start-ups interviewed total.



Types of Intellectual Property in IT

There are four types of intellectual property rights relevant to Information Technology which tech startups need to be well informed as part of building their structures: patents, copyrights, trade secrets and trade marks. Each offers a different type of legal protection. Patents, copyrights and trade secrets can be used to protect the technology itself. Trade marks do not protect technology, but the names or symbols used to distinguish a product in the marketplace.

1. Requirements for filing a Patent Application

Acquiring a patent as a legal protection ensures that these tech startups have a soft landing when they venture into the corporate world. Their ideas remain their sole property and this protects their inventions and creations from their competitors. However, when it comes to software it is not the applications that are patentable but the algorithms, functions and methods embodied in the software product. Acquiring a patent for software can protect features of a program that cannot be protected under copyright or trade secret law.

The Process of patenting begins with filing an application for a patent through Form IP3. The requirements in filing the application are:

- A request made through IP3;
- A description;
- One or more claims;
- One or more drawings (where necessary); and
- An abstract that entails 150 words.

Patents offer inventors monopolies on their creations for specific periods, and thus provide incentives for research and development. Without the possibility of patent protection, many people might not take the risks or invest the time and money involved in devising and perfecting new products. But patents do more than keep creative wheels spinning. Process of patenting involves the steps below:

- Prepare the Patent Application
- File the Patent Application
- Formalities Examination

KKIPI will then establish whether the applicant has complied with all the requirements under the Law for filing an application. If one has not fully complied with the requirements, they will be invited to make amendments to the Application. If the application has complied fully with all requirements, it will proceed to: substantive examination, amendment of application followed by advertisement of patent. There is no deadline

within which KIPI must publish the patent application. However, an 18-month period is observed under the international Patent Cooperation Treaty (PCT) system of filing for patents. Therefore an inventor may choose to file for a patent under the PCT system of the World Intellectual Property Organization (WIPO). The International Bureau of WIPO then publishes the PCT patent application 18 months from the priority date.

All published PCT applications are available on [PATENTSCOPE](#) for consultation and review by third parties. Third parties have an opportunity to make online observations and to submit prior art that they believe may be relevant to the determination of novelty and inventive step (non-obviousness). Applicants may respond to any third party observations should they so choose.

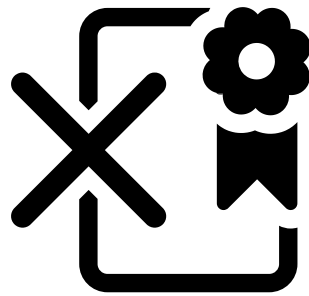
Once a patent has been filed the following steps follow:

Substantive Examination: This will usually involve a determination of whether the Patent is new, non-obvious and whether it can be applied in the industry. The Application for Substantive examination should be done within 3 years of filing the Application.

- **Approval or rejection of Application:** If the approval meets all the requirements, it will be granted. If it does not meet the requirements it is rejected. In case of rejection one may object the same.
- **Objection of Rejection:** Examiner reconsiders and either approves and/or calls for further objections or rejects the application. If final decision is rejected one may Appeal a grant of patent or publication of grant.

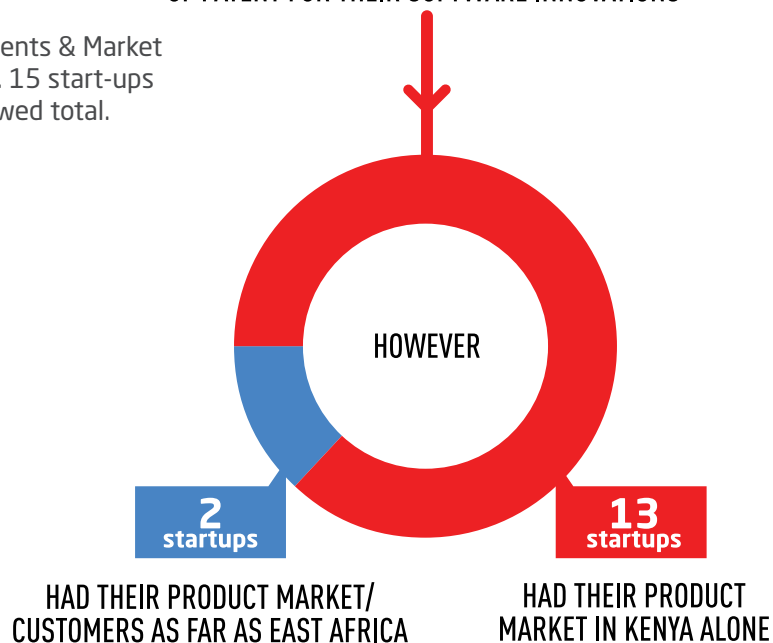
Software-related innovations are not patentable but can be granted for an invention, which may be described as a solution to a technical problem according to WIPO. Each patent document describes a new aspect of a technology in clear and specific terms and is available for anyone to read. Patents are made public specifically to promote the sharing of knowledge. As such they are vital resources for entrepreneurs, researchers, inventors, academics and others who need to keep up with development in their fields.

In our findings none of the 15 respondents have been granted any form of patenting. However, 13 (87%) tech start ups have their product audience in Kenya alone while the other 2 (13%) their product audience has grown exponentially beyond Kenya to the East African market. The 13% that have widened their scope of business beyond Kenya are part of the respondents that have registered their companies and conducted domain name registration. Hence there is also need for them to conduct a patent search to protect their inventions or ideas in the global scale to establish originality and success. In addition the 87% also need to start thinking of acquiring international IP to export their home grown technological innovations.



NONE OF THE STARTUPS HAVE FILED ANY FORM OF PATENT FOR THEIR SOFTWARE INNOVATIONS'

Figure 5: Patents & Market Penetration. 15 start-ups interviewed total.



2. Copyrights

Copyright protection extends to the particular form in which an idea is expressed. In the case of software, copyright law would protect the source and object code, as well as certain unique original elements of the user interface. In order for a copyright to be accepted for registration the following requirements must be met:

- The work must be of original authorship. Originality in the Copyright sense means that the work must not have copied from somebody else.
- Application shall be a prescribed form obtained from the Copyright Office or downloaded from the Kenya Copyright Board Website. The applicant will attach two copies of the works, where applicable with the application
- The work must be in a tangible form including digital form for example VCD, CD, DVD, books, and Music cassettes.
- A duly completed application form, fully filled, must be witnessed by a commissioner for oaths and accompanied by the required fees.

On receipt of the application, the office may, after making such enquiry as it may deem fit; enter the particulars of the work in a Copyright Register. The Copyright Office will then issue a certificate of registration within 7 days from the date of registration after a registration fee of Ksh. 1000 has been deposited in the Copyright Accounts.

5 (33%) of the tech startups interviewed have secured their software by registering for a copyright and of those 5, 3 found the process hard and costly. Others claimed it took too long and 1 respondent said had they known that software innovations are not patentable, they would not have wasted time to go to KIPI where they spent 2 months trying to understand the processes only to realize they were in the wrong place. Instead they would have approached Copyright Board to get a copyright in at least 2 days. 1 respondent found the process moderate except for the many legal procedures that were required.

The owner of a copyrighted software program has certain exclusive rights. Such rights include the right to copy the software, create derivative or modified versions of it, and distribute copies to the public by license, sale or otherwise. Anyone exercising any of these exclusive rights without permission of the copyright owner is an infringer and subject to liability for damages or statutory fines. 10 (67%) out of 15 respondents have not copyrighted their software. 3 (20%) said that they are developing a platform that is open source hence they saw no need. The other 2 (13%) cited that the process of software copyright is complex as their reason for not acquiring it. The remaining 5 (50%) out of the 10 who did not copyright their software said that they have not really thought about the whole process and were working on growing their brand first. All these is as depicted in the Figure 6 below:



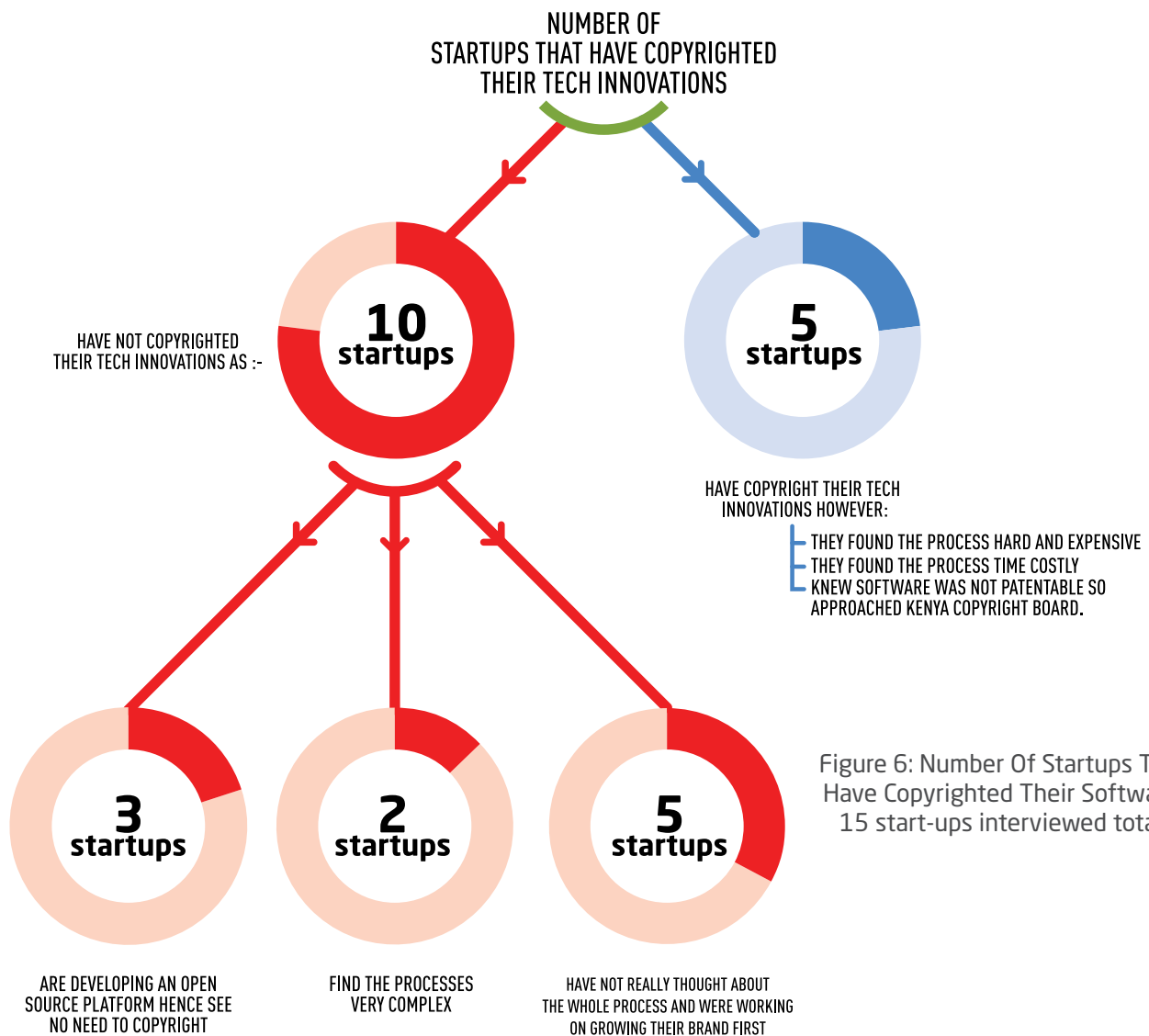


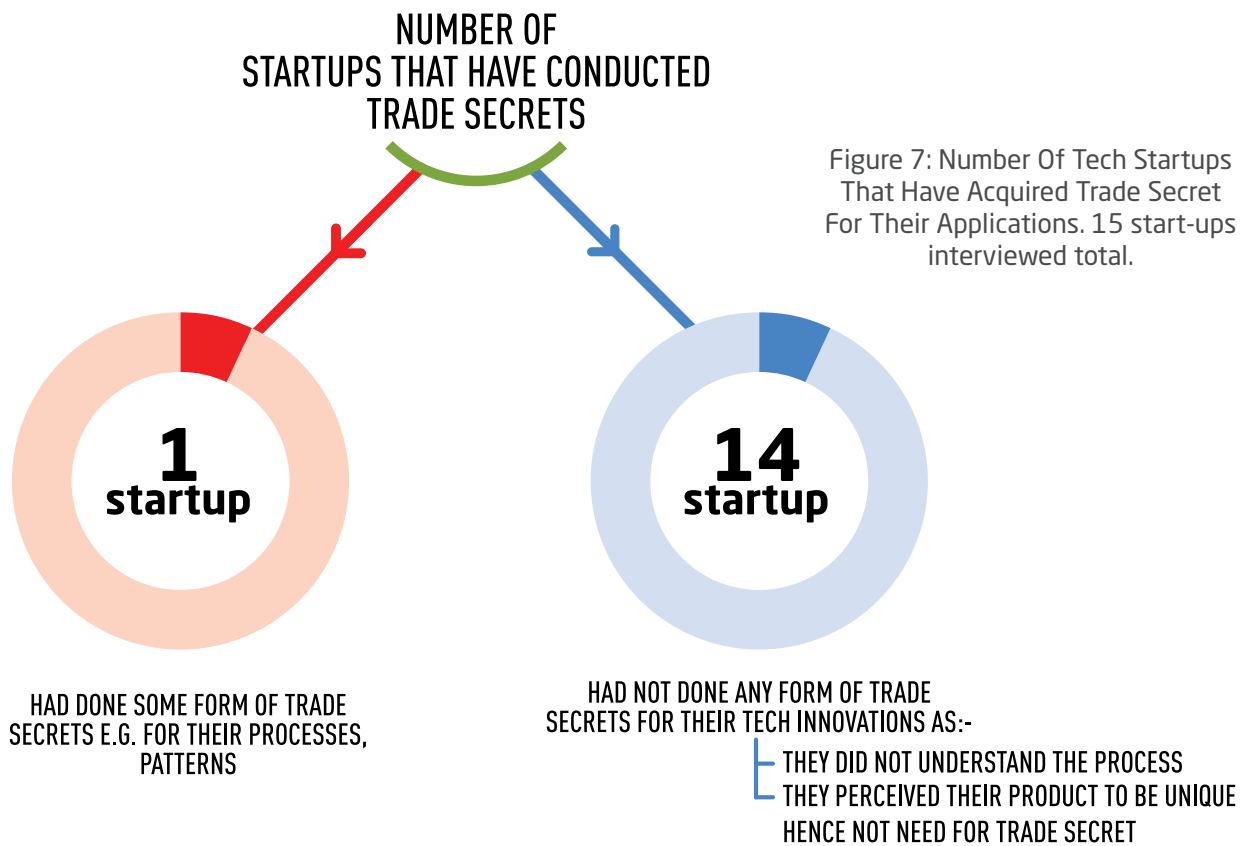
Figure 6: Number Of Startups That Have Copyrighted Their Software. 15 start-ups interviewed total.

3. Trade Secret

A trade secret is any formula, pattern, compound, device, process, tool, or mechanism that is not generally known or discoverable by others, is maintained in secrecy by its owner, and gives its owner a competitive advantage because it is kept secret. Many features of software, such as source code and the ideas and concepts reflected in it, can be protected as trade secrets. This protection lasts as long as the protected element retains its trade secret status. Trade secrets are not subject to infringement as with patents and copyrights, but are subject to theft. Their legal status as a protectable intellectual property right will be upheld if the owner(s) can prove the trade secret was not generally known and reasonable steps were taken to preserve its secrecy.

Only one (7%) respondent out of 15 has undertaken the necessary steps to understand what kind and type of trade secrets his competitors hold. While the other (14) 93% had not conducted any form of trade secret as they did not see their competitors as a threat

and their software brands are relatively young to warrant a trade secret as some of the reasons they haven't conducted the process.



4. Trade marks

Trade marks do not protect technology, but the names or symbols used to distinguish a product in the marketplace. This concept was not well understood by the respondents and neither could they differentiate it from patents, trade secrets and copyrights. According to Kenya Industrial Property Institute (KIPI) trade mark may consist of one or more distinctive works, letters, numbers, drawings or pictures, logos, monograms, signatures, colors or combination of colors etc. The sign may consist also of combinations of any of the said elements.

A trade mark can be a word, a symbol, a design, or a combination of these, used to distinguish the goods or services of one person or organization from those of others in the market place (International Trade mark Association, 2012). The Trade marks Act (Cap 506) describes a mark as a distinguishing guise, slogan, device, brand, heading, label, ticket, name, signature, word, letter or numeral or any combination thereof whether rendered in two-dimensional or three-dimensional form.

A trade mark provides protection to the owner of the mark by ensuring the exclusive right to use it to identify goods or services, or to authorize another to use it in return

for payment. All of the 15 respondents interviewed have logos. However, only 5 (33%) have filed trade marks for their logos. Figure 8.0 below shows the reasons why the tech startups that have not conducted a trade mark gave:

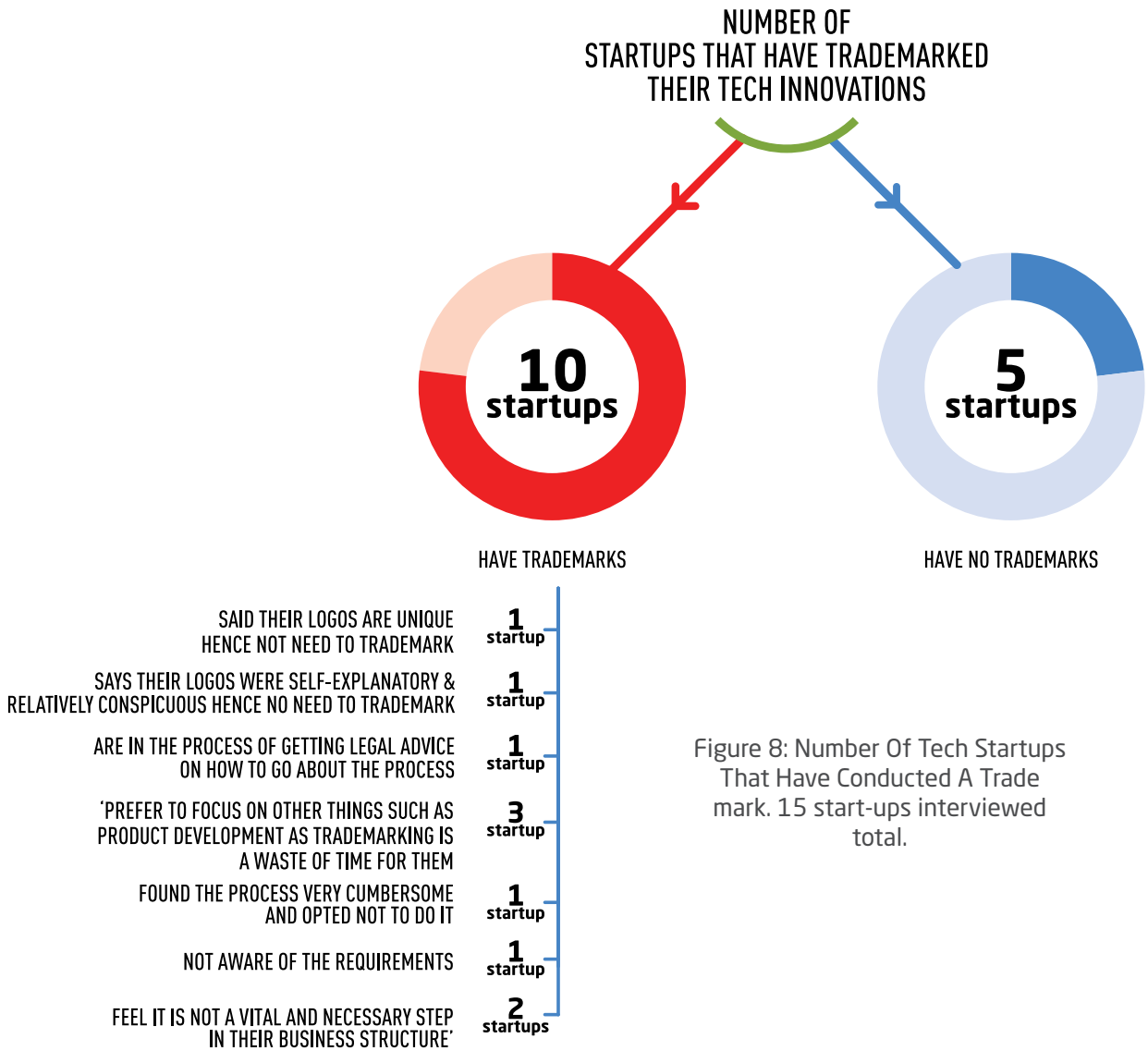


Figure 8: Number Of Tech Startups That Have Conducted A Trade mark. 15 start-ups interviewed total.

Role of IP In Enhancing Competitiveness of Tech Startups

Often, the technological innovations developed by the startups end up being replicated and distributed on media such as the Internet. Many tech startups do not realize the value of being the first to protect their ideas by first researching the IP their competitors have and subsequently giving them a powerful presence in the market.

Two (13%) respondents had searched for the IP of their competitors by consulting IP lawyers to help but their lawyers cautioned them that it is a grey area and costs too much. Of the 13 (87%) respondents that had not searched for the IP of their competition: 3 said it was too costly and expensive for startups, one saw no need to do it, 4 said they are a monopoly on their market, one said their product was unique and therefore would not

encounter competitors, one was not concerned about their competition and therefore did not find it relevant to carry out the search. One said he just has not been able to do so but knows their competitors patents their processes then brand them because they can afford, one said it was not possible to do so, and one has considered looking into it but is yet to do it. All these are depicted in Figure 9 below.

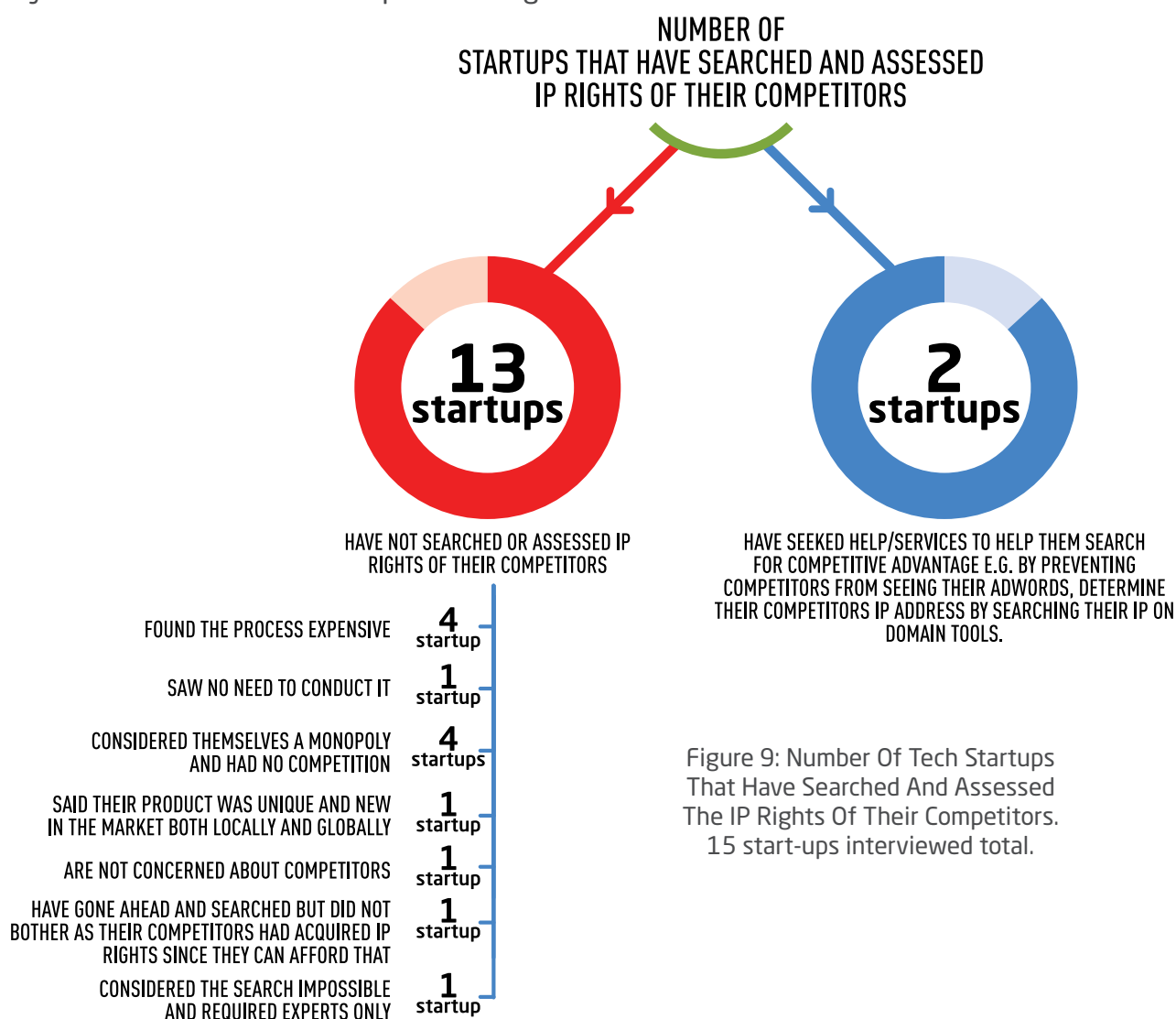


Figure 9: Number Of Tech Startups That Have Searched And Assessed The IP Rights Of Their Competitors. 15 start-ups interviewed total.

Identifying a startup’s IP with those of a competitor helps the entity position itself effectively in the marketplace. Managing innovation better than its competitors is one of the main objectives of a business that wishes to survive and thrive in today’s economy and this can be aided using the different IP tools.

As per the responses of the startups, they need to change their mind-set and stop thinking of themselves as ‘small companies’ and only large businesses can afford to conduct the IP processes. The initiative should start with them making an effort and using available resources and help by conducting search engine optimization to know what their competitors are doing or have secured.

Case study: Acquiring IP for Technological Innovations at KIPI

The processes involved in Intellectual Property for Information Technology rights involves creating awareness on the importance of patents and the role of the Patent Office, receiving applications from the potential inventors, filing of the patent specification together with the necessary forms and application fees and verifying their completeness. The researchers managed to have an interview with Mr. Sylvance Sange, the principal examiner at KIPI, who explained the current processes for acquiring tech IP in and was open to provide relevant resources that form part of the literature, reference materials or appendixes in this report:

1. Is technology patentable or not?

“There has always been a big debate on whether technology is patentable or not” says Mr. Sylvance Sange. “Patentability of Technology depends on what an inventor hopes to claim”, he added. The piece of technology in question has to have some sort of technological effect. To further expound on this point, Mr. Sange used the example of a cellular phone to break down the concept and levels of intellectual property that come into play. “ The design and aesthetics of a cellular phone is an industrial design, the brand names (Samsung, Apple, Nokia) are trade marks and the software that gives the phone that technological effect, usually warrants a copyright”.

2. Processes involved in IP in technology and how long it takes

The life span for each type of IP in technology varies. Patents are valid for a maximum period of 20 years, provided the owner pays annuities (renewals) every year. Copyrights on the other hand have a lease of a maximum period of 50 years. Industrial designs last for 15 years while utility models remain viable for 10 years. Trade marks and service marks are effective for a period of ten years from the date of registration. However, they can be renewed for additional decades in perpetuity. They can exist as long as you keep renewing them every 10 years. Some trade marks e.g. Pepsi, Louis Vuitton are more than 100 years old.

The Copyright Act protects certain classes or categories of works. The following works are eligible for copyright, if they are original.

- Literary works e.g. books and written composition novels.
- Musical works e.g. songs.
- Artistic works e.g. paintings and drawings.
- Cinematograph films e.g. programme carrying signal that has been

transmitted by satellite.

- Sound recordings.
- Broadcasts e.g. broadcasting of films or music.
- Published editions e.g. first print by whatever process.
- *Computer programmes (software)

3. Filing, documentation and sustainability plan

Additionally, for a work to be eligible for copyright protection, it must be written down and recorded to material form. This means that software source code needs to be documented and filed. It is worth noting that if the piece of software is on a compact Disc, the Disc bearing the software is patentable but the software ought to be copyrighted.

Technology related inventions also require a yearly sustainability plan in order to 'keep them relevant'. The sustainability plan entails paying an annual subscription fee to KIPi or the copyright board so as to keep the documentation of the patent and copyright relevant.

4. Challenges KIPi has faced so far

"KIPi as a government entity faces an array of challenges; both internal and external," says Mr. Sylvance Sange. There is a lack of relevant data in businesses in Kenya. Consequently, conducting an IP audit is time-consuming due to the fact that few companies have a specialized office dealing with the company's IP matters. It is even more difficult to conduct a valuation because of lack of specific data on invention costs, advertising costs per IP and other necessary information. Further, there is a lack of IP valuation and management organizations in Kenya.

There is also too much secrecy about IP in Kenya. Accordingly, comparable data is lacking where needed. In addition, inadequate enforcement of IP laws is a key challenge. The Anti-Counterfeit Agency is yet to establish its presence countrywide.

Mr. Sylvance further added that in Kenya, the IP asset is not recognized as collateral for purposes of obtaining finances. This is due to various reasons. The financial institutions have not yet recognized it as an asset that can be used as a powerful tool and the owners of IP have also not recognized it as an asset that can be offered to the financial institutions as collateral. More importantly, the law is deficient in that it does not provide for the creation of charges on Intellectual Property or registration of an interest in the register other than an assignment or license.

The lack of a deliberate intellectual property strategy and policy in Kenya is also inhibitive, although the 2010 Constitution is very IP-friendly

KIPi requires a period of 18 months to process the eligibility of a patent before it becomes

viaible. This time frame is viewed to be too long by many inventors and subsequently has labelled the entity as being ineffective and full of cumbersome processes. Additionally, the citizenry is slowly accepting the intangibility nature of Intellectual Property in Kenya, especially in tech related inventions.

5. KIPI Mitigation of challenges as mentioned above

In order to mitigate the above challenges, KIPI is structuring its administrative arm to make it more modern and relevant. This will be further enhanced by building human resource capacity by attracting more skilled labour force and improving its infrastructure in the coming months.

KIPI is also drafting more watertight IP law and regulations that the legislature can enact. This will ensure that inventors in Kenya are well protected from copycats.

Mr. Sange further added that his department is working on ways of providing the public with proper information on intellectual property and promoting human creativity in Kenya. This will be further enhanced through the workshops and programs that have been running in these ICT Hubs among other forums.

6. Communication channels KIPI uses to create awareness on IP rights

KIPI makes use of various communication channels to create awareness and educate the inventors on the processes related to IP in IT rights. The first is the use of their website (<http://www.kipi.go.ke/>). This medium of communication is the cheapest and frequently used by tech savvy inventors to get information. The website is populated with all related information and procedures regarding patents and trade marks among other necessary information. KIPI is also working to ensure that the information on their website remains relevant and up to date.

KIPI also sponsors outreach programs that create awareness and educate the public on the importance of IP. The outreach programs targets universities and innovation conferences where techies meet. Subsequently, KIPI collaborates with other IP entities such as Kenya Copyright Board and CIPIT (Centre for Intellectual Property and Information Technology Law) in Strathmore University (<http://www.kipi.go.ke/index.php/outreach>) to be able to escalate their services to a wider audience. The education and Outreach programme was launched in March 1995 with a view of implementing two of the four core functions of KIPI namely:

- Dissemination of patent information to the public; and
- Promotion of inventive and innovative activities in Kenya.

“The general Kenyan public, and in particular the crucial informal sector, is still a long way

from understanding the industrial property system let alone how to utilize it for industrial development” Mr. Sange points out. Furthermore, the general public is largely unaware of the fact that protection is given for a limited period only, after strict conditions are met and that once the protection ends, the invention becomes available and accessible in the public domain.

7. Internet and IP

Mr. Sylvance Sange hailed the coming of age of the Internet and the simplification it offers to the day-to-day lives of individuals. Concepts such as e-commerce, paperless banking and social media possess some form of IP in them i.e. Trade marks and service marks for logos and designs can be done as well as creating social media pages.

In conclusion, Mr. Sange reiterated that for the past 100 or so years, Intellectual Property has largely been seen as a purely legal and technical matter thus distancing the general public from the subject. As a result there is less understanding of and support for intellectual property protection.

Challenges for Enforcing Intellectual Property Rights

1. Challenges faced by KIPi

In addition to the above-mentioned challenges in the above case study, KIPi still continue to face other challenges that include:

Small number of patents applied

This challenge relates to the small number of patents applied and issued in Kenya (KIPi Annual Reports between 2002-2010). Only 419 patent applications had been granted by 2010. This may be attributed to the amount of fees charged by KIPi, which are considered to be rather high for tech startups, most of whom are bootstrapping. The other reason is due to the lack of data on IP in IT rights that may lead to creating knowledge and awareness as a form of research and development for the tech startups.

Dissemination of patent information

The dissemination of patent-related software rights information in Kenya is still an issue of concern. KIPi’s outreach programme is in its infant stage and its impact is yet to be felt in educating the public on patent information available at KIPi to enable them utilize it. Most people are unaware of what can be copyrighted and the criteria for copyrighting. The absence of a patent information policy at KIPi is also a challenge, hindering effective management of patent information in Kenya.

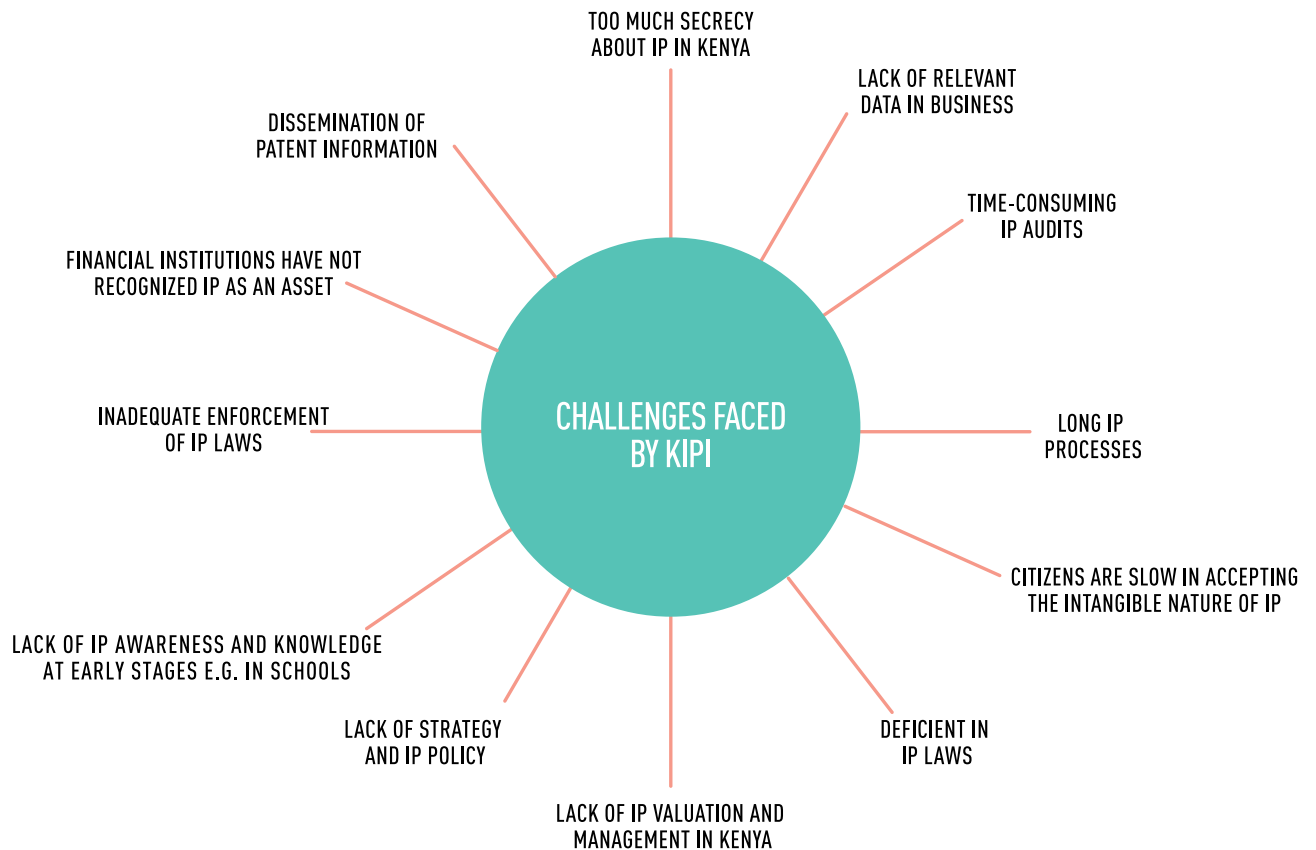


Figure 10: Challenges faced by KIPI in IP

2. Challenges faced by the tech startups

High cost for filing for a patent

Half of our respondents stated that the amount charged for filing and processing patent applications is overwhelming. The costs are as depicted below:

COSTS FOR FILING FOR A PATENT

Processing patent application	KSh 3,000 (US\$43)
Searching fee	KSh 2,000 (US\$29)
Examination fee	KSh 5,000 (US\$72)
Registration fee	KSh 3,000 (US\$43)
Publication fee	KSh 3,000 (US\$43)
Maintenance fee	Between KSh 2,000–5,000 (US\$29–\$43)

On the other hand, the costs for patent, copyright, trade mark and acquiring trade secrets are as shown in the Appendix below, which majority of the tech startups mentioned they are relatively high.

Long application processes

14 of 15 respondents reiterated that the time taken to process applications is obviously long. This includes the time a patent is filed to the time the other stages are administered, which all involve considerable documentation that the tech startups felt they had no time to do. They termed some of the processes redundant and hence need to solidify and standardize the processes.

Incompetent staff

The issue of skills and competencies of the staff charged with the responsibility of managing IP information at the Kenya Industrial Property Office has also impacted negatively on the management and use of patent information in the country. Although institutions such as KIPI have a number of professionals, quite often their deployment and allocation of responsibilities tends to be poor and dis-organized. In addition, registry staff who are directly responsible for filing and managing patent records lack the necessary skills and competencies in records and information management which are key to proper maintenance and care of these records, including patent records.

Finding up to date information

There is a lack of relevant data in businesses in Kenya; this was also echoed strongly by the principal examiner Mr. Sange. There is no up to date information available on digital channels that can then be used as open data. Lack of information has led to a more difficult process in valuation and auditing of IP systems. On the other hand, the lack of information may be attributed to the fact that many of the small business are surrounded by a lot of secrecy and are not willing to discuss and file their technological innovations.



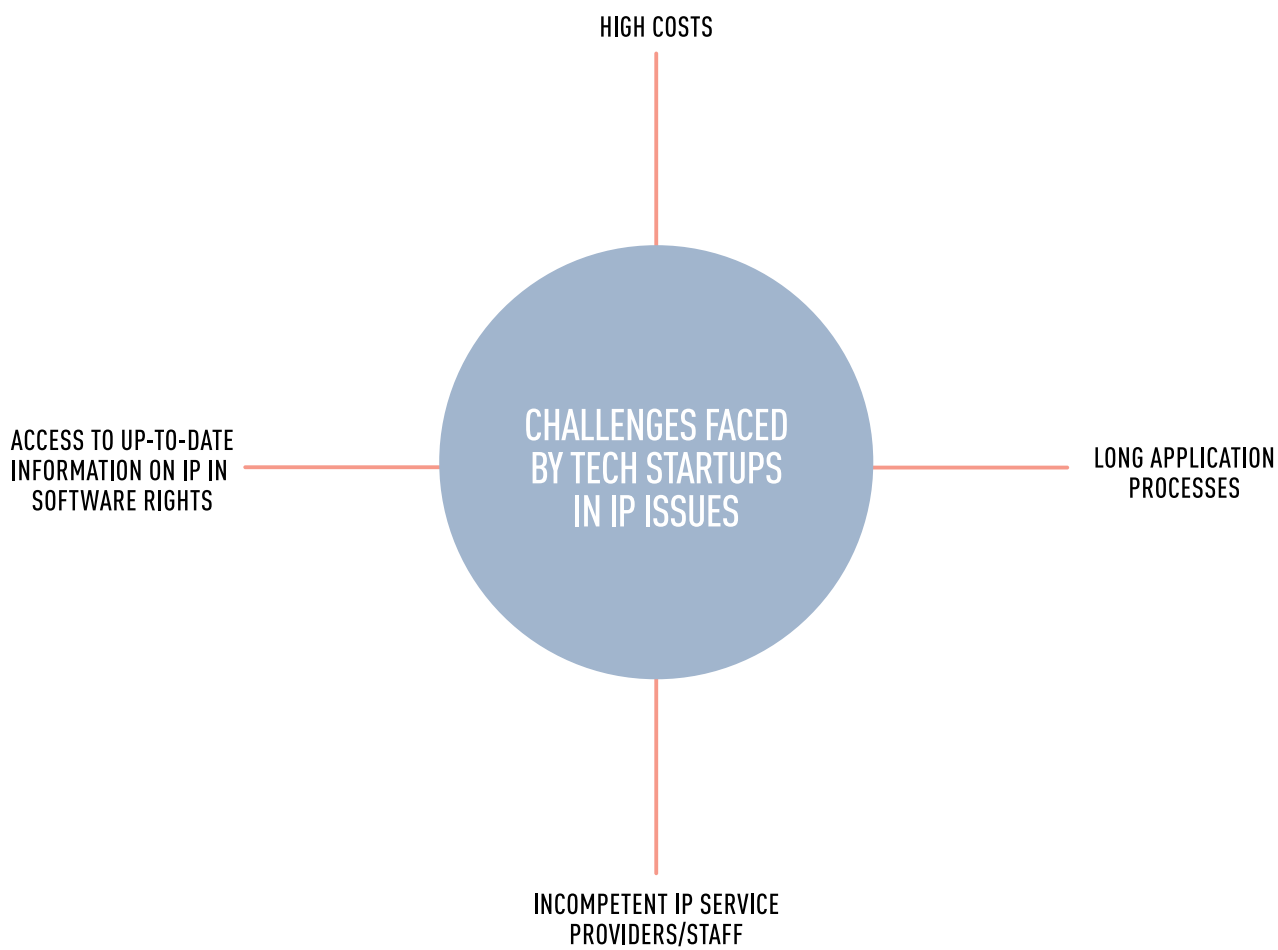


Figure 11: Challenges faced by tech startups

Recommendations for Increasing Awareness on Kenyan IP

Most of the interviewed tech startups felt there should be more awareness made on IP rights in Information Technology. Knowledge on intellectual property will assist developers and tech startups determine which piece of IP best suits them and subsequently protect their creations.

In order to ensure that the masses are well educated and equipped with the relevant IP information, entities such as KIPIT uses communication media such as their website, seminars and community outreach programs. The outreach programs targets universities and innovation conferences where techies meet and learn from experts.

Other IP entities such as CIPIT (The Center For Intellectual Property And Information Technology Law) in Strathmore occasionally organizes seminars that target lawyers, business professionals, venture capitalists, media houses, and startup incubators in the area of IP law, with a particular focus on issues unique to ICT. Examples of training topics CIPIT provides include but not limited to IP portfolio management, IP valuation, patent drafting and filing, and effective IP licensing.

The tech startups feel there is need to make the IP processes more welcoming and transparent in order to attract more of them to conduct the IP. Below are some recommendations for the various stakeholders.

Recommendations to the Kenyan Government

- **Government's role in IP:** The government should provide accessible help for tech startups to protect their technological inventions. Tech startups have pleaded that there is need for government to play an active role to ensure an ecosystem of qualified lawyers and service providers is enforced in case of infringements. In addition, the government's role is to ensure consistent enforcement of laws to punish those who violate intellectual property laws.
- **Create an incentive system** to encourage tech startups to protect their innovations e.g. tax holiday, where public IP service providers gives a window period where these tech startups can conduct the IP processes at subsidized costs. Also, through provision of free practical programs that can be part of the ICT Hubs activities.
- **Intellectual property law as a subject in schools:** There is need for having IP as a subject in tech related courses. This can be achieved by offering

practical courses on how IP Protection is conducted, and its requirements. The respondents echoed that trying to understand IP, as an independent topic is very uninteresting, hence making the topic more interactive and practical in the context of technology could be a solution to encouraging tech entrepreneurs to understand and utilize IP rights.

- **Increase capacity of expertise:** The tech startups mentioned that, they feel that majority of the human resource responsible for these processes in the public IP service providers such as KIPI, do not have sufficient knowledge and expertise on IP rights in technological innovations and when approached for help are unable to effectively assist. The government should therefore invest in more skilled and tech savvy personnel to assist in these processes.
- **Create awareness:** 93% of the tech startups interviewed, pointed out that there is great need for continuous awareness to be done where they are located. The government needs to come nearer to the ICT Hubs and form part of the ecosystem. The different ways of creating awareness can include: having regular workshops, programs and other activities, as well stationing IP lawyers at the hubs and having up to date information on their websites and materials.
- **Standardization of processes:** a few respondents suggested there is need to standardize the process involved in each stage of IP in order to ensure uniformity and efficiency that will encourage more tech startups to invest in protecting their technological innovations.
- **Ensure transparency and up-to-date database:** The public IP service providers should provide access to their information and regularly update their databases with regards to the IP they have granted in a given period. The local databases should be integrated with the other databases internationally in order to streamline processes such as searches.

Recommendations for ICT Hubs

- **Customer services desk at the ICT Hubs:** There is need to have representatives from the different IP service providers, sitting in these Hubs to understand how the tech startups work, their background and then assisting them in conducting the IP processes for their innovations. Other ways to facilitate this customer service would be through online chats or a toll free line with the IP experts to be asked real time questions.
- **Facilitate practical IP events and workshops:** Tech startups interviewed added that there was need to have more practical events and activities. Events that encourage more knowledge sharing among tech startups that have been successful to conduct the IP processes and the ones who have not. Also the IP experts should create time in such events to understand the tech startups products and take them through the right processes.

- **Document and publish on IP in IT subject matters:** Majority of the respondents suggested the need for the ICT Hubs to publish and push success stories or case studies of tech startups who have successfully conducted the IP processes, in order to learn from them and approach them for help. These publications can be done through the Hubs blogs, newsletters and website resources such as white papers.
- **Make the benefits and opportunities clear:** Tech startups should be shown the opportunities, benefits, risks, and trade-offs of conducting IP for their software innovations. Basically the role of IP needs to be clearly explained to them, the pros and cons and the sustainability plan for it. The ICT Hubs, management team can play a big role in communicating this message, as they are the stewards of connecting the tech startups to the right people or potential investors. This way they will help them by making sure all their structures are before approaching any funding opportunities.
- **Aim to create a culture of IP rights through collaborations:** Tech startups also recommended that there is need for the ICT Hubs to work with the other IP stakeholders in ensuring that the culture of tech startups to protect their technological innovations is instilled as part of developing their inventions. This is due to the fact that IP in Kenya is still not clearly understood. There should be collaborations with KICT (Kenya ICT) Board and institutions such as CIPIT to reach out to tech startups in the ICT Hubs.

Recommendations for Private IP Experts and Entities

- **Take time to understand the background of the tech startup:** A few of the respondents argued that some of the private IP experts such as consultants and private entities, have not time to understand the background of the tech startup in order to provide the right processes. This tends to result in generic solutions that do not address the problems that the startups actually have.
- **Reduce IP expert service charges:** Majority of the tech startups mentioned they have approached private IP experts to assist them protect their technological innovations. But they end up being very expensive, their prices almost twice as much as public services. This discourages them from continuing with the process and instead they focus on other things like developing their products.
- **Lack of personal versed in IP rights:** Tech startups mentioned that it is not easy to find lawyers who have specialized in IP rights in IT. Those that are there are not easily accessible or their information and contacts is not transparent online.

IP Lessons Desired By Tech Startups

Half of the tech startups have not attended any IP workshop or events. The other half have attended either at the iHub, Strathmore University and one organized by Kenya ICT Board and CIPIT (The Centre for Intellectual Property and Information Technology). Ma-

majority of those that attended such events have found these events helpful though one found the events not wholly comprehensive, as IP is a broad topic that cannot be covered in one session. Tech startups interviewed would therefore like to learn about:

1. Different types of IP Information Technology rights: Many tech startups wish to learn the different branches of IP such as patents, copyrights, industrial designs and trade secrets and how long each process takes. A firm grasp of these concepts would educate them on what type of protection to go for in order to secure their creations.

2. Different patenting scenarios, e.g. when patenting software as a service, patenting a product where the client will own the rights to the source code. Information on how to give source code to different clients without them claiming rights to it or claiming violation of rights is another important thing the tech startups would like to learn.

3. Know a list of recommendable IP lawyers or entities. Who and where are the experts that can be approached and are available to assist the tech startups protect their ideas? The tech startups are asking for recommendations of people who can help. This can be facilitated by the ICT Hubs network as well as through crowd sourcing of IP lawyers who have expertise in IT to be mapped on open platforms.

4. Role of IP in tech innovations: Tech startups want to understand the basics of why they should register their innovations IP and the benefits.

5. Exploitation of IP rights: Tech startups want to hear more case studies of where IP rights have been violated, and how redress was achieved; which authorities to involve and the resulting effects.

6. Advice based on the technological innovation: Tech startups are interested to get practical advice in IP and licensing matters based on their case study but not general views as most of their businesses/products are different hence there is need for the IP experts to sacrifice a bit of time to review each startup and help them based on the nature of their company and type of technological innovation be it product vs. process, radical (basic or fundamental) vs. incremental (improvement), and disruptive vs. sustaining (sequential and/or complementary).

7. Access to online templates and tutorials: Tech startups want to have access to online application templates that they can download, fill in then send electronically instead of having to go physically to the IP service providers. These resources should be simply formatted, clear instructions and without too much legal jargon. The majority of the respondents mentioned they find the materials with lots of legal jargon difficult to understand.

8. Transparency on costs involved in each stage: Tech startups wish to learn more about the aggregated costs involved in each stage of IP. What are the cost implications in both short and long term?

Perceived Benefits of Administering IP on Software Rights

14 of the 15 respondents think there are benefits to conducting IP in their technological innovations. The one respondent who did not think there are benefits says he does not see the importance of conducting IP processes because he views this as a waste of valuable time and monetary resources that could otherwise be channelled to other meaningful ventures such as selling the product, further development.

Five (33%) tech startups stated that IP gives them a weapon against copycats/competitors. This ensures that their ideas and creativity are not used without prior consent facilitating the market success of the innovations. For most technology-based enterprises, a successful invention results in a more efficient way of doing things or in a new commercially viable product.

- The majority of respondents stated that it could be used as a source of revenue as one will continue to have ownership and competitive edge for their products. This implies that the use of their software by second party entities is solely at the discretion of the first owner (the tech startup). The Copyright Act gives all authors a set of rights that only they may exercise. These include the right to make copies, to prepare derivative works, to publicly distribute, display and perform the work, and in the case of digital sound recordings, to perform the works over a digital network. This can be commercialized through licensing the products as the tech startups retain full IP ownership.
- IP as a tool is a form of unique identity: In the future development of taking it to the market through partnerships (such as, joint ventures, strategic alliances, licensing agreements, merger or acquisition) the ownership of IP provides a strong negotiating position in the process of getting into partnership. Both parties would avoid potential future conflicts if ownership of IP issues were resolved initially with clarity.
- Brings a sense of security: Many of the interviewed tech startups understand that protecting their business and technological innovations is a vital step for the overall good governance. This will ensure business confidence, compliance and protection against the ever-changing ICT security landscape.
- Due diligence-Assessing value and risks: During the interviews half of the respondents did not know that acquiring IP rights in their software was a means to expand their business, to raise capital, and to provide financial gain. To understand the full value of company intangibles and make the most of their potential benefits, companies regularly conduct IP audits. IP due diligence can be considered an essential process when developing an IP strategy, reducing risks for the players involved who may then be able to reap acceptable returns for their participation in the process.

Conclusion

Economies can lose billions of dollars due to piracy and IP infringement. Therefore, a country that values Intellectual Property can potentially create an excellent environment for IT innovation and economic growth. The 2008 survey conducted by the International Data Corporation (IDC) revealed that Kenya could create 977 IT jobs and the local IT industry could contribute \$73.60 million to GDP (an increase of \$40.01 million) by reducing the current 80% software piracy rate by 10 percentage points over four years (IDC, May 2010)

Perhaps the most successful case of IP protection is the Indian software industry. Between 1994-95 and 2001-02, the industry's gross earnings expanded from \$787 million to \$10.2 billion (a large proportion of which were software exports, which grew in value during the period from \$489 million to \$7.8 billion) and by March 2002, the software and services sector employed about 520,000 workers. It is certain that there is a wealth of creative talent in developing countries - such as software developers in Kenya, Jamaica or the traditional artists in Nepal - which could be harnessed to generate more wealth for emerging economies. But this will only happen if there are local infrastructures for technological and cultural industries.

During a recent CIPIT conference held at Strathmore University, Dr. Bitange Ndemo, the permanent secretary of the Ministry of Information and Communication stated, "...Kenya has begun to understand the complex process of protecting their inventions. This is important because we have not done it before and we are at a period where many Kenyans are coming up with many inventions; and this I thank God because He has given us too many problems and that is the reason why we are becoming very innovative."

As agencies such as WIPO, KIPI, CIPIT and the World Bank have pointed out in the past, it is important that developing countries develop mechanisms to protect and benefit from the commercial exploitation of their own past and present creative works. Despite the challenges of lack of data, unskilled expertise, long processes among others, there is huge need for the tech startups to invest their time and money on Intellectual Property rights. That way they will be able to reap the benefits of investment and financial opportunities, enhance competitiveness and facilitate establishment of joint ventures.

Despite the possible benefits of increasing IP rights in developing economies, there are instances where IP in technological innovations may hamper or limit innovation. Having stringent IP laws in an economic environment that is relatively young could impede the process of innovation of a country or region as compared to a mature economic environment. The idea of innovations and development in a tender economy is generally

characterized by a lot of experimentation and “trial and error” learning. Entities that exist in such an environment need time to learn and grow. Introducing strict IP laws in such an environment may as well condemn the entire economy and subsequently discourage the concept of creation and technological innovation.

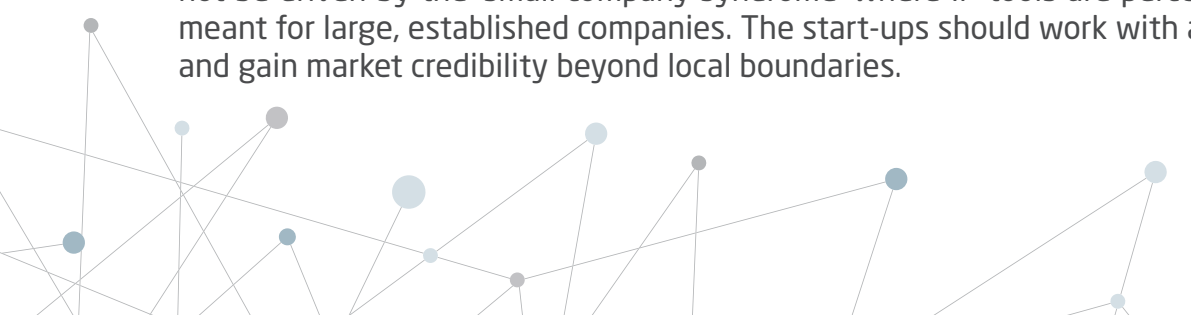
Additionally, intellectual property may at times be viewed as a stumbling block to the freedom of information that is enshrined in the universal rights of every individual. A common catchphrase among critics of intellectual property is that “information wants to be free.” The argument being made is that intellectual products by their nature seek out the widest possible audience and diffusion. As illustrated by unsuccessful attempts to prevent pirating, it is very difficult to stop consumers from taking intellectual property if there is a very high demand. The attempt to enforce intellectual property rights may end up alienating technology developers from their consumers.



“Understanding IP rights in IT as a tech startup, there is definitely huge growth potential in the market place if IP is used strategically. Gauging the importance of IP in innovation by merely focusing on patents as input and/or output of innovation does not do justice to the significant role that can be played by the other tools of IP. A broader approach to the contribution of IP in innovation is therefore needed” says a member from one of the tech startups interviewed that have conducted the IP rights for their innovation and can measure their success with the number of investment opportunities they have received, the number of clients beyond local boundaries, number of partners and joint ventures they have secured against their competition.”

Many startups feel that these IP processes are actively being practiced in the western countries, and hence many of the Western businesses have ended up being successful and acquiring huge financial opportunities. Therefore there is a perception that replicating the same culture in Kenya will similarly lead to an increase in financial success. This may not necessarily hold true in Kenya due to cultural, market, and historical differences. More research is needed to better understand how IP can be appropriately implemented in Kenya and the balance between open knowledge and intellectual property. While the model of implementation might be different as from the West, Kenya should look at lessons that can be learned from our western counterparts that have been successful in technological innovation.

Kenya’s IP model can be defined as new, lacking in transparency, relying on manual information systems, lacking in adequate skilled capacity, and lacking in integration and credibility. Kenya is on the verge of understanding and adopting IP systems and with the rise of IP service providers, IP clinics and online resources, there is need to streamline this ecosystem in a way that the different stakeholders work collaboratively to assist tech startups in the relevant IP processes. Tech startups should have a positive mind set and not be driven by the ‘small company syndrome’ where IP tools are perceived to be only meant for large, established companies. The start-ups should work with a vision to grow and gain market credibility beyond local boundaries.



References

- <http://www.kipi.go.ke>
- Story, A. (2002) "Copyright, Software and the Internet", Commission on Intellectual Property Rights Background Paper 5, Commission on Intellectual Property Rights, London, p.11. Source: <http://www.iprcommission.org>
- UNESCO (1998) "World Information Report 1997/98", UNESCO, Paris, p.320. Source: http://www.unesco.org/webworld/com_inf_reports/wirenglish/chap23.pdf
- Bgoya, W. et al (1997) "The Economics of Publishing Educational Materials in Africa", Perspectives on African Book Development series, ADEA Working Group on Books and Learning Materials, London. Source: http://www.adeanet.org/trans/Econ%20of%20publishing_ENG/Economic%20eng.pdf
- Ricketson, S. (1987) "The Berne Convention for the Protection of Literary and Artistic Works: 1886-1986", Kluwer, London, Chapter 11.
- Correa, C. M. (2000) "Fair Use in the Digital Era", UNESCO, Paris. Source: http://webworld.unesco.org/infoethics2000/documents/paper_correa.rtf
- Business Software Alliance (2001) "Sixth Annual BSA Global Software Piracy Study", BSA. Source: <http://www.bsa.org/resources/2001-05-21.55.pdf>
- UNESCO (2001) "Monitoring Report on Education for All", UNESCO, Paris. Source: http://www.unesco.org/education/efa/monitoring/pdf/monitoring_report_en.pdf
- Altbach, P. (1995) "Copyright and Development: Inequality in the Information Age", Bellagio Publishing Network, Boston MA; and Bgoya, W. et al (1997).
- Bitangi Ndemo (keynotespeaker). (October, 11 2012) CIPIT presentation, Strathmore University, Available from (<http://www.youtube.com/watch?v=fUzfGLMe-ZY>)
- IP innovation development (2012). (Retrieved October 2012) from
- http://www.wipo.int/sme/en/documents/ip_innovation_development.htm
- IP due diligence (2011) news document. Retrieved on October 25th, 2012, from http://www.iprhelphdesk.eu/sites/default/files/newsdocuments/IP_due_diligence_0.pdf

Appendices

Patent fees

	Local Fee	Foreign Fee
Patent registration fee	KSh	US\$
Fee for a request for written authority	1000	
Fee for a request for certificate that person has right to inspect files	1000	50
Fee for application for a patent With a provisional specification	1000	50
Fee for application for a patent with a final specification	3000	150
Excess claims fee, for each claim in excess of ten	100	20
Fee for filing a final specification	3000	150
Fee for a request for amendment or division of an application	2000	100
Fee for request for amendment of application to change name, address or other contact information	1000	50
Fee for a request for extension of time	1000	50
Fee for publication of patent application	3000	150
Fee for a request for a substantive examination	5000	250
Fee for grant of a patent	3000	150
Fee for a request for a certified copy	2000	100
Fee for a request for an uncertified copy	500	50
Transmittal fee (see Regulation 31) plus actual cost of transmittal	5000	250
Fee for request to have an international application treated as an application under the Act (refused application)	3000	150
Fee for request to have an international application treated as an application under the Act (entry into national phase)	3000	150
Fee for request to have a regional application treated as an application under the Act (refused application)	3000	150

	Local Fee	Foreign Fee
Annual fee for an application or patent:	KSh	US\$
For 2nd year	2000	300
For 3rd year	2000	300
For 4th year	2000	300
For 5th year	2000	300
For 6th year	2000	300
For 7th year	2000	300
For 8th year	6000	300
For 9th year	7000	350
For 10th year	8000	400
For 11th year	10000	500
For 12th year	12000	600
For 13th year	14000	700
For 14th year	16000	800
For 15th year	18000	900
For 16th year	20000	1000
For 17th year	30000	1500
For 18th year	35000	1750
For 19th year	40000	2000
For 20th year	50000	2500

Patent fees

	Local Fee	Foreign Fee
Fee for application for a utility model certificate	KSh	US\$
With a provisional specification	2000	300
With a final specification	2000	300
mFee for filing a final specification	2000	300
Fee for a request for amendment or division of an application	2000	300
Fee for request for amendment of application to change name, address or other contact information	2000	300
Fee for a request for extension of time 500 50 7	2000	300
Annual fee for an application for a utility model certificate, after the first year	6000	300

	Local Fee	Foreign Fee
Annual fee for a utility model certificate	KSh	US\$
Fee due in 1st year after grant	1000	50
Fee due in 2nd year after grant	1500	75
Fee due in 3rd year after grant	2000	100
Fee due in 4th year after grant	2500	125
Fee due in 5th year after grant	3000	150
Fee due in 6th year after grant	3500	175
Fee due in 7th year after grant	4000	200
Fee due in 8th year after grant	4500	225
Fee due in 9th year after grant	5000	250
Fee due in 10th year after grant	5500	275
Fee for a request to restore an application or utility model certificate	2000	100

	Local Fee	Foreign Fee
Fee for an application to have a change of ownership recorded in the register	KSh	US\$
For a change effected by a contract assigning	2000	100
For a change effected in any other way	1000	50

	Local Fee	Foreign Fee
Application fee for an application to register a trade mark TM 2	KSh	US\$
For the first class	400	200
For each subsequent class	3000	150

	Local Fee	Foreign Fee
Fee for filing a notice of opposition to an application to register a trade mark TM 6	KSh	US\$
For the first class	5000	250
For each subsequent class	4000	200

	Local Fee	Foreign Fee
Fee for filing a counter statement	KSh	US\$
For the first class	4000	200
For each subsequent class	3000	150

	Local Fee	Foreign Fee
Fee for registration of a trade mark under r. 60(1)	KSh	US\$
For the first class 2,000 150	2000	150
For each subsequent class	1500	100

Limitations Faced During the Research

While undertaking the exploratory Intellectual property study and survey, the following predominant challenges were experienced:

- **Lack of commitment:** from prospective respondents as most of them were busy.
- **Respondents soliciting an incentive before agreeing to the interview.** Despite the fact that this study had a limited budget and was based on volunteer contribution, most of the startups interviewed still demanded for a form of incentive, which was not accounted for in the study.
- **Respondents' inability to substantiate the difference processes of intellectual property rights in information technology.** Most of the respondents did not understand the difference between patents copyrights and trade marks.
- **Prospective respondents not meeting the vetting criteria.** Initially, we hoped to interview 40 tech startups but 25 of them did not meet the criteria that included:
 - The startup needed to have developed a technologically innovative product;
 - The startup needed to be based in the ICT Hubs and have worked there for a period of at least 3 months;
 - The tech startup must have passed the stage of discovery of their ideas and are now in the idea/concept formulation stage to the successful launching of a new or improved product in the market place.

*iHub Research

