

**INTELLECTUAL PROPERTY PROTECTION AS AN ENABLER OF  
LOCAL CONTENT IN UGANDA**

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**S16M47/009**

**A DISSERTATION SUBMITTED TO THE FACULTY OF BUSINESS AND  
ADMINISTRATION IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF  
BUSINESS ADMINISTRATION OIL AND GAS MANAGEMENT AT THE  
INSTITUTE OF PETROLEUM STUDIES KAMPALA IN AFFLIATION  
UCU.**

**JULY 2020**

## **Declaration**

I hereby declare that this research has never been presented for any academic award in any Institution or University. All sources used in this research have been rightfully acknowledged.

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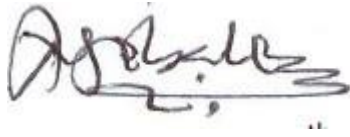
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## Approval

I acknowledge that this dissertation titled: -Intellectual Property Protection as an Enabler of Local Content in Uganda, I has been under my supervision and is ready for submission.



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**Dr. Dan Ayebale**

.....

**Date**

## **Dedication**

I wish to dedicate this work to my parents as well as my brothers, who have always given me support morally, financially and spiritually through their prayers. I would like to thank them for all the unconditional and unquestionable love, care and support they have always given me.

May God bless them.

## **Acknowledgements**

I thank the Lord God for the gift of life and for sustaining me throughout these two years of my studies. Without Him, this would all not be possible. Sincere thanks go to my supervisor, Dr. Dan Ayebale for his brilliant guidance, understanding and patience throughout this period as well as his assistance as I compiled and prepared this research report.

Special thanks go to the management and staff of Uganda Registration Services Bureau (URSB) at the Intellectual Property registration office for giving me the opportunity to carry out my research as well as for all their assistance. Thanks go to employees who willingly gave me audience during the short interviews.

I am also grateful to the staff both teaching and non-teaching as well as the students of Institute of Petroleum Studies, Kampala for their co-operation and friendliness as well as sharing information that helped me during my course of study.

I would like to extend my appreciation to the following individuals for all the parts they played during the time I wrote this paper; Miss Ingrid Muhanguzi, Miss Dorcas Magoba, Mr. Ainamani Jonath, Miss Lenah Kemigisha, and Miss Muhindo Ivona.

Not forgetting my family and friends that have always been there for me, Caroline Bonabana, Wilson Turinawe and Rodgers Mugaya. Thank you all.

May God bless them.

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## **Abstract**

The objective was to provide complex information how to deal with intellectual property and how it can be protected in Uganda. Specifically, the research sought to examine the current status of Intellectual Property Rights in regards Technology Transfer and Patent Protection for local Oil and Gas companies, discuss the opportunities that Intellectual Property Protection avails for the local Oil and Gas businesses and to analyze the challenges facing Intellectual Property protection in Uganda especially for Oil and Gas Companies. To achieve this the study adopted a cross sectional research design that combined both qualitative and quantitative methods. The research mainly focused a target population of 30 O&G business owners and key legislators. The study revealed that the Ugandan law protects intellectual property rights, but the government rarely enforces the law to prevent piracy and counterfeit distribution. While the Uganda Registration Services Bureau provides a standardized process for registering each type of intellectual property and allows for investors to enforce their rights through the court system, enforcement remains weak.

Among the many opportunities that were discovered in the research, and that have been discussed in the chapter before, none stood out for the oil and gas like technology transfer. Technological capacities have been promoted through the transfer of technologies by foreign investors in the oil and gas industry. The study also found some challenges that impacted the ability of IPRs to improve local content in the country. Apart from lack of awareness and knowledge on IP, the costs of registering IP are generally perceived as one of the greatest barriers for SMEs. In budgeting the costs relating to the acquisition of IP rights, entrepreneurs need to take into consideration not only the official fees but also the costs relating to application preparation and prosecution, legal advice and translation costs whenever the applicant intends to apply for protection abroad. The study concluded that that the costs of getting IP protection may be perceived by many SMEs as exceeding the potential benefits to be obtained from protection, particularly considering that a significant part of the costs may be incurred before the product has reached the market and that lenders, investors or government programs rarely provide financial support for the protection of IP rights.

# **CHAPTER ONE**

## **RESEARCH INTRODUCTION**

### **1.1 Introduction**

Whether it involves conventional or unconventional resources, participants in the oil and gas value chain are innovating to overcome technological challenges and improve competitiveness (Norton, 2018). Constantly, more efficient methodologies or tools are being developed for extracting ever-depleting conventional resources, or to challenge conventional wisdom and potentially replace existing oil sands extraction approaches, or, after recovery, to more efficiently process and upgrade heavy hydrocarbons. Ingrained within this culture of innovation is the oil and gas ecosystem, which combines a spirit of entrepreneurship and a –get-it-done attitude with the opportunity to participate in a booming energy economy (Tordo et. al, 2013).

The existence of a regulatory and legal framework, to govern intellectual property rights, is widely recognized and appreciated in the oil and gas space. However, because the relatively non-intuitive regulatory schemes relating to creation and ownership of intellectual property rights, commercialization opportunities can easily be missed in a fast-paced entrepreneurial environment built on personal relationships and fierce but friendly deal-making (Rashid, 2017).

This chapter put forth the background of the research, the problem statement and objectives of the research. From these, research questions were deduced and the scope of the study was defined. The chapter then concludes with the significance of the research and the conceptual framework.

### **1.2 Background of the Study**

#### **1.2.1 Historical Background**

Taking a geopolitical viewpoint, McNabb (2006) argues that the center of international stability calculations should be Intellectual Property Rights (IPRS). He maintains, after the demise of bipolarity with the fall of the Soviet Union, that there remain at least two major obstacles to the

development of a more stable, cooperative and productive global system. Miscalculations on the part of the West World are involved in one. The other is a profound misconception of the essence of progress inherent in western democracy and market economies in Europe and Asia. However, it remains a challenge to ensure that IPRS is safeguarded. Foreign businesses, explained by Fishman (2005), lose ownership of their goods in two related ways: through counterfeiters, who clone goods and then market them under distinct or altered brand names; and through pirates, who produce look-alikes and attempt to carry them on as the real thing. Piracy is the most prevalent of the numerous ways of transgression.

Another common kind of transgression is patent infringement. Unfortunately, for the infringer, a longstanding, global phenomenon, patent infringement also pays off. Usually, if found, those who infringe end up paying what they would have paid if a license had originally been negotiated. There is also no motivation for enforcement to be promoted in the scheme (Arai, 2000).

A study to evaluate and examine existing IPR activities in selected African countries was organized by the African Centre for Technology Studies (ACTS), defining the policy implementation issues and recording the capacity available to deal with IPR laws and policies in selected African countries and research institutions (Sikoyo, 2011). The driving rationale for this project is that effective IPR ability is an essential factor in ensuring African countries' consistent and wide involvement in effective WTO negotiations and related activities. In addition, some of the same skills and technical expertise needed for research on IPRs are also essential for the implementation of sustainable development policy in Africa at national and regional levels (Sikoyo, 2011).

While Uganda is one of Africa's fastest-growing economies, with sustained growth rates averaging 7.8 percent since 2000, the country ranked only 154th out of 177 countries on the Human Development Index of the United Nations Development Program in 2007/2008. The dominant field in Uganda 's economy remains agriculture. Dependence on agricultural commodities, combined with infrastructural deficits, low human growth, low gross domestic product and a relatively low 63% combined gross primary, secondary and tertiary education

enrollment ratio suggest that Uganda is currently at a low level of scientific and technological development. In Uganda, therefore, an important public policy aim is to develop, update and reinforce its Intellectual Property Rights base. Local content in relation to the oil and gas sector may be enhanced for this reason.

### **1.2.2 Theoretical Background**

In a symbiotic relationship with the growth of the modern state, utilitarian ideas of intellectual property evolved and evolved: from the creation and maturation of the mercantilist nation-states through the Industrial Revolution to the rise of the modern capitalist economy. Most early scholars concentrated on what Merges (1995b) calls the 'Great Question': whether intellectual property rights generated by the state should exist at all. More recently, focus has turned towards the creation of laws and institutions for intellectual property.

With the growth of manufacturing and the creation of international trade monopolies, intellectual property rights developed during the early mercantilist period as a way for nation-states to unify and increase their power and wealth. The term patent, derived from the Latin *patere* (to be open), refers to the government's open letter of privilege to practice an art (MMLJ, 1997, p. 122).

In reaction to the use of monopoly control to stimulate creativity, the theory of intellectual property later emerged. Although generally critical of monopoly control as counterproductive to the 'invisible hand' process, nevertheless justified the need for restricted monopolies that involve significant upfront investments and risk to facilitate innovation and trade. In addition to this argument for intellectual property rights, Jeremy Bentham (1839) gave a simple description of the unequal fixed costs incurred by innovators and local businesses.

### **1.2.3 Conceptual Background**

Whereas there is already a regulatory structure at EU level for a range of industrial property rights, the situation in the area of patents is very different (STOA, 2015). It is clear that the introduction of a Community Patent and EU-wide patent jurisdiction will significantly enhance affordability, continuity and balance between incentives to inventors and the dissemination of ideas (STOA, 2015).



It is commonly considered that the standard of patents in Europe is good. Nonetheless, stakeholders are worried about preserving and improving the standard of patents in Europe, as well as preventing the limitations of many other patent offices. In the European Parliament (STOA, 2015), this concern is also expressed. "For example, large numbers of overlapping patent rights can create additional barriers to the commercialization of new technologies in" patent thickets "that already exist (STOA, 2015). Bad quality rights can also lead to issues in the US legal system with "patent trolls" (STOA, 2015) that have arisen.

The intellectual property landscape in Uganda paints a picture of ineffective and poorly implemented legislation that lacks bite. These laws were the country's Intellectual Property norm prior to the 1990s, the general business community was not even aware of their presence and thus did not exercise any defense of LP rights or call for compliance changes where the same was considered to be missing and thus economic growth in this region was slow (ULRC, 2003).

Nevertheless, Uganda's ratification in October 1994 of the Agreement creating the World Trade Organization affected its stance to amend its intellectual property laws in line with the WTO provisions of the TRIPS Agreement (Manzi, 2002). These considered developments have extended the focus of Uganda 's viewpoint from traditional confines, that is, trademarks, patents and copyrights, to areas such as geographical indications, technology, trade secrets, security of plant varieties, traditional medicinal practice and the development of an intellectual property office (Atwine, 2006).

Nevertheless, it is more demanding than ever to boost the effectiveness of intellectual property laws and regulation. As more countries concentrate on harnessing their knowledge-based economies, there is international demand for local intellectual property rights security that flows into the country from foreign investment (Manzi, 2002). In the face of growing counterfeiting and smuggling of goods across borders, local investors are also weary of defending their IP rights, both locally and where cross-border trade with immediate neighbors is concerned. As the nation strives to put in place laws that are in compliance with other W.T.O. member states, these and more pressures on the legislative drafters continue to generate complications.

### 1.3 Problem Statement

Patents were increasingly used in the oil and gas industry. In 2013, over 12,000 oil and gas patent applications, three times the number filed 10 years ago. This surge was largely driven by innovations in fracking technology, with companies seeking protection over improvements to fracturing fluid, composition, method, apparatus and applications. In addition, many NOCs had increased presence in IP domain (China, Saudi Arabia, etc.) (Rashid, 2017). Patent applications covering methods for assessing the fracture size, systems to provide power to isolated wells and methods for preparing fracking fluids also have been filed. The most recent bust in oil prices had many impacts in oil and gas industry (Matos and Hall, 2007).

One interesting development is that during the period crude oil prices decreased threefold, patent litigation within the sector increased more than fourfold. Many oil and gas producers had to implement cost-savings and other measures to offset decreased revenues, but their expenditures on patent infringement litigation increased. In many cases, the entire company had to file for bankruptcy or downsize dramatically.

Uganda is the largest recipient of counterfeit products in the regions according to a survey by the East African Community (EAC). Some local and International companies that set up shop in Uganda end up making huge losses due to counterfeiting. Nice House of plastics, for example, losses about \$2m every year, that's about UGX 7.3 billion (Mukasa, 2010). This situation is dire for the country as counterfeit trade accounts for 10% of international trade in Uganda. Even worse is that some of the counterfeit products are manufactured right in our back yard (Mukasa, 2010). Just recently, Uganda Police carried out a sting operation against oil counterfeiters in Kiseka, where the police seized fake petroleum and lubricant goods worth about UGX 500 million (Jeanne, 2018).

Over the years some laws have been enacted like the Anti-Counterfeit law but have little influence on combating the situation (Mukasa, 2010). Worse still, this law does not empower Uganda National Bureau of Standards (UNBS) to deal with these counterfeits unless they are substandard. In addition, this predicament is aggravated by the lack of adequate enforcement of

the existing laws, weak punitive measures and lack of robust registration of trade marks in the country (Wambi, 2014).

The inadequacy in the Intellectual laws of Uganda, and their absence in the local content legislations hinder the decision of many international companies looking to invest in our Oil industry thus negatively affecting the local content participation.

## **1.4 Research Objectives**

### **1.4.1 General Objective**

The general objective of the research is to assess the best method of intellectual property protection in order to encourage local content development in the oil and gas sector of Uganda.

### **1.4.2 Specific Objectives**

1. To examine the current status of Intellectual Property Rights in regards Technology Transfer and Patent Protection for local Oil and Gas companies.
2. To discuss the opportunities that Intellectual Property Protection avails for the local Oil and Gas businesses.
3. To analyze the challenges facing Intellectual Property protection in Uganda especially for Oil and Gas Companies.

## **1.5 Research Questions**

- i. What is the current status of Intellectual Property Protection rights for local Ugandan Companies in terms of technology Transfer and Patent Protection?
- ii. Which opportunities does adhering to intellectual property rights bring to the local content development scene in Uganda?
- iii. Which Intellectual Property Protection challenges are currently being faced by in the move to develop and ensure local content development?

## **1.6 Scope of the Study**

### **1.6.1 Geographical Scope**

This research mainly focused on the national scale seeing as to how the IP protection in question only affected Uganda, its citizens and those investors looking to take part in its Oil and gas Sector. Particularly, the study centered around Kampala, with the main participants being the Legal bodies, legislators and O&G companies; of which many have headquarters in the Capital.

### **1.6.2 Time Scope**

The study looked back at the last 12 years of oil and gas activities; given it was during this period that we saw the Government of Uganda commence to accept bids, license oil companies to operate in Uganda. IOCs come in with a lot of technology, formulae and working mechanisms whose patent and rights they seek to protect.

### **1.6.3 Content Scope**

This study looked at the literature that pertains to intellectual property protection and local content in the oil and gas industry in Uganda. It basically reviewed the policies, regulation as well as institutions to support local content and local content development in Uganda. The study also borrowed on experience from other countries in relation to how those countries had treated local content and intellectual property protection issues in their systems.

## **1.7 Significance of the Study**

Government of Uganda: This research study will first and foremost benefit the entire nation as a whole. It is meant to sensitize our politicians and legislators to the importance of Protecting Intellectual property of both the foreign investors in the Oil industry and the local companies. This is not only a conducive move to attract investors but it also helps protect the inventions of our local oil and gas service providers.

Foreign Direct Investors: This research paper will bring to light how investor and IOCs can benefit from the addition of this element to the Local Content Development and Regulations.

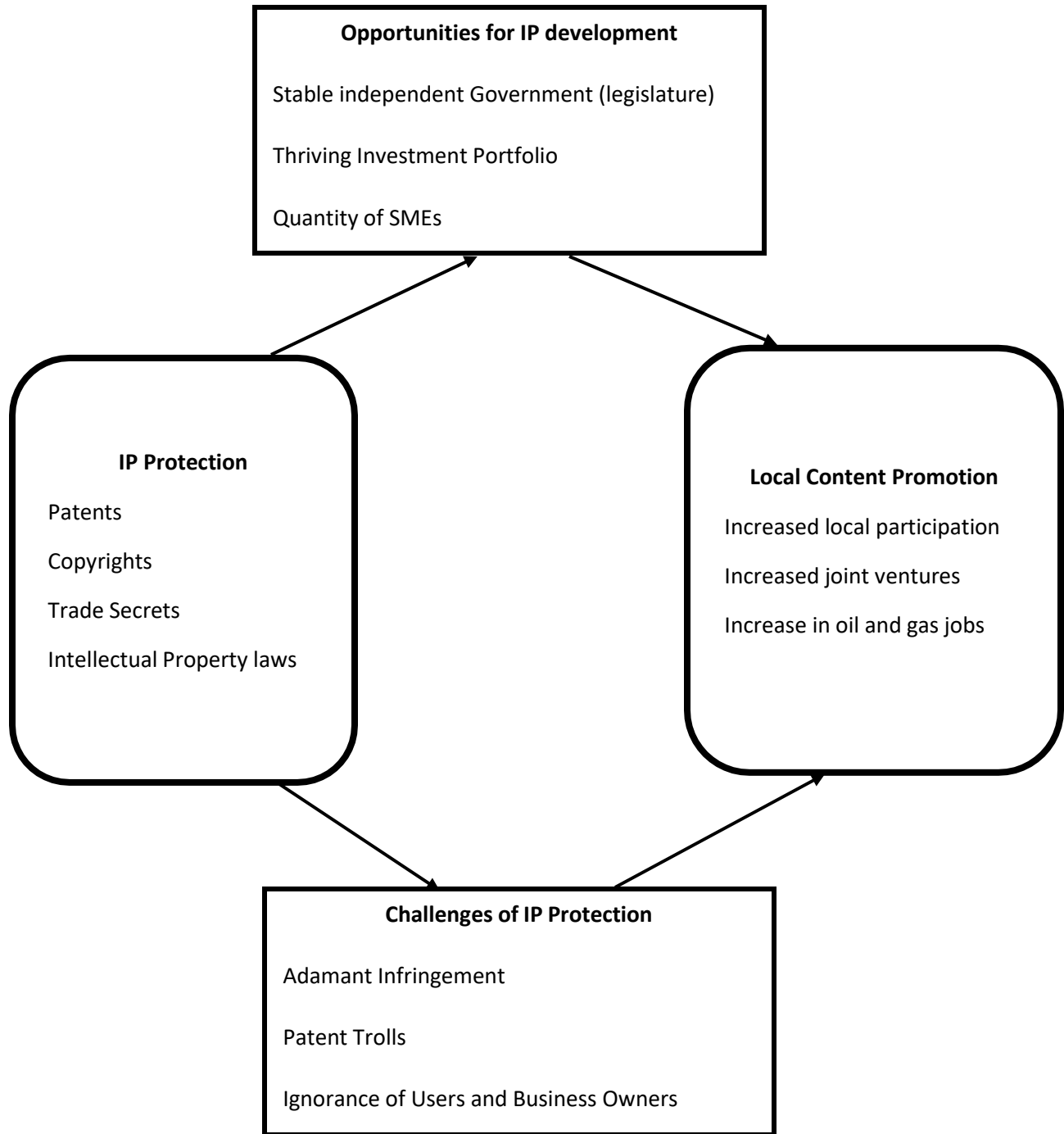
The paper will also highlight the existing Intellectual Property Protection laws in Uganda and the different ways they are being/ are like to be abused in Joint ventures in the Oil and Gas sector.

Local Content of Uganda: Intellectual property plays an important role both for the local citizens and their Oil Companies, which relies heavily on intellectual property to protect its products, and for oil and Gas generic service companies, which produce copies of existing petroleum products once patent protection expires. Beyond patent protection, trademarks are another form of intellectual property right used to identify and market petroleum products.

### **1.8 Justification of the Study**

Intellectual property protection in Uganda is not at its best; worse still, public knowledge about intellectual property rights in Uganda is still wanting. The concept of intellectual property among oil and gas companies and employees alike is not yet very popular for a country that has had more than a jubilee of independence. Whereas the concept is surely not alien to Uganda, it is not extremely popular either. Be that as it may, industrial activities in the country are gaining momentum and that kind development inevitably carries with it Intellectual Propertyrelated issues. The need to protect Intellectual Property Rights is therefore not a luxury even for developing countries, and this can only be realized under an efficient Intellectual Property System. This is the heart and spirit of this research.

## 1.9 Conceptual Framework



**Source:** Richard Li-Hua (2008) and Scotchmer (1991)

The security of IP rights conceived in the contractual narrative is very critical. An inventor or designer agrees to announce his creation in the state under the contract narrative. This is achieved by appealing to the patent office concerned and is eventually appended for monopolies on the product or concept (Scotchmer, 1991). If the fixed term is over, the creation is freely accessible to the public. It is presumed that the labor and time from the product can be recovered under the term given to the patentee or the proprietor. This approach is compromised by trade secrets and moral rights that are fundamentally non-contractual IP accounts. These stories are notbound by set words.

The embodiment of industrial practices with judicial and legislative connivance to help the phenomenon of ‘ever greening’ patents is valuable evidence of the systemic undermining of contractual theses. It is mostly done to strengthen the current patent, so that the duration of the patent can be extended by a further 20 years. It can be called a deliberative and innovative device for artificial product changes without making a new one. This type of practice again formally expands the term patent and detracts from potential innovators in any specific field (Scotchmer, 1991).

The extension of protection given for the regulatory or test data is another activity in the field of medicine, agribusiness and related industries. This is achieved solely under the terms of the TRIPS agreement by several state and national governments. Thus, these influential and formal procedures underline the very purpose of the contract thesis to provide the original creator or inventor with a secure and exclusive exploitation duration.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

In this chapter, the researcher critically and objectively reviewed and summarized reports, literature, theories and some laws that deal with intellectual property and the ways it improves the business environment for local businesses in Uganda. It is of great importance to note that most of the existing literature on the works of other scholars on the study or those who have addressed similar issues were instrumental in conceptualizing the study.

#### **2.2 Current Status of Intellectual Property Rights**

After arbitral proceedings in the commercial court of Uganda, the Coca-Cola Company Limited and Harris International producers of Riham Cola had a case of brand infringement settled out of court a few years ago. Counterfeit goods, ranging from foreign clothing lines, electronics, computer software, pharmaceuticals and agricultural inputs, are openly sold on the streets (Ssuuna, 2017).

Economically, these are sources of economic survival for nationals, but at the same time they impact those who deal with legitimate goods and, in addition to discouraging foreign direct investment, become a disincentive to creativity on new lines. They are a threat to plants and human health to the extreme! Economists would argue that Ugandans have not risen to a degree of purchasing power that will enable us to afford genuine goods! Is it a matter of political economics? Legal and regulatory structure? The Stakeholders' Laxity? No direct reply! (2017, Ssuuna)

Uganda's statute, in theory, safeguards intellectual property rights. Uganda is a member of the World Intellectual Property Organization (WIPO), a specialized global body of the United Nations responsible for promoting artistic practices and promoting intellectual property rights. Different laws concerning IP security are expressed in Uganda. The Uganda Registration Services Bureau (URSB) offers a structured procedure for registering each form of intellectual



property at the domestic level and enables investors through the judicial system to enforce their rights, but compliance remains weak (Ssuuna, 2017).

Other agencies include, among others, the Uganda Commercial Court responsible for hearing intellectual property and trademark cases, the Standards Enforcement of the Uganda National Bureau of Standards (UNBS), the Uganda Revenue Authority (URA) and the Uganda Police Force (UPF) (Ssuuna, 2017).

### **2.2.1 Property in Uganda**

The Constitution of Uganda guarantees the right to own property and mandates that private investment be encouraged by the state. There is also regulation on mortgages, trusts and liens in Uganda. There are also provisions for mortgages, sub-mortgages, trusts and other forms of lien in the Mortgage Act, 2009, and the Mortgage Regulations, 2012. The Property Act, 1998, requires a lease not exceeding 99 years to be acquired by foreigners. Foreigners; however, mailo or freehold land cannot be owned or purchased (Gulume, 2015).

Owners of freehold, leasehold, and mailo tenancy hold registered titles, while customary or indigenous communal landowners do not hold registered titles (who account for up to 90% of all landowners). The Land Act allows for the procurement of a Customary Certificate by traditional landowners, which acts as evidence of ownership and can be used as collateral. In addition, a number of reforms aimed at promoting land registration have recently been implemented by the government, including the digitization of land records. A National Land Policy aimed at encouraging optimum land use was introduced by Uganda in 2013 (Gulume, 2015).

In order to define ownership in cases where there is no specific title, the GOU has established an office inside the State House (State House Land Desk). Ugandan law provides for persons who settle on land to obtain prescriptive rights and whose settlement on such land is unchallenged for at least twelve years by the owner (Gulume, 2015).

### **2.2.2 Intellectual Property Rights**

Ugandan law guarantees intellectual property rights in principle, but little is done in practice to deter piracy and counterfeit distribution effectively. While a structured procedure for registering

each form of intellectual property is provided by the Uganda Registration Services Bureau and allows investors to enforce their rights through the court system, compliance remains poor (Kyaruzi, 2011).

In 2000, Uganda signed the Patent Law Treaty of the World Intellectual Property Organization (WIPO), but has not ratified it to date. Uganda 's president signed the new Industrial Property Act on January 6, 2014, which replaced previous legislation such as the Patent Act, 1993, bringing Ugandan law into line with international intellectual property standards. In addition to the Copyright and Neighboring Act of 2006 and the Trademarks Act of 2010, the Industrial Property Act of 2014 greatly increases the legal protection of Uganda 's intellectual creations. In Uganda's Performing Arts Rights Society, the Commercial Court of Uganda is responsible for hearing intellectual property and trademark cases, involving artists and musicians (Kyaruzi, 2011). It is the responsibility of the UNBS, URA and Uganda Police Force (UPF) to implement the current laws, but in reality, they are limited by insufficient resources and funding.

The efforts of the government to tackle the trade in counterfeit goods are inadequate. In Uganda's market places, counterfeit CDs, DVDs, and computer software are openly sold, and counterfeit pharmaceuticals and agricultural inputs are widespread throughout Uganda. In China and India, the bulk of counterfeit items entering Uganda are made. American entertainment industries, as well as consumer goods makers, argue that by deterring potential foreign direct investment and damaging brand names, counterfeiters are harming their businesses ((Kyaruzi, 2011).

The 1983 Uganda National Bureau of Standards Act authorizes UNBS to refuse entry to the Ugandan market for sub-standard products (but not necessarily counterfeit goods). Uganda is not reported on the Special 301 report of the United States Trade Representative and is not reported on the infamous industry report ((Kyaruzi, 2011).

### **2.2.3 Intellectual Property Rights**

Three theories can primarily describe intellectual property rights; the theory of natural law, the theory of personality and the utilitarian theory. The right to possession is a natural right. A individual has the right to own his mind's creation in the same way as he owns the creation of his labor. When a person is stripped of what he has made, he becomes an entity.

All was popular at the beginning, but it became private through the use of labor / intellect. We need somebody's labor to be covered because it is a natural right. So, it might be necessary to assume that natural rights are intellectual property rights (Fisher, 2001).

The problem is that the philosophy of natural law does not deal with the temporal constraint of intellectual property rights. It is true that intellectual property is subject to temporal restriction. Intellectual property is restricted much of the time in terms of the rights provided by statute. For corporeal ownership in which its presence can be for indefinite periods of time, this theory may be justifiable. In intellectual property, however, the job will be part of the public domain after a lapse of a certain time (Fisher, 2001). Nothing can be considered the property of a man with greater wealth than the fruits of his labor. He is never denied the property of any article or purpose for his own mechanical work; the work of his mind is no less worthy of the security of the law. A individual has a natural right to the fruits of his labor and, whether in tangible or intangible terms, this should be recognized as his property (Drahos, 2016).

John Locke has two philosophies. 1) Everyone has a right of ownership in the labor of his own body. His body's labor and the work of his hands is properly his. (2) The appropriation of an unowned object (ideas or theories) stems from the application to that object of human labour. The combining of one's own labor with an unowned thing gives the whole thing a property right (Drahos, 2016). Objects of similar quality must, however, remain in adequate quantity for others after appropriation: "Enough and left as good for others."

The theory of personality has it that to establish personal self-assertion, intellectual property rights are necessary. An individual will be more self-assertive if she / he owns land, as Hegel proposed (Hegel, 2008). (equality) would make him feel more equal. He's going to be freer. The work is believed to be the personal representation of the thoughts of the author or of the inventor. The right to decide when and how his work can be created or performed in public should therefore be granted to him, and the right to avoid mutilations and modifications (Fisher, 2001). Intellectual property laws ought to be there to secure the manifestation of his identity by the creator or the inventor. This is also accompanied by the need to protect the freedom of speech of the citizen.

One has to wonder in the Utilitarian philosophy, what do Intellectual Property Rights do? They make the public good a private, non-rivalrous, non-exclusive, exclusive and non-scarce scarce public good, which by default is not scarce. Artificial shortages of information are generated by legislation. This is because, unless they have had a way to regulate their information, creators do not have the requisite motivation. If this is not achieved, they lack the economic motivation that is required. This is called the philosophy of utilitarian intellectual property.

Organizations that are economically efficient are utilitarian. It notes that we have structures of intellectual property because it has an impact on society's economic improvement. Its correctness is to be measured in the countries' economic performance. It's, therefore, more of an economic problem. Both in science and in the arts, we have seen enormous technological advances. The question is: Without intellectual property structures, will it be possible? You do something according to this principle and you can get something (Fisher, 2001). Why should we be concerned with the development of society? Society should take care of its makers, since society itself is the real beneficiary, since they have solutions to technological problems.

As we would expect them to be, such a theory has never been successful. An objection from economists exists. According to them, when intellectual property is granted exclusive rights, it is a monopoly right established. A perfectly open market is contradicted by Monopoly. If the monopoly is unregulated, it could lead to a market crash (Moore, 2017). How does the right to intellectual property establish a monopoly? What are antitrust organizations battling against monopolies?

There are reasons that falsify this. The right holder is not allowed to regulate the issue whenever the law grants the innovator an exclusive right. There are so many ways to fix a problem. That means that there is no law on intellectual property that forbids other innovators from innovating a solution to the same problem. Because they protect expression of ideas, this is not sound in copyrights (Lemley, 2004).

## **2.3 Intellectual Property Protection Opportunities for the Local Oil and Gas Businesses**

Intellectual Property (IP) should be used instead of an obscure legal term as a power weapon for economic development. In inducing technological change and promoting economic development, the defense of IP rights plays an important role. The value of IP is often not properly understood and its ability to provide future profit opportunities is widely underestimated by SMEs. However, IP can become a valuable business tool when IP is legally secured and there is demand in the marketplace for IP-protected goods and/or services.

When ideas or inventions are protected (Mohd Noo, 2011), IP is a bundle of legally recognised rights. The key reason for inventors to make new inventions is said to be the defense of intellectual property rights (IPRs). It encourages commercialization, technology transfer, and foreign trade is encouraged. IP is a significant component of the economic growth of a country where investment and trade activities are increased by the continuous production of intellectual property from time to time (Gee, 2007).

IP and its importance have also not been properly understood. In the increasingly knowledge-driven economy, in day-to-day business decisions, IP is a key factor. New products, labels and innovative concepts appear on the market almost constantly and are the result of continuous human imagination and innovation. The driving force behind such developments is mostly small and medium-sized companies (SMEs) (Saleh, 2008). However, their imaginative and artistic potential is not always completely utilized because many SMEs are not aware of the framework of intellectual property or the security that their innovations, trademarks, and designs can provide (WIPO Magazine, 2005).

If left unregulated, larger rivals who are in a better position to sell the product or service at a more reasonable price may lose a successful idea or development, leaving the original inventor or creator without any financial gain or reward. Adequate security of the IP of a corporation is a key move in deterring future infringement and converting concepts of real market value into business assets.

Taking full advantage of the IP system allows enterprises to take advantage of their technical abilities and imagination, which promotes and helps to finance more innovation. Its ability to provide future profit opportunities is commonly underestimated by SMEs. If it is lawfully secured and there is a need for IP-related goods or services in the marketplace, IP may become a valuable business asset. IP may generate revenue for SMEs by licensing, selling or promoting IP products or services that may significantly boost the market share of SMEs or increase their profit margins (Idris, 2003).

In addition, the importance or importance of SMEs in the eyes of investors and funding institutions can be improved by IP rights. Therefore, IP assets could significantly increase the value of the enterprise in the case of sale or merger or acquisition. Physical assets have historically been responsible for the majority of the valuation of a corporate organization and have been primarily responsible for assessing the market success of an enterprise. As a result of the information technology revolution, however, these situations have changed, intangible assets ranging from human resources such as knowledge of ideas, brands, prototypes and other intangible assets from creative and imaginative potential are often more important today than physical assets (Idris, 2003).

Therefore, the strategic use of IP assets will significantly increase the competitiveness of SMEs. Small and medium-sized enterprises (SMEs) should ensure that they are ready to meet the challenge and take steps to leverage their IP and secure it wherever possible. Like physical assets, in order to extract their full value, IP assets must be obtained and retained, accounted for, valued, tracked closely, and handled carefully. But SMEs must first accept the importance of IP before this can be achieved and begin to see it as a valuable business asset.

Through its business growth and strategy, IP assets are credited to its owners: from product development to design, from service delivery to marketing, and from raising financial capital through licensing or franchising to exporting or growing its business. IP creates confidence, trust and loyalty to the customers it markets. In addition, a distinct identity, picture and reputation is given by IP (Urwin, 2008).

Marketing goods or services is a major obstacle for most small and medium-sized enterprises (SMEs). A marketing strategy should create a clear connection between your products or services and, as the manufacturer or supplier of those products or services, your SME. That is, consumers should be able to differentiate between your goods or services and those of your rivals at a glance and associate them with certain desired characteristics.

When used effectively, IP is an important tool in establishing a picture in the minds of your current and prospective customers for your company and in placing your company on the market (Perbadanan Harta Intelek Malaysia, 2013). In conjunction with other marketing tools (such as ads and other sales promotion activities), IP rights are important for identifying your goods and services and making them easily identifiable and diversifying your business strategy for various target groups, including overseas marketing of products or services.

However, for agro-based products, not all IPs may be appropriate or applicable (Mohd Noo, March 2011). The trademark will be very applicable to one IP. Brand is something that is recognizable and can draw individuals to a particular product or service. It is an immaterial commodity that is greater than the physical product or service. It is an immaterial commodity that is greater than the physical product or service. Today, instead of selling the actual product, selling the brand is much easier. Consumers prefer to be affected by the name rather than the product or service.

Entrepreneurs must have knowledge of trademarks in order to register a brand. A trademark is a distinctive symbol that distinguishes such products or services. One or a combination of words, letters, and numerals can be trademarks. They can consist of sketches, symbols, three-dimensional signs, such as the form and packaging of products, audible signs, fragrances or colors used as distinguishing features, such as music or vocal sounds. A trademark is used to encourage consumers to identify a specific trader's product as a marketing tool (Perbadanan Harta Intelek Malaysia, 2013).

## **2.4 Challenges Facing Intellectual Property Protection in Uganda**

There has been a growing use of patents in the oil and gas industry. About 12,000 oil and gas patent applications, three times the amount filed 10 years earlier, were filed in 2013. This surge was primarily driven by fracking technology advances, with companies seeking protection over fractionation fluid, structure, process, apparatus and applications improvements. Furthermore, the involvement of several NOCs in the IP domain (China, Saudi Arabia, etc.) has increased (Rashid, 2017). Patent applications have also been filed covering methods for measuring the fracture size, systems for supplying power to isolated wells, and techniques for preparing fracking fluids. In the oil and gas sector, the most recent bust in oil prices has had many consequences. One interesting trend is that crude oil prices have decreased threefold over the period and patent litigation in the sector has risen more than fourfold (Matos and Hall, 2007).

Many oil and gas manufacturers had to introduce cost cuts and other measures to mitigate lower sales, but their patent infringement litigation expenditures increased. The entire business had to file for bankruptcy or downsize significantly in several situations. The patent linkage has, however, increased (Gee, 2007). Oh, why is that? Might it be out of corporations' desperation to resort to arbitration as a means of recovering lost investment in technology infringed by a third party? In the industry, smaller players can derive a lot, if not all, of their revenue from proprietary technology. Therefore, for the success of their firms, patent-litigation can also be crucial (Idris, 2003). The connection is notable, whether incidental or consequential, as patent litigation can be costly.

Almost all patent litigation includes two similar questions: is the patent legitimate and is there an infringement of the patent? In 2015, the expense of prosecuting a patent infringement is \$2.2 million on average; the risk ranges from \$1 million to \$ 10 million (4), but there are also cases of triple harm of hundreds of millions of dollars. Many businesses know that they must litigate if they are to avoid others from using their IP (Gee, 2007). This alone indicates that there is no simple time for IP to be comfortable, particularly during the low-price climate for oil and gas companies. IP policy is closely linked to business strategy and is important for the well-being of businesses during good and bad times (Idris, 2003).



Insufficient evidence on the value of IP in day-to-day business, high costs associated with IP rights acquisition and compliance, misconceptions that the IP system is esoteric, too cumbersome and time-consuming (Gee, 2007). These are among the reasons that many small and medium-sized companies are often slow to protect their IP assets. Given the importance of small and medium-sized enterprises to the economies of all nations-which make up some 90% of all enterprises worldwide and account for more than 70% of the production of goods and services- the successful use of IP assets by small and medium-sized enterprises is a key factor in the ongoing economic growth.

In using the IP method, SMEs face a variety of difficulties (WIPO Magazine, 2005). This is also the product of their limited knowledge of the IP system's ins and outs, their lack of understanding about its importance to their business strategy and competitiveness, and their finding that the system is too difficult and costly to use. The available research on the use by small and medium-sized companies of the IP system are primarily restricted to the use of patents.

In addition to the lack of IP awareness and skills, IP registration costs are commonly viewed as one of the biggest obstacles for SMEs (Sajilan, 2008). Entrepreneurs must take into account not only the official fees (including application fees, publishing fees and maintenance fees) but also the costs relating to the preparation and prosecution of applications, legal advice and translation costs if the applicant wishes to apply for protection abroad in the budgeting of the costs relating to the acquisition of IP rights.

Many small and medium-sized enterprises (SMEs) may perceive the costs of obtaining IP protection as exceeding the potential benefits to be gained from protection, particularly considering that a substantial part of the costs may be incurred before the product has entered the market and that lenders, investors or government programs seldom provide financial support for the protection of IP rights (Idris, 2003).

There are a range of additional elements of the application process, aside from the costs, which may serve as a disincentive for SMEs to pursue IP rights, including the time needed to issue a patent or to gain registration of a trademark. The growing number of applications has also contributed to an increase in the backlog and, subsequently, to an increase in the time taken to

file a patent or to register a trademark. A lengthy delay in securing a patent leaves a high degree of ambiguity for SMEs and delays the prospect of discovering possible licensees or collaborators for the exploitation of an invention (WIPO Magazine, 2005).

There are, therefore, several obstacles to the broader and more efficient use of the IP system by SMEs. In conclusion, low knowledge of the system restricts the exposure of SMEs to the IP system and their ability to efficiently use all the elements provided by the IP system, including not only patents but also utility models, trademarks, industrial designs, trade secrets, patent databases, copyright and other IP rights, will be the first challenge (Saleh, 2008). Bad IP management skills within small and medium-sized businesses limit their ability to take full advantage of the system and, thus, prevent its potential use.

Secondly, insufficient access to the required human resources and/or usable legal advice complicates the use of the IP system and reduces the chances of success in the IP rights registration / grant application process. Effective management of IP requires a range of competencies, ranging from legal to scientific / technical and economic, which are not intrinsic to all SMEs. In fact, in many, if not most, SME support organizations, such expertise is generally lacking; this is equally true of private sector SME consultants and business advisors (Gee, 2007).

Thirdly, high costs are an additional obstacle, not only for the acquisition and maintenance but also for the monitoring and enforcement of IP rights, particularly for companies operating in a number of geographically distributed markets (Saleh, 2008). Fighting counterfeit products and piracy issues is another major challenge faced by entrepreneurs. Counterfeiting and piracy harms trade and public well-being and undermines trust in the quality of brand name goods, resulting in lost income, investment, potential profits, and growth opportunities of billions of dollars. It also damages legitimate companies and employees who play crucial roles in processing, processing, shipping, and selling real goods. Moreover, since infringing goods are often quality-substandard, they can affect customers in a number of ways, such as posing significant health and safety risks (Gee, 2007).

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

In this section an overview of how the research was conducted and presented. It described the research design, the target population, sample size, sampling technics, research instruments, data collection procedures and data analysis and limitations of the study.

#### **3.2 Research Design**

A cross sectional research design was used for this research. This combined both the qualitative and quantitative methods of data collection to achieve a feasible response to the objectives set forth in chapter one. The qualitative approach was used, which included interviews targeting specific groups of people especially those with reliable information and knowledge that is important to the success of this research and data analysis through published documents and literature that is relevant to the topic in question.

Qualitative research is –a form of systematic empirical inquiry into meaning|| By systematic this means –planned, ordered and public||, following rules agreed upon by members of the qualitative research community. By empirical, this means that this type of inquiry is grounded in the world of experience. Inquiry into meaning says researchers try to understand how others make sense of their experience. Denzin and Lincoln (2000) claim that qualitative research involves an interpretive and naturalistic approach: –This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them||

The researcher did consider other methodologies, but discarded them in favor of a qualitative approach when the researcher realized the level of quality that the respondents would offer through interviewing and observing. The researcher determined that a quantitative research approach would not be beneficial because of the potential to overgeneralize the findings and overlook pertinent details about the perceptions of the participants (Hatch, 2002). The researcher

decided that a cross-section was the most appropriate way to obtain and understand the participants' perceptions (Stake, 1995).

### **3.3 Target Population**

The total population was 30 people. This research mainly focused on local oil and gas business owners, key legislators, parliamentarians, informed politicians, policy formulators and Intellectual Property Academicians.

### **3.4 Sample Size and Sampling Procedure**

#### **3.4.1 Sample Size**

The sample size was determined by the number of people with crucial information in line with the specific topic in question. The targeted population in the organizations identified will be specific to senior officials responsible to the pertinent issues that are crucial to the success of the research.

A sample size for 28 respondents was used for the study. These were from different Institutions and organizations that the researcher believed had valuable information about intellectual property. The researcher used Krejcie and Morgan's table (1970) with a 95% confidence in the degree of accuracy for this research, to come up with the sample size that will be used.

#### **3.4.2 Sampling Procedure**

Sampling is the process of selecting a suitable sample, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population. Purposive sampling as a sampling technique was applied and used in conducting this research. This was useful in exploratory qualitative research, and was decisive in finding the solution in our research. It further involved identifying and selecting individuals that were experienced in a phenomenon in the research.

Purposive sampling procedure involves identifying and selecting respondents depending on their availability for study and accessibility. In this particular area of study most of the respondents are institutional heads, therefore, busy and are always on the move, therefore use of representatives of the group was prime in this research to get the required relevant information for development of the area of study.

The main goal of purposive sampling was to focus on particular characteristics of a population that are of interest, which would best enable the researcher to answer the research questions. The sample being studied was not representative of the population, but for researchers pursuing using this type of research design, this was not considered to be a weakness. Rather, it was a choice, the purpose of which varied depending on the type of purposive sampling technique that was used.

### **3.5 Data Collection Tool and Methods**

#### **3.5.1 Interviews**

In the interview method, an interview guide was used. This is a set of questions a researcher asks during the interview. Structured interviews are useful not only because they show excellent validity in an analytical research, but also because they provide a chance to probe the answers of the respondent and understand precisely what they mean. Interviewing is a very useful approach for data collection because it allowed the researcher to have control over the construction of the data and it had the flexibility to allow issues that emerged during the dialogue and discussion to be pursued. It is also done at the convenience of the respondent.

Interviews with officials in the Uganda Registration Services Bureau (URSB)-Intellectual Property registration office, as well as other stakeholders and knowledgeable persons in intellectual property. The interviews on the other hand brought the theoretical framework of this research to life by giving it a realistic feeling of the Ugandan situation. The interviews aided collecting data on the community understanding of patents rights.

### **3.5.2 Documental Analysis**

Secondary data from materials such as publications and reports both local and international that are in pertinent relation with the topic in study were used to back up the primary information and relate the findings to come up with a reasonable solution for the research in question. The use of documents was basically to ensure that the researcher got views from other writers who are instrumental in the area of research especially in comparison analysis and literature review. Though they are useful, conclusions were not based on these documents alone.

## **3.6 Data Sources**

### **3.6.1 Primary Data**

The primary data was obtained from the respective respondent that is the managers of home- grown business and application, the Government officials and legislators by use of interviews. This was for the purpose of acquiring first-hand information from the respondents.

### **3.6.2 Secondary Data**

The secondary data was obtained from reports on the contribution of intellectual property to local content for example WIPO and PAU.

## **3.7 Data Processing and Analysis**

The interview guide was cross checked for completeness; the responses to the binary and multiple questions were coded basing on the frequency of responses. The rest of the data was coded, interpreted, and analyzed both qualitatively and quantitatively.

While carrying out data analysis, the researcher used SPSS 20.0, a statistical program to come up with an analysis of the opportunities and challenges in oil and gas firms in Uganda. Descriptive statistics were used during the analysis of the data.

After the data had been analyzed, it will then be discussed. This process involved the interpretation and presentation of the findings by the use of tables, and narration in accordance with the objectives of the research.

### **3.8 Data Reliability and Data Validity**

#### **3.8.1 Data Reliability**

To ensure the reliability of the responses to the questions, the –Test re-test method as described by Roger Hussey (2003) was used. The respondents were asked the same questions on two separate occasions under different situations, to avoid having the respondents feeling like they are answering the same questions for a second time.

Reliability is the tendency toward consistency found in repeated measurements (Sekaran, 2003). The reliability of the instrument was ascertained using the internal consistency method. The researcher used the Cronbach’s alpha correlation matrix to test the reliability of the interview guide as ranked by the experts.

#### **3.8.2 Data Validity**

Validity as the extent to which a measuring instrument on application performs the function for which it is designed (Easterby-Smith et al. 2008). To ascertain the validity of the instrument, content validity was adopted. The instrument was validated by the researcher’s supervisor at the University. They ensured that the instrument represented the entire range of possible items to be tested in the study. The interview guide was modified in line with their recommendations. Furthermore, content validity index (CVI) was used; where a CVI value greater than 0.70 is considered valid otherwise not valid (Amin, 2005).

Furthermore, in the research that was carried out, the researcher used the –face validity as explained by Jill Collis (2003). Here the researcher used easily understandable questions in the interview guide that could easily be comprehended by the respondents. Such questions enabled the researcher to receive straight forward answers; hence the responses represented exactly what was —on ground.

### **3.9 Ethical Considerations**

As the research was being carried out, the researcher had to exhibit an ethical kind of behavior when collecting data, so the following had to be done:

The researcher went through the right procedures to access the information from the organization. It is usually unethical to just walk into an institution and start collecting data without the knowledge and permission of the management in charge of the organization.

The researcher informed the respondents of the intentions and purpose of the study that was being carried out so as to enable the respondents understand exactly what the information being collected was for.

In order to ensure anonymity and confidentiality of all respondents, they were not obliged to give their names while answering questions on the interview guide. In this way, the respondents were assured of being unidentifiable throughout the study.

### **3.10 Response Rate for the Research**

The research was fortunate to have such a high response rate. A total of 28 interviews were supposed to have been conducted, however, only 25 interviews were held as the other respondents were not readily available to the researcher. This represented 89% of the expected sample size.

$$\begin{aligned} \text{Response rate} &= \frac{\text{Actual Number of Respondents}}{\text{Sample size}} * 100 \\ &= \frac{25}{28} * 100 \\ &= 0.8928571429 * 100 \\ &= \mathbf{89\%} \end{aligned}$$



## CHAPTER FOUR

### PRESENTATION AND ANALYSIS OF DATA

#### 4.1 Introduction

This chapter described the analysis of data and its presentation. The findings relate to the research questions that guided the study. Data was analysed to provide complex information how to deal with intellectual property and how it can be protected in Uganda. These findings were presented in a subsequent format discussing the research questions and the broad themes of the entire study.

#### 4.2 Sample Characteristics

##### 4.2.1 Gender of Respondents

Gender is always a good balance indicator when it comes to surveys. Research has shown that the two genders interpret and get affected by different phenomenon in different ways. Intellectual property is no different in the way it is interpreted the different genders.

**Table 4.1: A table showing the Gender of Respondents**

GENDER	Freq.	Percent
MALE	18	72
FEMALE	7	28
TOTAL	25	100

From the table below, out of the 25 respondents that participated in the survey, 17 were male making up to 72% of the whole sample size and 8 were female making up to 28% of the whole sample size.

#### 4.2.2 Level of Employment

Given one's level on the employment hierarchy, their understand of intellectual property right and the need for them varies. Lower level employees and management barely have a clue of the existence of said rights.

**Table 4.2: A table showing the Level of Employment**

WORK LEVEL	Freq.	Percent	Valid Percent	Cumulative percent
Top Management	13	52	52	52
Middle Level Management	9	36	36	88
Lower	3	12	12	100
Other	0	0	0	100
TOTAL		100	100	

According to the survey, 52% of the respondents were in top level management, 36% in Middle Level Management, and 12% of the respondents in Lower Management. The level showed the amount of knowledge and influence that different workers had in regard to the intellectual property of their companies.

### 4.2.3 Level of Education

Respondents level of education normally portrays the kind of answers the research can anticipate for a given topic. A study group that has lower educated respondents is more likely to produce uncertain results about a topic like intellectual property protection.

**Table 4.3: A table showing the level of Education of the Respondents**

EDUCATION LEVEL	Freq	Percent	Valid Percent	Cumulative percent
PHD	3	12	12	12
Masters	20	80	80	92
Bachelor's Degree	2	8	8	100
Higher Diploma	0	0	0	
Diploma	0	0	0	
Others	0	0	0	
	25	100	100	

In the study, 12% of the respondents were PHD holders, 80% Masters holders and the remaining 8% were Bachelors of Degree holders. The study found that there was a strong positive correlation between the level of education and the intellectual property knowledge that employees held.

### 4.3 Current Status of Intellectual Property Rights

The people of Uganda are yet to harness the true potential of Intellectual property (IP). How could they when only just a handful of the population know what a Copyright, Trademark or Patent is.

In the last 20 years, we have seen exponential growth in the sectors of business and

technology. Yet somehow, this growth has not extended to the field of intellectual property. Uganda is still one of the lowest ranked countries in Africa in intellectual property applications.

#### 4.3.1 IP Improvements in a 3-year period

**Table 4.4: A table showing IP Improvements in a 3-year period where?**

IMPROVEMENTS	Freq	Percent	Valid Percent	Cumulative percent
Products	4	16	16	16
Processes	3	12	12	28
Organizational changes	10	40	40	68
Marketing changes	8	32	32	100
	25	100	100	

When asked if the companies the respondent worked for, had made considerable intellectual property improvements, 16% believe that there has been a significant improvement in products, 12% in processes, 40% believe the changes have occurred in Organizational changes and the remaining 32% believe there has been significant changes in the marketing changes.

The efficiency of Uganda's Patent System like any other Intellectual Property System is dependent on the law and more importantly the performance of the enforcement mechanisms put in place. Statistically, Uganda's patent office barely gets work compared to similar offices in other jurisdictions. The national intellectual property office receives and registers thousands of trademarks, a number of copyright applications and very few patent applications. Statistics for two financial years show that of the few patent applications received very minimal applications qualified for grant of a patent.

One of the key informers mentioned that, -Uganda has harmonized its industrial property law with its international and regional obligations under most, if not all instruments its party to. The

Industrial Property Act 2014 has succinct and clear provisions on patent registration, rights of a patentee and patent licensee, infringement and relief, and further special provisions on enforcement of patent rights. The provisions of the law are almost self-sufficient but most importantly for a patentee is the availability of favourable, certain and workable enforcement mechanisms invisibly supported by the good will of the populace to patent law and the rights thereunder.¶

The researcher found that intellectual property rights play a crucial role in the marketing strategy of all kinds of an increasing number of companies, and it involves a set of processes, creations and communications offerings which have value for the clients, customers or society in general. Marketing necessarily generates intangible assets that may be protected by intellectual property rights. In fact, this is the first significant aspect of the influence of intellectual property rights on marketing strategies: the protection of intangible assets in a marketing campaign.

#### **4.3.2 Measures Taken to Improve Competitive Advantage In Innovations**

**Table 4.5: A table showing IP Measures Taken to Improve Company’s Competitive Advantage in Innovations**

INTELLECTUAL PROPERTY RIGHTS	Freq	Percent	Valid Percent	Cumulative percent
TRADE MARK	8	32	32	32
PATENT	4	16	16	48
COPYRIGHT	10	40	40	88
GEOGRAPHICAL INDICATION	3	12	12	100
UTILITY MODEL	0	0	0	
	25	100	100	

The study showed that 32% of the respondents believe that Trade mark rights, 16% believe in patent rights, 10% in copyrights and the remaining 12% in geographical indication being the intellectual property rights measures which have improved the company's ability to derive competitive advantage from the new innovations.

The research found that it is widely accepted that innovation and technological progress are the single most important determinant of economic growth in the industrialized world. Studies show that the social return on investment in R&D not only extends beyond but significantly exceeds private returns, which suggests that policies that promote innovation can pay large dividends for society.

One of the respondents mentioned that, -IP rights create exclusive rights with a view to promote risk-taking and innovation. The patent system, in particular, is often conceived as: a limited monopoly that is granted in return for the disclosure of technical information'. Patents are thought to create incentives for inventors to invest in research and to develop new products by granting them a temporary monopoly on the fruits of their investment, while simultaneously disclosing valuable information to the public that would otherwise have remained secret.¶

The researcher found that the importance of IP rights for market competition has increased significantly in recent years. IP rights increasingly underpin the most dynamic economic sectors, digitalization continues to extend its reach, and the importance of intangible assets in the overall economy has increased.

### 4.3.3 Level of Collaboration with Other Entities to Develop Innovations

Table 4.6: A table showing the Level of Collaboration with Other Entities to Develop Innovations

INNOVATION TOGETHER	Freq	Percent	Valid Percent	Cumulative percent
LOCAL	18	72	48	48
REGIONAL	2	8	20	68
NATIONAL	2	8	12	80
EAC NATIONS	3	12	8	88
INTERNATIONAL COUNTRIES	0	0	12	100
	25	100	100	

When the respondents were asked of the level, it was discovered that they are collaborating with other entities to develop an innovation together, 72% said Local, 8% mentioned Regional and National respectively and the remaining 12% named EAC Nations.

These finding agreed with the research of Suuna (2017) which mentioned that collaborations can involve complexity in managing the interrelationships between confidentiality, use of existing IP, publication of information, commercialization and decision making around IP rights. These complexities mean that it is important to consider IP management at the outset. Collaborations can result in the creation of new IP in inventions, documents, products, services, processes, software and other material. Consideration and management of potential IP issues can help to prevent delays and avoid disputes as the project progresses.

The research found that most research organizations especially in the oil and gas sector have established dedicated units to facilitate the commercialization of technology. These units take a variety of forms and have differing responsibilities, including obtaining patent protection, negotiating licenses and agreements and, in some cases, establishing spin off companies. They

are also referred to by a range of titles, including ‘business liaison offices’, ‘technology transfer units’ or ‘commercialization arms.’

#### 4.4 Opportunities of Applying Intellectual Property Rights to the Local Content Development in Uganda

##### 4.4.1 Knowledge of IP

Table 4.7: A table showing the level of Knowledge of IP

Range	Frequency	Percentage
0-3	4	16%
4-7	15	60%
8-10	6	24%

When asked to indicate the level of familiarity with IPR, it was identified that a big number of respondents were familiar with IPRs with 60% of the responses ranging between 4 to 7 and 24% rating their knowledge about IPRs between 8 to 10. However, 16% of the respondents had little knowledge about IPR. The gist of this was to establish a baseline for analysing the different IP opportunities experienced by the employees and their companies.

For a country looking to be leading nation in innovation and technology as applied in the oil and gas sector, this discovered level knowledge on intellectual property protection is no satisfactory. More generally, acquiring the foundational knowledge needed to produce cutting-edge technologies is a costly affair. Taking advantage of the experience of others can be much cheaper than gaining such experience firsthand. Collaborating with another firm can be a way to leverage its experience without locking in to a commitment to build up the required knowledge internally. This is a particularly useful option when exploring new markets, geographies or technologies.

-In a knowledge-oriented economy, increasingly based on innovation, the Intellectual Property system is a very important competitive factor and provides a vital contribution to economic and



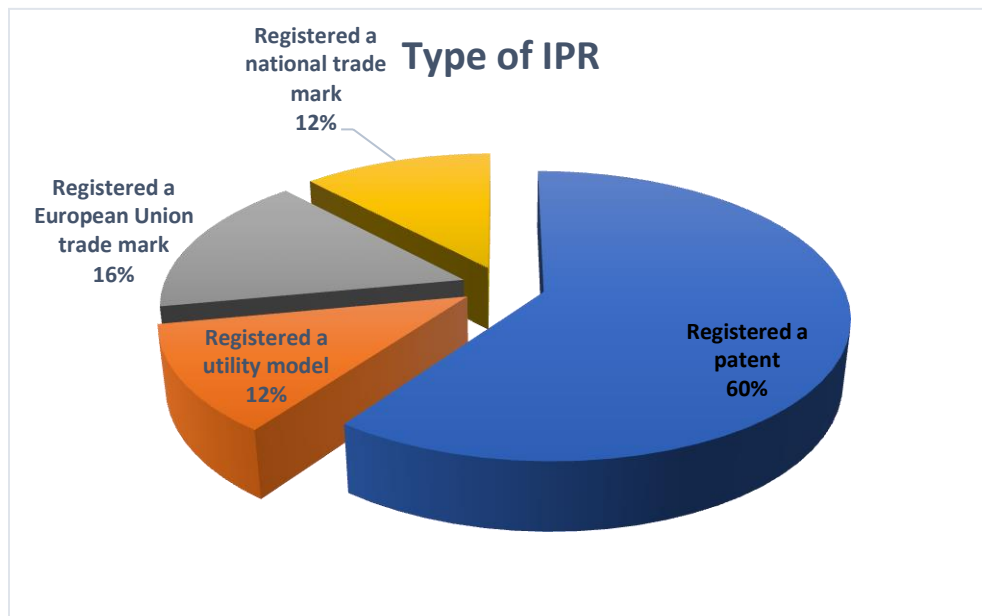
social development. The protection of the results of research work or the design and development of new products and the attendant assignment of Intellectual Property Rights should be regarded not only as a means for increasing the innovating party's profitability, but also as the key factor in the assimilation of knowledge within institutions, which is extremely important in the permanent search for innovation,<sup>ll</sup> according to one of the senior respondents.

#### **4.4.2 Types of IPRs used by the Respondents**

The study found that 60% of the respondents had registered a patent, 16% had registered a European Union trade mark and remaining respondents had registered either a utility model or a national trade mark with 12% each. To protect one's idea so that someone else cannot steal that idea, one needs to secure one or more of the four different types of intellectual property (IP). Every invention generally starts out as an inventor's trade secret. Before inventors market their inventions, they need to secure one or more of the other forms of intellectual property protection – patents, trademarks and/or copyrights.

According to a study by Guleme in 2014, patents constituted the least number of intellectual property applications. Over the period of two financial years, only 24 patent applications were received which is less than 1% of the received applications, 2% of the applications were copyrights and the 98% were trademarks applications. These statistics point to the limited engagement of the public in patent issues thus affecting the appreciation of patent law and rights.

**Figure 4.1: A figure showing the Types of IPRs used by the Respondents**



#### **4.4.3 Rationale for IPRs**

From the interviews carried out, the study found that the respondents gave a number of different reasons as to why their companies registered IP with a big number stating better legal certainty of extent of protection, prevention of others from copying products or services, effective enforcement, improvement in chances of financing plus a few other personal reasons such being a common practice among the firms in deal with, improving the negotiating position with other companies and institutions, increasing the value and the image of their companies and as well to obtain licensing revenues.

The researcher found that in respect to the moral rationale to IPRs it is argued that justice requires that society compensate and reward its people for their services in proportion to what they cost and how useful they are to society. However, it could be argued that it is very unlikely that the economic or money value (reflected in the reward system) of the idea is entirely related to the value of the idea created by the inventor. Money value tends to be circumstantial and indeed also a product of the external environment, and does not reflect the 'true' value created by

the inventor. Circumstantial and external elements include economic climate and investment confidence, other inventors making complementary inventions in the ‘region’ of the invention (notice analogy with housing markets), strategic interaction in markets for ideas where inventors are locked in to (or out of) technological webs, etc. The belief that society, or the market economy by its own working, ensures that the ‘reward system’ generates rewards based upon the true value of the invention, or solely the value created by the inventor, is doubtful.

The research also found that efficient IPR protection allows profit-oriented firms to enter (or develop) an industry or market. This rationale of IPRs has also been compared to that of tariff protection. Just as with tariffs, a monopoly patent protects against market entry. The idea is that a temporarily production and trade privilege will allow a firm or industry to develop and mature. This, in its turn, cause (or open space for) industrial development and progress.

This agreed with Edmund Kitch (1977) who argued that IPRs allow breathing room for the inventor to invest in development without fear that another firm will steal the idea. Furthermore, the temporarily trade privilege in the form of an IPR should, just as with a tariff, help a firm or an industry to cover the fixed costs of inventing and setting up the producing of a new product and thereby enhance the incentive to invent and innovate (see section 3 on incentive rationales).

## 4.5 The Challenges Facing Intellectual Property Protection in Uganda

### 4.5.1 Types of IPR challenges experienced in Uganda

**Table 4.7: A table showing the Types of IPR challenges experienced in Uganda**

Challenge	Freq	Percent	Valid Percent	Cumulative percent
Lengthy Registration Process	8	32	32	32
Fear of Derailing Innovation	6	24	24	56
Broadness of IP rights	3	12	12	68

Poor enforcement in Developing Countries	3	12	12	80
Limited Public Access to IP information	5	20	20	100
	25	100	100	

The respondents gave a number of difficulties they experience when registering an IPR and most of them gave a reason of taking long to have Intellectual Property Rights registered as the main problem.

Notwithstanding the reformation of patent law in Uganda, a number of persistent enforcement issues affecting the protection of Intellectual Property Rights have not yet been fully addressed. These issues range from technical challenges and administrative lacunas to lack of capacity building and awareness among others.

In a well-researched paper, Kakooza (2010) observed that states are urged pursuant to their international obligations under the TRIPS Agreement to adopt enforcement procedures under their respective domestic laws so as to permit effective action against any infringement of Intellectual Property Rights. Enforcement and maximal enjoyment of patent rights heavily relies on the vigilance and due diligence of the patentee. This is because unlike the case for copyright and trademarks there are no penal sanctions for infringement of patent rights. The Sectoral Committee on Legal and Parliamentary Affairs on the Industrial Property Bill 2009 observed and recommended in its report following observations in other jurisdictions that criminal sanctions for patent infringement would stifle innovation if included in the 2014 Industrial Property Bill.

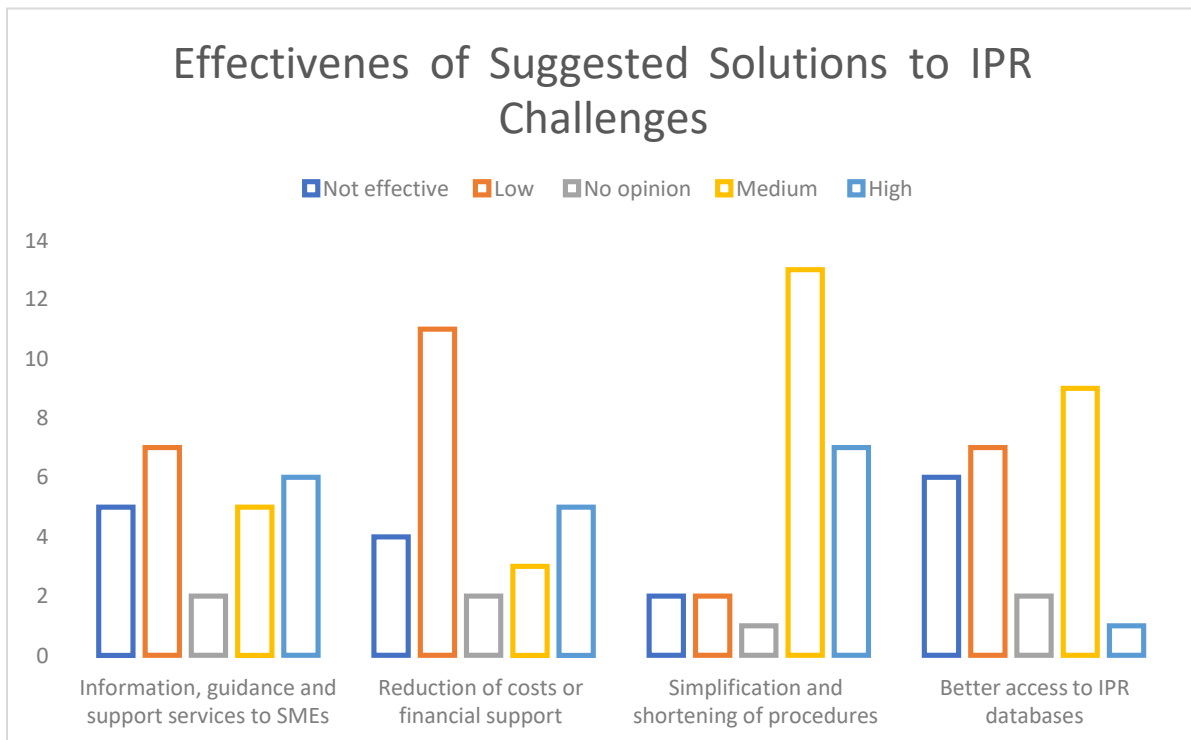
Kakooza (2010) makes a counter argument against the recommendation of the committee by holding the weak civil remedies for infringement of patent rights under the Patent Act Cap 216 to be a shortfall in the enforcement of the law on patent rights. The civil remedies under Cap 216 are similar to the remedies for infringement under the 2014 Act.<sup>203</sup> The problem of weak civil remedies is escalated by the lack of awareness hence the poor enforcement of patent laws and intellectual property laws at large.

The high level of technicalities involved in dealing with patents calls for adequate capacity building of officers in the enforcing departments and organs of government so as to allow the full appreciation of this nature of intellectual property. A case in point is the capacity building of patent examiners at the national registry of intellectual property under the URSB and custom authorities under the Uganda Revenue Authority.

#### 4.5.2 Effectiveness of Different Measures of Support

All respondents highly rated the effectiveness of different measures of support used or they would like to use if available. These measures include, but not limited to; Information, guidance and support services to SMEs when applying for IPRs, Reduction of costs or financial support, Simplification and shortening of procedures and lastly Better access to IPR databases.

Figure 4.2: A figure showing the Effectiveness of Different Measures of Support



According to other studies by ACORD Uganda where licensing is assumed, the means by which technology can spread internationally, the implications of stronger IPRs protection in the Uganda

and particularly in the oil and gas sector, are not clear cut. Kakooza (2001) argues that stronger IPRs in the country incite firms in the oil and gas industry to license advanced technologies. They increase the licensor's share of rents and reduce the costs of licensing contracts. Consequently, additional resources would be available for R&D. The research also found that simplification of IP procedures and improvement of the IP database went a long way in improving the way oil and gas officials perceived the concept.

## **CHAPTER FIVE**

### **SUMMARY AND DISCUSSION OF FINDINGS**

#### **5.1 Introduction**

In the earlier chapter the evidence of how intellectual property can enable the development of local content was given. In this chapter, the content to be discussed was divided into three sections; first section details the current use of Intellectual property right in Uganda. This is followed with the discussion of the opportunities that IPRs provide for both the employers and employees of oil and gas companies in Uganda. The last section addresses the challenges faced when implementing IPRs and the efficiency of said IPRs to the oil and gas business community in Uganda.

#### **5.2 Current Status of Intellectual Property Rights**

The research conducted has shown that, as demonstrated by the findings of the respondents, there is a positive movement in the use of intellectual property by Ugandan companies. The majority accepted that a lot of IPR operation had taken place in the last 3 years of their respective businesses. Further analysis of the region has shown that Uganda has made substantial progress in improving the administration and management of intellectual property rights. The Ugandan Parliament has passed significant IP legislation such as the Trade Marks Act 2010, the Copyright and Neighboring Rights Act 2006, the Geographical Indications Act 2013, the Plant Varieties Act 2014 and the Intellectual Property Act 2014. They gave life to an otherwise struggling sector and improved the protection of IP rights. Needless to say, these laws need continuous review if they are to be compliant with the ever-changing existence of the IP.

IPR encourages cultural expression and diversity, the creation and diffusion of new technologies. For example, the OECD found that a 1% increase in the intensity of patent protection, the basic and main form of IPR protection, in developing countries corresponds to an almost 1 % increase in domestic R&D. A similar increase in trademark and copyright rights, combined with two other vital sections of the successful IPR policy, leads to a 1.4% increase in domestic R&D and a 3.3%

increase in domestic R&D. It is important to note here that technology transfer is one of the components of local content creation and a prerequisite for all IOCs in the Ugandan oil and gas industry.

The study also showed that the country is currently taking various steps to boost the use of IPRs by the private sector and, in our case, by local oil and gas companies. This include the use of trade mark rights activists and patents to protect the inventions of Uganda's oil and gas industry. For example, the Trade Marks Act 2010 acknowledges that an exclusive licensee has the same rights as the owner of the Trade Mark. However, the act does not explicitly state whether or not a licensee may take an infringement action. This is in contrast to the United Kingdom Trade Marks Act 1994, which sets out detailed provisions on the rights of licensees in the event of infringement and specifically sets out the procedure that an exclusive licensee can pursue in an action against a trade mark infringer.

Collaboration was another topic reverberated in this section. Uganda's local business arena, especially in the oil and gas sector, has seen a growing need for cooperation and partnership with IOCs in order to receive bids on oil. This has contributed to a high degree of analysis of IPRs by all parties to these agreements. In fact, the study found that most local oil and gas companies collaborated with mostly large IOCs, mostly European ones, in order to benefit from intellectual property such as technology and work module systems.

However, the report also states that Uganda is still one of the lowest ranking countries in Africa in intellectual property applications. There is still a great deal to be done by the Government and the related stakeholders to emphasize and encourage creativity and innovation. Creativity and innovation are considered essential tools for growth and sustainable development. Education and preparation shall be seen as leading to the promotion of these capacities. Further action at national and regional level is therefore required to integrate creativity and innovation into lifelong learning.



### **5.3 Intellectual Property Protection Opportunities for the Local Oil and Gas Businesses**

The thesis first reached a baseline for the analysis when considering the possibilities that come with the use of IPRs. This was through the review of the core information regarding intellectual property that the respondent had. This was focused on the underlying factor that IPR opportunities were perceived differently by different workers based on experience and academic posture. In this respect, the study found that a large number of respondents had top-notch knowledge on the various sects covered in the Intellectual Property issue.

With this in mind, the study found that 60 % of respondents registered a patent, 16% registered a trade mark of the European Union and the remaining respondents registered either a utility model or a national trade mark with 12% each. One has to acquire one or more of the four different forms of intellectual property (IP) in order to protect one's idea so that someone else does not steal the idea. Generally, any invention starts out as the trade secret of an inventor. They need to obtain one or more of the other types of intellectual property protection-patents, trademarks and/or copyrights-before inventors sell their inventions.

This finding confirmed Balyanho's 2015 study that the defence of intellectual property rights, in particular patent rights, is intended to contribute to the promotion and advancement of technological innovation and to the transfer and dissemination of technology in industrial development. And as the case is, as they merge with IOCs for bids, Uganda firms, in particular those specializing in oil and gas, have benefited from technology transfer. Moreover, as a consequence of alliances focused on strong intellectual property rights, there has been an unparalleled flow of knowledge.

### **5.3 Challenges Facing Intellectual Property Protection in Uganda**

The study found that the respondents had a variety of difficulties they faced when registering an IPR by using a rating system and most of them provided a reason for taking a long time to register Intellectual Property Rights as the key issue. The study also showed that many

businesses and employees had trouble accessing intellectual property knowledge. They also reported that they asked for the advice of specialized lawyers, which turned out to be very costly.

The possibility of autonomous production in the oil and gas industry has been found to be reasonably high. The existence of the market ensures that a similar collection of challenges will also be faced by competing firms. Improving the quality of drilling or processing deep-sea oil, for example. Therefore, it is not surprising that rivals often come up with the same solutions to those problems. In addition, oil and gas firms will also closely watch any changes in their competitors' capabilities. If an innovation can be reverse engineered, then a rival would certainly do so.

In addition , the low level of public understanding of the value of patent rights and of the law has encouraged the continued violation in Uganda of those rights. The major modifications and repairs to proprietary manufactured goods in Katwe are a case in point. Such modifications and fixes constitute an infringement of a subsisting patent in law, given that they constitute a significant part of the development of new goods.

## **CHAPTER SIX**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **6.1 Introduction**

In this chapter, the researcher summarized the study, discussed and drew conclusions as well as recommendations that were made from the study. The conclusions and recommendations were made from the findings that were analysed, interpreted and presented in the previous chapter. This study aimed at assessing the ability of Intellectual property to support local content development in the oil and gas industry in Uganda.

#### **6.2 Conclusion**

The study aimed to evaluate Uganda 's existing intellectual property rights status. Despite a slow beginning to accept the implementation and use of IPRs, the results of the study showed that Uganda has gradually seen huge improvements in the region. And there has never been a high need for intellectual property rights in Uganda, with oil and gas activities increasing regular.

On the other hand, Ugandan legislation has been found to safeguard intellectual property rights, but the government seldom enforces the law to avoid the dissemination of piracy and counterfeiting. While a structured procedure for registering each form of intellectual property is established by the Uganda Registration Services Bureau and enables investors to enforce their rights through the judicial system, compliance remains weak. The Uganda Police Force (UPF) has formed the "Intellectual Property Police" unit for IPR compliance over the past two years, and companies are reporting an growing number of IPR prosecutions.

Among the many opportunities discovered in the study and discussed in the previous chapter, none stood out for the transition of oil and gas, such as technology. Through the transfer of technology by international investors in the oil and gas sector, technical capabilities have been promoted. The state-of-the-art polytechnical institution founded by CNOOC in Hoima to facilitate amateur welders, plumbers and technicians is a good example.

The study also found some obstacles that affected the ability of IPRs in the country to enhance local content. In addition to a lack of IP awareness and skills, IP registration costs are commonly viewed as one of the biggest obstacles for SMEs. Entrepreneurs must take into account not only the official fees (including application fees, publishing fees and maintenance fees) but also the costs relating to the preparation and prosecution of applications, legal advice and translation costs if the applicant wishes to apply for protection abroad in the budgeting of the costs relating to the acquisition of IP rights.

Moreover, the study found that many SMEs might view the costs of obtaining IP security as exceeding the potential benefits to be obtained from security, particularly considering that a significant part of the costs may be incurred before the product has entered the market and that lenders, investors or government programs rarely provide financial support for the protection of IP righthouses. Small population understanding of the importance and value of IP as assets appears to be the main obstacle to IP development in Uganda. Perhaps it's time to shake the lacklustre attitude in Uganda towards IP and join the rest of the world in reaping IP's rewards. In order to allow them to build a sound and viable technological base, developed countries must also facilitate the transfer of technology to least developed countries such as Uganda.

### **6.3 Recommendations**

The government through the institutions charged with the promotion, regulation and protection of intellectual property rights should carry out intensive sensitization of the public on the importance and relevance of patent rights. This will improve on the compliance to patent laws and respect of patent rights.

The lack of a National Intellectual Property Policy in Uganda is long overdue. There is need to develop an Intellectual Property Policy to address the policy linkages between intellectual property and other public issues

The Uganda National Council of Science and Technology (UNCST) might be overwhelmed with the role of promoting intellectual property. As recommended by the Sectoral Committee on Legal and Parliamentary Affairs on the Industrial Property Bill 2009, there is need to establish a

special institution for the promotion and development of intellectual property as the case is in Kenya which has an established functional institute, the Kenya Industrial Property Institute (KIPI).

Lastly, there is need to undertake more research in this area of law and policy to address the issues facing the enforcement of patent rights in Uganda in depth. Such research can be a basis for improving the functionality of Uganda's patent regulatory and enforcement institutions.

#### **6.4 Limitations of the Study**

The Intellectual Property Office did not readily avail the researcher with statistical data on the application and registration of patents despite numerous commitments by the office and appointments to retrieve and collect the said data. The national office has no computerized indexing mechanism of keeping records and tracking patent registrations and heavily relies on the index and data base of the ARIPO. A patent examiner at the national office informed me that the office has not procured a comprehensive computerized indexing application because of the small numbers of patent applications, registrations and renewals directly handled by the national office. Without such indexing mechanism, future research in this field is likely to face a similar challenge in respect to establishing statistical data on patent applications, registrations and renewals handled by the national Intellectual Property Office- Patent Department.

Secondly, there was a mentality and perception of likelihood of criminal prosecution and liability in the areas where patent infringement is rampant like Katwe. People were very sceptical to participate in interviews despite clear communication that the data collected was confidential and purely for academic purposes. The situation in Katwe is worsened by the high crime rates which have not been fully checked. Research in such areas of law and policy facilitates the formulation of functional policies but yet the people were not very willing to participate in a five minutes interview.

The scarce and limited publications on patent protection and infringement in Uganda did not avail many comparisons for this research to work with. In order to do a comprehensive research on the subject matter of this research, the researcher needed more funds to finance travels to

different parts of the country to do interviews and collect the data needed, which finances and time was not available. This research for the foregoing reasons is limited to data collected from interviews around Kampala and from literature reviews on general patent principles.

#### **6.4 Suggestions for Future Research**

Intellectual property is a two-fold element, the practicality, which has been discussed above and the legal aspect of it. Unfortunately, not a lot of studies have been conducted in this area. Compliance with existing laws is also minimal and there is a counterfeit problem in Uganda. These issues should be academically scrutinized so as to formulate solutions that will inform policy decisions in the near future.

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## Appendix 1

### Interview Guide

#### INTERVIEW GUIDE FOR INTELLECTUAL PROPERTY PROTECTION BY LOCAL OIL AND GAS COMPANIES

##### Introduction

Dear Respondent,

I am Oluka Andrew, a master's student of oil and gas from the Institute of Petroleum Studies in partnership with Uganda Christian University-Mukono conducting a research on –International Property Protection as an Enabler of Local Content in Uganda. You have been selected to participate in this study because the contribution you make to your organization is central to the kind of information required. The information you provide is solely for academic purposes and will be treated with utmost confidentiality.

Please kindly spare some few minutes to respond to the following questions.

Please provide the following regarding your position in the organization by placing -X|| or -√|| In the appropriate block.

##### SECTION A: BIODATA OF THE REpondENTS

What is your gender?

Male	
Female	

What age category do you fall into?

25 years and below	
26-34	
35-44	
45-50	
Above 50	

What category of work level do you fall into?

Top Management	
Middle level management	
Lower	
Other (Specify)	

How many years have you been employed at the Oil company?

0-5	
6-10	
Above 10	

What is your highest education level qualification?

PHD	
Masters	
Bachelor's Degree	
Higher Diploma	
Diploma	
Other (specify)	

Has your company registered any Intellectual Property Rights such as patents, trademarks or designs?

✓ Yes

No

Do you have any involvement in the Intellectual Property policy within the company?

Yes

No

Can you confirm that you will be answering this questionnaire on behalf of \_\_\_\_\_?

Yes

No

## **SECTION ONE: ASSESSMENT OF LOCAL O&G COMPANY INNOVATION**

**Is your company innovative?**

Yes

No

Don't Know

**In the last 3 years, did your enterprise introduce new or significantly improved...**

Products

Processes

Organisational Changes

Marketing changes

Other

Don't Know Not Applicable

**What measures did you take and what is their importance for your company's ability to derive competitive advantage from your innovation activities?**

*please select one response for each measure (both Intellectual Property Rights and Alternative measures for protection) going from 'I do not use it at all to 'High'*

### **Intellectual Property Rights**

Trade mark

Patent

Copyright

Geographical indication

Utility model

### **Alternative measures for protection**

- ✓  Confidentiality (trade secrets)
- ✓  Complexity of product design
- ✓  Leveraging my complementary assets
- ✓  Database law
- ✓  Time to market
- Other [O]
- My company does not take any measures to protect its' innovation outputs [S]

**Answers in column:**

- I do not use it at all
- Low
- Medium
- High
- ✓ **If 'No,' why don't you take any measures to protect your innovation?**
- I do not have enough knowledge on how to protect innovations
- The procedures are too costly
- The procedures are too long and burdensome
- I want to avoid any potential difficulties enforcing these measures
- I want to avoid any risk of potential litigation
- I don't see any benefits in protecting innovations
- Other (please specify)

✓ **Are you collaborating with other entities, such as companies, research institutes, academia etc. to develop an innovation together?**

Yes

No

Don't Know

✓ **If Yes, on which level are you collaborating with other entities to develop an innovation together?**

✓  Local

✓  Regional

✓  National

✓  EAC Nations

✓  International Countries

✓ **Are these Entities...**

✓  Large companies

✓  SMEs

✓  Universities/Academia

✓  Research Institutes

✓  Government Public Institutions

Other (please specify)

✓ **Are registered Intellectual Property Rights such as patents, trademarks and designs a result of this collaboration?**

✓  Yes

No

Don't Know

✓ If Yes, who is the owner of the Intellectual Property Right(s)?

My company

Partner

Both (in co-ownership)

Either 1, 2 or 3 depending on the case

## SECTION TWO: USAGE OF INTELLECTUAL PROPERTY RIGHTS BY UGANDAN O&G COMPANIES

✓ On scale of 10, How familiar are you with the term Intellectual Property Rights (IPRs)?  
*please indicate how familiar you are with the term Intellectual Property Rights on a scale from 0-10 where 0 means not at all familiar (don't know what IP is), 10 means very familiar (formulated an IP strategy) and 5 is the midpoint*

\_\_\_\_/10

You previously indicated that your company has registered IPRs. Could you please indicate which type of IPR and how many of each you registered?

- Registered a patent
- Registered a utility model
- Registered a European Union trade mark
- Registered a national trade mark
- Other alternative measures for protection like internet domain name(s)
- Never registered an IPR (no column answers for this option)

Answers in column:

- None
- 1
- 2-5
- 6-10
- 10+

✓ When did your company most recently apply for the registration/granting of an IPR?

When the company was started

Within the past year

Within the last 5 years

More than 5 years ago

✓ How important is it to have registered Intellectual Property (IP) in each of the following stages of the innovative process?

*Please select one answer for each stage going from 'Not at all' to 'Strong'. Please do not read out option 5 'No opinion'.*

**Stages of innovative process in row:**

Conducting research and development

Inventing new products, processes or services

Creating internal tools or processes to build final products, processes or services   
Undertaking the risks and costs of making, selling and marketing a commercial product

**Answers in column:**

Not at all

Weak

Moderate

Strong

No opinion

✓ Why did your company register IP?

please indicate all reasons why you registered IP



- It guarantees better legal certainty of extent of protection
- It helps me prevent others from copying my products or services
- It increases the chances of effective enforcement
- It improves chances of financing
- This is the common practice among the firms I deal with
- It improves my negotiating position with other companies and institutions
- It increases the value and the image of my company
- To obtain licensing revenues
- Other (please specify) \_\_\_\_\_

✓ Does your company include IP in its business strategy/business plan?

*Examples of including IP in your business strategy or business plan could be systematically aiming at obtaining patents, systematically registering trade marks for your products and their packaging or using IP licensing as an integral part of your strategy.*

Yes

No

Don't Know

✓ Where did you search for information to register IP?

*please indicate all that apply*

Internet

Outside private counsel

Chamber of Commerce

National IP offices/similar national bodies

International IP offices (World Intellectual Property Organization)

Other government organisation

Others (please specify) \_\_\_\_\_

✓ What kind of difficulties did you experience when registering an IPR?

Not enough knowledge/ I didn't know where to go

Not enough guidance

It took too long to have my Intellectual Property Right registered

Costly procedure

Difficult procedure

Invalidity of the application (conflict with an earlier right of a competitor)

Upfront refusal to register from IP office (or equivalent instance)

Absence of sufficient innovation (of a patent)

I did not experience any difficulties

Others (please specify)

✓ How do you rate the effectiveness of different measures of support that you use or that you would like to use if available?

*Please select one response for each measure, going from 'Not effective' to 'High'. Please do not read out option 5 'No opinion'.*

**Measures of support in row**

Information, guidance and support services to SMEs when applying for IPRs

Reduction of costs or financial support

Simplification and shortening of procedures

- Better access to IPR databases
- Other (please specify) \_\_\_\_\_

**Answers in column**

- Not effective
- Low
- Medium
- High
- No opinion

## Annex 3

### Introduction Letter



Institute of Petroleum  
Studies - Kampala

January 14<sup>th</sup>, 2019

TO WHOM IT MAY CONCERN

Dear Sir/Madam

#### INTRODUCTION FOR MR. OLUKA ANDREW TO CONDUCT RESEARCH IN YOUR ORGANISATION

Greetings in the precious name of our Lord.

I wish to introduce to you the above named person, who is a student pursuing Master of Business Administration in Oil and Gas Management, of Uganda Christian University in affiliation with the Institute of Petroleum Studies Kampala (IPSK).

His proposal has been approved by our vetting committee and is in the process of collecting data. Mr. Oluka would wish to conduct research in your organization.

The title of his research is **“Intellectual Property Protection as an Enabler of Local Content in Uganda”**

By copy of this letter, all respondents are notified that this study is for academic purposes and as an Institution, we request you to cooperate in facilitating this very interesting research project.

Sincerely,



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