

DECLARATION

**AWARENESS AND UTILISATION OF INTELLECTUAL PROPERTY
RIGHTS
BY MICRO AND SMALL ENTERPRISES
WITHIN THE MANUFACTURING SECTOR IN NAIROBI**

BY

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**A Management Research Project Submitted in Partial Fulfilment
for Degree of Masters of Business Administration (MBA) of the
University of Nairobi, School of Business.**

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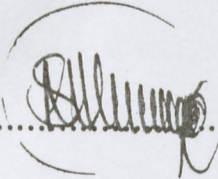


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DECLARATION

This research work is dedicated to my parents Mr and Mrs J. Munyi for their role in instilling a
This research project is my original work and has not been submitted for a degree in any
other University. I am again especially my family members Francis, Elly and John for their
patience, support, encouragement and understanding during my study.

Signature:

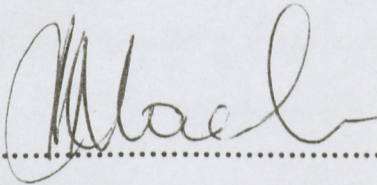


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My gratitude and appreciation goes to my Supervisor Mr. J. K. Maziu for his tireless efforts, professional guidance, advice, support, encouragement and constructive criticism he gave me throughout the study and which helped me to complete this project. I am convinced without his support this study would not be what it is. A special debt is owed to all the MBA Lecturers, Faculty of Commerce for their valuable support in assisting me realize my goal. I extend my appreciation also to my MBA colleagues.

May I also thank my husband Francis Thechi and children Elly Karim and Elvin Njeri for their patience, encouragement, support, understanding and long hours of waiting and the many things they missed and sacrificed because of my absence during my entire course.

Lastly but not least am very grateful to my colleagues and staff of the Kenya Industrial Property Institute for their assistance especially Maina, Wangachi, Catherine, and Njeri for their tireless effort in encouraging the typing of the project and other assignments during the entire course and to my dear young sister Njeri for her patience and assistance in typing and proof reading the project as well as Ken Aduda of the Kenya Industrial Research and Development Institute for the useful input to the document.

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ABSTRACT

In the increasingly knowledge driven economy intellectual property rights are valuable entrepreneurial products and are a key consideration in day-to-day business decisions where its protection and economic utilisation contributes to the economic success in established market economies. New products, brands and creative designs appear daily on the market and are the result of continuous human innovation and creativity.

This study focused on the Micro and Small Enterprises within the manufacturing sector to establish the level of intellectual property awareness, utilization and the factors that influence the utilization of intellectual property rights within the sector. This study is presented in five chapters and sections through which the researcher has tried to discuss the above issues. Quantitative as well as qualitative data analysis has been utilized. Summary tables containing frequencies and percentage have been used extensively in presenting the findings of the study.

The study established that the level of intellectual property awareness (5%) and utilization (5%) is low with few (20%) entrepreneurs taking steps to legally protect their intellectual property rights. They also had difficulties in differentiating between the various categories of intellectual property rights, recognizing inventions and innovations, knowing how and where to protect intellectual property rights, costs associated with obtaining and enforcing intellectual property rights, accessing intellectual property rights information, and knowing the relevance of intellectual property in daily business. Further, there was perception that intellectual property system is esoteric, too cumbersome, time consuming, with too much secrecy, lack of relevance and usefulness to the enterprises. However, there are few who acknowledge that

ownership and commercialization of intellectual property gave competitive advantage to those enterprises that own intellectual property assets.

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The study also established that the Micro and Small Enterprises have not adequately exploited the potential of intellectual property rights thus the strong need to promote the generation, protection and commercialization of intellectual property rights in Kenya. The sector has to constantly innovate and produce products that meet global standards if they have to survive and compete under a continuously changing and challenging liberalized environment.

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KIFI Kenya Industrial Property Institute

KIPO Kenya Industrial Property Office

KIRDI Kenya Industrial Research and Development Institute

MSME Micro and Small Enterprises

TRIPS Trade Related Aspects of Intellectual Property Rights

WIPO World Intellectual Property Organization

WTO World Trade Organization

LIST OF ABBREVIATIONS

ARIPO	African Regional Industrial Property Organization
GATT	General Agreement on Tariffs and Trade (1994)
KIPI	Kenya Industrial Property Institute
KIPO	Kenya Industrial Property Office
KIRDI	Kenya Industrial Research and Development Institute
MSEs	Micro and Small Enterprises
TRIPS	Trade Related Aspects of Intellectual Property Rights
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

CHAPTER ONE: INTRODUCTION

1.1. Background

In today's knowledge-driven economy, successful enterprises are those that consistently create new knowledge (innovate), disseminate it widely throughout the enterprise, and quickly embody it in new technologies and products. Such inventiveness, know-how and creativity are captured and transformed into exclusive business assets through the acquisition of intellectual property rights (Idris, 2003). Intellectual property protection has become an important tool for business to enhance competitiveness and strengthen the position of its products or services in the market place (WIPO, 2002).

Garner (2000) states that intellectual property is a category of intangible rights protecting commercially valuable products of the human intellect and comprises primarily trade marks, copyright, and patents rights, but also includes trade-secret rights, publicity rights, moral rights and rights against unfair competition. It may also be regarded as commercially valuable product of the human intellect in a concrete or abstract form, such as copyrightable work, a protectable trade mark, a patentable invention, or a trade secret.

Within a business, intellectual property refers to a wide range of intangible assets ranging from the innovative features of its products to the trade mark it uses for marketing its products and making them distinguishable and recognizable by consumers, to its creative designs that assist in making its products more appealing. By formally registering and protecting its intellectual

property, a business acquires the exclusive right to use its intellectual property for a limited period of time. This may provide an enterprise with a wide range of business opportunities (Idris, 2003).

The worldwide trend has been to encourage the Micro and Small Enterprises to utilize intellectual

The Micro and Small Enterprises have been recognized for their significance and strategic economic importance, particularly in terms of job creation, dispersion of wealth and poverty reduction (GoK, 2002). The Micro and Small Enterprises are defined as those enterprises that have between 1 and 50 employees (GoK, 1992). The micro and small enterprises sector employs more than 5 million people with a contribution of more than 18 percent to Kenya's gross domestic product (GDP) (GoK, 2003). They cover wide cross-sections of the national economy and can be found in most industrial sectors. The sector presents a wide variation of entrepreneurs, literacy levels, enterprises and interests. It also exhibits varying degrees of formality, productivity levels, use of information technology and output levels (Burrone, 2001).

GoK, 2003) provided the blue print for subsequent development plans all, which, smother the

Among other attributes, Micro and Small Enterprises can act as a seedbed for the development of entrepreneurial skills and innovation; provide economies with greater flexibility in the provision of services and manufacture of various consumer goods; increase the competitiveness of the marketplace (WIPO, 2003).

indigenous research and development, direct foreign investment and purchasing of existing

Burrone (2001) states that micro and small enterprises owners and managers are an heterogeneous group where some are dynamic, innovative and growth oriented and exhibit a high degree of initiative and are able to actively seek and take full advantage of information and there are those that are more passive. Studies in several countries have shown that the former group comprises only five per cent of micro and small enterprises owners, although this group contributes to over

fifty (50) per cent of new jobs. They manage what is called “growth-oriented firms” and are frequently referred to as the “gazelles” (ILO, 1999).

The worldwide trend has been to encourage the Micro and Small Enterprises to utilize intellectual property for the promotion of their development, competitiveness and growth. This is due to the recognition that there is often a significant discrepancy between these enterprises' important contribution to the economy and their level of utilization of intellectual property (Idris, 2003). Micro and Small Enterprises the world over are proven innovators with great creative capacity and the driving force behind many technological advances. They produce more than 80 percent of all goods and services and account for the majority of enterprises worldwide (WIPO, 2001⁽³⁾).

The Kenya Government recognises this sector and its contribution as outlined in the various policies papers. The Economic Management for Renewed Growth of 1986 (GOK, 1986) provided the blue print for subsequent development plans all, which amplify the role of technology in industrialization. Further, the Sessional Paper No. 2 of 1996 (GOK, 1996) envisaged Kenya becoming a Newly Industrial Country (NIC) by the year 2020 and included the sector as an integral part of industrial sector and engine to industrialization. It also proposed appropriate technology policies to spur industrial transformation such as acquiring technology, indigenous research and development, direct foreign investment and purchasing of existing technology and overseas training. Lastly, the 9th National Development Plan (GOK, 2002) stressed the need to promote indigenous creations and protection, by patenting of new technologies as a way of enhancing the role of technology, research and development in industrial growth.

1.2 Statement of the Problem

“Intellectual Property is a term increasingly in use today, but still little understood. To many people it remains an obscure legal concept of little relevance to everyday life” (Idris, 2003).

However, irrespective of the great emphasis and importance the Government lays on this sector, the innovative and creative capacity is not always fully exploited as many Micro and Small Enterprises are not aware of the intellectual property system or the protection it can provide for their inventions, brands and designs (Olembo, 2002).

This is common among local Micro and Small Enterprises where both the innovators and users of intellectual property products, processes, and services readily admit that they are uninformed about intellectual property rights (Kinyua, 2003). Due to this ignorance, the Kenyan society has suffered from counterfeiting and intellectual property rights abuse of various forms ranging from their own ideas being ‘stolen’, original work being imitated, copied and being commercialized in the local and global markets without due compensation to the original owners subjecting them to substantial losses. Local inventions such as the energy saving ‘jiko’ and the ‘money maker pump’ have been ‘stolen’, copied / imitated and commercialized elsewhere and sold in global markets without due recognition or compensation to the original investors (Olembo, 2002).

Good inventions or creations left unprotected may be lost to other competitors that are in better positions to commercialize the product or service at a more affordable cost leaving the original inventor/creator without any financial benefit, reward or recognition. Thus adequate intellectual property protection and enforcement is a crucial step in deterring potential infringement and

turning ideas into business assets with a real market value (Idris, 2003). Therefore forward looking enterprises face the challenge of extracting the latent value and using intellectual property effectively as a business tool.

From the above, it's clear that Micro and Small Enterprises must constantly innovate and produce products that meet global market standard if they are to compete under a continuously changing and challenging environment. Knowledge and utilization of intellectual property is key if the sector has to grow in a liberalized environment. (WIPO, 2002) Thus the need to develop a national strategy on intellectual property to provide a road map of achieving the intended intellectual property objectives is necessary and the need to generate data concerning the current state of intellectual property in terms of awareness, utilization and the factors that influence the utilization exploitation and commercialization of intellectual property among the Kenya Micro and Small Enterprises and determines if intellectual property is a real or perceived need.

1.3 Objectives of the Study

The objectives of the study were as follows:

- i. To determine the level of intellectual property rights awareness among Micro and Small Enterprises within the manufacturing sector.
- ii. To establish the levels of intellectual property rights utilization by Micro and Small Enterprises within the manufacturing sector.
- iii. To establish the factors that influences the utilization of intellectual property rights among Micro and Small Enterprises within the manufacturing sector.

1.4 Significance of the Study

The Micro and Small Enterprises have been recognized for their significance and strategic economic importance, particularly in terms of meeting the national development objectives. The Government of Kenya has placed the promotion of Micro and Small Enterprises high in its priorities of development agenda as outlined in various Sessional papers (GoK, 1992, 1996).

The findings of this study are important to: the Micro and Small Enterprises owners/managers; the Government; the providers of business development services; the academic community.

1.4.1 The Micro and Small Enterprises owners/managers

The study provides information that enables the Micro and Small Enterprises recognize the value of intellectual property rights to their business as well as the services available to them from intellectual property organizations and thus prepare and position themselves appropriately to benefit from these services. In addition, the study enables them to know which services to utilize for the development of their businesses and enhancement of their competitiveness and strategic advantage.

1.4.2 The Government

The government has identified the micro and small enterprises sector as an integral part of industrialization to be attained by the year 2020 as stipulated in its numerous development policy papers. Thus development in this sector is of prime importance to the Government. In addition, intellectual property has been identified as a key factor to industrialization. Thus findings of the

study are useful for the development of a strategy framework within which intellectual property can be utilized by potential and existing Micro and Small Enterprises to enhance their competitiveness and growth in order to facilitate the industrialization process. The study also highlights the areas of deficiency and the strategies that need to be addressed by the Government to attain meaningful development as well as strategies for enforcing intellectual property rights within the micro and small enterprise sector.

1.4.3 The providers of business development services.

These include the Government agencies such as the Kenya Industrial Property Institute (KIPI), Kenya Industrial Research and Development Institute (KIRDI), non-governmental organizations (NGOs) such as the World Intellectual Property Organization (WIPO), African Regional Intellectual Property Organization (ARIPO), public and private companies that have an interest in this area of intellectual property. The results of the study enables service providers to critically evaluate the services/products and their outreach strategies to Micro and Small Enterprises and learn about the innovative environment of the sector and law to create interest among the enterprises to protect their intellectual property rights.

1.4.4 The academic community

The study adds to the body of knowledge available in the area of intellectual property rights and micro and small scale enterprises development. It also forms a basis for further research in the area of intellectual property protection, awareness and utilization as a development tool in Micro and Small Enterprises.

CHAPTER TWO: LITERATURE REVIEW

2.1 Concepts of Intellectual Property

Intellectual property deals with protecting creations of the human mind, the 'human Intellect' and relates to pieces of information that can be incorporated into tangible objects (Idris, 2003). In legal terms intellectual property is divided into two main categories:

Industrial Property, which includes inventions or patents (the exclusive right granted for an invention, which is a product or process that provides a new way of doing something or offers a new technical solution to a problem), trade/service mark or brand name (which is a distinctive sign that identifies certain goods or services as those produced or provided by a specific enterprise), industrial design (an ornamental or aesthetic aspect of an article), utility models (petty patents), geographical indications (are signs used on goods that have a specific geographical origin and often possess qualities or reputation that are due to that place of origin), protection against unfair competition and protection of undisclosed information/trade secrets (protected information which is not generally known among or readily accessible to, persons that normally deal with the kind of information in question, has commercial value because it is secret, and has been subjected to reasonable steps to keep it secret by the person lawfully in control of the information) and

Copyright which is the legal protection extended to owners of rights in an original work that he has created and include musical works, literary works such as novels, poems, plays, films, artistic works including computer software, drawings, paintings, photographs; sculptures and

architectural designs and Related or Neighbouring Rights concern other categories of owners rights, namely those of performing artist in their performances, producers of phonograms in their recordings and those of broadcast and/or broadcasting organizations in their radio and television programs (WIPO, 1967) .

2.2 The Origins of Intellectual Property

For centuries millions of patents have been granted throughout the world under various patent laws of various countries but for similar reasons: “to encourage an inventor to disclose his invention to the public and thereby promote the progress of science and the useful arts” (Brink, 1959). Eisenschitz (1987) looks at this arrangement as “a bargain or contract between a Government and an inventor” where the inventor discloses the invention and the government in return provides the “monopoly” for a period of time.

It is believed that the British patent system is the “prototype of patent systems throughout the world” (Williams, 1999) and that modern patent law originates from Section IV of the 1623 Statute of Monopolies whose enactment was influenced by the publication of the Book of Bounty in 1610. Bochnovic (1982) in his book, *The Inventive Step*, hints that a submission by defence counsel Fuller during one of the cases based on the statute “was to become the common law foundation for present patent system”. Judge Giles S. Rich, an eminent Justice of the United States Court of Customs and Patents Appeals admits that the United States of America inherited its idea of patents for inventions from England.

Thus a brief history of the development of the patent system and the evolution of the inventive step in England can act as a basis of understanding the origin and evolution of patent rights now practised worldwide. Williams (1999) stated that prior to the Statute of Monopolies of 1623 there existed in Medieval England a system of Common Law relating to monopoly grants which aimed at encouraging trade in general rather than new inventions.

Another School of thought states that Renaissance northern Italy is thought to be the cradle of the intellectual property system. A Veteran Law of 1474 made the first systematic attempt to protect inventions by form of patent, which granted an exclusive right to an individual. It was also notable that the invention of a movable type and the printing press by Johannes Gutenberg around 1440 contributed to the birth of the first copyright system in the world (Idris, 2003).

2.3 Development of Intellectual Property

Cornish, (1999) states that protection of intellectual property at an international level can roughly be divided into three periods namely:

First, the territorial period was essentially characterized by an absence of international protection, was dominated by the principle of territoriality. That is, intellectual property rights did not extend beyond the territory of the sovereign that granted the right at the first place. The principle is the product of the intimate connections found between the sovereignty, property rights and territory.

Second, the international period begun in Europe during the nineteenth century. Idris, (2003) states that towards the end of the century (19th), inventive new ways of manufacturing helped

trigger large-scale industrialization, accompanied by such phenomena as rapid-city growth, expanding railway networks, the investment of capital and growing trans-oceanic trade. New ideals of industrialism, the emergence of stronger nationalism led many countries to establish their first modern intellectual property Laws with many taking greater interest in the possibility of international co-operation on intellectual property as manifested in the form of Bilateral Agreements.

Third period, the global period has its origins in the deliberate linkage between trade and Bilateralism in intellectual property was important in that it contributed to the recognition that an international framework for the regulation of intellectual property had to be devised and the contents for the same formulated. This was in the form of two multilateral pillars: the Paris Convention of 1883 (Union for the Protection of Industrial Property) and the Berne Convention of 1886 (a Union for the Protection of literary and artistic works).

These two conventions ushered in the multilateral era of international Co-operation in intellectual property and the twentieth century saw the proliferation of international intellectual property regimes. These include agreements on Trade Marks (Madrid Agreement and Protocol on Marks of 1891), Lisbon Agreement for protection of Appellations of Origins (1958), Trademarks Law Treaty (1994), The Hague Agreement of 1925 on Designs, Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organization (1961) Plant Varieties (International Convention for the Protection of New Varieties of Plant of 1961 and 1991), Patents (Patent Co-operation Treaty, 1970), Semi Conductor Chips (Treaty on intellectual property in respect of integrated circuits, 1989). These conventions have undergone numerous revisions. (WIPO, 2001²).

Treaty making in intellectual property was accompanied by the rise of International Organizational forms. The Paris and Berne Conventions saw the creation of an international secretariat (bureaus) in 1893 known as the United International Bureaux for the protection of Intellectual Property that was superseded by World Intellectual Property Organizations (WIPO) established by a treaty in 1967. (WIPO, 1967).

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Third period, the global period has its origins in the deliberate linkage between trade and intellectual property in the 1980's, a linkage which emerged at a multilateral level in the form of the Agreement on Trade-Related Aspects of Intellectual Property Rights, 1994 (TRIPS Agreement). Some developed countries began to use trade measures to curb piracy of intellectual property abroad. Intellectual property was deliberately included as a negotiating issue in the Uruguay Round on General Agreement on Tariffs and Trade (GATT) Negotiations. The conclusion of the negotiations not only led to the TRIPS Agreement but also the Agreement establishing the World Trade Organization (WTO). The TRIPS Agreement became binding to all members of the WTO. Thus there was no way for a state that wished to become or remain a member of the multilateral trading regime could step a side the TRIPS Agreement (Cottier, 1992).

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The TRIPS Agreement built on the edifice of the principles of territoriality and national treatment represents the beginning of property globalisation. (Correa, 1997) intellectual property has come to feature strongly in regional arrangements of the 1990's and the 2000's particularly trade arrangements. It is important to note that all of the TRIPS Agreement is binding on all members of WTO. Therefore States have to implement a common and enlarged set of Intellectual Property Standards. The POST-TRIPS era has seen a period in which countries have had to engage in the task of national implementation of obligations under the TRIPS Agreement. That is, to make

intellectual property provisions in their National Laws that some authors evaluate as perpetrating the 'First World' interests in developing economies (Abbott, 1999).

2.4 Development of Intellectual Property in Kenya

Prior to the enactment and coming into force of the now repealed Industrial Property Act, Chapter 509 of Laws of Kenya (GoK, 1989) that came into force on 2nd February 1990, the Kenyan patenting system was wholly dependent on that of the United Kingdom, Kenya's former colonial masters. The Patent Registration Act, Cap 508 was the law governing patent protection in Kenya. This was the period between 1914 and 1989. Under this British patent system, any person desirous of obtaining a patent was required to apply and obtain the same in the United Kingdom before having the same automatically registered in Kenya. Once registered, such a patent continued to be in force only if it remained so in the United Kingdom.

Industrial designs registration was governed by the United Kingdom Industrial Designs Act (Chapter 510). This Act inter alia provided that a registered owner of an industrial design under the said Act automatically enjoyed similar privileges and rights in Kenya. These two United Kingdom based Acts' (generally referred to as former patent laws) were repealed by section 125 of the Industrial Property Act. Section 126 of Industrial Property Act provided inter alia that all patents granted/registered in Kenya under the former patent laws (UK Acts) and the privileges and rights conferred by the registration effective immediately before the commencement of the Act (Cap 509) should be treated as if they had been granted under the new Act. As for the expiry date as regards Kenya the same would expire as if the new Act had not been enacted, (that is, the time they were supposed to expire under the United Kingdom Acts). These two Acts were

administered by the Registrar General Department under the Attorney General's Office. (Cap 508 and Cap 510) During this period when the UK Patent Laws were in force, about 4000 patents granted in the United Kingdom were registered in Kenya yet none of these was from Kenya (Norah, 2003).

Registration of Trade Marks in Kenya dates back to 1913. Before Kenya gained independence, the Law governing the registration of trademarks was the Trade Marks Ordinance, 1912. On attaining independence, trademarks were registered under the Trade Marks Act, Chapter 506 of the Laws of Kenya whose commencement date was 1st January 1957. This Act was a complete replica of the Trade Marks Act, 1938 of the United Kingdom. This Act has been amended severally. (GOK, 1957).

What then brought the enactment of the Industrial Property Act (Cap 509) (GoK, 1989)? Olemba (2003) states that the Government realized the need for a fully homegrown patenting system. It was felt that time was ripe to break the dependency on the outside systems (United Kingdom) and thus a need to establish an industrial property system in Kenya that would enhance and promote inventiveness and innovativeness. Further, stimulatory effect of protection for inventions was seen as being key to the growth of the private sector namely the drug industry and the artisan in the cottage industries such as the micro, small and medium size enterprises. The Act was also seen as being important in technology transfer where apart from protection being seen as facilitation in the acquisition of technological know-how from the developed countries, it would also provide a legal policy framework for the Industrial Property Office to advise on and record technology transfer agreements and licences. Some of the technology would then be modified and or simplified to suit the environment or the needs of the country.

Olembo (2003) further states that it was the invention by Kenya Medical Research Institute (KEMRI) dubbed “KEMRON” that acted as the catalyst for enactment of the Act when it was realised that the invention could not be patented in Kenya without the same being first registered in the United Kingdom thus the enactment of the Industrial Property Act, (GoK, 1990). Under this Act the country could register the patent nationally without reference to the United Kingdom. The Act came into force on 2nd February 1990 by Gazette Notice No. 79 of 1990 (GoK, 1990).

The Kenya Industrial Property Institute (KIPI) as a body corporate and conforms to the (TRIPS)

The Act Inter alia provided for the establishment of the Kenya Industrial Property Office, a Government Department whose main functions was to:

Receive, examine and process application for and register / grant industrial property rights

- (b) Promote inventiveness and innovativeness in Kenya
- (c) Provide patent information to the public, and
- (d) Screen technology transfer agreements and licences (GoK, 1990).

The said Act was by global Standards of industrial property in the 1990's quite up-to date. This is because apart from providing for patents, utility models and industrial designs, the Act provided for enforcement of intellectual property rights and dispute settlement. It also conformed to the provisions of the Paris Convention and Patent Co-operation Treaty administered by WIPO and the African Regional Industrial Property Organisation (ARIPO) Protocol administered by ARIPO. Further, it had provisions for the Industrial Property Tribunal whose main function was to hear appeals from the decisions of the Director, Kenya Industrial Property Office. Lastly, it repealed the Patent Registration Act, Cap 508 and the United Kingdom Industrial Designs Act, Cap 510 (GoK, 1990).

With the vast changing global trends and the Kenyans largely getting enlightened on the need to protect their intellectual property rights, the Government realized the need to up-date the Industrial Property Act, Cap 509. Since the amendments were quite substantial, they could not be taken care through an amendment to the Act but through a repeal that meant complete overhaul. This Act was hence repealed in the year 2001 through the Industrial Property Act, 2001 that commenced on 30th April, 2002 (GoK, 2002). This Act provides for the establishment of the Kenya Industrial Property Institute (KIPI) as a body corporate and conforms to the (TRIPS) Agreement administered by the WTO (GoK, 2002).

2.5 Intellectual Property and Micro and Small Enterprises

The available research works in the field of MSE are mostly in general areas of management financing, policy and constraints faced by the sector. Various studies have been carried out to determine the problems facing the sector Mbuvi (1983), Maalu (1990), Kilonzi (1992), Wakah (1999) and Mwangi (2001) looked at the various problems facing the MSE and the necessary support services required to enhance their growth and development.

Problems identified by the studies include: lack of capital, lack of business experience, training, high level of dead and slow moving stocks, poor record keeping and poor financial management and low demand. Other problems included saturated markets, inadequate management skills and harassment from local authorities just to mention a few. However, an in-depth study in relevant areas of Micro and Small Enterprises and intellectual property and how the same can hence steer development is not only limited but also lacking. Few researches exist on general aspects of

intellectual property protection systems and its impact on Micro and Small Enterprises development. Yet this area has been found to play an important role in the development of Micro and Small Enterprises.

The current literature on intellectual property mainly covers emerging issues in intellectual property such as electronic commerce, biotechnology, protection of traditional knowledge and expressions of folklore, trade related aspects of intellectual property rights.

Correa, (1997) focuses on international trade and its impact on the developing countries, the role of intellectual property and the WTO. He cuts through the daunting technicalities of one of the most important international agreements with regard to trade and intellectual property rights the (TRIPS) Agreement. He explains the main provisions of the Agreement. He also looks at the impact of the Agreement on intellectual property rights in the developing nations and how it affects trade.

He also addresses the issue of information technologies, notable in the form of computer software, multimedia products, integrated circuits and the digital information. The area of genetic resources, access and exploitation of the same is pursued in great detail. His research is an essential introduction to the TRIPS Agreement and provides elements to develop policies and laws on intellectual property from a developing country perspective. Further, he gives an insight into the different areas of intellectual property rights, namely the industrial property and copyright. Licensing of intellectual property and transfer of technology are also explored in depth with regard to the developing countries.

Cornish (1992) looks at intellectual property rights in general. He gives a detailed introduction into both industrial property and copyright and related rights. The role of the WIPO in the development of intellectual property rights with its member states is discussed extensively. The author seeks to introduce the reader to the history of intellectual property law and the various international instruments that govern intellectual property law such as the Paris Convention, the Berne Convention, the Madrid Agreement, the TRIPS Agreement and to name a few.

Further, he gives an insight on the enforcement and management of intellectual property including the collective management of the rights as well as the obligations of the member states of WIPO with regard to the same. Lastly, the technological legal developments in intellectual property in general are also discussed.

Abbot (1997) in their collection of Material and Commentaries on the Intellectual Property Law System looks at the various aspects of intellectual property system. He dwells on the significance of intellectual property and its role in the global market. In his research he evaluates the role of intellectual property in perpetrating the 'First World' interests in developing economies and how this was catalyzed by the coming into being of the World Trade Organization after the multilateral negotiations.

He covers intellectual property in international trade, law and policy as well as the evolution of technology markets and the management of intellectual property. The book contains a detailed introduction to intellectual property as well as illustrated examples and cases on the said subject matter. This includes the sources and basic principles in intellectual property law. The

international and regional organizations that deal with intellectual property rights are also covered in great detail such as WIPO, WTO and other regional organizations.

The authors cover the dispute settlement mechanisms of solving intellectual property rights disputes. Further, new areas in intellectual property especially in the digital environment and the licensing of rights, technology transfer as well as the evolution of technology and the markets are also extensively covered. These include global electronic commerce, internet domain systems and the challenges to international institutions. The challenges of implementing the international agreements and cross border conflicts on intellectual property rights are sufficiently researched.

Gurry (1992) researched on the evolution of technology markets and the management of intellectual property rights. His thesis was an interplay between intellectual property and the market economy. He tries to outline the importance of intellectual property in international trade and marketing and how the same can be utilised as a business tool.

At the international level focus is the protection of traditional knowledge, the WIPO commissioned a fact-finding mission in 1998-1999 on Intellectual Property and Traditional Knowledge and folklore. The findings in the said report form the basis of current discussions and research on intellectual property and Traditional Knowledge and Intellectual Property needs and expectations of Traditional Knowledge Holders – (WIPO, 2001⁽¹⁾).

Other Studies focusing on Micro and Small Enterprises and innovation include studies by Audetsch (1990) who examined innovation among these enterprises and focused on mechanisms by which to improve and introduce new products. He concluded that majority of these enterprises

are technology followers with low innovative and creative capacity. This was echoed by Cohen (1996) who pointed out the absence of research and development within the sector highlighting the informal and incremental nature of innovations by these enterprises which he concluded are often characterized by adaptations of existing products to meet the markets demands (demand-pull).

Archigubi (1996) pointed out that Micro and Small Enterprises innovation tend to be more concentrated in certain sectors particularly those requiring low capital investment and also emphasized the advantages of Micro and Small Enterprises visa vis large firms due to their greater flexibility to take risks and adapt to market demands as they are free from bureaucratic constraints. Easteban (2000) groups the sector into three (3) categories namely; (i) technology developers who consist of 1-3% of the sector, (ii) leading technology users consisting of 10-15 % while (iii) technology followers consisting of 80-85% of the sector. He concluded that majority of Micro and Small Enterprises are technology followers with low innovative and creative capacity.

Burrone (2001), states that Micro and Small Enterprises are a heterogeneous group whose innovative capacity and ability to develop new and innovative products varies significantly based on their sector, size, focus and resources. He states that most thriving industries of recent years include software and biotechnology where innovation and technology acquisition is a key feature in business operation. However, he states that this is not so in the industrial sector.

In Kenya, however, not much has been done in regard to intellectual property & Micro and Small Enterprises. However, there are various articles on intellectual property where the importance of

intellectual property protection has been outlined. The Association of Makers and Exporters of Gift and Allied Articles (AMEGA) – Kenya argued the government to introduce patent rights to protect its products from piracy. It was emphasised and stated that the enforcement of patent rights for its products would protect the industry from losing millions of shillings to pirates and that due to lack of patents rights to govern products, the Kenyan “Kiondo” had been imitated by other people and sold in global markets adversely affecting the original producers and subjecting them to substantial losses (Satiki, 2001).

From the above, it is clear that patent rights can curtail unscrupulous traders from producing similar products. He challenged the major players in the industry to be more innovative and produce products that meet global market standards enhancing their development, competitiveness and growth. He further acknowledged that piracy and counterfeits are global problems that require concerted efforts to eliminate. However, it was acknowledged that this was a new field that required concert effort to encourage intellectual property utilization among the Micro and Small Enterprises as the awareness level was very low. (Satiki 2001).

Otswongo (2002) emphasis the importance of intellectual property in research and development of intellectual property policy at institutional level, needs of national institutions in the establishment and use of intellectual property management policy and functions of intellectual property desks in national institutions and collaborative activities and linkages in the said area. The need to form an intellectual property initiative to manage intellectual property issues at universities was echoed. Further, Researchers are challenged to increase the use and application of biotechnology in both health and agriculture to improve the output and cope with the challenges that impede the country’s growth rate. It was emphasized that intellectual property

rights was a tool for technology transfer, an opening for private sector investment in research, an attraction for research and development and above all an appropriate route through which research output from universities and other institutions reach the consumers through the industries and Micro and Small Enterprises. However, it was acknowledged that the notion of intellectual property had not gained roots in the Kenyan society. Capacity and institutional arrangements for the effective use of the system was yet to be fully developed in the universities and research institutions.

Baraza (2002) emphasized that teaching, research and training on intellectual property rights matters entrenched with appropriate policies was necessary as well as the development of intellectual property policies at Universities, Polytechnics and among the industries. The institutions were challenged to establish technology transfer and intellectual property management offices in order to ensure coordinated marketing of knowledge in the institutions. Further, it was resolved that intellectual property systems should be strengthened in the country's institutions of higher learning. Lastly, the institutions were challenged to ensure that agreement with donor agencies or the private sector relating to funding of research incorporate clauses and other measures to protect intellectual property rights and other assets that would accrue from the research. However, it was also acknowledged that the term intellectual property was little understood though increasingly in use today.

Jumah (1989) outlines a brief analysis of the Industrial Property law in Kenya. He explores the various policy options and strategic approaches on Industrial Property. He further outlines various provisions on promoting the social innovator and consumer interests in technology.

Another study on innovation, technology transfer and intellectual property was outlined. The study emphasis on how technology can be modified to suit the needs of the developing nation.

3.1 Research Design

From the above it is clear that the literature available concentrate more on the universities and the research institutions while the Micro and Small Enterprises are left behind. Research on intellectual property and Micro and Small Enterprises and the role intellectual property plays in their (Micro and Small Enterprises) development and growth or how intellectual property can be used to enhance their competitiveness and strategic advantage is therefore lacking. The need for a national strategy on intellectual property to provide a road map of achieving the intended intellectual property objectives is necessary thus the need to generate data concerning the current state of intellectual property among the Micro and Small Enterprises in terms of intellectual property awareness, utilization and factors that influence the utilization, exploitation and commercialisation of intellectual property among the Kenya Micro and Small Enterprises research and determine whether intellectual property protection is relevant or irrelevant to the Micro and Small Enterprises or whether it is a felt or perceived need based on the entrepreneur's own assessment or it is a logical or real need which is as a result of the service provider's own analysis as expressed by the entrepreneur.

Table 1.1 Distribution of the Main MSB sub-sectors in Kenya

Sub-sector	Trade	Services	Manufacturing	Bank, Hotels & Restaurants	Construction
Percentage	64.1	14.8	13.4	6.0	1.7

(Source: CBS, 1999)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research Design

The researcher used the survey design where the respondents were interviewed to get the required information. This choice of design was influenced by the fact that intellectual property is a fairly recent phenomenon in Kenyan Micro and Small Enterprises and not much research has been done in this area. The survey approach was thus appropriate to start documenting existing practices. This research design is useful where the objective of the research is to gain an insight on an issue (Churchill, 1991).

3.2 Population

There are about five million people in the Micro and Small Enterprises sector in Kenya (GoK, 2003) who are distributed in various sub-sectors. Table 1 below shows the distribution of the main Micro and Small Enterprises sub-sectors in Kenya (CBS, 1999).

Table 3.1 Distribution of the Main MSE sub-sectors in Kenya

Sub-sector	Trade	Services	Manufacturing	Bars, Hotels & Restaurants	Construction
Percentage	64.1	14.8	13.4	6.0	1.7

(Source: CBS, 1999)

The study concentrated on the manufacturing sub-sector that consists of 13.4 % of the total Micro and Small Enterprises. This sub-sector has various clusters that include electrical & electronics, chemical, metal & metal products, textile, wood works, leather works, food processing, art & craft, waste recycling and automotive.

The study identified and focused on the growth-oriented Micro and Small Enterprises (gazelles) that consists of five per cent of the total Micro and Small Enterprises in this sub-sector (ILO, 1999). The study focused on ten (10) clusters in the manufacturing sub-sectors of the MSE sector. The clusters of focus were electrical & electronics; chemical; metal and metal products; textile; wood; leather; food processing; art & craft; waste recycling and automotive.

A random sample of 100 growth-oriented Micro and Small Enterprises located in Nairobi was studied. This is because wider populations of the Micro and Small Enterprises in Kenya are located in Nairobi thus a representative generalization of the population can be drawn. Due to resource constraints only ten (10) % of the population was studied.

3.3 Sampling

This study adopted clustered random sampling as was successfully adopted in studies by Wakah (1999) and Mbuvi (1993). As Micro and Small Enterprises are considered a heterogeneous group with many differences according to business sector, capital assets, working capital, technological capacity and intellectual property assets only ten (10) respondents from each of the clusters were interviewed. This was echoed by Mc Cormick (1986) where she concluded that micro and small enterprise in a given area differ significantly from each other in many aspects.

Therefore, if more respondents from several clusters / locations in Nairobi were interviewed, a more representative generalization can be drawn. This is because the essential requirement of any sample is that it be as representative as possible of the population from which it is drawn. A sample is considered to be representative if the analyses made using the researcher's sampling units produce results similar to those that would be obtained had the researcher analyzed the entire population (Nachmias, 1996).

beneficiaries of the study.

3.4 Data Collection

The study relied on primary data collected by the researcher from the Micro and Small Enterprises. A Questionnaire (Appendix II) was administered through personal interviews and where necessary read and translated the questions to the respondents and filled the blanks on behalf of those respondents who cannot read or write.

Observation was also used to give the researcher a general overview of the enterprise operation. The data collected was then coded and analyzed.

3.5 Data Analysis Technique

Once received, the questionnaires were checked for completeness and consistency. Data was then classified into more usable form for analysis. The nature of information obtained from the questionnaire was descriptive. Therefore descriptive statistics was used to analyze the data.

The researcher used:

- i. Tables to display data and show specific values;
- ii. Bar charts
- iii. Line graphs to show trends;
- iv. Pie charts and percentage component bar charts to show proportions.

The researcher prefers this method for their ease of reference and interpretation by the beneficiaries of the study.

4.2 Profile of Respondent Enterprises

4.2.1 Ownership and Management

A total of eighty-one (81) Micro and Small Enterprises successfully filled the questionnaires although most complained that the questionnaire was too long and technical. Some respondents also stated that some parts of the questionnaire were sensitive especially the part requiring financial aspects and majority were not willing to disclose the information. For the intellectual property rights informed respondents they found the questionnaires very informative and useful and made copies of the same and retained them as reference documents and most requested for feedback on the results of the project as well as the expectation of better service delivery from the national intellectual property offices.

The study focused more on the decision makers within the enterprises. The reason being that the decision to use intellectual property rights within any business is a strategic policy decision that must be made at the highest level within any organization.

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION

Questionnaires were edited for completeness and consistency and the open-ended questions were assigned appropriate codes. The responses were codified, analyzed and presented as set out below.

4.2 Profile of Respondent Enterprises

4.2.1 Ownership and Management

A total of eighty-one (81) Micro and Small Enterprises successfully filled the questionnaires although most complained that the questionnaire was too long and technical. Some respondents also stated that some parts of the questionnaire were sensitive especially the part requiring financial aspects and majority were not willing to disclose the information. For the intellectual property rights informed respondents they found the questionnaires very informative and useful and made copies of the same and retained them as reference documents and most requested for feedback on the results of the project as well as the expectation of better service delivery from the national intellectual property offices.

The study focused more on the decision makers within the enterprises. The reason being that the decision to use intellectual property rights within any business is a strategic policy decision that must be made at the highest level within any organization.

The information below shows the representation of the profile of the respondents who filled the questionnaire.

Table 4.1: Profile of Respondents

Profile of Respondents	Frequency	Percentage (%)
Owner / Managers	10	12.6
Owners	43	30.7
Managers	40	49.1
Employees	6	7.6
Total	81	100%

Source: Research Data

Majority of the respondents who filled their positions were managers, 49.1%, followed by owners/proprietors, 30.7%, then owner / managers, 12.6% and lastly, employees, 7.6%. From the on-going, 92.4 percent of the respondents fall within the focused group, however, responses were obtained from the employees in instances where the owner / managers were unavailable but they had permission to respond. This shows the representation of the sample respondents provided the information required for the study in terms of strategy formulation and implementation in the enterprises.

As alluded to earlier the decision to use intellectual property rights within any enterprises is a strategic policy decision made at the highest level, the information here in will therefore assist the decision makers in these recognize the value of intellectual property rights in their business as well as the services available to them from the intellectual property organization and thus prepare

and position themselves appropriately to benefit from these services. Further, they will be able to know the services to utilize for the development of their businesses and enhancement of their competitiveness, growth and strategic advantage.

4.2.2 Number of Employees

In Kenya, the size of the enterprises is defined by the number of employees. 78 percent of the respondents gave information about the number of employees at inception. Of these, 60 percent were micro enterprises (1 to 9 employees) while 40 percent were small enterprises (10 to 50 employees).

Table 4.2: Enterprise Dynamics

	Enterprises	
	Micro	Small
At Inception of Business	60%	40%
During the Study	44%	56%
TOTAL	100%	100%

Source: Research Data

The table above shows a comparison of the number of employees at the time of inception /start of business and the time of the study. The respondents indicated that 60 percent started as micro enterprises, while 40 percent started as small enterprises. However, during the study, 16 percent of the enterprises that started as micro enterprises had grown and graduated into small enterprises. A general growth of the enterprises was observed. This may be due to the fact that the research

tried to concentrate on growth oriented firms frequently referred to as “gazelles” whose characteristics are said to be heterogeneous in that they are dynamic, innovative and growth oriented and exhibiting a high degree of initiative and are able to actively seek and take full advantage of information.

Legal Status of the Enterprises

The legal status defines whether a business is formal (registered) or informal (unregistered). Registration widens the scope of the opportunities available to the enterprise in terms of status, access to finance and markets.

In terms of legal status 70% were sole proprietorships, 25% partnerships while 4 % were limited liability companies. The table below shows the legal status of the enterprises.

Table 4.3 Legal Status of the Enterprises

Legal Status	Frequency	Percentage (%)
Sole Proprietorship	57	70
Partnership	20	25
Limited Liability	4	5
Total	81	100%

Source: Research Data

The table above shows that the majority (70 percent) of the respondent enterprises were sole proprietorship, 25 per cent were partnerships while 4 per cent are limited liability companies.

Majority of the enterprises fall under sole proprietorship which is a basic/primitive form of business probably because such legal form has got the least requirement (registration fees and licenses, tax returns etc) and formalities as compared to other legal forms. They also require less capital to start and are therefore easy entry and exit (minimal barriers) They are easily managed as the proprietor is everything and tend to be operated on family lines as well as high degree of flexibility and also quick decision making process. They however have disadvantages in that liability is unlimited, death of the owner may also spell the death of the business (no continuity) the proprietor usually lacks business skills (management) the same may easily collapse since the capital base is relatively small. Further they do not enjoy economies of scale as well as significant discount due to the size of the business. Many of the enterprises may prefer registration as it widens the scope of opportunities available to the business in terms of status, access to finance and markets enhancing competitiveness.

4.2.4 Products Produced by Enterprises

Most of the enterprises produced unbranded products. 20 percent of the entrepreneurs did not specify where they learnt to make the products but majority stated that they learnt from others friends, relatives or previous employment. Only 5 percent of the respondents had come up with their own creations, invention and ideas. Most of the products produced by the enterprises are similar "me too" showing lack of originality with majority using technology in public domain. Others used obsolete technology. This implies that majority of the products from this sector are uncompetitive with little or no innovation taking place within the enterprise

On the production methods used most had not made any improvements in the production process since inception though they had the desire to make and stated lack of capital to incorporate the new methods hampered them.

	Frequency	Percentage
Intellectual property rights	37	46
Innovators to substantial losses.	51	100%

The results indicate that counterfeiting and intellectual property rights abuse of various forms ranging from ideas being ‘stolen’, original work being imitated, copied and being commercialized is prevalent within the micro and small enterprise sector. This has actually subjected the innovators to substantial losses.

Source: Research Data

4.3 Awareness of Intellectual Property Rights

Majority of the respondents, 54 percent, stated that they were not aware of intellectual property

4.3.1 Level of Awareness

of the Industrial Property Office nor the Copyright Office. Only 32 percent of the respondents had heard of the industrial property office while 14 percent had heard of

The contribution of intellectual property to enterprise competitiveness and growth hence the economic and cultural development of a country is substantial. Intellectual property protection is an important tool for business to enhance competitiveness and strengthen the position of its products or services in the market place and awareness of intellectual property rights enhances the chances of intellectual property rights utilization. The table below shows the level of intellectual property awareness as established by this study.

assistance to their businesses. In other words, out of the total sample surveyed, only 3 percent of the respondents were aware that the services offered by the intellectual property offices could be of assistance to their businesses.

Most of the respondents lacked knowledge on how and where to protect intellectual property rights with many assuming registration of industrial property rights was done at the Attorney

Table 4. 4 Level of Intellectual Property Awareness

Awareness	Frequency	Percentage
Intellectual property rights	37	46
Type of intellectual property services	33	40
Assistance to Business	11	14
Total	81	100%

Source: Research Data

Majority of the respondents, 54 percent, stated that they were not aware of intellectual property rights neither had they heard of the Industrial Property Office nor the Copyright Office. Only 32 percent of the respondent had heard of the industrial property office while 14 percent had heard of the copyright office.

For those who were aware of intellectual property rights and intellectual property offices, only 40 percent stated that they knew of the types of services offered by the said offices. The study further found out that only 30 percent of those who knew that the above offices offer services were aware that such services could be of assistance to their businesses. In other words, out of the total sample surveyed, only 5 percent of the respondents were aware that the services offered by the intellectual property offices could be of assistance to their businesses.

Most of the respondents lacked knowledge on how and where to protect intellectual property rights with many assuming registration of industrial property rights was done at the Attorney

Generals office as it was the office where basic business registration such as business names, incorporation of companies was done. Others sought registration for copyright and related matters in the industrial property Office.

The above results are clear indication of the gaps that exist between the outreach services offered by intellectual property offices and the needs of the enterprise is wide as the later seem ignorant of the same.

4.3.2 Perceived Importance of Intellectual Property Rights to the Enterprises

The table below shows the analysis of the responses of enterprises to the question on the extent to which they would consider trademark, patent, utility model, industrial design, trade secrets and copyright to be important for their enterprises.

Table 4.5: Percentage comparison of the various categories of intellectual property

Importance to Enterprises	Trademarks	Patents	Utility Models	Industrial Design	Trade Secrets	Copyrights
Very important	47	9	14	31	35	7
Important	15	12	6	10	7	15
Somehow important	12	15	12	22	18	16
Not Important	11	29	32	17	12	22
No idea	15	35	36	20	28	40

Source: Research Data

Many had difficulties in recognizing invention and innovation due to the belief that they are complex technical solution or processes that require time, patience and resources. Most

The results of this study indicate that 62 percent of the respondents rated trade marks as important to very important to enterprise development and business growth. It is worth noting that most of the respondents make and sell unbranded products, and that only 5 percent of them are aware of the importance of the services offered by the intellectual property offices to their businesses. The above results are clear indications of the gaps between the outreach / support services offered by the intellectual property offices and the needs of the enterprises

It is recognized that intellectual property rights are valuable entrepreneurial assets that contribute to enterprise competitiveness and economic success. However, merely being aware of and

The low rankings of the copyrights (7%), patents (9%), and utility models (14%) and the respondents' reluctance to disclose the source of their product ideas and designs (only 5% of them had own creations, invention and ideas) reinforce the fact that counterfeiting and intellectual property rights abuse of various forms ranging from ideas being 'stolen', original work being imitated, copied and being commercialized is prevalent within the micro and small enterprises sector.

This is followed by industrial designs at 51 per cent trade secrets at 49 per cent. The low ranking rights are utility models at 20 per cent. Patents at 21 per cent and copyright at 22 per cent.

The level of intellectual property awareness is generally low. Most of the respondents cannot actually differentiate between the various types of intellectual property and only trade marks were reasonably and well understood by most respondents and there was confusion in differentiating between a patent, utility model and industrial design.

Many had difficulties in recognizing invention and innovation due to the belief that they are complex technical solution or processes that require time, patience and resources. Most respondents actually pay little attention to some of the innovative activities they are involved in their daily operations practically product and process designs and improvement and as such most innovations with potential for protection actually go unnoticed.

4.4.1 Utilization of Intellectual Property Rights

It is recognized that intellectual property rights are valuable entrepreneurial assets that contribute to enterprise competitiveness and economic success. However, merely being aware of and owning intellectual property rights is not sufficient condition for enterprise competitiveness and success. Intellectual property rights must be utilized and properly managed in order to achieve their potential.

4.1.1 Intellectual Property Assets

The study found that 90 industrial property rights had been registered, 278 filed and awaiting. The table below shows the analysis of the categories and number of industrial property assets created by target enterprises over the last five years.

Table 4.6: Status of Intellectual Property Rights Categories and Number Created by the Enterprises

Type of Intellectual Property				
	Registered	Unregistered		
		Application Filed	A	B
Patents	3	1	0	1
Utility Model	2	0	0	0
Industrial Design	31	90	44	106
Trade Marks	41	183	0	56
Service Marks	13	5	6	0
Total	90	278	50	162

Source: Research Data

Note A Application of industrial property not yet filed but due for filing

B Disclosure of industrial property done without filing applications

The study found that 90 industrial property rights had been registered, 278 filed and awaiting registration / rejection, while over 212 industrial property rights had either been disclosed and not filed or not yet filed. It is important to note that most of the applications for registration are in the trade marks and industrial designs categories. The high rates of disclosure and non-filing of application could be attributed to lack of awareness and appreciation of intellectual property rights, inability to recognize and differentiate inventions and innovations, and lack of originality.

Other reasons may be difficulties in recognizing inventions and due to the belief that they are not only complex and technical solutions or processes.

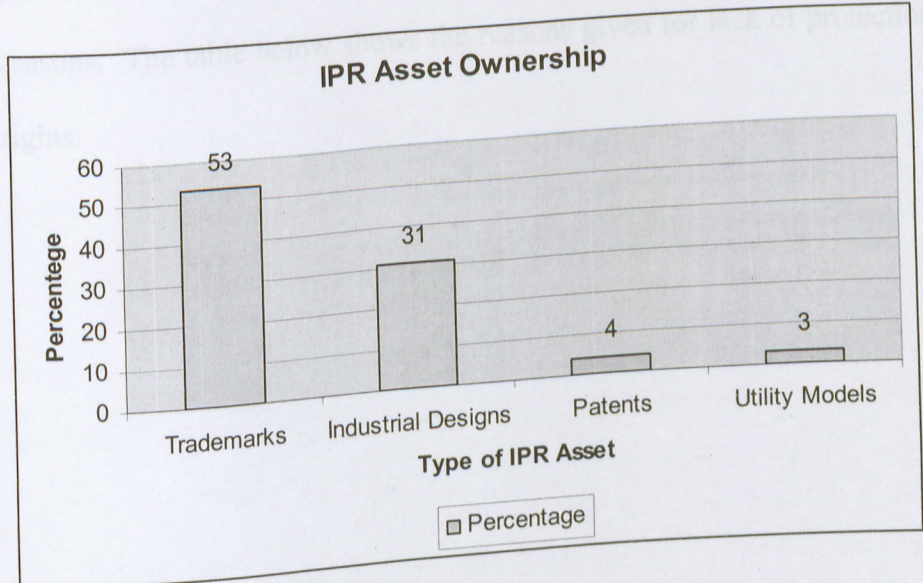
Many actually pay little attention to some of the innovative activities they are involve in their daily operations particularly product and process designs and improvement and as such most innovations with potential for protection actually go unnoticed.

4.4.2 Ownership of Industrial Property Assets

Legal protection of intellectual property rights gives the enterprise the exclusive rights over their

The figure below shows the types of industrial property assets owned by enterprises.

Figure 4.1: Industrial Property Assets Owned by the Enterprises



Source: Research Data

Trade (including service and collective) marks (53%) and industrial designs (31%) are the main industrial property rights owned by the enterprises. Very few enterprises own patents (4%) or utility models (3%). This may be attributed to the fact that trade marks are considered important to their businesses, easier to create, register and are readily available, unlike the other category of intellectual property assets.

4.4.3 Legal Protection of Intellectual Property Assets

Legal protection of intellectual property rights gives the enterprise the exclusive rights over their competitors to commercially exploit its intellectual property rights for a limited period. This provides the enterprise a wide range of business opportunities. Analysis showed that only 20 percent respondents had taken steps to legally protect their intellectual property rights, another 37 percent had no intellectual property to protect whereas the remaining 43 percent cited the various reasons. The table below shows the reasons given for lack of protection of intellectual property rights.

It is evident that lack of awareness of intellectual property rights still ranks high among the reasons for failure to protect intellectual property rights. Also significant is the number of enterprises without intellectual property rights to protect. This foregoing is a clear indication of low levels of innovation and inventiveness within the Micro and Small Enterprises.

For most of the respondents who had tried to register the various intellectual property rights considered the process very slow, immensely complex and costly. Others suggested that they did not foresee any economic benefits of protection especially if others could still copy their products without any penalties.

Table 4.7: Reasons for Lack of Protection of Intellectual Property Rights

Reason	Frequency	Percentage
Not legally aware that one could legally protect intellectual property	10	29
Not aware of the usefulness of intellectual property to their business	9	26
High cost and complexity of intellectual property system	7	20
Inadequate effective enforcement mechanism for intellectual property	5	14
The process is too cumbersome and time consuming	4	11
TOTAL	35	100

Source: Research Data

It is evident that lack of awareness of intellectual property rights still ranks high among the reasons for failure to protect intellectual property rights. Also significant is the number of enterprises without intellectual property rights to protect. The foregoing is a clear indication of low levels of innovation and inventiveness within the Micro and Small Enterprises.

For most of the respondents who had tried to register the various intellectual property rights considered the process very slow, unfriendly, complex and costly. Others indicated that they did not foresee any economic benefits of protection especially if others could still copy their products without any penalties.

4.4.4 Intellectual Property Policy

The intellectual property policy provides guidelines for the development, exploitation and management of intellectual property rights within the enterprise. The policy includes provision of resources, development, registration, promotion, and maintenance of intellectual property rights.

The analysis showed that only 1.6 percent of respondents had an intellectual property policy in place. This may be attributed to the fact that most of the respondents do not consider intellectual property as an integral part of their business growth strategy, low level of intellectual property awareness and utilization.

Maintenance of intellectual property rights Register is part of intellectual property management that provides the history and status of each intellectual property rights. Analysis showed that whereas some of the enterprises consider intellectual property to be integral for their business strategy, only 5 percent of the respondents maintained a register of their enterprise's intellectual property assets or intellectual property in their use belonging to other enterprises.

Provision of resources for the implementation of the intellectual property rights policy is equally important for business success. Analysis shows that most (91%) of the enterprises did not have provisions for intellectual property rights development while 71 percent did not have provisions for intellectual property protection. This accounts for lack of resources and failure to protect inventions and innovations.

The intellectual property policy also encourage the development of inventions and other intellectual property creations for the interest of the inventor, the public in general, sponsors (if any) and permit the timely protection and disclosure of such intellectual property, as well as act as an incentive that stimulate and increase creativity and innovation.

Further the policy is intended to protect the respective interests of all concerned by ensuring that the benefits of such property accrue to the inventor, public, the system and sponsors (if any) of the specific research (if any) to in varying degrees of protection, monetary return and recognition as need be.

Non-disclosure agreements are often used to prevent leakage, piracy and counterfeiting of registered or unregistered intellectual property rights, to competitors. The results of the study show that most enterprises were neither aware of nor understood non-disclosure agreements. Only 1.6 percent of the respondents had non-disclosure agreements with their employees.

4.4.5 Business Performance and Commercialization of Intellectual Property Assets

Intellectual property rights can only be of benefit to the enterprises when they are commercialized either by self-exploitation or licensing. Only 5 percent of the respondents stated that they had commercialized their intellectual property assets.

Further, most entrepreneurs (95 per cent) stated that commercialization of intellectual property rights is a frustrating experience in Kenya. This is basically due to the high expectations for rewards form their inventions. Others wrongfully expect that the intellectual property offices and or the Government should financially assist them to exploit their intellectual property rights or get

investors for them. Others think that commercialization of intellectual property rights is only through self exploitation and are not aware of licensing, joint ventures or outright sale as alternative avenues.

Among the 95 per cent of the respondents who had not commercialised their intellectual property assets they stated several factors such as:

- i. There were no linking mechanism between inventors and potential investors
- ii. Lack of professional services on commercialization of intellectual property
- iii. Inventors has no idea on how to value their intellectual property assets
- iv. Intellectual property assets were not recognized by the financial institutions as collateral assets
- v. The inventors lacked skills in product design contract negotiation and marketing
- vi. Most were afraid of releasing the details of their invention for fear of exploitation and infringement by others.

The above negatively impacted on the enterprise as few actually commercialised their inventions.

However, those who had commercialized their intellectual property rights assets confirmed that commercialization impacted positively on their businesses through provision of appealing and quality products thus making the enterprise more competitive in the market place.

4.5. Factors that Influence the Utilisation of Intellectual Property Rights

Factors that affect utilization of intellectual property rights range from education and training levels of the entrepreneurs, perceived levels of relevance of intellectual property rights to

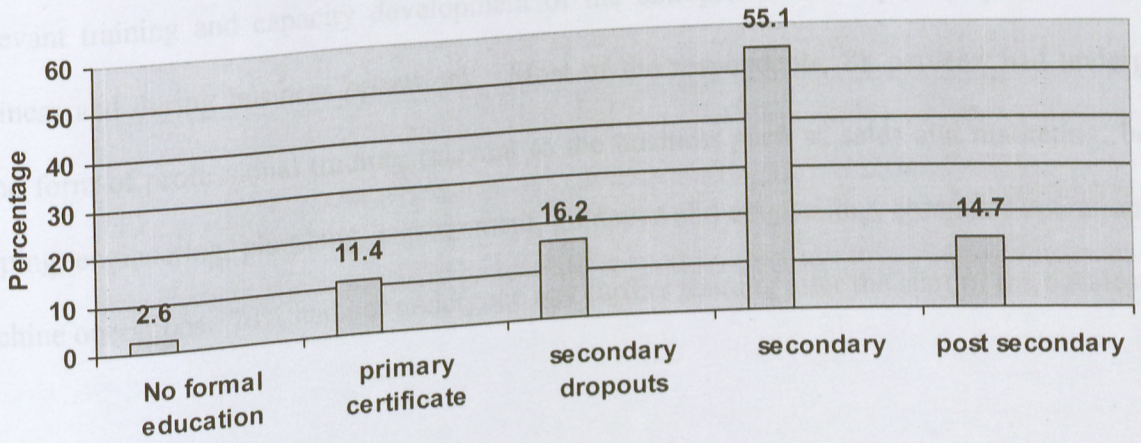
business, access to intellectual property rights information, access to support institutions, perception of being expensive, time consuming and cumbersome, to weak enforcement environment.

4.5.1 Education Level of the Respondents

The level of formal education and training of the entrepreneur has an important bearing on the performance of the business. It improves the level of awareness, capacity to conceptualize and turn ideas into innovative business opportunities and growth.

The figure below shows the average level of education attained by the respondents.

Figure 4.4: Average level of education



Source: Research Data

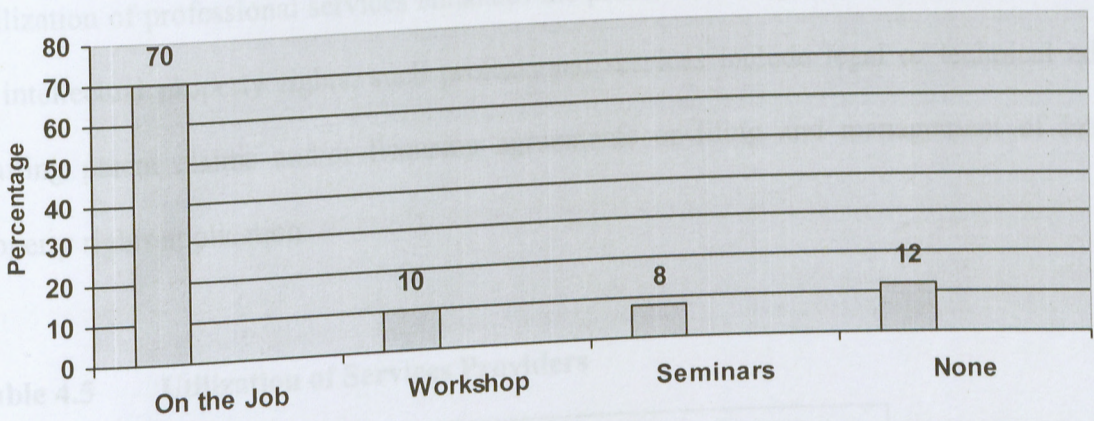
14.7 percent of the respondents had attained post secondary level of education, while 55.1 percent had attained and completed secondary level of education. 16.2% had attained some secondary level (secondary drop-outs), 11.4% had primary certificate level of education level while 2.6 % of the respondents did not have any formal education.

The focus of the study was on growth-oriented enterprises in the manufacturing sub-sector within Nairobi and its environs (urban). The graph is a typical characteristic of growth-oriented enterprises with the majority (69.8%) being those owned and managed by entrepreneurs with formal education levels of secondary and above. Despite this majority of the enterprises were unaware of intellectual property rights and its usefulness to the business or how the same could enhance their competitive advantage.

4.5.2 Training

Relevant training and capacity development of the entrepreneur is important prior to start of business and during business operations. Most of the respondents, 88 percent, had undergone some form of professional training relevant to the business such as sales and marketing, book-keeping, engineering, plumbing, management, guidance and counselling, computer operation and machine operations. 70% had not undergone any further training after the start of the business.

Figure 4.5: Training After the Start of Business



Source: Research Data

While only 18 percent of the respondents had attended training programmes, workshops or seminars after the start of business, 12 percent had not undertaken any training prior to starting or during business operations. Majority of the respondents considered training on the job conducted in-house as the most appropriate and convenient type of training. This could be attributed to financial constraints. However, internal on-job trainings alone tend to develop introvert entrepreneurs.

The level and type of education and training amongst the entrepreneurs could also account for the low level of new innovations (products and services), difficulties in characterizing and differentiating the various categories of intellectual property rights arising from their daily business operations. In addition, the low level of awareness (desire to seek or receive and internalize intellectual property rights information), registration, protection and utilization of intellectual property rights within the enterprises may also be attributed to the level and type of education and training.

4.5.3 Utilization of Professional Services

Utilization of professional services enhances the professional capacity of an enterprise. In terms of intellectual property rights, such professional services include legal or technical advice for drafting patent claims and/or licensing agreements or filing and management of intellectual property rights application.

Table 4.5 Utilization of Services Providers

Utilization of service provider	Frequency	Percentage
National patents office	13	16
Patents Agent	5	6
Personal service	10	12
Not Aware	49	60
No Response	4	5
Total	81	100

Source: Research Data

The study results indicate that 60 percent of the respondents said they were not using professional service providers while only 16 percent used National Patent Offices, 12.5 percent used own services, and 6 percent used patent agents. Most cited lack of awareness of the availability of professional services and the high fees charged as the main reason for not utilising legal or technical services as well as lack of knowledge of intellectual property.

Though the provision of professional intellectual property services is important for the promotion of the generation and commercialization of intellectual property, most stated that there were few professionals offering services such as patent drafting, filing protection maintenance as well as legal representation in courts. However, most of the respondents were not aware of the existence of such services. For those who were aware they stated that the services were offered by few legal firms though intellectual property was not their core business. Most stated that they were deterred from approaching the agents and opted either for free service from the national intellectual property offices or trial and error (own services) as the professional fees charged were very high. Others stated that lack of awareness on the availability of professional services on intellectual property as well as the lack of knowledge of general intellectual property rights.

Thus one would conclude that there is low level of intellectual property awareness as well as knowledge on intellectual property rights and low level of inventiveness and innovation within the sector. This can be addressed by more aggressive awareness campaigns of various forms such as seminars, field visit and through an aggressive outreach programme on the general aspect of intellectual property rights to sensitize the sector groups.

4.5.4 Budget Allocation to Intellectual Property Development

Development and utilization of intellectual property is an essential component of enterprise sustainability, competitiveness and growth. Many growth-oriented enterprises have clear innovation and intellectual property policy objectives. They allocate and utilize commensurate resources for the implementation of innovation and intellectual property policies.

Analysis of the responses established that only 9 percent of the respondents make provisions for intellectual property rights development. They stated that their budget allocations ranged between 0 -10% of their annual budget. Further most of the enterprises (81%) do not have any measures to stimulate innovation within the enterprises.

In their budget for the creation, acquisition, protection, promotion, development, and commercialization of intellectual property. It is a well known fact that research and development is an expensive activity. Therefore majority of the enterprises cannot afford especially, due to the fact that most are sole proprietorship.

However level of funding on research & development directly indicate the level of creativity and innovation of the enterprises. It also believed that most of the enterprises choose this category as they had no provision for intellectual property development in their budge. Most also stated the main source of funding was the enterprise own resources and that the Government or donors play insignificant role towards financing the intellectual property rights development.

It is undisputed fact that the enterprise knowledge and intellectual property utilization is key if the sector has to grow. Further, the sector has to constantly innovate and produce products that meet global markets standards if they have compete under continuously challenging and changing environment. Though expensive research and development is necessary for the enterprise survival.

4.5.5 Product Promotion

Most of the respondents admitted they had done nothing to promote their products through prints, electronic media, brochures, posters or trade fairs/exhibitions or through private or public marketing bodies. Most relied on customers satisfaction and quality as a method of promotion of their goods.

b) External Factors

4.5.6 Obstacles to the Development and Management of Intellectual Property

The following obstacles were perceived to be most significant towards the development and management of intellectual property within the enterprises.

Table 4. 6: Main Obstacles to Development and Management of Intellectual Property

Main Obstacles	Frequency	Percentage
Inadequate awareness of the benefits of owning and commercializing intellectual property	15	19
High Research and Development costs	14	17
High cost of legal advisory	12	15
Lack of effective legal protection	12	15
Lack of Markets	11	14
Lack of Research and Development Subsidies from Government	9	11
Weak industrial domestic sector	8	10
TOTAL	81	100

Source: Research Data

i) Internal Factors

Internal factors which arise from the entrepreneur's own limitations appear to be the primary factors and rank highest (first, second and fifth) in the list of obstacles. An effective awareness creation and outreach programme can minimize these obstacles.

ii) External Factors

External factors which arise from the weak enabling environment and are beyond the entrepreneur's own control appear to be secondary factors and rank lower (third, fourth sixth and seventh) in the list of obstacles. An enabling environment for innovation is required to minimize these obstacles.

From the above factors within the control of the entrepreneur are the main obstacles towards the development and management of intellectual property. Through the awareness campaign the entrepreneur shall learn on the benefits of owning and commercialization of intellectual property and the reason as to why he should allocate some money to the research and development as the level of funding on research and development directly indicate the level of creativity and innovation within the enterprise. Creativity is key to the growth of enterprises.

4.5.7 Challenges to Economic Realization of Intellectual Property Assets

The following policy issues were identified by the respondents to be of most significance obstacles towards commercialization and economic utilization of intellectual property.

The table below shows some of the major challenges identified by the respondents.

Table 4.7: Challenges /Obstacles to Commercialization of Intellectual Property Rights

Challenge/Obstacles	Frequency	Percentage
Lack of awareness	15	19
Lack of information	15	19
High cost of communication	14	17
Inadequate infrastructure	14	17
Lack of effective legal protection of intellectual property	12	15
Lack of legal and business advisory services	11	13
TOTAL	81	100

Source: Research Data

From the results of the study, it is clear that lack of awareness, information and inadequate infrastructure coupled with unfavourable enabling environment are major stumbling blocks towards commercialisation and economic utilization of intellectual property.

4.5.3 Intellectual Property Laws

Commercialization and economic realization of intellectual property assets is hampered by various obstacles. This is due to the fact that majority of enterprise think that commercialization and economic realizations of intellectual property rights is only through self exploitation and are unaware of other avenues such as outright sale, joint ventures or licensing as alternative avenues or are unwilling to enter into such agreements.

Others have very high expectations for rewards from their inventions and expect the intellectual property offices or the Government to not only assist them financially but also get investors for them thus when such are not forthcoming the entrepreneur becomes frustrated. Other factors also internal to the business and within the control of the business also rank high such as lack of awareness, lack of information.

External factors such as lack of legal and business advisory services and lack of effective legal protection of intellectual property rank low.

However ownership of intellectual property rights within the enterprise had impact on their businesses and made them competitive due to provision of appropriate solutions to customers in that they produced what the customers required further they had more appealing product designs which were more attractive to the customers meaning that they were able to sell more before others copied their designs this placed them far ahead of their competitors they also produced good quality products, had better price formulation, lower production costs as well as higher production capacity as most used up to date technologies unlike their counterparts who used absolute technologies. These attributes obviously made the enterprise more competitive in the market.

4.5.8 Intellectual Property Laws

Appropriate and effective intellectual property Laws encourage inventiveness and innovativeness and ensure returns on investment to the entrepreneurs. Such policies and laws make provision for promoting intellectual property assets development in the business such as tax incentives, reduction of brain drain and investment in research.

From the results of the study, 96% of the respondents felt that Kenya's policies and laws are not effective in protecting their intellectual property rights or promoting the creation of intellectual property rights. Furthermore, the respondents (94%) felt that they have never been involved on the process of designing intellectual property Laws, regulations and policies.

Currently the specific laws governing the protection of intellectual property rights are the Industrial Property Act, 2001 Provides for rights such as patents, utility models, industrial designs as well as technovations. Trade Marks Act, Cap 509 laws of Kenya provide for trade and service marks, collective marks as well as certification marks. The Copyright Act, 2001. The Industrial Property provides for rights such as musical literary, artistic and the neighbouring rights. The above laws are TRIPS complaint in that they provide the minimum standards of all the aspects of intellectual property rights. The law has provisions that encourage innovativeness as well as polices that make provisions for promoting intellectual property rights development. These laws have effective enforcement provisions that assist entrepreneurs upon infringement or counterfeit of their products.

4.5.9 Sourcing of Intellectual Property Rights by the Enterprises

Intellectual property rights are products with commercial value and can be traded in the market or exploited for strategic gain. An entrepreneur can source intellectual property rights from the market through licensing or develop, protect and exploit, the decision of which depends on the strategic options available to the entrepreneur.

The results of the study show that only 5 percent of the respondents were using Intellectual Property Rights owned by other enterprises, however they were not able to show what type of licensing agreements they had. None of the respondents gave the value of any of their intellectual property assets. This is a clear indication that enterprises are not in a position to value their intangible assets.

It was established that in total, 23 intellectual property rights were in use by these respondents. Five were from the local enterprises while 18 were from foreign companies. These intellectual property rights were mainly through direct sourcing from owners. Majority of the intellectual property rights were acquired from the engineering industry.

CHAPTER FIVE: SUMMARY AND CONCLUSIONS

RECOMMENDATIONS

5.1 Introduction

The overall purpose of this study was to determine the level of intellectual property awareness, establish the levels of intellectual property rights utilization and the factors that influence the utilization of intellectual property rights among Micro and Small Enterprises within the manufacturing sector. The results of the research are summarized and discussed here. Also highlighted here are the limitations of the study recommendations for further study as well as recommendations for policy and practice.

5.2 Summary of Findings

The study established that majority of the enterprises are owned by the sole proprietors or managed by the managers who are employed to manage the enterprises. Most of the enterprises have attracted some legal status in form of registration as sole proprietorship, partnership or private limited companies. A general growth of the enterprises was observed most entrepreneurs had attained formal education (form four) meaning that the level of professionalism was rather low. Majority had undergone some form of training prior to and after the start of the business. However on the job training was considered most appropriate and convenient may be due to financial constraints. Training is taken as essential for the growth and development of the enterprises by the entrepreneurs.

In terms of intellectual property awareness the study established that majority of the enterprises had neither heard of the industrial property office nor the copyright office or the services offered by these offices. It was also established that majority of the enterprises did not utilise professional services (legal and technical) while drafting patent claims, licensing agreement or filing intellectual property rights applications as majority were not aware of the availability of professional services and others were scared by the high fees charged.

There was the general impression that the level of intellectual property awareness and utilisation is low with very few entrepreneurs taking steps to legally protect their intellectual property rights or with majority not knowing what intellectual property rights are and most stating lack of intellectual property awareness as the reason for not protecting their intellectual property rights. Other findings were that most enterprises were not aware that there were offices dealing with intellectual property in the country.

On factors that influence the awareness and utilization of intellectual property rights it was established that trade marks were the most utilised type of intellectual property and was considered the most important type of intellectual property for enterprises development. This is followed by industrial designs and trade secrets. A good number of enterprises had actually registered trade/service marks and industrial designs. Patents, utility models and copyright were considered least important and irrelevant to their business and very few enterprises owned them. It was further established that some enterprises had no intellectual property to protect while others did not seek protection due to various reasons. The study also established that most enterprises did not commercialise their intellectual property assets while some sourced intellectual property rights from other enterprises. Enterprises commercialised through sale, licensing and mostly by self-exploitation of the invention. However, no enterprise was able to value in intellectual property assets. Majority of enterprises did not maintain an intellectual property register nor did they have any intellectual property policy even though intellectual property was considered an integral part of their business.

The enterprises did not have non- disclosure agreements with employees or business neither partners nor did they have any intellectual property protection provisions in their agreements. Majority of enterprises did not use professional intellectual property services and also did not allocate any funds or very little to their budget towards intellectual property development. Few enterprises commercialized their intellectual property assets due to the high cost of commercialization and lack of awareness. Enterprises that owned commercialized and utilized intellectual property were more competitive in the business.

On factors that influence the awareness and utilization of intellectual property rights it was established that most respondents had difficulties in differentiating between the various types of intellectual property rights and that the enterprises faced obstacles in the development and management of intellectual property that include high research and development costs, lack of awareness of the benefits of owning and commercialising intellectual property, lack of government subsidise in research and development, weak industrial domestic sector, high cost of legal advisory, lack of funds, lack of information and inadequate infrastructure (high cost of power communication and transport) as well as lack of markets for their products due to high costs of business resulting to high prices. .

Other factors include ineffective legal protection lack of legal and business advisory services. Inadequate enforcement mechanisms, high cost and complexity of the intellectual property system, lack of awareness that one could legally protect intellectual property rights, difficulties in recognizing inventions and innovations and not knowing how and where to protect intellectual property rights. Majority also produced unbranded products and also did nothing to promote their products and relied on customer satisfaction and quality as a method of promotion of their products. The study also revealed that many intellectual property rights are yet to be filed or disclosed giving an impression that many intellectual property rights lay unprotected. Majority of those who had tried to register their intellectual property rights claimed that the process was time consuming, expensive and cumbersome. However, those who owned utilized and commercialized their intellectual property rights acknowledged that their products were more competitive in the market due to good quality, appealing designs and sometimes price.

5.4. Conclusions

The study established that the level of intellectual property generation, acquisition, exploitation and commercialisation within the sector that is considered as the engine for Kenya's industrialization is low and needs to be addressed.

At the enterprise level, the low level of awareness of intellectual property, lack of intellectual property policy, low budgetary allocations to Research and Development activities as well as poor and inadequate infrastructure and information, as well as lack of incentives to motivate the staff to innovate/ invent needs to be addressed.

At the national level, the low awareness level of intellectual property, weak intellectual property policy, weak and ineffective intellectual property enforcement, low budget allocations to Research and Development activities as well as poor and inadequate infrastructure and information, lack of incentives to motivate the staff to develop innovative extension and outreach services needs to be addressed.

Intellectual property should be demystified among the various stakeholders by disseminating information that is simple and appropriate to the wider target such as the immediate potential innovators and inventors and other potential users within the industries. Entrepreneurs should be encouraged to produce branded products and also promote their products especially through fairs and exhibitions rather than rely on customer satisfaction and quality as a method of promotion of their goods as markets are now competitive than ever before.

The government should put in place a mechanism where enforcement of intellectual property Intellectual property should be introduced at various levels of training right from primary schools to university, tertiary institutions such as polytechnics and institutes of technology. This will ensure intellectual property and its importance in economic development is appreciated from an early age. Further, teaching of intellectual property should be given prominence as related courses such as information technology (IT). An intellectual property culture should be developed in the business community and the society at large. Micro and Small Enterprises should be made aware of the benefits that can be accrued by the effective use of the intellectual property system further more, entrepreneurs should be exposed to the millions of different technological and commercial information available in patent and trademark databases to learn about the recent technological breakthroughs, identify future partners and find out about the innovative activities of competitors. This will ensure that time and resources are not wasted trying to re- invent the wheel.

Entrepreneurs should be encouraged to disclose their inventions or innovations by registering them. This will ensure that unauthorised person do not exploit or copy the protected technology. This will further assist in marketing and commercialization of intellectual property.

Entrepreneurs should be encouraged to have non- disclosure agreements and with their employees, business partners as well as sign confidentiality agreement especially where an invention involves know-how. They should also have intellectual property registers. where all the rights are registered.

The government should put in place a mechanism where enforcement of intellectual property rights is efficient as intellectual property enforcement makes the intellectual property system effective. This not only includes an effective legal framework on national intellectual property matters but also establishing appropriate administrative structures. Just like other assets intellectual property should be an acceptable form of collateral in financial institutions.

Intellectual property disputes should be resolved faster as long judicial process is demotivating and a hindrance in promoting the generation, protection and utilization of intellectual property rights as Justice delayed is Justice denied.

To increase awareness and understanding of intellectual property issues within the Micro and Small Enterprises community especially the manufacturing sector, interactions should be strengthened between the Micro and Small Enterprises, Micro and Small Enterprises support institutions and associations, national government and intellectual property offices as well as other relevant inter government and non-governmental organisations with a view to better identify the needs of the sector and facilitate the implementation of customized target activities addressing the specific intellectual property needs of each sector or group.

Professional capacity building should be developed and encouraged to cater for this new emerging areas of intellectual property to include intellectual property agents, intellectual property valuers, intellectual property court and intellectual property prosecutors, as well as technology and innovation managers.

Intellectual property policies should be developed within the enterprises framework. This will ensure that some funds within their budget are allocated to the creation, acquisition, protection, promotion and commercialization of intellectual property rights (intellectual property development). Further, enterprises should have intellectual property an integral part of its business.

The country requires development of a national policy on intellectual property. This will give direction in respect to intellectual property development; enhance generation, acquisition, development and commercialization of intellectual property assets. Other issues to be addressed by the policy are guidelines and intellectual property generation and exploitation management and administration of intellectual property, enforcement, commercialization training as well as professional services in relation to intellectual property.

This will provide guidelines on intellectual property ownership, collaborative research, encourage acquisition and transfer of technology, prevent the passing of proprietary information to competitors and encourage investors to finance commercialization or research and development activities.

5.3 Recommendations for Further Research

It is generally a truism that no research is an end in itself. Therefore, what this research has achieved in this area can only be considered to be little requiring further research work. From the

insights gained in the course of this research, the researcher offers the following suggestions, which should act as a direction to future researchers:

(i) There is need to undertake further research in the field of intellectual property in Kenya. Study should be undertaken of other institutions (research) universities and other Micro and Small Enterprises sectors so that a comparison can be made.

(ii) A replication of this study should be done after sometime to find out if there are any changes that have taken place within the sector and a comparison with the current data and a definite recommendation should be arrived at.

In a nutshell insufficient information on the relevance of intellectual property in day to day business, high costs associated with obtaining and enforcing intellectual property rights, perception that intellectual property system is esoteric, too cumbersome and time consuming is among the reasons why many Micro and Small Enterprises are sometimes too slow to protect their intellectual property.

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Appendix 1

INTRODUCTORY LETTER

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: AWARENESS AND UTILISATION OF INTELLECTUAL PROPERTY RIGHTS BY Micro and Small Enterprises

I am a postgraduate student studying at the University of Nairobi, Faculty of Commerce. I am conducting a management research project in partial fulfilment of the requirement of the Masters in Business Administration (MBA) degree. My topic of research is;
AWARENESS AND UTILIZATION OF INTELLECTUAL PROPERTY RIGHTS BY
MICRO AND SMALL ENTERPRISES WITHIN THE MANUFACTURING SECTOR IN
NAIROBI

Your enterprise forms part of the population and I would greatly appreciate if you could provide the information requested for in the questionnaire.

All responses are strictly confidential and shall be used purely for academic purposes. A copy of this research project can be made available to you upon request.

Your kind assistance and co-operation in facilitating the above will be highly appreciated.

Thank you for your cooperation.

Yours Sincerely,

Stella Munyi
MBA Student

J.M.Maalu
Supervisor

Appendix II

RESEARCH QUESTIONNAIRE

1. RESPONDENT'S INFORMATION

QUESTIONNAIRE NO.....

BASIC BUSINESS INFORMATION

Name of Business:

Address:

Physical Location:

Area/Town:

Name of Respondent:.....

2. (i) Form of business ownership

- Sole proprietorship
 - Formal
 - Informal
- Partnership
- Limited liability company
- Other (please specify)

3. When did you start the business? Year

4. Type of business (size)

- Micro
- Small

5. (a) How many employees did you have at start-up

- 1 to 4
- 5 to 49

(b) How many employees do you have now?

SECTION B

6. What is the level of education/training attained?

- 1-4
- 5-9
- Post Secondary level
- Secondary level
- Some secondary (drop-out)
- Primary
- None

7. Did you have any formal training experience prior to the start of this Enterprise/business?

- Yes
- No

(b) If yes State the type o training/experience of marketing, machine operation etc

8. Have you attended any training after the start of business?

- Yes
- No

(b) If yes where did you attend the training? e.g. on job training seminar

Workshop etc

WORKING EXPERIENCE

9. Did you get any assistance in form of advice when starting the business?

- Yes
- No

If yes, what kind of advance/assistance did you get? Who provided this advice?

Type of Support		Who Provided It
Registration and Licensing		
Book Keeping		
Business Planning		
Technical Operations		
Marketing		
Intellectual property rights		
Specify others		

SECTION B

1. (a) What type(s) and ranges of products do you make?

.....
.....

(b) Do you brand your products?

- Yes
- No

2. Do you employ any specialized techniques in your work?

- Yes
- No

Explain.....

(b) How do you identify your technology machinery?

- KIPI
- Friends
- Magazines/newspapers
- Fairs/shows
- Catalogues
- Others.....

Do you have any options in the choice of technology/machinery?

- Yes
- No

3. Are you satisfied with the production process and methods currently used in your business?

- Yes
- No

Explain

4. Have any improvements been made in production process in the last year?

- Yes**
- No

Explain

5. Are there any improvements desired which have not been made?

- Yes**
- No**

Explain

6. (a) Have you heard about the Kenya Industrial Property Institute (KIPI)?

- Yes

No

(b) How often do you hear about the Institute?

- Many times
- More than once
- Only once
- Never

(c) From which source did you hear about KIPI?

- Newspaper / journals
- Friends
- KIPI Office
- Seminars / exhibitions
- Jua Kali / SME Organization

(d) Are you aware that KIPI can be of assistance to your business?

- Very much
- Fair
- Quite a bit
- Don't know

7. (a) How often do you hear about Intellectual property rights (intellectual property rights)?

- Almost always
- Sometimes
- Rarely
- Never heard

(b) From which source have you heard about intellectual property rights?

- Newspapers / Journals
- KIPI Office
- Seminars / Workshops
- Jua Kali / SME Organization
- Friends
- Others

(c) Have you heard about industrial property rights?

- Yes
- No

8. (a) Have you heard of the Copyright Office?

- Yes
- No

(b) How often do you hear about the office?

- Almost always
- Sometimes
- Rarely
- Never hear

(c) Are you aware that the Copyright Office can be of assistance to your business?

- Very much
- Quite a bit
- Fair
- Don't know

9. How important are the following intellectual property rights to your business?
please rate the importance on a five-point scale

- 1 – Very important
- 2 – Important
- 3 – Somehow important
- 4 – Not Important
- 5 - have no idea

	Very Important	Important	Somehow Important	Not Important	Have no idea
Trade/service marks	1	2	3	4	5
Patents models	1	2	3	4	5
Utility models	1	2	3	4	5
Industrial designs	1	2	3	4	5
Trade secrets	1	2	3	4	5
Copyright	1	2	3	4	5
Related Rights	1	2	3	4	5

(a) Others (specify).....

(b) Not aware of Intellectual Property

(c) Aware but not able to use them

10. State from the above the intellectual property rights that are among your enterprise's intellectual property assets portfolio

(a).....

(b).....

(c)

(d) Others.....

11. Have you taken any steps to legally protect your enterprise's intellectual property rights?

- Yes
- No

If yes, which one of the above have you legally protected?

(a).....

(b).....

If no, please indicate the reasons for not protecting you intellectual property

(a) High application costs

(b) Inadequate / absence of effective enforcement mechanisms

- (c) The process is too technical
- (d) Do not know that one can legally protect intellectual property (not aware)
- Any other reason.....
-

12. Can you propose any remedy (ies) for the problems/reasons above?

.....

13. Can you comment on the time taken to process the intellectual property rights applications?

- Very long
- Long
- Appropriate
- Short
- Very short

14. Does your enterprise consider intellectual property as an integral part of its business strategy?

- Yes
- No

15. Do you maintain a register of the intellectual property that your enterprise uses?

- Yes
- No

16. Does your enterprise have non-disclosure agreements?

- (a) Individuals / Institutions
- (b) With its employees
- (c) With business partners
- (d) With others

17. Do your business agreements have intellectual property protection provisions?

- Yes
- No

18. Does your enterprise have a written policy that regulates the creation, acquisition, protection and commercialization of intellectual property rights?

- Yes
- No

Others (please specify)

19. What percentage of the enterprise budget is allocated to the creation acquisition?
 Protection, promotion and commercialization of intellectual property rights?

- None
- 1-10%
- 10-25%
- 25-50%
- More than 50%

20. What are the enterprise's special measures/incentives to stimulate innovation?

- Not applicable
- Skills development programs
- intellectual property rights ownership policy
- Others.....

21. What are the major obstacles that hamper the development and management of intellectual property assets? Rate obstacles on a five point scale

- 1–Most significant
- 2–Significant
- 3–Moderate
- 4–Less
- 5–Least

	1	2	3	4	5
High R & D	1	2	3	4	5
Lack of R & D financing from donors NGOs etc.	1	2	3	4	5
Lack of R & D subsidies from Government?	1	2	3	4	5
Lack of capable human resources	1	2	3	4	5
Restrictive internal research financing capacity	1	2	3	4	5
Lack of technical skills	1	2	3	4	5
Lack of basic infrastructure (water, electricity, road, telephone etc)	1	2	3	4	5
Lack of policies against brain drain	1	2	3	5	5
Weak domestic industrial sector	1	2	3	5	5
Inadequate awareness of the benefits of owning and commercializing intellectual property assets	1	2	3	5	5
Lack of effective legal protection of intellectual property rights	1	2	3	4	4
Lack of awareness of intellectual property issues in general	1	2	3	4	4
High cost of legal advisory services on intellectual property rights	1	2	3	4	4

Others (please specify).....

22. Please indicate how the following policy issues pose obstacles in the economic Utilization of intellectual property assets by your enterprise. Rate obstacles on a five point scale

- 1–Most significant
- 2–Significant
- 3–Moderate
- 4–Less
- 5–Least

	1	2	3	4	5
High costs of commercialization of intellectual property rights	1	2	3	4	5
High costs of acquisition of intellectual property rights owned by others	1	2	3	4	5
Lack of competitive advantage on the market	1	2	3	4	5
Low demand for intellectual property assets due to poor domestic industrial sector	1	2	3	4	5
Lack of comprehensive public sector institutional framework to promote the commercialization of intellectual property assets	1	2	3	4	5
Lack of comprehensive private sector institutional framework to promote the commercialization of intellectual property assets	1	2	3	4	5
Lack of awareness of the benefits of owning and commercializing intellectual property assets	1	2	3	4	5
Lack of effective legal protection of intellectual property rights	1	2	3	4	5
Lack of legal and business advisory services	1	2	3	4	5
Lack of awareness of intellectual property issues in general	1	2	3	4	5

Others (please specify)

.....

(23) State the number of intellectual property assets created by your enterprise over the last 3 years

- None
- 1-5
- 5-10
- above 10

(24) Have the intellectual property laws and/or policies made provision(s) for promoting intellectual property assets development in the business sector, e.g. tax incentives, reduction of brain drain, and investments in research?

- Yes
- No

(25) a. How would you rate the effectiveness of the laws and policies that protect intellectual property rights? Please indicate the answer on a five point scale (i.e., highly effective = 1, significantly effective = 2, fairly/moderately effective = 3, fairly not effective = 4, and highly not effective = 5)

	1	2	3	4	5
a. intellectual property laws in general	1	2	3	4	5

b.	intellectual property policies in general	1	2	3	4	5
c.	I have no idea (I am not informed about intellectual property laws and policies)	1	2	3	4	5

(b) Are these intellectual property laws and policies effective in promoting the creation of intellectual property rights?

(i.e., highly effective = 1, significantly effective = 2, fairly/moderately effective = 3, fairly not effective = 4, and highly not effective = 5):

		1	2	3	4	5
a.	intellectual property laws in general	1	2	3	4	5
b.	intellectual property policies in general	1	2	3	4	5
c.	I have no idea (I am not informed about intellectual property laws and policies)	1	2	3	4	5

(26) Has your enterprise been involved in the process of designing new intellectual property laws, regulations, and policies. (Please indicate the answer on a five point scale i.e., always = 1, mostly = 2, sometimes = 3, seldom = 4, and never = 5):

		1	2	3	4	5
a.	Designing intellectual property laws	1	2	3	4	5
b.	Designing intellectual property regulations	1	2	3	4	5
c.	Designing intellectual property policies	1	2	3	4	5
d.	NA (I am not informed about intellectual property laws, regulations, and policies)	1	2	3	4	5

(27) Do you know any intellectual property-related association(s)?

- Yes
- No

If yes which one(s)

- a.....
- b.....
- c.....

(28) a Does intellectual property ownership have any impact to your business performance ?

- Yes
- No

(b) Any significance on the following?

- Price formulation
- Good quality products
- Appealing product design
- Lower production cost
- Solution to customers

- (29) What factors have hindered the improvements of the production method used in your business? Rate obstacles on a five point scale 1–Most significant 2–Significant 3–Moderate 4–Less 5–Least Great Least

	1	2	3	4	5
Lack of Technical skills	1	2	3	4	5
Lack of qualified personnel	1	2	3	4	5
Lack of funds	1	2	3	4	5
Lack of information on alternative methods	1	2	3	4	5
	1	2	3	4	5
Lack of electricity, water etc.(inadequate infrastructure)	1	2	3	4	5
Others specify	1	2	3	4	5

- (30) What kind of support/assistance do you need in order to encourage greater creativity in developing or improving on products and services offered to your customers?

		(ii)	(iii)		(iv)
Technical skills	1	2	3	4	5
Information about alternative methods	1	2	3	4	5
Marketing skills	1	2	3	4	5
Credit	1	2	3	4	5
Advice on how to evaluate	1	2	3	4	5
Skilled personnel	1	2	3	4	5
Good Roads	1	2	3	4	5
Water and Electricity	1	2	3	4	5
Telephone services	1	2	3	4	5

- (31) Where do you go to when looking for information?
- KIPi Document and Information Centre
 - Local Polytechnic
 - Public Library

Other, specify

- (32) Are you satisfied with the available information sources in relation to:-

Yes No

Machinery

Processes

Raw materials

Markets

Technology and pricing

- (33) Where do you get your technical support from?

- KIPI
- Applied Technology Officer
- Government agency

Other, specify.....

(34) Does this support satisfy you?

- Yes
- No

Explain

UTILITIES

(35) What type of energy do you utilize?

- Electricity
- Diesel generator

Others

(36) Is the energy supply reliable?

- Yes
- No.

Explain.....

(37) How do you dispose of your waste?

- Sewage
- Garbage sites

Other.....

(38) If your work produces emissions, have you had any problems with your neighbours or the authorities?

- Yes
- No

Explain.....

39. Do you insure your machinery and premises?

- Yes
- No

(40) Do you have any other information that you would wish to notify the researcher?

.....

GENERAL OBSERVATIONS ON THE ENTERPRISES BY INTERVIEWER (S)

Name of Business & Address

Physical Location/Area:

1. Types of tools in use.

- Basic & old
- Basic & modern
- Advance

2. Types of machinery/Equipment in use.

- Basic & old
- Basic modern
- Advance

2. Process

- Crude
- Basic
- Advance

3. Observation of safe practices within the enterprise.

- None
- Basic
- Reasonable
- Stringent

5. Observation of Quality Standard practices within the enterprise.

- None
- Basic
- Reasonable
- Stringent

6. Size of Premises (in relation to process)

- Too small
- Adequate
- Too large

7. Size of Premises (in relation to main Market)

- Appropriate
- Inappropriate

8. Site of Premises (in relation to raw materials)

- Appropriate
- Inappropriate

9. Type of Premises

- Permanent

- Semi Permanent
- Temporary

10. Environmental awareness

- None
- Basic
- Reasonable
- Stringent

Thank you for your patience.