

**DOES THE GROWTH OF ICT IN ZIMBABWE PRESENT AN OPPORTUNITY
FOR THE EFFECTIVE UTILISATION OF INTELLECTUAL PROPERTY
RIGHTS?**

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DEDICATION

To my amazing family; Pias, Memory and Tofara

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List of Abbreviations

ARIPO	African Regional Intellectual Property Organisation
BAZ	Broadcasting Association of Zimbabwe
FDI	Foreign Direct Investment
ICT(s)	Information and Communications Technology (Technologies)
IP	Intellectual Property
IPR(s)	Intellectual Property Right(s)
ITU	International Telecommunications Union
KECOBO	Kenya Copyright Board
NECF	National Economic Consultative Forum
POTRAZ	Postal and Telecommunications Regulatory Authority of Zimbabwe
PPP	Public Private Partnership
R&D	Research and Development
SIRDC	Scientific and Industrial Research and Development Centre
SME	Small and Medium Enterprises
SSTI	Second Science Technology and Innovation Policy of Zimbabwe
TRIPS	Agreement on Trade Related Aspects of Intellectual Property
WIPO	World Intellectual Property Organisation
WSIS	World Summit on the Information Society
ZIMASSET	Zimbabwe Agenda for Sustainable Socio-Economic Transformation
ZIPO	Zimbabwe Intellectual Property Office

CHAPTER 1

1.1 Introduction

In the last decade, like the rest of the continent, Zimbabwe has seen a steady rise in Information Communication Technology (ICT). The International Telecommunications Union (ITU) reported that in 2014 mobile broadband penetration in Africa increased and though it stood at 19 per cent, its growth rate of 43 per cent was twice as high as the global average.¹ There is widespread uptake of ICTs and access to the internet is on the rise with local internet service providers offering a wide variety of services. Mobile cellular companies and traditional fixed telephone line companies have broadened their operations to offer broadband services to subscribers.

ITU ranked Zimbabwe among the most dynamic countries in one of the categories used to measure the development of ICT, the ICT Development Index (IDI). The ITU developed the index to monitor and compare the ICT development in countries by assessing eleven indicators which are divided into three stages; ICT readiness, intensity and impact. The indicators, among others, include mobile cellular subscriptions, percentage of households with a computer, percentage of individuals using the internet fixed (wired)-broadband, active mobile-broadband subscription, tertiary gross enrolment ratio.²

The ITU report states that Zimbabwe showed an above average change in IDI showing a 19 per cent increase putting Zimbabwe on position 115 in the world and in the top ten in Africa. The country improved on ICT infrastructure, access to ICTs, percentage of individuals on the internet, mobile broadband subscriptions and households with computers and internet access.³ The Mozambique to

¹ The International Telecommunications Union '2014 Facts and Figures' available at <http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2014-e.pdf>, accessed 11 January 2015.

² The International Telecommunications Union *Measuring the Information Society* (2012) 18.

³ Ibid.

Zimbabwe backbone fibre connection was completed in 2011 resulting in improved broadband by the state owned fixed telephone operator TelOne.⁴ The other telecommunications companies Econet Wireless Zimbabwe, PowerTel and Africom were already connected to international fibre cables. The statistics indicate a definite advance in ICTs on the continent and Zimbabwe in particular.

Various reasons have been attributed to this growth key among these being the liberalisation of the sector as governments privatised state owned telecommunications companies and loosened their monopoly in the telecommunications market licensing new operators.⁵ The advent of mobile communications further changed the ICT platform with installation of infrastructure and technology transfer to the continent. Regulatory reforms and the creation of independent regulatory bodies to ensure a competitive environment for the emerging players enabled private firms to establish themselves in the sector.

In Zimbabwe however, the first private mobile cellular operator Econet Wireless Zimbabwe fought a protracted legal battle to acquire a license as government sought to maintain its monopoly in the telecommunications services.⁶ The argument was that the Postal and Telecommunications Service in terms of the legislation governing the institution had the exclusive mandate to offer those services and further there was no market for mobile cellular service. It was only after the Supreme Court settled the matter that the sector was opened up.

Africa became a viable investment destination as there was a ready market for ICTs. Beginning with fixed telephone lines and dial up internet services there was demand particularly from businesses and multinational corporations. When mobile communication became available subscription rates for voice services steadily increased as a more convenient means of communication. The need for

⁴ TechZim 'TelOne's fibre connection on EASSy now live, total 2.48 Gbps lit', 31 March 2011, available at <http://www.techzim.co.zw/2011/03/telone%E2%80%99s-fibre-connection-on-eassy-now-live-total-2-48-gbps-lit/>, accessed 3 December 2014.

⁵ United Nations Conference on Trade and Development, *Information Economy Report Science and Technology for Development: the new paradigm of ICT*, 2007-2008 (2007) 121.

⁶ *Retrofit (Pvt) Ltd v Posts and Telecommunications Corporation (Attorney-General of Zimbabwe Intervening)* 1996 (1) SA 847 (ZS).

connectivity led to fast adoption of services and the expansion of network coverage.

Firms invested financial and technological capital, considering the high profit margins in the sector investing in Africa was an attractive option for big telecommunications companies. The mobile cellular market is one of the fastest growing telecommunication markets attracting companies like the British firm Vodafone which has a presence in Egypt, Ghana and South Africa. Compared to the developed West, Africa yields high returns as ICT is still expanding and it makes business sense to exploit opportunities in Africa. In Zimbabwe the second largest mobile operator Telecel Zimbabwe has a foreign shareholding of 60 per cent held by Global Telecom Holding.⁷

ICT has enabled innovations and one that has penetrated many countries on the continent affecting traditional banking practices is mobile money, where mobile technology is used to transfer money from one individual to another. The M-Pesa model which began in Kenya has been replicated across Africa offering a convenient way to send and receive money. M-Pesa means mobile money, the 'M' stands for mobile and Pesa means money in Swahili. The service does not require a subscriber to have a bank account to send or receive money, one only has to have an account on their mobile device. In Zimbabwe the three mobile communications operators; Econet Wireless, Telecel Zimbabwe and Netone Wireless offer a mobile money platform to their subscribers.

Activities on the internet transcend national boundaries and hence the need for online payment services like PayPal, which is used to transfer money electronically through the internet. For a while the service was not available in Zimbabwe and developers came up with a platform for online payment called PayNow. The application, just like PayPal, enables electronic transfer of funds directly into the bank account of the recipient. Although PayPal is now available in Zimbabwe it has a limitation in that it only allows subscribers to make payments

⁷ This is despite the indigenisation law which requires 51 per cent shareholding of companies to be held by locals as provided by s.3 (1) (a) Indigenisation and Economic Empowerment Act (*Chapter 14:33*).

to recipients outside Zimbabwe but does not permit subscribers to receive of payments.

The innovations in ICT bring about possible intellectual property (IP) issues. An investigation to assess whether these innovations could enable effective utilisation of IP rights in Zimbabwe would be insightful. It is important here to define innovation. Although it is understood differently, one meaning is as follows;

‘An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations’.⁸

It can also be described as ‘the conversion of knowledge into new commercialised technologies products and processes and how these are brought to the market’.⁹ This is the definition adopted for this study. Another concept that has been used in discussion about innovation is open innovation. This concept will be elaborated on in chapter 2.

1.2 Importance of Intellectual Property Rights (IPRs)

Philosophical theories are advanced in support of IPRs¹⁰ and protection is used to reward creativity and foster innovation. The underpinning idea is that these rights stimulate creative activity and inventiveness which propels economic development and provide incentives to creators to produce more works. The extent of protection of IPRs continues to be debated among scholars, with many aligning with one theory or the other. Arguments have been made for and against strong IP protection resulting in increased innovation.

There are economic and social benefits arising from IPRs. IP is generally divided into copyright and industrial property. Copyright protects literary and artistic works while industrial property includes patents, trademarks and geographical indications. By granting creators some exclusivity over the exploitation of their works for a period of time, the creators can reap economic

⁸ OECD *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data* 3ed (2005) 46.

⁹ WIPO IP Report: *The Changing Face of Innovation* (2011) 23.

¹⁰ Intellectual property theories can be divided into four; fairness, welfare, personality and culture. See SR Munzer *New Essays in the Legal and Political Theory of Property* (2001) 168.

rewards for their labour, skill or investment. A country can benefit economically from the investment in research and development and knowledge creation where the IP regime is favourable. The protection is also beneficial for society as works are disseminated granting people access to the creations and also stimulated to innovate as others build upon the innovations.

IP occupies a role in development and on the global scale its value is reiterated by the various multilateral agreements and most importantly the World Trade Organisation's (WTO) Agreement on Trade-Related Aspects of Intellectual Property (TRIPS). The objectives of the agreement are the protection and enforcement of IPRs, promotion of innovation, transfer and dissemination.¹¹ Trade is also driven by IP as nations with effective protection measures tend to attract more foreign direct investment.¹²

Ideas and knowledge are important for trade and some economies are becoming more knowledge based. ICTs also rely on computer software hence the increasing value of IP. Software companies earn significant income from their IPRs in software and their brands. There is debate on whether software should be patented, but for the purpose of this work the position that patenting software is valid will be taken. In Zimbabwe the legal framework for the protection of IPRs exists and Zimbabwe is signatory to the various multilateral agreements and has enacted legislation to give effect to its' international obligations.

1.3 Research Question

In light of the innovation and the possible IP implications, the question becomes: does the growth of ICT in Zimbabwe present an opportunity for the effective use of copyrights, patents and trademarks? An investigation into what the growth could attract in terms of IPRs over some of innovations would be insightful. The objective of the dissertation is to assess whether there is scope for registration

¹¹ Agreement on Trade Related Aspects of Intellectual Property Art.7.

¹² CA Primo Braga & C Fink 'The Relationship between Intellectual Property Rights and Foreign Direct Investment' (1998) 9 *Duke Journal of Comparative & International Law* 163.

of IPRs on innovations that have arisen from the growth of ICT in Zimbabwe. This will be achieved by answering three sub questions;

Is the ICT Policy addressing the changed climate?

Is the IP framework utilised?

What has been the motivation for innovation in the ICT sector?

1.4 Structure of the Dissertation

Chapter 2 examines the current ICT policies, it will outline some of the shortcomings of the current National ICT Policy and national policies that have a bearing on information communication technologies particularly, the Second Science Technology and Innovation Policy (SSTI) and the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZimAsset). It will assess whether those policies been effective in addressing the changes in ICT and a brief discussion on the role of the various stakeholders in ICT; government, industry, tertiary and research institutions.

Chapter 3 assesses the IP regime, namely copyright, patents and industrial designs legislation and the challenges associated with registration and enforcement of the IPRs. It will investigate the IPRs available for some of the innovations in ICT. Reference will be made to the international obligations arising from multilateral agreements and the importance of an effective policy and discuss the Draft National Intellectual Property Policy currently being considered by various stakeholders, its objectives and relation to ICT.

The findings of a case study on Mobile Applications Development (apps) will be presented in Chapter 4. The case study will show the perspectives of individuals and institutions in ICT on the growth of the sector, the ICT Policy and awareness of IPRs. The perspectives on innovation in chapter 4 are limited to the individuals and not the research and development (R&D). The study does not interrogate innovation in the context of institutions. It will also highlight their concerns in relation to enforcement and perspectives on innovation and research.

Finally, Chapter 5 will offer some recommendations which include the reviewing of ICT policies and legislation, the need to raise awareness of IP issues and the tightening of enforcement mechanisms. Experiences of Rwanda and Kenya will be used to provide recommendations for Zimbabwe. Just like Zimbabwe, these two countries are developing countries with similar socio-economic challenges. They have however made strides, for Rwanda in the ICT space and for Kenya in its IP system.

1.5 Methodology

Most of the research will be done through analysing the policies on ICT and the legislation on IPRs. Information will also be sourced from scholarly journals and case law and a case study will be used to give the research depth. Ethical clearance has been obtained from the faculty to conduct interviews. The information sheet, consent form and the questionnaire have been added as appendixes. The qualitative method of data collection will be employed as the aim is to gather information on participants' perspectives on the ICT Policy, their experiences in coming up with innovations and their understanding of IPRs. Such information can be accurately gathered on an individual basis. ICT is a broad field and to get the best out of the research a case study approach on a researchable example like app development is more appropriate to gain specific insight on the area.

CHAPTER 2

2.1 Brief background to the ICT Policy

The nation had seen a significant uptake of ICT prior to 2005 and with the deregulation of the telecommunications sector, challenges were becoming apparent. These included the inadequate communications infrastructure, facilities and skills. The government sought to conduct an e-readiness survey (an ICT assessment in all sectors) to assess the nation's ICT readiness. Up until 2005 there had never been a particular policy to coordinate and enable effective utilisation of the ICT infrastructure, measure ICT capacity or provide a clear strategy on the implementation of ICT.¹³

In addition, at the World Summit on the Information Society (WSIS) in Geneva, Switzerland, heads of state and government had adopted the Geneva Plan of Action, which Zimbabwe agreed to and signed in December 2003. The objectives of the plan, among others, were to build an inclusive information society, to put the potential of knowledge and ICTs at the service of development, to promote the use of information and knowledge for the achievement of internationally agreed development goals.¹⁴ Emphasis was also on bridging the digital divide and key strategies were agreed.

The government and the National Economic Consultative Forum (NECF) then set out to undertake the e-readiness survey. The National e-Readiness Survey covered a broad spectrum of respondents which included ICT professionals and stakeholders, government, commerce, transport, education and governance. The results revealed that the nation was not uniformly e-ready and facing challenges. The survey report highlighted that the nation lagged behind in terms of ICT

¹³ There were policies for other sectors namely; Science and Technology Policy of Zimbabwe 2002 and Industrial Development Policy 2004.

¹⁴ World Summit on the Information Society 'Geneva Action Plan' available at http://www.itu.int/dms_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0005!!PDF-E.pdf, accessed on 10 February 2015.

infrastructure and that the use of computers, telephones, mobile phones and the internet was low compared regionally and the cost of internet connectivity was high. It showed that there was a lack of cohesion of sectoral policies to propel ICT utilisation and a failure to address promotion and the use of ICTs for agriculture, national development, production and marketing. The report noted the challenges of uptake of ICT, affordability and usage and the digital divide between the urban and the rural societies as services were concentrated in the urban areas. It noted the lack of development infrastructure and broadcasting services particularly in remote areas.

On the basis of the National e-Readiness Survey Report, the Millennium Development Goals and the UN WSIS Declaration of Principles and Plan of Action the government in conjunction with the NECF drafted the National Information and Communications Technology Policy Framework in December (2005) (National ICT Policy) which was launched by the President in 2007. The principles in the policy were also informed by various preceding reports and sectoral policies.¹⁵

2.2 National ICT Policy (2005)

2.2.1 Objectives of the Policy

The vision of the policy is to transform Zimbabwe into a knowledge-based society by 2020 and its mission is to accelerate the development and application of ICTs in support of sustainable socio-economic growth and development in Zimbabwe. To that end the policy contains six objectives; to ensure provision and maintenance of infrastructural facilities necessary for ICTs development, to promote and support the systematic, relevant and sustainable development of ICTs, to embark on extensive educational and training programmes to provide adequate supply of qualified ICT personnel and knowledge in all sectors, to establish structures for effective implementation of ICT strategies, to establish institutional

¹⁵ Science and Technology Policy of Zimbabwe 2002, Zimbabwe Vision 2020, National Economic Recovery Programme 2004-2006, Nziramasanga Education Commission Report 1999 and Industrial Development Policy of Zimbabwe 2004.

mechanisms and procedures for determining sectoral application priorities and to encourage the development and use of and ensure equitable access to benefits offered by ICTs across gender, youths, the disabled and the elderly.

2.2.2 ICTs Sector

The trend in developed countries has shown that the ICT industry can contribute to the GDP of an economy and that ICT can be effectively used as a tool for competitiveness of products and services of a country.¹⁶ The National ICT Policy outlines policy statements with regards to clusters namely; ICTs, government, commerce and small to medium enterprises, agriculture, tourism and environment, health, mining and manufacturing, transport, gender youths disabled and the aged, human resource development. Of importance to this work is the ICTs sector and for the purposes of this work out of the thirteen goals, five will be discussed.

One of the policy statements is to promote local production of ICTs products to ensure relevance of content and use of appropriate technologies that meet international standards.¹⁷ The utilisation of ICTs has largely been for basic purposes like emails within organisations and websites and yet there is much more that can be done. For example marketing products and services, interactions with customers and offering online services¹⁸ thereby increasing the potential pool of business. In addition, government itself has also not fully embraced ICTs as most of its operations are not computerised.¹⁹ The banking sector has been identified as

¹⁶ SM Kundishora 'The Role of Information and Communication Technology in Enhancing Local Economic Development and Poverty Reduction' available at http://siteresources.worldbank.org/CMUDLP/Resources/Role_ICT_paper.pdf, accessed on 13 March 2015. See also AS Bedia 'The Role of Information and Communication Technologies in Economic Development – A Partial Survey' Discussion Paper on Development Policies Paper 7 (1999) 42.

¹⁷ National Information and Communication Technology Policy Framework of Zimbabwe (2005) 18.

¹⁸ T Tsokota and R von Solms 'ICT and the Turning Around of the Zimbabwean Economy' Paper presented at the International Conference on ICT for Africa (2013) 3.

¹⁹ Tsokota and von Solms op cit (n18) 8.

one area underutilising ICTs and yet it plays a key role in the economy²⁰. Internet banking facilities which would be very convenient for business and customers are not sufficiently utilised. Internet banking allows customers to get access to their accounts offering a plethora of benefits which include; cost reduction, increased customer base, marketing and communication.²¹ Security concerns have been raised as a factor inhibiting the adoption of internet banking by both banks and customers.²²

However one example of local production of ICTs is the introduction of mobile money services. As already shown in chapter 1 the platform was pioneered by mobile phone operators, initially the innovation did not sit well with banking institutions which called upon government to introduce a mobile banking policy.²³ Now a number of commercial banks are linked to the mobile money platforms for instance Stanbic Bank, CBZ, NMB and Banc ABC.

The policy also aims to establish institutional mechanisms to coordinate inter-organisational planning, policy-making and the implementation of strategies to develop ICTs taking into account the convergence of broadcasting, telecommunications and on-line computer services.²⁴ ICTs are employed across government, industry and economic sectors but without coordination nothing worthwhile can be realised. Some overlap and duplication of functions between Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ) and Broadcasting Association of Zimbabwe (BAZ) has been observed as both regulate electronic transmission of information and data.²⁵ A single national body is

²⁰ T Dube, T Chitura and L Runyowa 'Adoption and use of Internet Banking in Zimbabwe: An Exploratory Study' (2009) *Journal of Internet Banking and Commerce* 2.

²¹ T Dube, T Chitura and L Runyowa op cit (n20) 5.

²² M Mutengezanwa, F Mauchi-Ngoma, T Dube et al 'Factors Influencing the adoption and usage of Internet Banking by Consumers in Zimbabwe' (2014) 2 *Journal of International Academic Research for Multidisciplinary* 120.

²³ Janet Shoko 'Zimbabwe Telecoms and Banks Lock Horns Over Mobile Banking' The African Report, 25 November 2013, available at <http://www.theafricareport.com/Southern-Africa/zimbabwe-telecoms-and-banks-lock-horns-over-mobile-banking.html>, accessed on 20 March 2015

²⁴ National ICT Policy op cit (n17) 18.

²⁵ M Zunguze 'Contextualising ICT for Development in Zimbabwe' Regional ICT Discussion Forum Project, Zimbabwe Country Report (2009) 22.

ideal to handle all ICT related matters and some suggest that a quasi-government organisation would best serve such the purpose.²⁶

The National ICT Policy in addition highlights the need to implement measures to develop and retain skilled human resources in the ICTs sector.²⁷ The vision to create a knowledge based society is closely dependent on the ability of people to employ ICTs. Zimbabwe boasts a high literacy rate, a highly educated citizenry which is not sufficiently e-literate. The then Ministry of Information Communication and Technology in its Strategic Plan 2010-2014 had objectives to introduce mandatory International Computer Driving License (ICDL) courses to at least 30 per cent of all employees in the public sector and introduce a national e-retention strategy.²⁸ It is not clear what became of these plans. It also became very difficult to retain skilled staff particularly in the light of economic hardships with some skilled professionals seeking greener pastures beyond Zimbabwe's borders.²⁹ However, institutions of higher learning provide training in ICT, the oldest being the University of Zimbabwe which has a School of Technology which offers certificates, diplomas and degrees for the different stages of completion. Chinhoyi University of Technology, the Harare Institute of Technology and various other colleges also offer training in ICT.³⁰

The policy states that there is need to create a conducive environment for investment in the areas of ICTs through public private partnership in all sectors and promotion of local research.³¹ Such an environment, among other things, includes measures that assure investors of security of investment, open competition, cooperativeness of regulatory institutions, standardisation of best practices and sound financial institutions. Substantial investment in ICT infrastructure is key for

²⁶ T Tsokota and R von Solms op cit (n18) 8.

²⁷ National ICT Policy op cit (n17) 18.

²⁸ Ministry of Information Communication and Technology Strategic Plan 2010-2014 (2010) 21.

²⁹ GA Lemarchand and S Schneegans (ed) *Mapping Research and Innovation in the Republic of Zimbabwe* (2014) 102.

³⁰ Ibid.

³¹ National ICT Policy op cit (n17) 18.

the realisation of growth anticipated from effective use of ICTs.³² Investment in ICT results in;

‘...improved economic efficiency and competitiveness; more efficient and effective education; healthcare and public administration; opportunities to exploit low factor costs in international markets; opportunities to increase social capital; and opportunities to bypass failing domestic institutions.’³³

Favourable conditions do not seem to be prevalent particularly with the provision of the shareholding structure mandated in the indigenisation laws and utterances by officials that do not boost investor confidence.³⁴ The ICT regulator, POTRAZ is government controlled and with the statements that have come from government there has been scepticism about investing in the country from potential investors. The restoration of international relationships with the Western world and crafting investor-friendly business laws have been identified as an important aspect in making the country a safe investment destination³⁵

Public-Private Sector Partnerships are important to synergise the efforts to develop ICT and promote research. ICT depends on sound infrastructure, effective communications systems and constant energy supplies and to establish a robust ICT sector government and the private sector have to cooperate. Significant capital investments are required in ICT particularly in telecommunications because of need for infrastructure and because technology is ever evolving constant investment is needed.³⁶ Government does not have the capacity to establish infrastructure alone and neither does the private sector. An example of concerted efforts in investment is the fibre optic projects embarked by government and the private sector which saw the completion of one major connection linking Zimbabwe and Mozambique in March 2014.³⁷ The project was aimed at ensuring fast and reliable internet

³² AS Bedia op cit (n16)21.

³³ G Kabanda ‘Impact of ICTs on Millennium Development Goals: Context for Diffusion and Adoption of ICT innovations in East and Southern Africa’ (2011) 3 *Journal of African Studies and Development* 5.

³⁴ Zimbabwe was ranked 132 out of 148 in the World Economic Forum Global Competitiveness Report 2013-2014 available at <http://www.weforum.org/reports/global-competitiveness-report-2013-2014> accessed on 11 March 2015.

³⁵ GA Lemarchand and S Schneegans op cit (n29) 19. See also T Tsokota and R von Solms op cit (n18) 8.

³⁶ International Telecommunications Union op cit (n2) 144.

³⁷ T Tsokota and R von Solms op cit (n18) 2. See also Zimbabwe National Budget Statement (2013) 160-161.

connectivity. Private entities, Liquid Telecom and Africom, have laid cables across the country.³⁸ One of the plans in the Strategic Plan 2010-2014 was to establish technoparks per province and incubation hubs in collaboration with international and regional organisations.³⁹ It would seem like the private sector together with international organisations have gone it alone and instead run workshops and conferences with government presence being minimum if not non-existent.

The policy also states the need for development in software and hardware relevant to all sectors of the economy and to promote awareness and use of ICTs.⁴⁰ This aspect calls for local innovations in ICTs which is important as heavy reliance is on content developed and managed in the developed countries which attracts significantly high costs taking into account the prevailing economic conditions. ICT software and hardware in organisations has not been effectively used as a number continue to use the traditional ways in customer services, evidenced by the long queues and tons of paperwork filled for simple transactions⁴¹. Utilisation of ICTs can only be realised if individuals are aware and skilled enough to use them hence the need to raise awareness, educate and equip people with the necessary skills. One of the goals in the Strategic Plan 2010-2014 was to go out into provinces and raise awareness of ICT.

2.2.3 Policy Institutional Roles Government, Parliament and Research Institutions

The National ICT Policy assigns policy implementation roles to government, parliament and research institutions. Government, among other things, is tasked to develop broad ICTs skills and knowledge base in public sector, enact legislation to establish a National ICTs Authority and a Converged National ICTs Regulator, mobilise adequate technical and financial resources and build Public Private

³⁸ Ministry of Information ICT 'Postal and Telecommunications Authority of Zimbabwe (POTRAZ) Sector Performance Report Third Quarter 2014' (2014) 15.

³⁹ Strategic Plan 2010-2014 op cit (n28) p22.

⁴⁰ National ICT Policy op cit (n17) 18.

⁴¹ Tsokota and von Solms op cit (n18) 2.

Partnerships (PPPs) to implement the ICT policy and undertake continuous monitoring and evaluation of the ICTs programme interventions and outcomes.⁴² It has been over eight years since the Policy came into effect and the National ICT Authority has not been set up, the issue of a converged regulator is still outstanding and plans for the first review of the policy are being done now in an area that is ever evolving.

Parliament is mandated to advocate for allocation of financial resources to sustain implementation of the policy, monitor effective utilisation of resources in implementing the policy and ensure that good governance principles are applied and adhered to in implementing the policy.⁴³ It is curious to note that the responsibility of enacting legislation to establish the National ICT Authority and the regulator was not mandated to Parliament, as the legislative body it would be expected that it is given this role. Back in 2012 it was anticipated that Parliament would pass the ICT Bill, however it suffered a still birth.⁴⁴ Though the then ICT Minister Chamisa expressed enthusiasm and hope of tabling the bill before Parliament, this never materialised. If the Bill had been passed it would have added to the four already existing legislation on communications namely; Broadcasting Act (2001), Post and Telecommunications Act (2000), Access to Information and Privacy Act (2002) and Interceptions of Communications Act (2007). There is an aim to undertake continuous monitoring and evaluation of ICTs programme interventions and outcomes and undertake adequate policy reviews in consultations with stakeholders. Currently there have been plans and consultations to review and develop a new ICT policy and an ICT Bill.⁴⁵

Research Institutions are tasked to consolidate research and development in the use of ICTs, use ICTs to extend scientific and research facilities taking advantage of the internet, assume leadership in testing new technologies, create

⁴² National ICT Policy op cit (n17) 24.

⁴³ National ICT Policy op cit (n17) 24.

⁴⁴ New ICT Bill to go before Cabinet, 13 January 2012, available at <http://www.chronicle.co.zw/new-ict-bill-to-go-before-cabinet/>, accessed on 30 March 2015.

⁴⁵ See The Zim ICT Policy, Cyber-crime Bill are nowhere in sight, 26 February 2015, available at <http://www.techzim.co.zw/2015/02/zimbabwe-ict-policy-cyber-crime-bill-are-nowhere-in-sight/>, accessed on 30 March 2015.

networked and multidisciplinary research teams on ICTs and initiate and support ICTs innovation and incubation and technology transfer and adaptation.⁴⁶

There is recommendation for a national converged regulator that should develop and implement licensing frameworks for operators and service providers, develop guidelines, control and regulate broadcasting and telecommunications services, regulate charges and tariffs among other things.⁴⁷ A regulator with broad sweeping powers ought to be independent and free from external influences be it from the political arena or the institutions it is meant to regulate. This entails transparency in the selection process of members of such a body and appointment of credible and impartial individuals. The current set up however shows how skewed the playing field is with a government controlled regulator.⁴⁸ It is not clear whether the converged regulator will replace POTRAZ and BAZ or what would be its relationship with those bodies.

The policy also speaks of a national ICTs Authority to advise government on national ICTs requirements and policy matters, foster and coordinate accelerated development of ICTs, promote the development of ICTs industry in conjunction with relevant stakeholders, promote awareness and use of ICTs products and services, conduct surveys to monitor and evaluate performance of the ICTs sector and renew ICTs policy, among other things.⁴⁹ The relationship between the Authority and the Regulator is also not provided for. The current regulatory authority POTRAZ still plays its role and the authority contemplated in the policy has not been established.

2.2.4 Potential of e-government and e-commerce

The e-readiness report recognised the potential of e-government and e-commerce and the ICT Policy provides policy statements on these areas.

⁴⁶ National ICT Policy op cit (n17) 24.

⁴⁷ National ICT Policy op cit (n17) 25.

⁴⁸ M Zunguze op cit (n25)23.

⁴⁹ National ICT Policy op cit (n17) 25.

The Policy states the use of ICTs in e-government to provide convenient access to government information and services, delivery of public services and efficient and effective methods of conducting business transactions.⁵⁰ In realising the goal of access to government information, the most basic and crucial aspect is provision of an informative and interactive website. Many government ministries and parastatals have functioning websites one challenge however is the lack of up-to-date information, interactive platforms or online marketing initiatives. For instance the Ministry of Information Communication Technology, Postal and Courier Services (MICTPCS) website provides information on upcoming events but does not have any legal instrument or releases available for download or sight and the hyperlinks seem non-functional. The Zimbabwe Government website contains outdated information on the investment opportunity area on the aspect of maximum share ownership.

The aspect of e-commerce, defined as the production, distribution, marketing, sale or delivery of goods and services by electronic means⁵¹, is important in achieving economic growth particularly in the context of the global village. The Policy particularly recognises the Small and Medium Enterprises (SMEs) as forming the foundation for economic growth, social progress and drivers of the economy.⁵² Considering that SMEs constitute a sizeable portion of the economic players their use of e-commerce could provide cost effective ways of marketing, operational efficiency, opportunities to tap into new markets and improve competitiveness.⁵³ The policy statements for e-commerce include cultivating a culture of e-commerce which makes business easy, quick and effective especially among SMEs in national and international transactions and implement appropriate security systems for e-commerce.⁵⁴

⁵⁰ Ibid.

⁵¹ National ICT Policy op cit (n17) 20. See also T Dube, T Chitura and L Runyowa 'Electronic Commerce Benefits and Adoption Barriers in Small and Medium Enterprises in Gweru, Zimbabwe' (2010) 15 *Journal of Internet Banking and Commerce* 3.

⁵² National ICT Policy op cit (n17) 20.

⁵³ T Dube, T Chitura and L Runyowa op cit (n51) 5. See also UNCTAD Information Economy Report op cit (n5) 195.

⁵⁴ National ICT Policy op cit (n17) 20.

With increased internet usage and internet penetration rate at 47.5 per cent,⁵⁵ the need for quick, easy and cost effective methods of service delivery can be a pull factor to customers and a benefit to organisations. Use of online advertising and marketing opens up international markets to local businesses⁵⁶ and yet a number of government ministries lack in this regard.⁵⁷ E-commerce is said to be in its infancy and the challenges to adoption of e-commerce have been the awareness of e-commerce, lack of technical resources, skills levels, security issues and associated costs of installation.⁵⁸

2.3 The Second Science, Technology and Innovation Policy (2012)

The Second Science, Technology and Innovation Policy (2012) (SSTI) is the successor to the National Science and Technology Policy of 2002 with a vision to make science and technology an integral part of both individual and national development.⁵⁹ Though the policy specifically addresses science and technology it contains a section that pertains to ICT. It states a policy implementation to learn and utilise emergent technologies to accelerate development and the specific policies for ICTs are; research into the creation of IT platforms for innovative deployment of data and knowledge for use in various sectors of the economy, and enhance national competence for computer hardware, software engineering and cyber security.⁶⁰ It recognises that advances have taken place through the use of ICTs and the need for research and appropriation of knowledge.

It has generally been observed that research and development (R&D) is generally capital intensive and the uncertainty of innovation make it difficult to access capital to fund R&D activities.⁶¹ For a developing country like Zimbabwe it is even more difficult. The then Ministry of Science and Technology Development

⁵⁵ POTRAZ Sector Performance Report Third Quarter 2014 op cit (n38) 14.

⁵⁶ AS Bedia op cit (n16)10.

⁵⁷ Tsokota and von Solms op cit (n18) 4.

⁵⁸ T Dube, T Chitura and L Runyowa op cit (n51) 8.

⁵⁹ Second Science, Technology and Innovation Policy of Zimbabwe (2012) 3.

⁶⁰ Ibid.

⁶¹ UNCTAD Information Economy Report 2007-2008 op cit (n5)193.

signed a memorandum of understanding with a Chinese company to promote scientific research and innovation in ICT⁶² and implementation was said to have been at an advanced stage and there was a plan to establish high-performance computing centres. Government spending for R&D was estimated at US \$76.3 million by the National Survey of Research and Development conducted in 2013. This amount is not specific to ICT but is inclusive of all sectors.

The Department of Science and Technology was set up in 2002 and had a function to promote scientific and ICT literacy to enhance the country's competitiveness in the global economy.⁶³ Further a cabinet committee on scientific research, technology development and application was to be also set up and comprise of ministers from several ministries including ICT and chaired by the Minister of Science and Technology Development. However this committee never materialised. An innovation and commercialisation fund was also set up under the Ministry of Science and Technology as provided in SSTI Policy, it was however not clear whether ICT enthusiasts could apply for funding. The Ministry was later disbanded and made into a department under the Ministry of Higher and Tertiary Education.⁶⁴

One of the major research institutions in the country is the Scientific and Industrial Research and Development Centre (SIRDC) and it has an Electronics and Communications Institute (ECI) established to carry out R&D and provide consulting and industrial support services to local manufacturing and technology industries.⁶⁵ There is also a Communications Design Division that focuses on radio communication, internet communication technologies, telecommunication technologies and power-link communications⁶⁶.

2.4 The Zimbabwe Agenda for Sustainable Socio- Economic Transformation (2013) (ZimASSET)

⁶² Ministry of Science and Technology Annual Report (2012) 30.

⁶³ GA Lemarchand and S Schneegans op cit (n29) 90.

⁶⁴ Ibid.

⁶⁵ Ibid.

⁶⁶ See SIRDC institutes, available at <http://www.sirdc.ac.zw/index.php/institutes/electronics-and-communications-institute-eci>, accessed on 1 April 2015.

The economic blueprint adopted in 2013 is cluster based and is intended to foster sustainable development and social equity anchored on indigenisation, empowerment and employment creation.⁶⁷ The vision is towards an empowered society and a growing economy and the mission is to provide an enabling environment for sustainable economic empowerment and social transformation to the people of Zimbabwe.⁶⁸ It divides the result areas into six clusters and ICT falls under the Infrastructure and Utilities cluster. It recognises the importance of ICT and identifies value addition processes in the sector as key drivers for economic growth and employment creation. One of the key strategies is expanding the accessibility and utilisation of ICTs to improve service delivery and accelerate economic growth.⁶⁹

ZimASSET states that the infrastructure cluster is focused on the rehabilitation of infrastructural assets and recovery of utility services in Zimbabwe and ICT is identified as one of the services needing attention. Under the ICT matrix it is outlined that the key result areas are ICT governance, the backbone and infrastructure, e-government and research and development. The lead institutions are the Ministry of Information Communication Technology and Postal and Courier Services (MICTPCS) and the Office of the President and Cabinet.

For ICT governance the outcome is improved regulatory environment and the sector outputs are the revision of the ICT Policy, development of the ICT Bill and creation of the Internet Policy. The strategies are; develop and review appropriate ICT legislation and policies, ensure compliance with Information Communication Technology, Postal and Courier Services (ICTPCS) policies and statutes through quarterly reviews and establish collaborative links with ICTPCS institutions at regional and international levels.⁷⁰

⁶⁷ GA Lemarchand and S Schneegans op cit (n29) 118.

⁶⁸ Zimbabwe Agenda for Sustainable Socio-Economic Transformation “Towards an empowered society and a growing economy” (ZimASSET) October 2013 to December 2018 (2013) 9.

⁶⁹ Ibid.

⁷⁰ Ibid.

The plan states that the outcome for ICT backbone and infrastructure is improved communication including access and utilisation, to be carried out through the capacitation of the government entities TelOne, NetOne and PowerTel, PPPs with the private sector, establishment of an ICT hub and improved ICTPCS literacy by 10 per cent annually, creation of special economic zones, establishment of a National Data Centre, promote ICTPCS utilisation in line ministries and departments by 20 per cent annually, increase ICTPCS access, improve broadband capacity realisable at PFMS terminal points to at least 1Mbps, document and regularise ICTPCS sector.⁷¹ The aim is to ensure connectivity of major towns and cities through optic fibre and installation of Last Mile connectivity through PFMS to 20 districts and the national data centre.⁷²

ZimASSET also emphasises e-government as a sector key result area and divides it into two categories; e-government proper and e-learning. For e-government the aim is improved government efficiency and the key strategies are facilitating the fulfilment of outstanding contractual obligations with service providers, engage friendly countries and development partners to invest in ICTs and direct government institutions to come up with flagships. This should result in the development of an e-government policy, eliminate revenue leakages, establishment of a government data centre and automation of government systems and elimination of queues for national identification documents.⁷³

The e-learning programme is aimed to produce computer literate pupils, teachers, community and innovative school graduates through expansion of the presidential e-learning programme and PPPs for the programme and introduction of PPPs for e-government programme. The anticipated sector outcomes are improved standards of education through e-learning and improved school infrastructure. The Ministry of Education is included as a lead institution in carrying out the e-learning plans.⁷⁴

⁷¹ ZimASSET op cit (n68) 88.

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Ibid.

ICT research and development has three categories; to promote three national ICTPCS research projects, quarterly reviews of ICTPCS indicators and provide ICTPCS PPPs. The sector outcome is to improve ICT standards and utilisation and it is anticipated that national high performance computing centres will be established and ICT R&D projects will be undertaken.⁷⁵

In terms of ICT, ZimASSET generally aims to improve connectivity, e-government, e-learning and conduct R&D. The plan itself has received mixed reviews.⁷⁶ It states that initiatives identified in each of the clusters;

‘will be implemented immediately to yield rapid results (Quick Wins) in the shortest possible time frame (October 2013 to December 2015) with other deliverables targeted up to December 2018’⁷⁷

However there are not so many ‘quick wins’ for ICT with only one which is prioritising the implementation of the e-government programme.⁷⁸ ZimASSET also makes some assumptions, for instance on increased investment in infrastructure through the acceleration in implementing PPPs, increased FDI and improved liquidity and access to credit by key sectors of the economy,⁷⁹ which fail to take into account the realities. The main concern is implementation as in the past strategies have been made but faltered when it came to implementation.⁸⁰

2.5 Open Innovation

Collaboration between key stakeholders is identified in the ICT policies as important for the development of the ICT space. The mode of collaboration ultimately depends on the entities that enter into a working relationship or joint venture. Another method that can be utilised in the ICT space is open innovation. Open innovation is defined as ‘the use of purposive inflows and outflows of

⁷⁵ ZimASSET op cit (n68) 91.

⁷⁶ WG Bonga ‘Economic Analysis in Zimbabwe: A Review of Zimbabwean Economic Policies: Special Reference to ZimASSET’ (2014) SSRN 11.

⁷⁷ ZimASSET op cit (n68) 10-11.

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ See ‘ZimASSET: Government plans for Tech’, available at <http://www.techzim.co.zw/2013/12/zim-asset-zimbabwes-government-plans-tech/>, accessed on 1 April 2015.

knowledge to accelerate internal innovation and to expand the markets for external use of innovation, respectively'.⁸¹ The literature distinguishes between inbound and outbound open innovation. Inbound open innovation pertains to the gathering in of knowledge, concepts and technologies of others whereas outbound open innovation entails transfer of technologies to others.⁸²

The process of open innovation essentially involves an exchange of knowledge that allows for the development of new products or processes by entities. Synonymous with open innovation is crowd sourcing. In the context of Zimbabwe open innovation can be adopted in the ICT sector where ideas abound among the different industry players. In an effort to increase local production of ICT products entities can acquire technologies from one another to produce better products. Since the process of open innovation can be formal or informal and with varying degrees of openness, it leaves room for industry players to adopt whichever model best suits the project.

2.6 Conclusion

In transforming Zimbabwe into a knowledge based society the objective of the ICT Policy is the development and application of ICT for socio-economic development. There has been progress particularly on public-private partnerships in infrastructure development and local production of ICTs. Learning and utilising emergent technologies can accelerate development. With ZimASSET it remains to be seen how the goal of expanding accessibility and utilisation of ICT will be achieved. The discussion on the policies shows that the objectives are sound but the policies have lagged on implementation. Commitment by relevant stakeholders is needed and practical strategies to fulfill the laid out plans. Having set the ICT framework, the next stage is to lay out the IP framework which is presented in Chapter 3.

⁸¹ WIPO op cit (n9) 47 quoting HW Chesbrough *Open Innovation: The New Imperative for Creating and Profiting from Technology* (2003)

⁸² Ibid.

CHAPTER 3 Intellectual Property Rights Framework

3.1 International Obligations

Various products that emanate from ICT can be protected under IP laws. Some of the most profitable companies in the world have patents over their products and valuable trademarks. A list of the top brands in Africa showed that 10 per cent were telecommunications companies.⁸³ Google's recent announcement that it would launch a program to purchase patents⁸⁴ from 8 to 22 May 2015 shows that it recognises the value of IP. ICT products emanating from Zimbabwe can also benefit from the country's IP regime that is premised on the international IP system. Zimbabwe is a dualist state therefore international obligations do not become automatically binding. In terms of s. 327 (2) of the Constitution of Zimbabwe, an international treaty is not binding until it has been approved by Parliament and does not become part of the national law unless it has been domesticated by an Act of Parliament.

Zimbabwe joined the World IP Organisation (WIPO) in 1981 and is party to several IP treaties administered by WIPO. These include the Paris Convention for the Protection of Industrial Property (as amended on September 28, 1979), Berne Convention for the Protection of Literary and Artistic Works (as amended on September 28, 1979), Patent Cooperation Treaty (as modified on October 3, 2001), Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks (as amended on November 12, 2007).⁸⁵ As a member of the World Trade Organisation (WTO) it is also bound by the Agreement on Trade

⁸³ See Farai Gundan 'Made in Africa : Brand Africa Announces 2014 Best Brands in Africa', 21 November 2014, available at <http://www.forbes.com/sites/faraigundan/2014/11/21/made-in-africa-brand-africa-announces-2014-best-brands-in-africa/>, accessed on 26 July 2015

⁸⁴ See 'Google Announces the Patent Purchase Promotion to Foster Innovation', 29 April 2015, available at, <http://www.ipwatchdog.com/2015/04/29/google-announces-the-patent-purchase-promotion/id=57250/>, accessed on 26 July 2015

⁸⁵ See WIPO Lex, available at <http://www.wipo.int/wipolex/en/profile.jsp?code=ZW>, accessed on 26 July 2015.

Related Aspects of IP Rights (TRIPS). Zimbabwe is also a member of the African Regional Intellectual Property Organisation (ARIPO) and has incorporated the ARIPO Protocol on Patents and Industrial Designs into the Patents Act⁸⁶ and the Banjul Protocol on Marks⁸⁷ into the Trademarks Act.

Legislation that governs IP has been enacted and includes; the Copyright and Neighbouring Rights Act (Chapter 26:05), the Patents Act (Chapter 26:03), the Trade Marks Act (Chapter 26:04), the Industrial Designs Act (Chapter 26:02) and the Geographical Indications Act (Chapter 26:06). There is also the IP Tribunal established in terms of the IP Tribunal Act (Chapter 26:08)⁸⁸ to deal with all IP matters. It does not however have exclusive jurisdiction as the Magistrates Courts and the High can also hear IP cases. The Zimbabwe IP Office (ZIPO) under the administration of the Ministry of Justice, Legal and Parliamentary Affairs handles registration of IP rights. The Chief Registrar of Deeds and Companies and the Controller of Patents, Trademarks and Industrial Designs run the IP Office. A discussion into every IP right cannot be sufficiently canvassed in this chapter but for the purposes of this work focus will be on copyright, patents and trademarks.

3.2 Copyright

The Copyright and Neighbouring Rights (Copyright Act) entered into force on 10 September 2006 repealing the old Act. It is also supported by the Copyright and Neighbouring Rights Regulations (Copyright Regulations) SI 256/2006.

The Copyright Act defines copyright in s.9 (1) as,

...a real right which subsists in a work by virtue of this Act and which entitles its owner exclusively to do in Zimbabwe and to authorise others to do in Zimbabwe the thing which this Act designates in relation to that work.

The rights in relation to copyright are those as contained in the Act and no right in the nature of copyright subsist under common law.⁸⁹ For copyright to subsist in a work it must be original, in material form and have been made by a

⁸⁶ Section 82 Patents Act (Chapter 26:03)

⁸⁷ Section 19 Trade Marks Amendment Act, 2001.

⁸⁸ Section 3 Intellectual Property Tribunal Act (Chapter 26:08).

⁸⁹ Section 128 Copyright and Neighbouring Rights Act (Chapter 26:05).

qualified author. A work is also eligible for copyright protection if it is first published in Zimbabwe or a designated country.⁹⁰ There is no definition of original though the requirements for originality and materiality are envisaged in s.10. The threshold for originality is not very high as a work is not ineligible for copyright solely because it is infringing on the copyright of another.⁹¹ A qualified author is a person who is a citizen of, or domiciled or ordinarily resident in Zimbabwe or a designated country and in the case of a company one which is incorporated under the law of Zimbabwe or a designated country.⁹²

The works eligible for copyright protection are listed in s.10; literary, musical and artistic works, audio-visual, sound recordings, broadcasts, programme carrying signals and published editions. Literary works are those which are written, spoken or sung including dramatic works, letters, reports and memoranda, lectures, speeches, sermons and computer programs and tables and compilations.⁹³ The literary quality, mode or form of expression is not relevant. Ideas, procedures, systems, methods of operation, concepts, principles, discoveries, facts or figures are not copyrightable.⁹⁴

The *de facto* position with regard to ownership of copyright is that it vests in the author of the work or in the case of a work of joint authorship in the co-authors of the work.⁹⁵ Where a work is commissioned the author is the person under whose instruction the work was made⁹⁶ and where a work is made in the course and scope of employment the ownership of copyright vests with the employer.⁹⁷

In terms of s.15 the duration of copyright is fifty years, depending on the type of work, from the year in which the work was made available to the public, first broadcast or published.⁹⁸ For literary, musical or artistic works however, it is the

⁹⁰ Section 12 (1) of the Copyright Act.

⁹¹ Section 10 (4) of the Copyright Act.

⁹² Section 11 of the Copyright Act.

⁹³ Section 2 of the Copyright Act.

⁹⁴ Section 10 (5) of the Copyright Act.

⁹⁵ Section 14 of the Copyright Act.

⁹⁶ Section 14 (4) and (2) of the Copyright Act.

⁹⁷ Section 14 (3) and (5) of the Copyright Act.

⁹⁸ Section 15 (a)-(e) of the Copyright Act.

life of the author plus fifty years from the end of the year in which the author dies⁹⁹ and where there is joint authorship the life of the author who dies last.¹⁰⁰

Copyright holders have economic and moral rights in terms of ss 17 to 23, and ss 61 and 64 of the Act respectively. For literary and musical works the rights of reproduction, publication, adaptation, importation and exportation, performance, broadcasting and transmission are exclusive to the copyright holder.¹⁰¹ In the case of a computer program the rights include publishing an adaptation of the program, directly or indirectly selling or letting for hire a copy of the program, exposing a copy for sale or hire.¹⁰² For artistic works further rights are to include the work in audio-visual¹⁰³ and for audio-visuals a right to make a still photograph, selling or letting for hire, offering for sale or hire.¹⁰⁴ For sound recordings the rights include; making a record embodying the sound recording, selling or letting for hire or offering for sale or hire¹⁰⁵ and for a broadcast making a still photograph and rebroadcast.¹⁰⁶

The moral rights include the right of attribution (to be identified as the author) and the right of integrity of the work for as long as copyright subsists in the work. Section 61 provides that the author of a literary, musical or artistic work and the director of an audio-visual work has the right to be identified as the works author so long as copyright subsists in it whenever activities outlined in the Copyright Act are done in relation to the work. These activities include when the work is published commercially, performed in public, broadcast or included in a cable programme carrying service or issued or exhibited to the public.¹⁰⁷ Moral rights are not transferrable during the lifetime of the person in whom they vest but

⁹⁹ Section 15 (1) (f) of the Copyright Act.

¹⁰⁰ Section 15 (4) of the Copyright Act.

¹⁰¹ Section 17 of the Copyright Act.

¹⁰² Section 17 (h) of the Copyright Act.

¹⁰³ Section 18 (d) of the Copyright Act.

¹⁰⁴ Section 19 (a) and (g) of the Copyright Act.

¹⁰⁵ Section 20 (a) and (b) of the Copyright Act.

¹⁰⁶ Section 21 (a) and (b) of the Copyright Act.

¹⁰⁷ Section 61 (1) of the Copyright Act.

they may be transmitted by testamentary disposition or by operation of law on when the copyright holder dies.¹⁰⁸

There are exceptions to the right of attribution, it does not apply in relation to any of the following descriptions of work; computer program, design of an typeface, any computer generated work, a work made for the purpose of reporting current events.¹⁰⁹ This is a rather curious provision considering that one of the requirements for copyright is authorship, if the author has no right to be identified how is the requirement met? Further to effectively exercise economic rights there must be some form of identification as to who the author of a work is even a pseudonym. How can copyright be licenced if the identity of the author is unknown? This gives rise to the orphan works problem where the author of a copyrighted work cannot be identified or contacted. Unless the author does not want to be identified as provided in s.63 (1) and (2) that right ought not to be denied.

The right of integrity of the work is contained in s.64 (2) and states that for as long as copyright subsists, the author has the right ‘not to have a derogatory treatment of the work published commercially, performed, shown in public, broadcast or included in a cable programme service’. Derogatory treatment is defined as any alteration, modification or adaptation which amounts to distortion or mutilation of a work or is prejudicial to the honour or reputation of its author.¹¹⁰ There are exceptions to this right for instance with regard to audio-visuals, computer programs or computer generated work but only in so far as the modification or alteration is necessary for technical reasons for the purpose of commercial exploitation.¹¹¹

Copyright may be transmitted and s.45 of the Copyright Act provides that ‘copyright may be transmitted as incorporeal movable property by assignment, testamentary disposition or operation of law’. The owner of copyright can assign the economic rights to varying degrees; some rights or a part of the term of

¹⁰⁸ Section 66 of the Copyright Act.

¹⁰⁹ Section 62 (a) of the Copyright Act.

¹¹⁰ Section 64 (1) of the Copyright Act.

¹¹¹ Section 64 (3) (b) of the Copyright Act.

copyright or a specific territory.¹¹² An assignment is valid only if it is reduced to writing¹¹³, does not extend to rights that are not expressly referred to in the assignment¹¹⁴ and may be registered.¹¹⁵ The assignment application is done in the prescribed form in the schedule to the Copyright Regulations and payment of the application fee.¹¹⁶

The owner of copyright can licence economic rights in terms of s.49 and the licence can be exclusive, that is to the exclusion of other people including the owner of the copyright¹¹⁷, or non-exclusive which doesn't preclude the owner to licence other people.¹¹⁸ In terms of s.49 (3) an exclusive license is only valid if reduced to writing and signed by the person granting the licence but a non-exclusive licence may be oral or inferred from conduct and easily revocable¹¹⁹ both however can be registered.¹²⁰ The application for a licence is US \$200.¹²¹ Section 49 (4) provides that a licence does not extend to rights not expressly referred to so the agreed economic rights the copyright holder intends to licence should be enunciated. A licensee may grant sub-licence to any person but only to the extent of those rights the licensee has in terms of the licence.¹²²

Infringement of copyright can be direct where a person commits an act which is the preserve of the copyright holder without permission or indirect where a person causes someone to do an infringing activity.¹²³ Dealing in infringing copies is also infringement and s. 51 (2), (3) and (4) outline infringing activities; making an infringing copy, importing or exporting other than for personal use, possessing or exhibiting in public or distributing, selling or letting for hire, or otherwise than in the course of business distributing to an extent that causes prejudice to the

¹¹² Section 46 (2) of the Copyright Act.

¹¹³ Section 46 (3) of the Copyright Act.

¹¹⁴ Section 46 (4) of the Copyright Act.

¹¹⁵ Section 46 (5) of the Copyright Act.

¹¹⁶ Section 7 Copyright Regulations.

¹¹⁷ Section 49 (2) (a) of the Copyright Act.

¹¹⁸ Section 49 (2) (b) of the Copyright Act.

¹¹⁹ Section 49 (5) of the Copyright Act.

¹²⁰ Section 49 (6) of the Copyright Act.

¹²¹ Second Schedule of Copyright Regulations.

¹²² Section 49 (9) of the Copyright Act.

¹²³ Section 51 (1) of the Copyright Act.

copyright holder. Removal of information that identifies the author, work, owner of any right and terms and conditions of licence with the intention to infringe copyright in the work is also an offence.¹²⁴ In terms of s.51 (2)(b) infringement also occurs in relation to an ‘article which is specifically designed or adapted for making copies of the work and which the person knows or has reason to believe is likely to be used’ for infringing purposes.

In case of infringement the law provides the civil remedies as those available for other proprietary rights namely damages, interdict, attachment, the rendering of account, delivery up and Anton Piller order.¹²⁵ The state can also pursue criminal sanctions against a person who engages in infringing activities¹²⁶, the Copyright Act provides for a fine or two years imprisonment or both in respect of each article violated under s.51. A civil suit may be instituted in the Tribunal established in terms of the Act, the High Court or the Magistrates Court. The Tribunal however does not have jurisdiction to entertain criminal proceedings.¹²⁷

Section 129 offers a layer of protection beyond the traditional scope of copyright to some extent incorporating technological protection measures. The WIPO Copyright Treaty in article 11 calls for the legal protection against circumvention of technological protection measures. Zimbabwe however is not party to the treaty but addresses circumvention of copy-protection. Copy-protection is defined as a ‘device or arrangement of any description designed to restrict the making of unauthorised copies of a work or to impair the quality of any such work’.¹²⁸ Infringing activity associated with a device that is designed or adapted to circumvent a form of copy-protection incorporated in a copyrighted work issued in electronic form, constitutes a criminal offence which carries a fine or imprisonment for a period of not more than six months or both.¹²⁹ A person prosecuted for copy-protection infringement can be sued by the owner of the copyright as though he

¹²⁴ Section 130 (2) of the Copyright Act.

¹²⁵ Section 52 (1), (2) and s.57 of the Copyright Act.

¹²⁶ Section 59 of the Copyright Act.

¹²⁷ Section 54 of the Copyright Act.

¹²⁸ Section 129 (1) of the Copyright Act.

¹²⁹ Section 129 (2)(a)-(c) of the Copyright Act.

infringed the copyright in the work and the device concerned were an infringing copy.¹³⁰

There are exceptions and limitations to the rights of copyright contained in Part 3 of the Act, These include; fair dealing for research or private study,¹³¹ fair dealing for purposes of criticism, reviews or news,¹³² use or illustration for teaching purposes,¹³³ for archival copies in a library and quotations,¹³⁴ However the author of the work must be acknowledged, the use must not unreasonably prejudice the legitimate interests of the copyright holder and be compatible with fair practice.

3.3 Patent

Patent is a grant given to an inventor by the state to exclude others from commercially exploiting the invention for a limited period and in exchange for disclosure¹³⁵ so that others may gain the benefit of the invention. Patents are available for inventions which are new, useful and non-obvious, an invention is defined in the Patents Act as,

...any new and useful art whether producing a physical effect or not, process, machine, manufacture or composition of matter which is not obvious or any new and useful improvement thereof which is not obvious, capable of being used or applied in trade or industry and includes and 'alleged invention'.¹³⁶

An invention is new if before the application for the patent in respect to the invention, it was not known or used in Zimbabwe, exploited anywhere in the country, described in a patent specification available to public inspection, described in writing or any other way in any publication of which there was a copy anywhere in or outside Zimbabwe.¹³⁷ A patent is granted for one invention only.¹³⁸

The granting of patents is not only for reward but also for utilisation, s. 31 (b) of the Patent Act states that,

¹³⁰ Section 129 (3)(a) and (b) of the Copyright Act.

¹³¹ Section 24 of the Copyright Act.

¹³² Section 29 of the Copyright Act.

¹³³ Section 25 of the Copyright Act.

¹³⁴ Section 26 of the Copyright Act.

¹³⁵ WIPO *IP Handbook: Policy, Law and Use*, (2004) 17

¹³⁶ Section 2 (1) of the Patents Act.

¹³⁷ Section 2 (a)-(e) of the Patents Act.

¹³⁸ Section 24 (3) of the Patents Act.

‘patents are granted not only to encourage invention but also to secure that inventions shall so far as possible be worked on a commercial scale in Zimbabwe without undue delay’.

The term of a patent is twenty years from the date on which the application was lodged¹³⁹ it can be renewed yearly from the third year of registration provided the prescribed fees are paid. If the fees are not be paid the patent lapses¹⁴⁰, though it can however be restored as provided under s. 28 (1). The provision for lapsing of patents can be necessary to ensure that patents are exploited but the period of time within which to pay fees may not be friendly enough for patents that have not been sufficiently worked to the extent of giving a profit enough to pay renewal fees. The restoration period is however quite flexible, three years from the date the patent lapsed.¹⁴¹ Where there has been improvement or modification to the invention to which a patentee already holds a patent, they can be granted what is called a patent of addition.¹⁴² A patent of addition remains in effect for as long as the patent in the main invention is still in effect.¹⁴³

A patent grants the following rights to the patentee to prevent others from commercially exploiting the invention without his authorisation, this includes making, selling or using the invention.¹⁴⁴ In terms of the Act the following are granted to the patentee;

- (a) where the invention is a machine, manufacture or composition of matter—
 - (i) to make, use, offer for sale or sell that machine, manufacture or composition of matter within Zimbabwe; and
 - (ii) to import that machine, manufacture or composition of matter into Zimbabwe for the purpose of making it, using it, offering it for sale or selling it;
- (b) where the invention is an art or process—
 - (i) to use that art or process within Zimbabwe; and

¹³⁹ Section 25(1) of the Patents Act.

¹⁴⁰ Section 27 (1) of the Patents Act.

¹⁴¹ Section 28 (1) of the Patents Act.

¹⁴² Section 26 (1) of the Patents Act.

¹⁴³ Section 26 (5) of the Patents Act.

¹⁴⁴ WIPO IP Handbook: Policy, Law and Use, op cit (n135)17.

(ii) to use, offer for sale or sell within Zimbabwe any manufacture or product obtained directly by that art or process; and

(iii) to import into Zimbabwe any manufacture or product obtained directly by that art or process;

in such manner as he thinks fit, so that he enjoys the whole profit and advantage accruing from the invention during the term of the patent.¹⁴⁵

The rights granted under a patent may be assigned or devolve by operation of law.¹⁴⁶ A patentee may also offer an exclusive licence, which gives the licensee rights in relation to the patent to the exclusion of others including the patentee.¹⁴⁷ A patentee can apply to the Registrar for the patent to be registered as one in respect of which licences may be issued as of right, with the Registrar attending to issues such as the period of licence, terms of renewal amount of royalties and payment.¹⁴⁸

In some instances compulsory licences may be issued in terms of s.30A and 31. Section 30A applies to a situation where the working of a patent is dependent upon a licence to use a prior patent but the patentee cannot agree with the dependent patent holder as to the licence terms, the dependent patent holder can apply to the Registrar for a licence under the prior patents on such conditions the Registrar deems fit.¹⁴⁹ A compulsory licence can also be issued where one fails to acquire a licence on reasonable terms and applies to the Registrar on the basis that ‘the reasonable requirements of the public with respect to the invention in question have not been or will not be satisfied’.¹⁵⁰ Such grounds exist where the patent is not being worked without justifiable reasons. Compulsory licences also be issued for service of the state upon agreed terms and conditions¹⁵¹ and where agreement cannot be reached upon terms determined by the Tribunal.¹⁵² Further during a period of emergency the state may use, make, exercise and vend the invention for

¹⁴⁵ Section 24 (4) of the Patents Act.

¹⁴⁶ Section 53 (1) of the Patents Act.

¹⁴⁷ Section 2 (1) of the Patents Act.

¹⁴⁸ Section 29 (4) of the Patents Act.

¹⁴⁹ Section 30A of the Patents Act.

¹⁵⁰ Section 31 (1) of the Patents Act.

¹⁵¹ Section 34 (1) as read with 34 (2) of the Patents Act.

¹⁵² Section 36 (1) of the Patents Act.

any purposes which appears necessary, these include medical reason, relief and industrial productivity.¹⁵³ This provision has been used before by the government¹⁵⁴ when it declared a national emergency on HIV/AIDS and issued a compulsory licence to a make or use any patented antiretroviral drugs and import any such drug for a period of six months.

A patent can be jointly owned and an inventor or assignee or legal representative can apply for the registration of a patent.¹⁵⁵ An inventor can also apply for a patent in Zimbabwe where he already has a patent in another country.¹⁵⁶ Where a patent is co-owned each patentee is entitled to an equal undivided share in the patent and to work it unless agreed otherwise.¹⁵⁷

A patent application will contain a specification which gives the description of the patent and the subject to which the invention relates. A specification can be provisional or complete. A provisional specification ‘fairly’ describes the invention and a complete specification ‘fully’ describes the invention and manner in which it is to be performed and the best method of working it.¹⁵⁸ The claims should relate to a single invention, be clear and succinct and fairly based on that matter disclosed in the specification.¹⁵⁹ At the request of the Registrar a specification may be accompanied by drawings, which shall be deemed to be part of the specification.¹⁶⁰

Patentable subject matter includes products and processes to the exclusion of diagnostic, therapeutic or surgical methods of treatment, plants and animals other than micro-organisms and biological processes for the production of plants and animals other than micro-organisms.¹⁶¹ An application can be denied in the circumstances contained under s.13; if it is frivolous, not patentable subject matter, endangers public order, against public morals, endangers life, prejudicial to environment. However the fact that exploitation of an invention would be contrary

¹⁵³ Section 35 (1) (a)-(g) of the Patents Act.

¹⁵⁴ Declaration of Period of Emergency (HIV/AIDS), General Notice 240 of 2002.

¹⁵⁵ Section 6 (1) (b) of the Patents Act.

¹⁵⁶ Section 6 (2) of the Patents Act.

¹⁵⁷ Section 41 (1) and (2) of the Patents Act.

¹⁵⁸ Section 9 (2) and (3) of the Patents Act.

¹⁵⁹ Section 9 (4) of the Patents Act.

¹⁶⁰ Section 9 (5) of the Patents Act.

¹⁶¹ Section 2A of the Patents Act.

to the law of Zimbabwe solely does not constitute a ground for refusal of an application.¹⁶² This provision is somewhat difficult to reconcile with the provision for refusal on public policy grounds.

The application process involves submitting the prescribed form to the Patent Office. The application should show that the applicant owns the invention and accompanied by a provisional specification provided that with twelve months the complete specification should be lodged.¹⁶³ The applications for patents are examined by patent examiners to ascertain whether the application, specification and accompanying documentation comply with the requirements.¹⁶⁴ An examination however does not warrant the validity of a patent.¹⁶⁵

The Registrar may accept the application any at time but an applicant can request the Registrar to postpone acceptance for not more than eighteen months.¹⁶⁶ Upon acceptance the applicant advertises in the journal that specification has been accepted this is done to allow for opposition to the grant of the patent to be made and the documents submitted in application are open to the public.¹⁶⁷ The grant of the patent can be opposed within three months on the grounds that the invention is obvious, not useful or cannot be ascertained how to work it or that subject matter is not clear or on allegations of fraud.¹⁶⁸ Where the application is granted the patent is sealed with the seal of the patent office and entered into the register and the date of the patent is the effective date of the application.¹⁶⁹

Unlike under copyright, parallel importation is permitted for patented products. Section 24A provides that,

‘...a patented product which has been put on the market in another country by a patentee may be imported into Zimbabwe without the consent of the patentee, if the cost of importing such a product less than the cost of purchasing from the patentee.’

¹⁶² Section 13 (2) of the Patents Act.

¹⁶³ Section 8 (1) and (2) of the Patents Act.

¹⁶⁴ Section 11 (1) of the Patents Act.

¹⁶⁵ Section 11 (3) of the Patents Act.

¹⁶⁶ Section 16 (1) of the Patents Act.

¹⁶⁷ Section 16 (3) of the Patents Act.

¹⁶⁸ Section 17 (1) of the Patents Act.

¹⁶⁹ Section 12 (1) and 23 (1) (a) of the Patents Act.

This provision supports the rights of users to access the product but may as well impact the economic benefits of the patentee where the product maybe cheap outside the country.

The law also allows for a patented product to be tested for further development and in terms of s.24B such test batches may be produced without the consent of the patentee six months before the expiry of the patent but cannot be commercially availed.

Parent infringement is actionable in the Tribunal, High Court or Magistrates Court by the patentee or the exclusive licensee.¹⁷⁰ The relief available for infringement includes interdict, damages, inspection or account and any other direction the court may order.¹⁷¹ An Anton Piller order can also be issued where legal proceedings are anticipated and the alleged infringer is in possession of evidence of infringement and there is a real danger that the evidence will be destroyed or hidden before discovery can be done at trial.¹⁷²

Unlike copyright, there are no criminal penalties for patent infringement. However, falsification of documents, deceiving or influencing the Registrar or examiner, giving false evidence, trafficking in patents and unauthorised claim of patent right¹⁷³ are criminal offences and carry a punishment of a fine or imprisonment for a period of not more than two years.

3.4 Trade Marks

A trade mark means a mark which is used in relation to goods or services for;

(a) indicating a connection in the course of trade between the goods or services and some person having the right, either as proprietor or as registered user, to use the mark, whether with or without any indication of the identity of that person; and

¹⁷⁰ Section 48 (1) and (1a) (a)-(c) of the Patents Act.

¹⁷¹ Section 48 (7) of the Patents Act.

¹⁷² Section 48A (1) (a)-(c) of the Patents Act.

¹⁷³ Section 84, 85 (1), 86, 87 (1) and 88 (1) of the Patents Act.

(b) distinguishing the goods or services in relation to which the mark is used or proposed to be used from the same kind of goods or services connected in the course of trade with any other person;

A trademark generally serves two purposes identification and distinction, it identifies the goods or services of a particular proprietor and distinguishes them from the goods or services of others.¹⁷⁴ For a trademark to be registered it must comply with those purposes, be a sign that can be graphically represented and be distinctive¹⁷⁵. It is deemed applied to goods if it is attached to the goods, attached to a covering of the goods, if the goods are enclosed or annexed to the covering or any other manner that implies the goods are associated with the trademark.¹⁷⁶ A trademark is deemed applied to services if it is used in any way that gives the impression that the services are associated with the trade mark.¹⁷⁷

A trademark can be protected under common law and under statute law. Under common law the mark has to be used and acquire a reputation.¹⁷⁸ Under statute it has to be registered in terms of the Trade Marks Act where it is provided that;

A trade mark shall be registered in respect of a particular class or particular classes of goods or services or in respect of goods or services falling in such class or classes in accordance with such classification as may be prescribed.¹⁷⁹

An application is made for the registration in terms of s.21 of the Act and if accepted it shall be advertised¹⁸⁰ after which it will be entered in the register¹⁸¹ and

¹⁷⁴ WIPO IP Handbook: Policy, Law and Use op cit (n135) 67

¹⁷⁵ Section 12 of the Trademarks Act (Chapter 26:04).

¹⁷⁶ Section 82 (1)(a)-(d) of the Trademarks Act.

¹⁷⁷ Section 82 (3) of the Trademarks Act.

¹⁷⁸ *National Food Ltd v Midland Milling Company (Pvt) Ltd* 1996 (1) ZLR 159.

¹⁷⁹ Section 7 of the Trademarks Act.

¹⁸⁰ Section 22 (1) of the Trademarks Act.

¹⁸¹ Section 23 (1) of the Trademarks Act.

the proprietor issued a certificate.¹⁸² There are various fees payable for registration with US \$200 being payable upon lodging of documents.¹⁸³

Registration is done for a particular class of goods or services or in respect of goods and services falling within a particular class. There are forty-five classes of trademarks.¹⁸⁴ The register of trademarks has four parts; A, B, C and D. Part A is for registration of distinctive marks and to be distinctive a trade mark can contain a name denoted in a unique way, invented words or signature.¹⁸⁵ For purposes of registration the distinctiveness is determined by the Registrar.¹⁸⁶ Part B is for registration of marks capable of distinguishing and the determination of whether a mark is distinguishing lies with the Registrar,¹⁸⁷ but a mark can be registered in both Part A and B.¹⁸⁸ It is so because the distinguishing aspect of a trademark can also constitute distinctiveness. Part C is for registration of certification marks and Part D for registration of defensive trademarks.¹⁸⁹

Section 14 of the Act provides marks which are excluded from trademark registration and provides that;

- 1) A mark—
 - (a) the use of which would be likely to deceive or cause confusion; or
 - (b) the use of which would be contrary to law; or
 - (c) which comprises or contains scandalous matter; or
 - (d) which is prescribed to be a prohibited mark; or
 - (e) which, for any other reason, would not be entitled to protection in a court of law; shall not be registered as a trade mark.¹⁹⁰

In terms of s.15 a mark that is identical to another registered trade mark may not be registered in respect of goods or services similar to those to which the registered trademark relates or if it similar to the registered trademark to such an extent as to cause confusion. Also a mark will not be registered if its registration

¹⁸² Section 23 (2) of the Trademarks Act.

¹⁸³ See Department of Deeds Companies and Intellectual Property, available at, <http://www.dcip.gov.zw/index.php/component/content/article/88-ip/119>, accessed on 26 July 2015

¹⁸⁴ Third Schedule Trade Marks Regulations, 2005.

¹⁸⁵ Section 12 (1)(a)-(e) of the Trademarks Act.

¹⁸⁶ Section 12 (3) of the Trademarks Act.

¹⁸⁷ Section 13 (2) of the Trademarks Act.

¹⁸⁸ Section 12 (6) and 13 (4) of the Trademarks Act.

¹⁸⁹ Section 3 Trademarks Amendment Act.

¹⁹⁰ Section 14 (1) of the Trademarks Act.

would result in it being contested as an imitation, reproduction or translation of a familiar foreign mark.¹⁹¹

The right to use a trademark is subject to any conditions which may be entered on the register and these mainly have to be with how the goods are distributed that bear the trademark, the performance of such services associated with the mark and the incorporation of such goods into other goods as accessories.¹⁹² Further the proprietor of a trademark cannot interfere with somebody who uses a similar mark in relation to goods or services where that person has always used the similar mark to the trade mark before the registration of the proprietor's trademark.¹⁹³

Essentially because of the distinguishing function of trademarks, the main right of a proprietor of a trademark is the right to exclude others from using the mark. The rights also prevent unfair competition as the proprietor can prevent others from using an identical mark that can be likely to deceive or cause confusion. A trademark can be assigned or transmitted even an unregistered trademark.¹⁹⁴ A trademark can be licenced upon such terms as agreed and where it has been assigned or transmitted the person concerned shall apply to the Register to have such title registered.¹⁹⁵

The duration of a trademark can be forever, this is because the initial duration is ten years¹⁹⁶ but it is subject to renewal. A proprietor can renew it for a period of ten years after the expiration of the last registration.¹⁹⁷ Where the conditions for renewal have not been met, for instance payment of the renewal fees, the trademark may be removed from the register subject to conditions for restoration.¹⁹⁸ Late payment can however be made but within six months.¹⁹⁹ A trademark may also be removed from the register on the grounds that there was no bona fide intention to

¹⁹¹ Section 8 Trademarks Amendment Act.

¹⁹² Section 8 (3) and (4) Trademarks Act.

¹⁹³ Section 10 of the Trademarks Act.

¹⁹⁴ Section 27 (3) of the Trademarks Act.

¹⁹⁵ Section 29 (1) of the Trademarks Act.

¹⁹⁶ Section 24 (1) of the Trademarks Act.

¹⁹⁷ Section 24 (2) of the Trademarks Act.

¹⁹⁸ Section 24 (3) of the Trademarks Act.

¹⁹⁹ Section 10 Trademarks Amendment Act.

register the mark and that there has been no bona fide use of the trademark²⁰⁰, and where in five years the trademark was registered but not used.²⁰¹

A registered trademark is infringed by,

‘...any unauthorised use in the course of trade, whether as a trade mark or otherwise, of a mark that is identical to the registered trade mark or so nearly resembling it as to be likely to deceive or cause confusion, where that mark is used in relation to the same or similar goods or services as those in respect of which the trade mark is registered.’²⁰²

The test for infringement depends on whether there is sufficient similarity likely to cause confusion.²⁰³ Forging a registered trademark, making a device for purposes of forging, disposing or possessing a device for purposes of forging, falsely applying a mark to goods or services are prohibited²⁰⁴ and carry criminal sanctions of a fine or imprisonment of not more than two years.

The Amendment Act introduced a new term in relation to import and export goods that display a trademark without authorisation, or have a mark that resembles a registered mark, these are termed ‘counterfeit trade mark goods’.²⁰⁵ Such goods can be stopped from entering or leaving the country if the proprietor of the trade mark so requests to the Director of Customs and Excise and provides security.²⁰⁶ Selling or importing goods which bear a forged registered trademark or a falsely applied trade mark is also an offence.²⁰⁷

An action for infringement can be instituted by the proprietor of the trademark or user and the remedies available are the same as those available for other proprietary rights namely; damages, interdict and attachment.²⁰⁸ Also available is rendering of account, delivery of goods bearing the infringing mark and articles used to the mark the goods.²⁰⁹ Damages however will not be awarded where the infringer had no knowledge that he was engaging in activities that infringed the

²⁰⁰ Section 31 (1)(a) of the Trademarks Act.

²⁰¹ Section 31 (1)(b) of the Trademarks Act.

²⁰² Section 5 Amendment Act.

²⁰³ *Kellogg Co. v Cairns Foods Ltd* 1997 (2) ZLR 230 (SC)

²⁰⁴ Section 84 (1)-(d) of the Trademarks Act.

²⁰⁵ Section 17 Trademarks Amendment Act.

²⁰⁶ Section 17 Amendment Act as read with s.86 of Trademarks Act.

²⁰⁷ Section 85 (1) of the Trademarks Act.

²⁰⁸ Section 9A (1) and (2) of the Trademarks Act.

²⁰⁹ Section 9A (2) Amendment Act of the Trademarks Act.

rights of the proprietor.²¹⁰ In determination of damages, it will be taken into account the extent and nature of infringement, amount payable had the infringer been a registered user, any benefit accrued due to the use of the trademark and the flagrancy of infringement.²¹¹

Also just like for copyright and patent infringement, one can apply for an Anton Piller order and the requirements are the same the purpose being to preserve the evidence. The remedies available for infringement under the Act are not available for an unregistered trademark. However, in terms of s.6 of the Act as read with s.4 of the Amendment Act an action can be brought for unlawful competition or passing off where goodwill or reputation is established.²¹² Only registered trademark are entitled to the remedies under statute. An action for infringement can be instituted in the Tribunal, High Court or the Magistrates Court²¹³ but the Tribunal does not hear criminal matters.

3.5 Conclusion

This chapter has laid down some of the IPRs which are available to ICT products, which are copyrights, patents and trademarks. The pieces of legislation outline the protectable subject matter and enforcement mechanism. ICT is a broad field and depending on the product or process IP protection is available in Zimbabwe. In order to assess whether the IP system could be effectively utilised for ICT products in Zimbabwe a study was undertaken and chapter 4 highlights the research findings.

²¹⁰ Section 9C (4) Amendment Act of the Trademarks Act.

²¹¹ Section 9C (2) and (3) of the Trademarks Act.

²¹² *Unilever P.L.C. and Another v Vimco (Pvt) Ltd and Another* HH-175-04

²¹³ Section 9B of the Trademarks Act.

CHAPTER 4 Research Findings – Mobile Applications Development

4.1 Perspectives on ICT and the ICT Policy

In order to assess whether the growth of ICT in Zimbabwe presents an opportunity for effective use of IP rights, a survey was undertaken as indicated in chapter 1. The questions were divided into three sections ICT, IP and innovation and the questionnaire has been added as an appendix. The study was focused on entities and individuals in the ICT industry that develop mobile applications ‘apps’. A total of ten individuals were interviewed; seven sent their responses by email and on average it took one month for the participants to send their feedback. Two interviews were conducted over the telephone and one via Skype. All the participants had at least five years’ experience in the ICT industry and at least three years developing apps. The participants were asked to give their perspectives on the ICT sector drawing from their experience and also their understanding of IP issues. The findings of the survey are presented in this chapter.

The target group is relatively new in the country compared to other app developers globally. That was a limiting factor to the research as there was no other data focusing on developers from which to draw some insights. Another limitation was the number of participants. As it is an area still in infancy the pool of participants was small and this was also made difficult as others did not want to participate. Some could not participate due to time constraints, others indicated that they did not take part in a research of this kind for confidentiality reasons and others simply did not respond. Nonetheless those that did participate provided much information and seemed to share almost the same views. There was a general consensus that the country is experiencing ICT growth and that it could take time to get to the global standards of usage.

4.1.1 Regulatory framework

All of the participants were aware of the ICT regulatory framework and 75% understood the implications of the various pieces of legislation. Those that had never familiarised themselves with the contents of the legislation, particularly the ICT Act and the Policy, did not fully comprehend the impact of the regulations. These indicated that the legislation is not publicly available, for instance on the website of the ICT ministry.

25% stated that the ICT Policy did not directly impact on their work as the policy was detached from what they do. The rest stated that the policies set the pace and regulate the work they do because in building technology they need to be aware of how to treat private information and data, licensing issues and the channels of communication.

The ICT Policy and legislation does not address some of the diversified services, for instance the mobile money offered by mobile operators. In the early stages of the introduction of the mobile money service, those in the banking sector complained that it was not regulated and were insisting that mobile operators make use of banks.²¹⁴ There has been no regulations put in place to date to address mobile money. Further there is also no law that governs cyber transactions, although a bill has been said to be in the pipeline.

4.1.2 Some challenges to ICT growth

Among the challenges identified as hampering the growth of ICT were; inadequate infrastructure, financing, skills shortage, obsolete policies, slow rate of adoption of technology and unfair monopoly by large corporations.

The participants were of the view that the ICT Policy no longer suited the environment as it had been overtaken by events and welcomed the preparations of a new draft. They all had taken part in some of the stakeholders meetings on the draft policy and 25% felt that they had not been fully engaged in the consultative

²¹⁴ Kennedy Maposa 'E-cash system riles Zimbabwe's banks', *Mail and Guardian*, 14 June 2013 available at <http://mg.co.za/article/2013-06-14-00-e-cash-system-riles-banks>, accessed on 26 July 2015

process. These noted that the some of the challenges faced by small scale players in the sector were not canvassed the likely result being a skewed policy in favour of established players.

50% placed emphasis on the unfriendliness of the regulatory framework in that it is difficult for small scale players to engage and participate in the development of technology. A participant felt that the ICT field was cultured to sustain and maintain those already in the industry. The reason given was that POTRAZ and the ICT ministry focus on large corporations, to substantiate this view the participant gave an example of the licensing requirements. He noted how POTRAZ was no longer issuing new licences advising those with innovations in the telecoms space to work with those who already had licences.

The participant indicated that the problem with joining an established corporation is that large telecoms companies will either want the same thing that the startup is working on or at some point muscle out the startup. Two cases were cited, *Econet Wireless v Trustco Mobile Ltd*²¹⁵ and *Tengende v Telecel Zimbabwe*²¹⁶, as examples of how corporations can take over concepts. In *Econet Wireless v Trustco*, a Namibian company, Trustco, developed a system which Econet used to offer life insurance cover known as Ecolife. A dispute arose regarding royalties due to Trustco and breach of contract. The case went all the way to the Supreme Court where Econet won and subsequently developed its own system to continue offering the insurance service now called Ecosure. In *Tengende v Telecel Zimbabwe* Tengende alleged that he proposed an idea for a quiz competition run on the mobile service to Telecel. Telecel however chose another partner to develop the idea without Tengende's permission. The court stated that copyright does not subsist in ideas, procedures, systems, methods of operation or concepts and Tengende lost the case.

4.1.3 Mobile Applications

²¹⁵ [2013] ZWSC 43.

²¹⁶ HH- 672-14.

The participants developed apps for use on smartphones and tablets. The apps are targeted for the Zimbabwean market. 75% identified the slow rate of adoption of technology in Zimbabwe as a limiting factor to profit generation and were now aiming to develop technology not only for local use but for the sub-Saharan region. They stated that in Zimbabwe not many people buy apps hence the thrust into the rest of the continent. 25% noted that development is market oriented and while in some countries people consume technology as a lifestyle in Zimbabwe adoption is premised on functionality hence the low adoption rate.

4.2 Awareness of IP rights

All the participants had some knowledge about copyright, patents, trademarks and industrial designs. They understood more about copyright than the other IPRs and knew that their applications were copyright subject matter particularly the software, databases, artistic and audio-visuais. In Zimbabwe there are no formality requirements for copyright which subsists automatically upon the creation of a work as indicated in Chapter 3.

None of the participants however, knew that the logos, signs and symbols or combination thereof on the apps could be protected as trademarks. The understanding of trademarks was limited to brand names of corporations and products. One participant was aware that the graphical objects and layouts on apps can be registered as industrial designs.

4.3 Enforcement of IP rights

Under enforcement, it was a two pronged enquiry; the process of registration where possible and the protection of the rights.

4.3.1 Registration Process for Patents and Trademarks

25% noted that even though there is awareness of IP issues, there is not enough latitude for small scale innovators to grasp the issues which are complex and require the assistance of lawyers. It can take about six months to navigate the registration process of a patent. 75% stated that tech hubs like Hypercube aim to assist individuals and small companies with patent queries and connect them with professionals who can assist. These have partnerships with IP consultants to educate others about IP matters.

One of the issues raised was the difficulty in acquainting oneself with different requirements in the process of registering patent rights for those in the ICT sector. These are from two government departments, the Policy Coordination, Development and e-Government under the ICT ministry and the Department of Deeds, Companies and IP under the Ministry of Justice. 25% indicated that the officials can refer one back and forth hence they end up abandoning the process as it is unnecessarily time consuming.

A participant indicated that software cannot be patented in Zimbabwe and ZIPO tells developers to rely on copyright for protection which can be difficult to enforce. However, there is no provision in the Patent Act which states that software cannot be patented. The ZIPO website also has information to the effect that software cannot be patented. Nonetheless software can be patented as it is not among the list of inventions for which patents may not be granted.²¹⁷ One entity indicated that it decided not to prioritise IP issues as they were spending more time with the process of registration rather than developing. It adopted a strategy to develop and release apps in the hope that once released nobody can imitate the same product. Two entities however copied one of their innovations.

25% stated that although the Ministry of ICT has expressed willingness to assist, it could not directly assist every single entity. They would rather have a framework in place that does not make the process burdensome to register IP rights themselves. Some suggested that the ministry coordinates with the IP department to create policies and guidelines on IP matters. A single document would be a viable option to streamline the whole process.

²¹⁷ Section 2A of the Patents Act.

The survey showed that the lack of a publicly available database for patents makes it impossible to conduct a search. One has to pay fees for ZIPO to conduct searches, currently set at about USD \$300. 50% noted that they could not afford to pay the fees. Trademarks, patents and industrial designs have registration application fees of \$200. There is also a processing fee of \$80 for a patent or an industrial design and \$130 for trademark. Patents and trademarks also have a \$10 publication fee. Cumulatively the fees could be a limiting factor to those who may want to register their IP. 50% said they could pay the fees but the money would be lost should the search show that prior art exists. 75% indicated that because the process was not simple to navigate, engaging the services of lawyers would compound the costs.

There is not much locally generated IP, ZIPO patents an average of about 5 patents a year which are regional patents registered by non-residents.²¹⁸ Considering that IP is one of the aspects taken into account in measuring innovation, this is one of the reasons why the country has been ranked low on the innovation index.

4.3.2 Protection of copyright

75% knew they had the copyright in their work and reaffirmed it with the sign, ©, on their apps. Though this is not a legal requirement for copyright protection, they were using it to warn against unauthorised use. They were aware of some of the rights including that they could sell or licence the apps. Copyright protects the text, source code, graphic and audio visual content. They were aware of what constituted infringement of copyright. There are no formality requirements as copyright vests upon creation of an original work if it meets the eligibility criteria and there is no registration required which makes copyright a simple no cost method of protecting apps.

²¹⁸ WIPO Statistical Country Profiles available at http://www.wipo.int/ipstats/en/statistics/country_profile/profile.jsp?code=ZW accessed on 25 July 2015.

50% of the participants noted that globally not many apps become commercially successful and considering the Zimbabwean environment where technology is not as used as much as in some countries, a no cost protection measure like copyright is most suitable. Only when there is potential for profit will they take other measures of protection.

However, 75% stated that criminal enforcement of IP rights generally was not adequate and gave the example of how copyright in literary works is infringed. If copyright infringement of literary works, which leads to the detriment of the copyright holder is not punished, the chances are copyright in apps will equally be infringed. Apps can be protected under copyright laws but the Copyright Act in its current form does not address some challenges in the digital age. For instance the right of attribution does not apply in relation to computer programs. Without identifying the developer of an app, it is simple for one to manipulate, make an adaptation or even copy it.

25% did not consider IP rights to be important for apps. They expressed the view that the intention behind protection is for use and to acquire a reward, but where there are no rewards to talk about there is no need to pursue enforcement mechanisms.

4.3.3 Protection of Patents and Trademark

None of the participants had any registered trademark or patent and only one participant had tried to register a patent. The participant stated that having patent protection for software would be advantageous considering that much is happening in terms technological innovations such that copyright protection may not be sufficient. As indicated in chapter 1 the discussion on patenting of software has resulted in divergent views. However Zimbabwe still has an opportunity to adopt a position suitable to its development needs. It is the view of the author that patenting software be utilised. For a country that is still developing its IP framework there is room for trying out new avenues, seeing what works and what does not work.

As indicated in Chapter 3 trademarks play a distinguishing role, having a trademark for an app could contribute in differentiating among certain apps that may serve the same purpose. App development is a highly competitive area and developers strive to create relevant apps and are continually trying to come up with the new and best thing. Particular characteristics such as functionality and aesthetics could be associated with a certain product consumers would prefer over another. Further the protection of trademarks is well established in the case law²¹⁹ such that there is guidance on the legal issues.

4.3.4 Trade Secrets

An aspect that did not arise in the interviews but is pertinent to the discussion of protection of computer programs is trade secret protection. Trade secrets can be defined as any information that is not disclosed and has an economic value to an entity.²²⁰ Trade secrets are also known as undisclosed information and TRIPS provides for the protection of such information in art.39. Undisclosed information can be protected by keeping it confidential using whatever means preferred. The information is protected against unauthorised use and disclosure. Unauthorised use of confidential information is deemed unfair practice in terms of the competition law.

In the context of a computer program, the source code can be protected as a trade secret. Computer programs are written in code and the source code is known to the developer. The source code can therefore be termed confidential information. Many businesses rely on trade secrets to protect their source code. For instance when buying a computer program there is a licence to use but the source code is not part of the package. Unknowingly the participants are using trade secret protection.

4.4 Innovation

²¹⁹ See *Unilever PLC v VIMCO (Pty) Ltd* HH-175-04, *First Mutual Life Assurance v Intermarket Holdings Ltd* HH-08-06.

²²⁰ C Ncube *Intellectual Property Protection for E-Commerce Business Methods in South Africa: Envisioning An Equitable Model for SMEs in the Tourism Industry* PhD (UCT) (2010) 177.

This section of the survey was not aimed at assessing R&D in research institutions, but to assess the participants' views toward innovation in the ICT space. The aim of the questions was to assess to what extent there is support for technological development deducing from the experiences of the participants. The survey did not seek to assess the R&D in tertiary institutions as a whole that is beyond the scope of this work.

4.4.1 Support for technological development

Of the participants 75% never received any support for technology development or in coming up with their innovations. 25% had received support and endorsement from some organisations for different technological development projects, ministries and some banking institutions. 25% had sold some of their innovations. This indicates that there is room for collaborative partnerships between small scale innovators and organisations for the development of solutions in the ICT space.

All participants had at least three times taken part in workshops, seminars and trainings on technological innovation. The Hypercube, Sky Hub, ZOL, TechZim, British Council, US Embassy were some of the institutions mentioned by participants to have offered a platform for training and discussion. At the workshops awareness is raised on development of technology and sometimes issues of IP. They are also equipped with new skills on developing technology.

25% were of the view that there is no legislation to promote the actual development of technology. 25% of the participants indicated that the IP system can sometimes impede innovation particularly because of some of the requirements that have to be met which can be too stringent. An example of this is in the case of patents on the requirement for novelty. An innovation may not be new in the strict sense of the word. Also to get a licence to use someone's patents to develop new products can be very costly, especially where the patent belongs to a large

corporation that derives huge profits from its patent. There is discussion about whether IPRs are a hurdle to subsequent innovation.²²¹

There was general consensus that not enough is being done for research in ICT. Among the challenges identified were; the lack of information, skills capacity, resource constraints, lack of support structure

25% indicated that there was recycling of research in some institutions though there are also new concepts emerging from some research conducted. 75% noted that the research in institutions undertaken by lecturers and students is commendable but stated that the problem is that students do research for final year projects which are neglected after graduation. They noted that it would be ideal to publish some of the research and where possible commercialise.

4.5 Conclusion

The research showed that the regulatory framework is not adequate to meet the changed ICT environment. The field is ever evolving such that constant reviews are needed. Presently the regulatory framework has been overtaken by events and a policy is needed to deal with new issues.

One of the goals of the ICT Policy is to promote local production of ICT products but from the survey the support from industry or government is limited if not non-existent. Support need not only be financial but can be in the form of skills and technological capacity as provided by the tech hubs identified. This could lead to innovations that provide solutions to some challenges. The creation of IT platforms for innovative deployment of data and knowledge is a step in the right direction.

The results also show that though there is less locally generated IP registered, there is scope for effective use of IP within the context of ICT. The legal framework exists but the challenge is inadequate knowledge of IP issues. Even though there is awareness of IP it is limited. The registration process is also

²²¹ For a discussion specific to ICT see C Crampes and C Langinier, 'Are Intellectual Property Rights Detrimental to Innovation' (2009) 16 *International Journal of Business* 249.

difficult to manoeuvre compounded by the issue of the costs involved. The challenges of enforcement could also lead to a lack confidence in the system.

What can be deduced from the survey is that the IP landscape needs to be tailored in order to harness the benefits of the small scale technological innovations. In the next chapter some recommendations will be made that could potentially address some challenges identified and comparisons will be drawn from the experiences of other countries.

CHAPTER 5 Recommendations and Conclusion

The propositions made in this chapter are drawn from the experiences of other countries on the continent, namely Rwanda and Kenya as indicated in Chapter 1. Rwanda is an example of how ICT has been effectively harnessed for the development of the country and Kenya is a success story on the utilisation of the IP system. A vibrant regulatory and institutional mechanism exists in Kenya and Zimbabwe can learn from it. Lessons can be derived from the Kenya Copyright Board (KECOBO). The author appreciates that KECOBO focuses on copyright, however its strategies could equally apply for other IPRs and that is the context in which it is used as an example in this chapter. There is scope for the effective use of IP rights from the advances in ICT, what is needed is adequate awareness of the rights and a robust system that supports the utilisation of these rights. In answering the three sub questions; is the ICT Policy addressing the changed climate? Is innovation sufficiently promoted? Is the intellectual property framework utilised? The recommendations below address some of the challenges identified in the previous chapters.

5.1 Reviewing ICT Policies and Legislation

A new ICT Policy for Zimbabwe is in the pipeline and may address the issues of ICT infrastructure, wireless and emerging technologies and make it easy for ICT players of different sizes to take an active role in the industry. Although the draft has not been publicly availed, some key stakeholders have been invited to contribute what they would want to see in the policy. The policy should be effectively implemented, it is not enough to have it on paper. Implementation should be spearheaded by the ICT Ministry with follow ups from the office of the President and Cabinet as is being done with ZimASSET, the economic blueprint. A constant review of the regulatory framework is necessary considering how dynamic the sector is and should be crafted into the policy.

Increasingly transactions are carried out online and the digital age calls for laws that govern cyber transactions. In light of that, the drafting of the cyber bill should be prioritised. A bill crafted with the assistance of ICT experts is what is required and not a copy and paste of foreign pieces of legislation.

POTRAZ, as the regulatory authority, needs some autonomy in the exercise of its functions and this can begin by devolving it of some degree of government influence. Some scholars have put forward the idea of a quasi-government organisation.²²² This can be a step in ensuring the incorporation of diverse perspectives in laying the direction of ICT. The functions of a national converged regulator proposed in the National ICT Policy (2005), could be taken up by POTRAZ. Rwanda is one of the success stories of advances in the ICT landscape, its national regulatory authority has spearheaded the implementation of its ICT policy. There have been improvements in ICT infrastructure, wireless internet, e-banking and e-government.²²³

The promotion of investment in ICT is crucial for growth of the sector. As noted in chapter 1 many countries, for instance Uganda and Zambia, have identified in their ICT policies, the creation of a conducive environment for foreign direct investment and public-private partnerships as necessary for developing ICT infrastructure and capacity.²²⁴ Foreign investment will require that the indigenisation laws be tailored to promote foreign direct investment in ICT, a rigid 51 per cent local ownership scheme may scare away investors.²²⁵ Local investment should equally be supported for instance through tax incentives and lower customs duties on imports of ICT products.

5.2 Promoting ICT Innovation

²²² T Tsokota and R von Solms op cit (n18)8.

²²³ Ibid.

²²⁴ M Blakeney and G Mengistie 'Intellectual Property Policy Formulation in LDCs in Sub-Saharan Africa' (2011) 19.1 *AJICL* 66.

²²⁵ See Indigenisation and Economic Empowerment Act (*Chapter 14:33*).op cit (n7)

The suggestions on promoting innovation in this section have been derived from the participants of the survey. Innovation, as defined in chapter 1, plays an important role, it has been observed that ‘cumulative innovation – incremental innovation where one builds on existing products, processes and knowledge... is shown to have a significant social and economic impact.’²²⁶ Research institutions, companies and government can support this kind of innovation which will cost relatively low in comparison to traditional R&D. As the challenges of R&D funding may persist for a while, in the meantime innovation without R&D particularly in the small to medium enterprises, is feasible. All that is important is creating an enabling environment for technology transfer. Lessons can be learnt from Rwanda where ICT innovation has played a role in availing simple solutions with support from the highest levels in government.²²⁷

Zimbabwe can benefit from technology transfer and the adaptation of technologies consistent with the local needs. Small scale innovators are well placed to take a role in tailoring technology and develop the ICT space. The pool of potential innovators is quite significant when one takes into account students with interest in ICT. Tech hubs have shown that there is a significant number of people with ideas that can be developed.

The process of ‘open innovation’²²⁸, discussed in chapter 2, can be harnessed to increase ICT outputs and utilisation of emerging technologies. ICT growth can become more obvious giving impetus for Zimbabwe to reach global standards. The exchange of ideas and incorporation of new concepts from different sectors creates a diverse pool of knowledge and information from which to develop new products. Presently small scale innovators seem to pursue this kind of innovation, but because of the limited reach the impact is small. Established companies can adopt this model and because of the financial muscle and wide markets they have, the outputs of open innovation can have a greater impact.

²²⁶ WIPO op cit (n9) 26.

²²⁷ T Tsokota and R von Solms op cit (n18) 5.

²²⁸ WIPO op cit (n9) 47.

5.3 Adjusting the IP framework

5.3.1 IP Policy

The capacity to craft IP policies that not only constitute sound institutions but also substantive regulatory strategies, is necessary for the effective use of IP rights and the creation of a robust IP framework. Some authors have noted IP policy capacity as one complex area in Sub-Saharan Africa.²²⁹ Efforts have been made for the development of a national IP Policy with a draft produced by the Secretariat of the Inter-Ministerial Committee on IP with assistance from WIPO. The goal of the policy is to make the country a knowledge based economy.²³⁰ It identifies IP as a ‘...key enabler of innovation and creativity as well as incentive for the investing in R&D’.²³¹

Though in many instances policy ought to precede legislation,²³² Zimbabwe as a former British colony inherited the IP laws. Policies can now come in to tailor those laws to the prevailing realities. As noted by some ‘...IP protection standards should be differentiated according to the specific environment in which innovation takes place.’²³³ The draft policy presents an opportunity to begin a process of adjusting the IP legislation appropriately.

Further, many IP issues are contained in various other national policies,²³⁴ one document which harmonises all the IP aspects could assist in coordination, pursuing commercialisation and the ultimate goal of IP for development. Rwanda is one example of a country with a national policy that harmonises IP matters.²³⁵ It is important that the national IP policy take into account the unique local innovation and not simply regurgitate IP formulations of other nations at different stages of development.

²²⁹ M Blakeney and G Mengistie op cit (n224) 67.

²³⁰ The Draft National IP Policy of Zimbabwe (2014) 7.

²³¹ Ibid.

²³² C Ncube, *Intellectual Property policy, law and administration in Africa: Exploring continental and sub-regional co-operation* (Unpublished Manuscript) (2015) 4.

²³³ WIPO op cit (n9) 81 see also C Ncube ‘The Development of Intellectual Property Policies in Africa: Some Key Considerations and a Research Agenda’ (2013) 1 *Intel. Prop Rights* 2.

²³⁴ SSTI Policy op cit (n59) and ICT Policy op cit (n17).

²³⁵ M Blakeney and G Mengistie op cit (n224) 15.

5.3.2 Patents and Trademarks

As the requirements for patentability have never been tested before the courts, there is no jurisprudence that has developed the law in this regard. Some of the inventions may not comply with all the requirements but nonetheless involve an innovative step or a substantive contribution. An option for Zimbabwe could be introducing utility models. As the threshold for technological progress is relatively lower for utility models,²³⁶ it will be ideal for the kind of innovation being done by individuals and in small to medium enterprises. In addition, the level of development may require a less rigid standard than that of patents. If properly administered, this could also promote local innovation and develop the IP system as more people utilise it.

Furthermore, the challenge of registration of patents and trademarks could be addressed by introducing an online registration system. It would make it simple for individuals to register their work, cut down on costs and eliminate the complex process. Currently application forms can only be collected from ZIPO which will require one to be physically present to make an application. Kenya's recent launch of an online registration system for copyright was done by KECOBO in collaboration with Microsoft 4Afrika.²³⁷ In Kenya copyright vests automatically,²³⁸ registration is voluntary and is for establishing a database and enforcement purposes. Already KECOBO had been offering downloadable forms which could be handed in upon payment of fees using the mobile money system. Once in full operation the Kenyan online system will not only be simple, but affordable at a cost of \$10. A similar strategy could be tried in Zimbabwe for registration of patents and trademarks.

The issue of registration costs for patents and trademarks can be handled in two ways, firstly by creating a publicly available database of locally registered IP

²³⁶ WIPO *Handbook: Policy, Law and Use* op cit (n135) 80.

²³⁷ KECOBO, Microsoft 4Afrika develop online IP Registration System, 25 June 2015, available at <http://www.biztechafrika.com/article/kecobo-microsoft-4afrika-develop-online-ip-registr/10269/#.Vbi0TLOqpHx>, accessed on July 28 2015

²³⁸ Section 4 of the Kenya Copyright Act Cap 130.

on an online registration platform. This will eliminate costs of searches and enable one to look for prior art and similar trademarks. Secondly, the application fees can be reduced to cater for small scale innovators. One recommendation has been the stratification of fees²³⁹ and to distinguish between established entities and those starting out and also favourable fees to local innovators in comparison to big multinationals.

5.3.3 Copyright

In relation to the Copyright Act the protection of computer programs needs to be fortified. Computer programs are categorised as literary works however as indicated in Chapter 3 there is no right of attribution. The Act can be amended to remove this provision as there is a right not to be identified should one so wish.²⁴⁰

5.4 Raising awareness of IP Rights

It was noted from the findings presented in Chapter 4 that knowledge of IPRs is limited. There is more that is known about copyright than about patents and trademarks. Even that which is known about IPRs is tainted with misunderstandings for instance on the patentability of software. A functional and effective institutional framework for the promotion of IP could be instrumental. Zimbabwe hosts the headquarters of ARIPO in Harare and could benefit from this proximity to disseminate information on IP matters. ZIPO could be capacitated and mandated to engage businesses, small to medium enterprises and industries.

In order to increase awareness ZIPO can carry out public outreaches to research institutions, government research facilities and legal practitioners. As noted by some authors an IP office can play a role in supporting research and innovation and assist in securing registrable IP rights.²⁴¹ Different mediums of communication can be utilised to get the information across to a broader audience.

²³⁹ WIPO Mission Report (2012) *Needs Evaluation and Development-oriented Intellectual Property (IP) Plan for the Republic of Zimbabwe* 4.

²⁴⁰ Section 63 of the Copyright Act.

²⁴¹ M Blakeney and G Mengistie op cit (n224) 76.

A comparison in this regard is the KECOBO which is responsible for, among other things, copyright legislation and related rights, conducting training programmes and informing the public about copyright. Whereas KECOBO focuses on copyright matters, ZIPO could focus on all IPRs.

5.5 Tightening enforcement mechanisms

The IP legislation incorporates offences in relation to infringement of the rights²⁴² but without punishment there will be no deterring would be offenders. Counterfeiting and infringement of rights can be subdued, firstly by ensuring the public is aware that these are offences and secondly by prosecuting offenders. Enforcement of IP rights ultimately is effected by the owner of the rights, but there can be provision for officials sufficiently trained in IP matters who can prosecute cases of infringement. For instance, KECOBO has a legal and enforcement division with prosecutors and copyright inspectors. Judicial officials could receive IP training and the Magistrates courts could employ similar strategies by having a few prosecutors knowledgeable on IPRs to effectively handle cases. This will result in imposition of stiffer penalties that can also act as deterrent measures.

The cost of litigation can be an impeding factor in civil proceedings, this can be alleviated by equipping the Tribunal to function effectively. Though the legislation also gives jurisdiction to the High courts and Magistrates courts, the Tribunal could be made the ‘court’ of first instance for all IP matters in civil proceedings. This will not only ease pressure on other courts but also as a specialist court it will be better able to handle the cases. The Tribunal will need to be sufficiently funded to curtail costs and have rules of procedure that can be navigated by unrepresented parties.

5.6 Conclusion

The growth of ICT in Zimbabwe can be propelled by the implementation of the policies aimed at infrastructure development, skills capacitation and technology

²⁴² Copyright Act s.59 and Trade Marks Act s.84 and s.85

transfer. Having a policy on paper does not translate into implementation, strategies are needed for objectives to become realities. An active ICT Ministry can drive the development of the ICT space working within the available resources and progress from there. The various ICT products locally generated can then be protected by IPRs. The ICT growth presents an opportunity for the effective use of IPRs. Patents and trademarks can be registered over ICT products thereby developing the local IP system. Utility models can also be introduced for innovations that may not meet the requirements for patents. As IP contributes to the level of innovation, using IPRs could potentially drive the country up the innovation index and spur development.

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Appendices

Appendix 1 Information Sheet and Consent Form



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INFORMATION SHEET AND CONSENT FORM – MOBILE APPLICATION DEVELOPERS

Dissertation Title: Does the Growth of ICT in Zimbabwe Present An Opportunity For Effective Use of Intellectual Property Rights?

Hello, my name is Charlene Musiza and I am conducting research towards a Masters degree. I am researching on whether there is scope for registration of intellectual property rights on innovations that have arisen from the growth of ICT in Zimbabwe and I seek your consent to participate in the research.

I would like to interview mobile application developers and I am interested in finding out their views on ICT, the mobile applications they have come up with and their awareness of intellectual property rights that they could have over them. I would like your input because you are in the ICT sector and have developed mobile applications.

Please understand that participation is voluntary and the choice to participate is entirely yours. If you choose to participate, but wish to withdraw at any time, you will be free to do so without negative consequences. However, I would be grateful if you would assist me by allowing me to interview you.

All you will be required to do is answer some questions and the interview will not take more than an hour. There will be no payment or reimbursement of any costs and I will interview you at a place convenient for you. I will be taking down notes as you respond to the questions and I also seek your permission to audio record the interview.

There will be no direct benefit to you from this research and no risk of harm. Any question you do not wish to respond to your decision will be respected. Should you wish to remain anonymous, anonymity cannot be completely ensured but your details will not be disclosed to third parties. All the information you will share will be treated as confidential and not disclosed to third parties. The data collected will be destroyed after the research. Should you require any feedback I am prepared to share with you after the research is concluded.

If you agree to participate please sign below at the bottom right corner.

Charlene Musiza

Interviewee

'If you have concerns about the research, its risks and benefits or about your rights as a research participant in this study, you may contact the Law Faculty Research Ethics Committee Administrator, Mrs Lamize Viljoen, at 021 650 3080 or at lamize.viljoen@uct.ac.za. Alternatively, you may write to the Law Faculty Research Ethics Committee Administrator, Room 6.28 Kramer Law Building, Law Faculty, UCT, Private Bag, Rondebosch 7701.'

Appendix 2 Questionnaire

QUESTIONNAIRE

Introductory Questions

1. How long have you been working in the ICT sector?
2. Could you give brief details on the work you do?
3. How much experience do you have in mobile applications development?

ICT

4. How do you view ICT growth in Zimbabwe?
5. Are you aware of the ICT Policy of Zimbabwe?
6. Does the Policy directly affect your work?
7. Are you aware of the legislation regulating ICT?
8. Do you think the regulatory framework is adequate?
9. What mobile application have you come up with?
10. Please briefly describe its functions?

Intellectual Property

11. Do you know what Intellectual Property Rights are?
12. How do you view their enforcement?
13. Are you aware of what intellectual property right could be available to your mobile application?
14. Have you considered getting intellectual property rights over your work?
15. Have you given your mobile application to any organisation for them to use?
16. Have you taken part in any seminar or workshop on intellectual property?

ICT Research and Development

17. Have you sought or received any support from government or private institutions to develop mobile applications?
18. Have you taken part in any ICT research related work?
19. Have you taken part in any seminar or workshop on innovation?
20. What are your thoughts on ICT research in Zimbabwe?

