

**OPPORTUNITIES AND CHALLENGES OF PLANNING FOR VIRTUAL MARKETS  
IN LUSAKA**

**By**

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Master of Science in Spatial Planning.**

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## **DECLARATION**

I, **PASMORE LUAPULA, Computer Number 2017014883** do hereby declare that this dissertation is my own work to the best of my knowledge and that it has never been produced or submitted for any degree, diploma or other qualification at the University of Zambia or indeed at any other university for academic purposes. I further declare that all other works of people used in this research have been duly acknowledged.

**Signed.....**

**Date.....**

## APPROVAL

This dissertation by **PASMORE LUAPULA** has been approved as fulfilling the requirements for the award of Master of Science Degree in Spatial Planning by the University of Zambia.

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## **DEDICATION**

I dedicate this work to my wife, Patricia Kamanga Luapula, and my children Esther Walusungu Luapula, Agape Luapula and Mano Bethel Luapula. Thank you for your encouragement and thank you for sacrificing the time I should have spent with you but spent working on this dissertation.

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## ABSTRACT

The advent of internet and increase in the usage of information and communication technology has brought about the demand for advertising and transaction of goods and services online through the use of cyber or virtual Markets. Zambia is among the most urbanized countries in Sub-Saharan Africa and is faced with an increase in the users of social media and other digital media platforms where advertising and online transactions are taking place without the required regulations and necessary legislation to guide and regulate the virtual Markets.

The study was aimed at assessing how the current planning processes can include planning for virtual urban Markets. The study was set to assess the awareness of virtual urban Markets among urban planners and to examine the potential for inclusion of virtual space in planning for urban Markets. The study was anchored on the data collected from 36 participants which were purposefully selected from institutions responsible for coordination of planning and provision of policies on Virtual Markets and regulation of trade and commerce. The participants included key informants from key institutions and practicing planners. The study findings indicated that there was general awareness among urban planners on the usage of the virtual Markets to the advertisement and transaction of products in the virtual space through cyber platforms. The results further established that though there were policies to provide for advertisement and transacting online through cyber platforms, there are no regulations and standards to guide virtual Markets in their operations. For the possible inclusion of virtual Markets in the planning, the results indicated that there was progress being made by the Government ministries in advancing Virtual Markets by promoting a Smart Zambia campaign. The results indicated a serious challenge of low internet connectivity and high levels of computer illiteracy which hindered full participation of the general citizenry in virtual Markets. Furthermore, absence of hardware such as computers, phones and software coupled with lack of coordination among sector ministries in advancing the use of virtual Markets poses a great challenge in the planning and subsequent legislation of virtual Markets. This study concludes that the inadequacy coordination, low investments in Virtual Markets, inadequate regulations of cyber Markets, high internet access divide, between the urban areas and rural areas, high risks of internet fraud and low access to internet facilities and accessories hinders successful planning for virtual urban Markets. The virtual Market transactions have changed the way people advertise and trade their products in that the physical Market has been avoided and substituted by the virtual Market and so are some of the taxes and fees due to local authorities and the Government. To regulate and plan effectively for the virtual Markets, there is need to provide regulations pertaining cyber transactions and provide necessary education to the citizenry on the importance of virtual Markets. The Ministry of Local Government and Rural Development together with Zambia information Communication and Technological Authority to come up with a deliberate policy of registering online firms that advertises and transact with the public. The Government should introduce taxes and revenues that are connected with local authorities on every Virtual Market created and pay directly to the council in form of a percentage or royalties.

**Key words:** *Virtual Urban Markets, Virtual Markets, Virtual Space, Cyber Platforms*

## ACRONYMS

<b>APP</b>	Applications
<b>B2B</b>	Business to Business
<b>CMC</b>	Computer Mediated Communication
<b>GRZ</b>	Government of the Republic of Zambia
<b>ICTs</b>	Information and Communication Technologies
<b>LCC</b>	Lusaka City Council
<b>LPPA</b>	Lusaka Province Planning Authority
<b>MCTI</b>	Ministry of Commerce Trade and Industry
<b>MLG</b>	Ministry of Local Government and Rural Development
<b>PACRA</b>	Patents and Companies Registration Authority
<b>VFM</b>	Virtual Farmers' Market
<b>VM</b>	Virtual Markets
<b>WFP</b>	World Food Program
<b>ZABS</b>	Zambia Bureau of Standards
<b>ZICTA</b>	Zambia Information and Communication Technology Authority

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## CHAPTER ONE: INTRODUCTION

### 1.1 Background of the study

The use of internet and advances in information technology are changing how cities operate and the ways they engage with citizens (Kourtit et al., 2015). Within the last few years, millions of computer users worldwide have begun to explore the Internet and engage in commercial online activities. Many have joined one or more of the online communities that have sprung up to serve consumer needs for communication, information, and entertainment (Wang, et al., 2002). A growing number of cities around the world have also realized the need to capitalize on the rapidly growing digital economy (Bloomberg et al., 2010, 2013; Carter, 2013; City of Chicago, 2013). In recent times, Cities have started to develop urban digital strategies to move their digital planning and policy making approach from ad-hoc to an integrated and strategic one that utilizes diverse potentials of digital opportunities (Wasson et al., 2009).

Internet based, local initiatives known as "virtual cities" provide a variety of "electronic spaces" that are accessed through computing equipment and that have been developed variously to Market cities as nodes of global investment, to widen local participation in telematics, and to engineer the emergence of new "electronic public spaces," which, at the local level, was to complement or replace the undermined physical public spaces of cities (Wasson et al., 2009). In the United States, the use of direct Marketing via postal and telephone services existed before the introduction of personal computing, reaching close to 12 percent of annual retail sales in 1982 (Kellerman, 1984). It has been observed that contemporary online shopping through the Internet, aided by smartphones has become quite popular in North America as compared to Europe (Kellerman, 1984). Social media is changing the way society consumes and contributes to the creation of information. Technology now allows individuals to easily contribute their thoughts, opinions and creations to the Internet. This has radically altered the way information is created and disseminated (Buhalis & Law, 2008; Gretzel et al., 2000; Xiang & Gretzel, 2010). Social media refers to 'participatory,' 'conversational' and 'fluid' online communities which focused on user-generated content (Buhalis & Law, 2008).

The information and communication technology (ICT) sector in Zambia has made tremendous development and it has remained competitive over the past decades (Habeenzu, 2010). The opening up of the ICT sector brought in new players in the Market giving consumers a wider

choice of services due to competition. This resulted in the adoption of information technology services by both private and public sectors (RICT Solutions, 2017).

The use of virtual space as a platform for Marketing and conducting transactions has continued to emerge as a new phenomenon in the advertising of goods and services in Zambia. The use of virtual space for Marketing and transactions has continued to emerge as the new phenomena in advertising of goods and services in Zambia. Advertising agents and individuals are opting to transact and conduct trade using Virtual Markets as opposed to having contact with the physical Markets. This has been a consequence of embracing the use of social media and online shopping which has resulted in the creation of virtual communities and virtual Markets. This study looked at the challenges and opportunities that the Virtual Markets have presented on the Zambian scenario and how local authorities can plan for them.

## **1.2 Statement of the problem**

The virtual space is becoming heavily used in cities and towns as an action space for most diversified activities (Warf, 2013). The use of Internet based social media online applications have continued to dominate and influence the way people have been Marketing goods and services (Kellerman, 2014). Despite the existence of virtual Markets, the previous and current planning practices have not embraced and taken into consideration the importance of the virtual space as a Marketing tool for goods and services. The current planning processes only concentrates on planning for physical urban Markets while overlooking the emergence of virtual urban Markets as a reality. In as far as the virtual space advertising and trading implies modernity, it has many risks and implications which include lack of quality control, risk of fraud and security threats (Loo, 2012). Other implications of these virtual space interactions include the avoidance or riddance and substitution of the physical space as a recognized place for trading of commodities with a virtual space. This has deliberately hit out the middleman in the formal trading Markets and thereby reducing revenue that municipalities and state agencies can get when the people interact with physical Markets. Whilst appreciating the advances in information and technology, planning authorities and state departments have not taken advantage, regulated and accommodated the development and the importance of virtual space in their planning for the cities. Despite the existence of virtual Markets, the current Urban and Regional Planning Act no.3 of 2015) does not provide for planning of Virtual Markets. The virtual Market has continued to be ignored in the planning process and spatial planning practices seem not to have evolved fast enough to take into account the planning and use of

Virtual Markets. Studies have been conducted on the use of virtual space to enhance community participation in urban developments. However, no study could be found on the possibility of planning for Virtual Markets in Lusaka (Zambia).

The lack of planning for Virtual Markets is an issue in Urban planning as it affects the usage of space such as designated Bus stations and Markets are shunned due to advent of Virtual Markets. The taxes which are collectable physically tend to be a challenge for local Authorities which in the end affect service Delivery.

This study assessed the challenges and opportunities of planning for Virtual Markets in Lusaka.

### **1.3 Aim of the study**

The aim of the study was to assess how the planning process can include Virtual Markets.

### **1.4. Objectives of the study**

The study was anchored on the following objectives:

1. To assess the awareness of Virtual Markets among urban planners
2. To examine the potential of planning for Virtual Markets in Lusaka (Zambia)

### **1.5. Specific research questions**

1. What is the knowledge level of Virtual Markets among urban Planners?
2. What are the benefits of planning for Virtual Markets?
3. What are the challenges and opportunities of planning for Virtual Markets?
4. What are the implications of Virtual Markets inclusion in planning legislation and regulations?

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0 Introduction**

This chapter presents a review of literature available on the opportunities and challenges on Virtual Markets covering both local and international sources. The review of literature focuses on revealing opportunities available in the integration of Virtual Markets and the challenges posed in the integration of virtual Markets in the planning processes. The literature covers key concepts on virtual Markets such as smart city concepts, legislative frameworks and administrative requirements for the possible inclusion of virtual Markets in the planning process.

#### **2.1.1 Conceptualizing the Virtual Community**

The virtual community has become a broad term to describe any collection of people who communicate and transact online. These people can be special interest groups for education, professional issues, hobbies and transactions who fulfill a specific aim to draw only members sharing that interest (Wang, et al, 2002). A virtual community can be considered as a place where people can develop and maintain social and economic relationships and explore new opportunities (Wang, et al., 2002). Virtual communities can be perceived as social organizations centered on certain commonalities. The advent of social media has transformed the traditional one-way communication into multi-dimensional, two-way, peer-to-peer communication (Berthon, Pitt, and Campbell, 2008). Social media platforms offer an opportunity for customers to interact with other consumers; thus, companies are no longer the sole source of brand communication (Li and Bernoff, 2011).

Hagel (1999) states that virtual communities evolved as spontaneous social events on electronic networks, which saw the introduction of online interactions, the early internet, or the thousands of independent bulletin board services that developed around the United States (US). De Valck (2009) describes a virtual community as people gathered around common areas of interest, engaging in shared discussions that persisted and accumulated over time that led to a complex network of personal relationships and an increasing identification with the group as a community. Information exchange between consumers on the Internet has continued to grow drastically due to the success of social networking sites like YouTube, Facebook and WhatsApp (De Valck, 2009). Thus, the spheres of interaction and influence have become more and more virtual. Marketers and Government agencies have been challenged to cater to this development of Virtual Marketing.

The most often cited definition of a virtual community is first defined by Rheingold (1994) as social aggregations that emerge from the internet when enough people carry on those public discussions long enough, with sufficient human feelings, to form webs of personal relationships in cyber Market. Rheingold (1994) further defines a virtual Market as a nonphysical and borderless spatial dimension that exists in the digital domain, in which exchange relations and transactions take place at different levels through digital interactions supported by communication technologies. A virtual community is a group of people who may or may not meet one another face to face, and who exchange words and ideas through the mediation of computer bulletin boards and networks (Rheingold, 1994). The traditional shopping experience falls within the framework of physical Markets which involves shopping at a physical retail location from the now common online or virtual Market. This includes, transportation of people, shopping for food without any physical interaction of the seller and the buyer. This poses a challenge in the way cities manage transportation, taxation and effective management of physical space.

#### **2.1.1.2 Conceptualization of Spatial Planning Process**

The term ‘Urban or Spatial Planning’, while embodying the original design and development control focus of planning which is the art and science of ordering the use of land and siting of buildings and communication routes so as to secure maximum practicable degree of economy, convenience and beauty, also reflects the geographical scope and spatial scale of the activity of planning. Gretzel (2010) states that the main area of concern is the urban area, cities and smaller towns, and the different dimensions of urban planning from the city-region, through the city scale down to the planning of districts, neighborhoods, individual sites and buildings. The concern of the local planning authorities in Zambia is mainly physical planning which has been outlined by the, which does not take into consideration the virtual space and its impact on the physical space when it comes to planning matters.

Tennøy (2010) holds that physical Markets are planned and ordered according to different land uses while the virtual Market has no physical land use as spatial planning is bounded by physical boundaries, which defines the scope of planning. Furthermore, Næss et al. (2013) argue that there is widespread agreement on the generality of a number of linkages between various urban structural dimensions (for example, density, residential or workplace location, mixed land use, public transport system, road capacity, and parking policy) that form a rather

stable foundation for ‘the-state-of-the-art’ claims concerning the outcomes of certain planning proposals.

Hiselius (2014) noted that municipalities have extensive control over spatial planning which includes transportation systems, the use of courier services for delivery of goods and services, and the use of land within the borders of the Municipality. Koglin (2015) explains that spatial planning is also connected to the mobility of the people living in the city or municipality and therefore influences travel behavior.

Land use planning’, ‘town planning’ and ‘physical planning’ are deeply rooted in the desire to control not only the location of human activities such as housing, education, industry, retail and agriculture to ensure harmony among them, but also to shape the intensity, form, amount, spacing and the interlinkages between various land use activities. Spatial planning has been associated with land use planning while the idea of virtual space is not fully incorporated yet it remains to be an important aspect of the planning process as can be seen in the emergency of the virtual Markets which is a new dimension in planning of cities (Couch, 2016).

### **2.1.1.3 Conceptualization of the Virtual Market**

Virtual Market (VM) is an app-based Virtual Markets platform where sellers’ and buyers’ demand for goods and services are advertised and traded and supported by communication technologies (Wang, 2002). These Markets include any online platforms where buyers and sellers exchange information on various products which are on the Market and are able to be transacted online without having a physical place of exchange of goods. Virtual marketing is a set of tools and methodologies used for promoting products and services through the internet. Online marketing includes a wider range of marketing elements than traditional business marketing due to the extra channels and marketing mechanisms available on the internet (Reibstein, 2002).

### **2.1.2 The Benefits of Planning for Virtual Markets**

The key feature of Virtual Market is the separation of physical goods and information (Wang, 1997). Therefore, in a typical Virtual Market transaction, the information will be transferred from physical suppliers, information mediators (information producers and Virtual Markets) and customers to Virtual Market-spaces can be categorized into four virtual spaces: a virtual information space, a virtual communications space, a virtual distribution space and a virtual transaction space. There is an important issue for customers, that is to say, e-business became

clear that the race was on to acquire customers. These include all kinds of Virtual Market-space should be focused on “customers” (Reibstein, 2002). A Market place as a historically evolved institution which allows customers and suppliers to meet at a certain place and a certain time in order to communicate and to announce buying or selling intentions, which eventually match and may be settled (Grieger, 2003).

Studies have been conducted on information and technologies in planning and it was realized that it is critical if we are to make use of Technology to tackle the most complex urban challenges and enable effective and efficient governance of urban Markets (O’Brien, 2009). O’Brien (2009) observed that it is evident that the increasing use of internet has led to an emergence of Virtual Markets where communities are able to advertise goods and services. Litow (2009) states that the virtual community is always seen as a means of getting the right information in real time in making right decisions that affect the urban Market.

Kanter (2009) holds that some of the benefits of using Virtual Markets or online advertising platforms are that if Marketers can create realistic systems that measure consumer demand of products and services, they can replace expensive goods and dramatically reduce costs and delivery time. Floridi (2007) argues that this will enable a larger number of possible products to be tried, and valuable new features can be identified and designed into next generation of products. The use and benefits of Virtual Markets are likely to increase as Virtual Market improves.

### **2.1.3 Virtual Markets and Advertising of Products**

A study on social media websites have revealed that virtual Markets and advertising can facilitate consumer-generated content and can be widely used by online travelers (White & White, 2007). Consumer Generated Content and reviews sites such as Tripadvisor.com, are widespread and may even undermine the authority of traditional destination Marketing organizations (DMOs) or conventional advertisements (Yuan, & Fesenmaier, 2000; Rand, 2006.) It is manifest that understanding of social media is often vague and varied. Very rarely are the rights and wrongs of general marketing rules precisely defined, but rules surrounding Virtual Market marketing are even more ambiguous and unclear (Gretzel, 2006).

The growth of the Virtual Market has had significant implications for the media and advertising industry (Heath & Bryant, 2000; Lewis 2010). Studies show that technological enhancement has led to diverse forms of media usage and online activities for people all over the world. In contrast to traditional sales and purchase transactions, online transactions can be performed

with ease without having to physically go outdoors to purchase things or services. Products ranging from clothing to doctor consultation can be found online. There are several places where online transactions may occur. Firstly, through social media, such as Instagram or Facebook and secondly, through online Virtual Markets platforms such as e-bay, Gozambia Jobs and Ulendo Taxi. These developments of social media have enabled higher levels of interactivity, customization and social interaction (Hill & Moran, 2011). Colliander & Dalhen (2011) posit that the studies indicate that publicity from consumers through blogs and other social media platforms can have a strong impact in generating positive attitudes towards brands (goods and services). In addition, some consumers perceive information about products and brands on social networking sites as trustworthy, and this, often affects their purchase decision-making. Further Studies by Coghlan (2007) indicate that many advertisers believe that Virtual Market Marketing is due to become a dominant in the next decade.

Literature shows that both large and small scale advertising agencies are paying increasing attention to social media for Marketing and advertising activities, particularly on platforms such as Facebook and YouTube, in order to be more competitive in this changing Market environment (Li & Bernoff, 2008; Kaplan & Haenlein, 2010). Social media is also attractive to advertisers because of the relatively low cost of reaching consumers, the potential for greater efficiency, and the ability to engage in more timely and direct contact communication than is offered by most traditional media tools (Choi, 2011; Muntinga et al, 2011). Despite the authors indicating the power and influence of Virtual Market advertising, none of the authors have written or mentioned the risks associated with transacting of goods through social media advertising Markets.

#### **2.1.4 The Virtual Market Platforms in Marketing of Goods and Services**

The Virtual Market has been used as a platform for advertising of goods and services besides the tradition physical Markets. Studies have shown that social media has facilitated increased communication and interaction between organizations, firms, and people (Tobias et al., 2016; Zhou and Wang, 2014). Urban planning has become increasingly interactive and participatory and increasingly dependent on ICT (Geertman, 2002). The platforms form Markets where two or more types of users are brought together by a platform to facilitate an exchange or a transaction (Martens, 2016). Users can be buyers and sellers, advertisers, software developers, social media users. Martens (2016) has identified social media platforms as avenues of enhancing community participation in urban planning. This scholar identified the use of ICT

as a means of advancing Marketing of products by the citizens within the comfort of their homes.

### **2.1.5 Implications of Advertising on Virtual Markets**

Internet lifestyle has become more popular and at the same time, the public is increasingly concerned about urban planning, which is related to their quality of life (Grieger, 2003). This has led to different types of participation tools and platforms such as web-based planning support systems and crowdsourcing participation platforms which have been developed to support citizen participation and the cooperation of various actors in the planning process (Lin and Geertman, 2015). New types of GIS (Geographic Information System), Web 2.0, and mobile phone apps, as well as their precursors rely on user-generated content, are community-based, and are designed to harness and communicate a collective wisdom (Epp, 2012). Constantinide (2005) mentions that there is a challenge on the part of E-Marketers to retain and maintain customers as they face a difficult and complicated task in the battle to win the online consumers as the Marketer of the 21st Century will deal not only with a fast changing Market context but also with a different customer; changing, empowered and unpredictable. The critical issue for attracting and retaining online customers becomes a very delicate issue where there is a complex collection of elements making part of the online Markets to be effective. The author's emphasis on the virtual Market undermines the existence of physical Market which renders the planning for physical Markets a bit absurd and irrelevant to the current discourses in urban planning.

### **2.1.6 Opportunities and Challenges of Virtual Markets**

Virtual Markets has been defined as the process of buying, selling, transferring or exchanging products, services, and/or information via computer networks, including the Internet (Turban, 2006). These transactions include consumers purchasing goods and services online; as well as businesses selling and communicating with other businesses through the Internet. Gupta (2018) asserts that the Virtual Market is giving women freedom to work from the comfort of their homes. He further argues that the Virtual Market has a great deal of advantages over “brick and mortar” stores or physical Markets. Consumers can easily search through a large database of products and services. They can see actual prices, build an order over several days and email it as a “wish list” hoping that someone will pay for their selected goods. Customers can compare prices with a click of the mouse and buy the selected product at best prices without physical interactions with store staff.

The rationale for moving from physical transactions to Virtual Markets is a belief that the Virtual Markets have the potential to be more efficient in developing new information-based goods and services, finding global customers and trading partners to conduct business. Lee (2001) suggests that Virtual Markets has altered the outlook of businesses from one focused on lean manufacturing (termed as economics of scarcity) to a focus on information which he terms as economics of abundance. According to the above author, Virtual Markets provide diverse opportunities for consumers to choose from as there is an array of platforms offering different goods at different prices. Wen et al., (2001) submits that electronic commerce which encompasses the Virtual Markets has become very popular because of the benefits and the convenience it brings along with it. The benefits include product promotion, cost saving, timely information, shortened remittance time, information consistency, better customer service, better customer relationship, customization of products, competitive advantages, and convenience of doing business.

Wood (2004) also suggested that the Virtual Market has given positive impacts on the global economy because of its flexibility and ability to create new Market accessibility. In his study, Wood grouped the two benefits of e-business, namely: (i) macro-economic benefits, and (ii) the benefits of the micro to the individual and community. In terms of macro economy, the benefits of e-business are to improve efficiency in the distribution of goods and services, increase economy of scale in the production process, promote the growth of tax base, encourage innovation and improve product Marketing expertise. Accordingly, the benefits of the individual or community include allowing more access to information, encouraging Marketing or entrepreneurship, and creating opportunities to gain revenue and develop family businesses.

Carter (2013) insists that the benefit of engaging in Virtual Markets in business and economic activities is creating opportunity. Through this opportunity, Virtual Markets (VM) contribute positively to the promotion of economic growth and development so that it becomes a means of helping to reduce poverty in a country (UNDP, 2000). Furthermore, Kellerman (2014) indicates that the use of ICT in Virtual Market transaction activities is seen as an opportunity particularly for developing countries, as it gives a stronger base in implementing the multilateral trading system. Virtual Markets or e-commerce is different to business in general, because business-people do not need to have physical buildings, or require storage space or other infrastructure investments as in the retail sector in general. This causes a reduction of business costs and encourages a higher profit margin for Virtual Market actors (WTO, 2013).

A study conducted in Indonesia by McKnight (2008) established that one of the challenges that Virtual Markets lack is clarity on the regulatory framework of VM that provides for security and deal with legal issues. He adds that security and legal guarantees need to be clarified and more socialized as e-business is done through the global internet connection. Another factor that leads to the low activity of e-business that produces online shopping is the low level of consumers' trust in doing transactions. Trust is an important factor in encouraging consumers to make purchases, sales and payments using computer and internet networks. In addition, UNCTAD (2015) conducted a study in Indonesia which reported that one of the challenges of electronic transactions is related to the payment in which consumers feel reluctant to do it online because they fear fraud and cybercrime which are still high in Indonesia. A survey conducted in 2013 showed that one third of internet users in Indonesia claimed not do online shopping for fear of fraud. Although the studies have shown various challenges of running Virtual Markets which include among others, fraud, security and lack of trust due to personal information privacy, the studies have not looked at the governance of Virtual Markets in terms of tax collections and consumer protection.

The other apparent external barriers to Virtual Markets include the unfavorable economic environment, the high cost of ICT, and the security concerns. The internal barriers are poor internal communication infrastructure, lack of ICT awareness and knowledge as well as inadequacy of ICT-capable and literate managers and workers, insufficient financial resources, and the perceived lack of relevance or value-added of ICTs to Virtual Markets (UNCTAD, 2015). Another challenge against the encouragement and increase of Virtual Market transactions in developing countries is still relatively low penetration of information and communication technology (ICT) which is caused by the relatively limited infrastructure for Virtual Markets that results in high cost of Virtual Market application (Molla and Licker, 2005).

OdedraStraub (2003) conducted a study which revealed that other than the insufficient physical infrastructures, the electronic transaction facilities are deficient, and the legal and regulatory framework is inadequate. Most consumer Markets face severe limitations in terms of connectivity, ability to pay, deliveries, willingness to make purchases on the internet, ownership of credit cards, and access to other means of payment for online purchases and accessibility in terms of physical deliveries. Added to the listed limitations are the low levels of economic development as well as small per-capita incomes and the limited skills base with which to build Virtual Markets services (Molla and Licker, 2005). While many developing

countries have abundant cheap labour, there still remains the issue of developing IT literacy and education to ensure the quality and size of the Information Technology workforce. The need to overcome infrastructural bottlenecks in telecommunications, transport system, electronic payment systems, security, standards, skilled workforce and logistics must be addressed, before ecommerce can be considered suitable for developing countries (McKnight, 2008).

A study undertaken in India by Shekhar (2019) revealed that in the advent of conducting business online, the commercial requirement of physical presence of a non-resident entity in the source state or in the traditional sense has become redundant. Therefore, Income Tax (revenue collection agents) Departments and later the courts are, to this day, struggling on following two questions. Firstly, this how to ascertain, whether or not, assess who had conducted its business in digital space, was conducting its business within the territorial boundaries of that country and secondly how to identify the income which has got generated from the doing of business in the consuming state as in the digital space. In most cases, it is not possible to state with certainty that the income is coming from a particular country (Warf, 2013).

Zambia as a developing economy is faced with the massive challenges of taxation especially in the electronic transactions and Virtual Markets with undeveloped national address system which makes it difficult to locate physical addresses of Virtual Markets. Coordination among Government departments, where policy directions are concerned is always cardinal when it comes to implementation of planning interventions such as planning for Virtual Markets Peters (1998). One example is that of claims that there have been complaints that one department or organisation does not know what another is doing, and that programmes are contradictory, redundant or both ever since governing structures began to be differentiated into departments and ministries (Stewart, 2000). Planning systems are increasingly being seen as mechanisms to improve policy integration, and policy integration is increasingly becoming part of the orthodoxy of spatial planning. The integration or coordination of sectoral policies is frequently considered as one of the main objectives of contemporary spatial planning (Counsell et al., 2006),

#### **2.1.6.1 Case Experience of Virtual Markets**

The use of more advanced mobile technology and applications to do banking and agri-business continues to grow. Meanwhile, rural smallholder farmers are faced with numerous obstacles,

particularly as they struggle to reach Markets where they can gain better prices for their crops. The VFM app is a new WFP initiative that builds on the momentum of this information and communications revolution to provide new business opportunities and improved livelihood options for smallholder farmers. One such experience of the use of the Virtual Market is in Southern Zambia where the World Food Programme piloted a program (UN, 2017). The case in point has provided an opportunity to enhance transportation planning in the delivery of goods. This is a challenge on local authorities to enhance the transportation planning to effectively deliver the goods ordered online.

#### **2.1.6.2 Virtual Farmers Market pilot in Zambia**

The Virtual Farmers' Market (VFM) is an app-based Virtual Markets platform where farmers' surplus and buyers' demand for crops are advertised and traded. VFM provides a transparent, open and trustworthy space for smallholder farmers and buyers to negotiate fair prices and deals (UN, 2017). The Application Provides information on farmers' supply and buyers' demand, identity and location to everyone through a smartphone application, facilitates farmer-buyer discussions and price negotiation as well as the sale of farmers' produce through a payment system where World Food Program (WFP) acts as a guarantor (UN, 2017). In July 2016, the WFP Innovation Accelerator provided seed funding to prototype and pilot the VFM platform with farmers from rural areas in three districts in Zambia. This was done in consultation with Zambian farmers and Market actors. VFM began prototyping in late 2016.

The pilot made use of WhatsApp and other existing mobile applications which were used to simulate an online Market place. The participating farmers helped refine the innovation and decided to name the app Maano, which means intelligence in the local language which is Tonga (UN, 2017). The Maano app was launched in May, 2017 and since then, it has reached over 1,000 smallholders through 50 Maano ambassador farmers. During the pilot harvest season over 100 transactions were made, with some 150MT of produce worth US\$50,000 traded through the app. During the pilot, the VFM project has proven to be particularly beneficial for the "last-mile" smallholders, the most disconnected from stable access to Markets. By providing early-adopter advantage to an otherwise disadvantaged Market segment, Maano has the potential to disrupt the unequal Market dynamics (UN, 2017).

### **2.1.6.3 Sustainable business model**

The Virtual Farmers Market essentially follows the same ‘three-way handshake’ modality used by successful online businesses like Airbnb, Uber and Alibaba. Considering the fast growing revenues of these and similar companies, this model also has the potential to revolutionize WFP’s work in providing Market access and fair business opportunities for smallholder farmers (UN, 2017). The VFM proposes to use a Five percent (5%) transaction fee paid by buyers on each purchase in order to sustain the business model. At the moment, smallholder farmers are not paying anything to use the Market place, thereby increasing client acquisition and the speed with which the system will have the critical mass of data and users to spur its growth.

In the case of the local authorities in Zambia, there is currently no local authority which has taken advantage of the existence of Virtual Markets to use the platforms to act as guarantors between the sellers and buyers where a transaction fee is paid to the local authorities for every transaction which happens on a regulated and registered Virtual Market.

### **2.1.7 The Institutional and Legislative Frameworks of Planning and ICT in Zambia**

The legal framework guiding Planning in Zambia is guided by the Urban and Regional Planning Act No.3 of 2015. The Act provides for development, planning and administration principles, standards and requirements for urban and regional planning processes and systems. It also provides for a framework for administering and managing urban and regional planning for the Republic; provides for a planning framework, guidelines, systems and processes for urban and regional planning for the Republic.

The Ministry of Local Government and Rural Development through the Planning and Information Department coordinates planning, budgeting, inter-department programmes and projects in order to ensure their effective implementation. It also coordinates the formulation and review of relevant policies and legislation in order to provide appropriate guidance as well as coordinate the budgeting process in the ministry. It is responsible for establishing and maintaining an effective Information System on the programmes of the ministry and local authorities in order to facilitate informed decision-making. These functions include, coordinating all information and communication technology (ICTs) activities in the Ministry including technical support of office equipment. Despite the Ministry of Local Government having a mandate of providing technical assistance in the area of information technology to the

local authorities, the emergency of Virtual Markets has not been brought on board as the planning department is mostly dealing with spatial aspects of planning.

The use of information and communications technology in Zambia is regulated by the Zambia Information and Communications Technology Authority's (ZICTA). The key mandate as established under the Information and Communications Technology (ICT) Act No. 15 of 2009 is to promote universal access to ICT products and services to all irrespective of their age and status. The regulatory body has the mandate to disseminate information and promote the participation of the public in the provision of electronic communication services, to promote the interests of consumers, purchasers and other users of information and electronic communication services, and to promote research, development and the use of new and appropriate technologies in the sector. The Act is basically interested in sound information dissemination to the members of the general public. However, the use of Virtual Markets through various social media platforms and online transactions is not strictly regulated as the act only provides for the use and enjoyment of information technology.

The Local authorities in Zambia are mandated to establish and regulate physical Markets under the Markets Act. It is within the powers of every Local Authority that every established Market in the area of a local authority, are under the control and management of that local authority; This includes regulating the use of Markets and Market buildings, keeping order, preventing obstructions, and maintaining cleanliness therein or in the approaches thereto prescribing the goods which may be sold in any Market. This Act applies to physical Markets which fall under a certain land use, however, this Act does not apply to Virtual Markets and online platforms

## **2.1.8 Theoretical Framework**

### **2.1.8.1 The theories of Smart Cities**

The smart city paradigm is associated with the internet of things, sensors and big data leading to informed and a data led governance (Kitchin, 2014). Batty (2008) holds that Smart Cities provide a new form of instrumentation for observing in fine detail the way that people use the city and so may enable new approaches to theories of cities. Through new sources of information cities hope to create insight, innovation, opportunity and real jobs that will increase prosperity and quality of life. Thus "Smart City" has to do with creating an environment that is attractive to citizens and should offer pervasive public wireless network access. The city

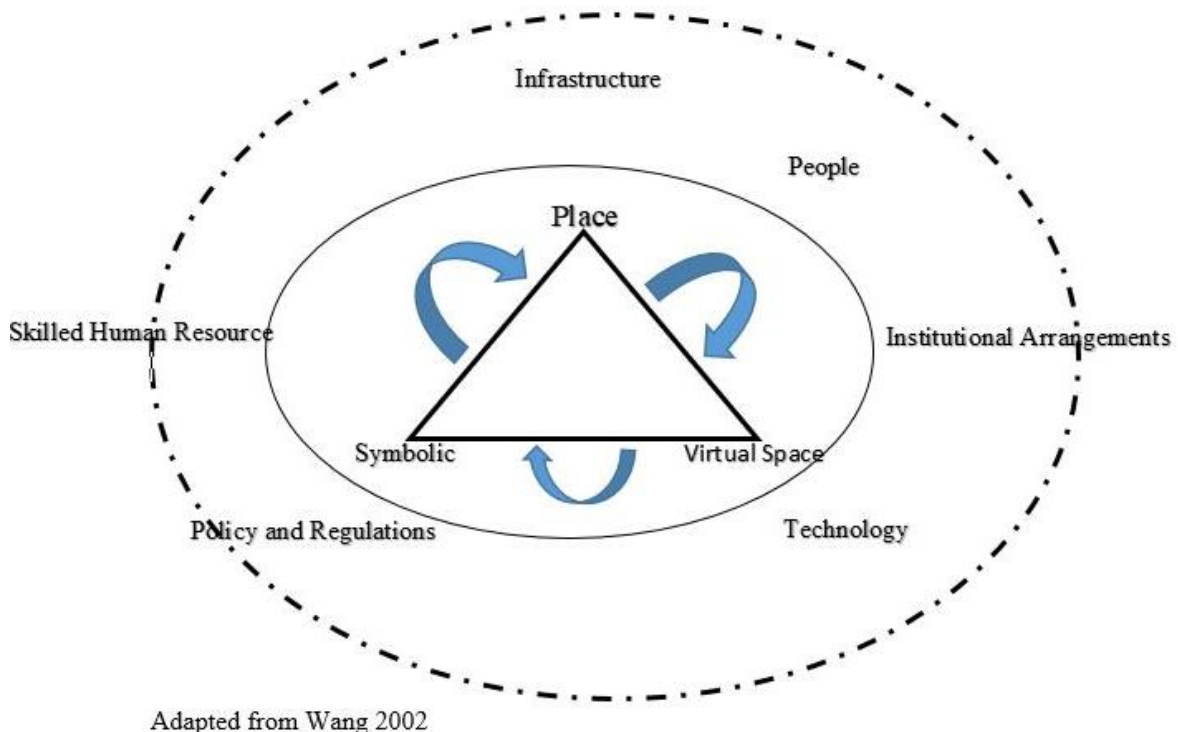
should interact with its citizens through instant access, digital interfaces rather than through offices with long queues and paper forms.

Caragliu and Nijkamp (2011) observe that there are six axes that make up a smart city. Therefore, the definition of smart cities is based on these six axes. These axes are: a smart economy; smart mobility; a smart environment; smart people; smart living; and, finally, smart governance. These six axes connect with traditional regional and neoclassical theories of urban growth and development. For a city to be smart, there is need for investments in human and social capital and traditional (transport) and modern (ICT) communication. The infrastructure can fuel sustainable economic growth and a high quality of life, with a wise management of natural resources, through participatory governance.

Kitchin (2014) describes the general premises of the concept of “smart city”. The concept of “smart city” urban development is based in various decision-making areas related to the quality of life on the preference of savings, or obtaining the best long-term expenses-effects ratio, while considering the systemic approach to solving a given problem. Furthermore, Fernandez (2016) looks at the Smart city as a novel concept aimed at managing cities (urban areas) in a modern way, using the latest technical means offered by advanced technologies (including IT), according to the environmentally-friendly principles and while maintaining the tendency to save resources and achieve the expected results.

The development of innovative technologies, especially computer and communication technologies, used in various areas of human activity allows the functionality of contemporary cities to be significantly improved. Intelligence is, in its broad sense, the ability to solve problems, perceive relationships, learn, adapt to the changing external circumstances, seize opportunities, prevent threats, act purposefully, think rationally and cope with problems effectively, process information actively, act logically and foresee the consequences (Yigitcanlar, 2015). The “smart city” concept urban management is characterized by the features of intelligence. Innovations and technologies foster “smart” management both in public organizations. Fernandez (2016) asserts that the cities are centers of innovation, although it is obvious that people (authorities, society, users, and policy-makers) are the ones implementing the rules of this concept.

**Figure 1. Showing the Concept of a Virtual Market Model**



### **2.1.9.1 Virtual Market as Place**

Smidfelt Rosqvist & Winslott Hiselius (2016) assert that in the understanding of online Markets, people often make it equivalent to physical Market. In the physical Market, people group themselves into aggregated physical villages that they call physical Markets. People also group themselves into symbolic subdivisions based on lifestyle, identity, or character that they call Markets. The Market belief has been deeply rooted in our humanity, and we have traditionally associated Market with place (Wang, 2002). Furthermore, Głowicka (2015) argued that a Virtual Market can be conceived as a place where people can develop and maintain social and economic relationships and explore new opportunities.

### **2.1.9.2 Virtual Market as Space**

Van Rietbergen (2009) suggests that the virtual community exists in the minds of participants; this, however, does not mean that the virtual community exists solely in the minds of the participants. It also exists in the connection between what social constructs the user imagines and the CMC-generated representations of these constructs (Wang 2002). In fact, Wang claims

that there is no true distinction between “virtual” community and “real” community since the term “virtual” means something akin to “unreal” and so the entailments of calling online communities “virtual” include spreading and reinforcing a belief that what happens online is like a community but isn’t really a community. Kakimoto (2003) explains why people in the offline world tend to see online communities as virtual, but participants in the online communities see them as quite real. Though, if one agrees that communication is the core of any community, then a virtual community is real whether it exists within the same physical locality or half a world away.

### **2.1.9.3 Virtual Market as a Symbol**

A virtual Community, just like any other social construct, embodies a symbolic dimension (Cohen, 1985). In the process of community creation, there is tendency to symbolically attach meaning to the community we belong to regardless of the social or geographical characteristics of the community. In such an entity of a community laden with symbolic meaning, we seek substance rather than form. One standard of measuring virtual community is to see whether the community constructed can provide meaning and identity to its community members. In this sense, a virtual community is a very personal thing and only the individual can tell if he or she feels a part of the community. If that feeling is lacking, then for that person, the community may as well not exist. Thus, the notion of virtual community addresses what Calhoun (1980) refers to as “as a complex of ideas and sentiments” where the virtual community exists in the minds of participants. It exists because participants define and give it meaning. A Virtual community has its own cultural composition; it has its own collective sense, and its own virtual ideology and symbol. It should be noted that the symbolic dimension of a virtual community is made possible by CMC.

### **2.1.9.4 Technology**

The smart city is seen as an urban space for business opportunities, followed by a network and universal technologies installed across the city, which are integrated into everyday online advertisements and transactions (Schweidel and Moe, 2014). The software that supports online Markets is a frequently used shorthand way of defining them. It is very common to hear “techies” refer to chat, bulletin board, WhatsApp, Facebook or Web-based community (Preece, 2000). Though such terms are concise and instantly meaningful to insiders and this “geek speak” is of value only to those who know about technology-related issues, little or nothing is said about virtual Markets and interactions of consumers and buyers. Zhang et al.

(2017) argues that in Virtual Markets, any chat or bulletin board or communications software can be regarded as the basis for an online Market. Toubia and Stephen (2013) write that to the Virtual Market entrepreneurs, the important issue is what draws people to and holds people in a Web site, social media platforms and other online platforms so that they will buy goods or services.

#### **2.1.9.5 Policy and Regulations**

Wang and Feeney's (2016) suggest that the virtual community needs policy to direct online behavior and transactions on Virtual Markets. Specifically, policies are needed to determine requirements for joining a Virtual Market, the style of communication among participants (both buyers and sellers), accepted conduct, privacy policies, security policies, and repercussions for non-conformance. Unwritten codes of conduct may also exist. Furthermore (Ahn, 2011; Linders, 2012) insist that the nature of the policies that govern the Virtual Market and how they are presented can strongly influence who joins the Markets and its character. Issues to do with impersonation, fake identity and issues of refunds in case of failed transactions need to be taken care of.

#### **2.1.9.6 Skilled Human Resource**

In Today's Virtual Markets businesses, (Lourenc, Piotrowski, and Ingrams, 2017) indicate that there is need for personnel who are skilled enough to deal with a massive influx of advanced systems and technologies. In addition, Luna-Reyes and Ramo'n Gil-Garcia (2011) advocate that for the Virtual Market model to thrive, there is need to have the right balance of personnel who can deal with technological challenges which can get so complicated that many entrepreneurs who start online Marketplaces actually consider to be technology enterprises. It is envisaged that the local authorities should provide adequate and trained human resource personnel in the Information technology and planning departments in order to keep up with the technological advancements that come with virtual Markets (Preece, 2000).

#### **2.1.9.7 People**

Coursey and Norris (2008) believe that an online community is a composition of people who interact as they strive to satisfy their own needs or perform special roles; a shared purpose such as an interest, need, information exchange, or service that provides a reason for the online community. Additionally, Lee, et al (2011) propose that policies should guide people's

interactions with computer systems which support and mediate social interaction and facilitate a sense of togetherness.

#### **2.1.9.8 Infrastructure**

Crocco, Eboli, & Mazzulla, (2013) affirm that it is the computer systems that make the online community a new phenomenon by supporting and mediating social interaction and facilitating a sense of togetherness. Prologis (2014) further argues that the internet has two particularly important roles: to enable millions of people to access vast quantities of information and to enable them to communicate with each other. Both are important in the success of online communities.

#### **2.1.9.9 Institutional Arrangements**

Institutional arrangements include those institutions that regulate trade and enforce taxation in virtual transaction space. In this regard, transaction space consists of new internet-based channels through which economic agents can exchange formal business transactions. These include orders, invoices and payments. Cardinal to the successful implementation of the virtual Markets are the local authority, the Ministry of Local Government, Zambia Information and Communication Technologies (ZICTA), Ministry of Commerce and Trade for policy guidelines on trade.

## **CHAPTER THREE: STUDY AREA**

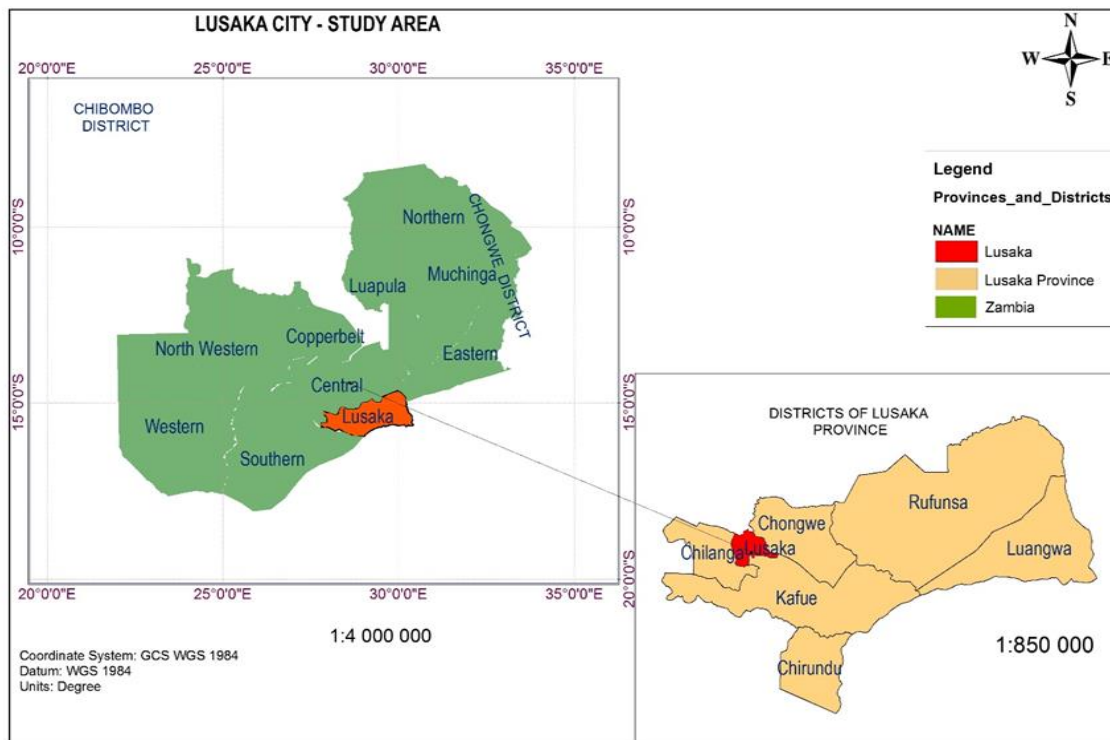
### **3.0 Introduction**

This Chapter looks at the Study area of Lusaka City. It looks at the geographical location, the administrative component, the climatic conditions of the area, The study area looks at the population Distribution, and economic activities. The chapter further looks at the information and technological infrastructure in the city and how it affects the virtual Markets.

### **3.1 Study Area**

Lusaka is the capital and largest city of Zambia. One of the fastest growing cities in Southern Africa, Lusaka is in the southern part of the central plateau at an elevation of about 1,279 meters (4,196 ft.). Lusaka is close to the centre of Zambia between the eastern and western bulges. All major routes to the east, west, north and south flow through the city. The Great North Road comes from Tanzania via Kapiri-Mposhi and is about 1100km from the Tanzanian border. The Great East Road from Chipata to Lusaka is 570km. The city is the centre of both commerce and Government in Zambia and connects to the country's four main highways heading north, south, east and west. This study does not only confine itself to the physical boundaries of Lusaka District but goes beyond as the users of the Virtual Markets are not restricted by physical boundaries. However, for the purposes of this study, Lusaka City was chosen as a study area especially that most of the institutions that are mandated with planning for Markets and directing policy formulation are based in Lusaka.

**Figure 1: Location Map of the Study Area**



**Source: GIS Unit, Department of Physical Planning, Lusaka 2019.**

### 3.1 Administration

The cabinet office and all ministerial headquarters are located in Lusaka City. All diplomatic mission offices are also located in the city. The highest learning institution which is the University of Zambia as well as parliament, Supreme Court and key national institutions such as Zambia Information and Communications Technology Authority (ZICTA) and many media houses are also found in Lusaka City. The presence of the mentioned institutions makes planning and coordination cardinal and as such, the use of virtual space in the day to today advertising and Marketing is of vital importance.

### 3.2 Local Government and Planning

The city of Lusaka hosts the Ministry of Local Government, which is a crucial ministry in the implementation of the virtual Markets. The Ministry plays a role in providing policy guidance to the local authorities and as such, the challenges and opportunities that many local authorities face can best be understood by the ministry responsible for local Government (GRZ, 2019). The local Government systems play a crucial role in the transformation of people's living

standards because it tends to be physically closer to the people in need of development than the Central Government (GRZ, 2019). This makes the planning system easier.

Furthermore, the importance of the local Government system is that it helps to develop the agenda of the country in explaining the implication of Government programmes to the people. Because of its proximity to the people, the local Government system is in a better position to ensure that Government policies are translated into services that will automatically meet the needs of the people. Without a strong local Government, the efforts of the Central Government in the national development agenda will be in vain, because the local Government is meant to be the link between the central Government and its people (LCC, 2019).

### **3.3 Infrastructure**

Lusaka is the most developed City in Zambia in terms of both institutional and physical infrastructure in the country. The city has a good number of modern infrastructures such as hotel facilities, event venues, sports/recreational centres. Hospitals, road networks, schools, universities and communication facilities, shopping malls and public Markets are well developed in the City of Lusaka. Transport infrastructure covers roads and bridges, railways, airports and aerodromes and maritime and inland waterways. The state of transport infrastructure, however, remains inadequate to sustain and match the desired levels of growth due to weak structural and management capacity resulting in over commitments, high cost of construction and low investment (LCC, 2019).

### **3.4 Population**

According to the CSO (2019) projected population of the city, the city's population was about 3,308,400. The population density is 4 853.2 persons per square kilometer (CSO, 2019 projections).

### **3.5 Economic activities**

Being the capital city of Zambia, Lusaka is the main hub of economic activities like manufacturing, transport, construction sectors, shopping malls, education, health, urban agriculture and street vending. The City is centrally located and connects to neighboring countries. For instance, the major road, which is the Great East Road, connects to Malawi. The Great North Road connects to the Democratic Republic of Congo and Angola via Copperbelt and North-Western provinces respectively. The Great North Road also connects to Tanzania

via Nakonde and it is said to be the gate way to East Africa. In the southern direction via Kafue, the road connects to Zimbabwe, and Botswana. Most residents of Lusaka are in informal employment (traders, small scale entrepreneurs) (LCC, 2019).

### **3.6 Information Communication Technology (ICT) Usage**

Lusaka is the most populated city with the highest number of people having access to information and communication technology services (ICT). Information and communications technology is increasingly advancing and stimulating socio-economic growth in all sectors of the economy (GRZ, 2015). The media continues to play a vital role in information dissemination for socio-economic development. Meteorology safeguards life and property through provision of vital information on scientifically derived early warning systems, predictions and information in the provision on weather and climate conditions especially in hazard prone areas. A survey by ZICTA (2015) revealed that the coverage area for mobile cellular networks is high at Ninety two92% in Zambia with 64 percent 64%of the households having access to a mobile phone. Such high coverage and increased subscription provide opportunities for implementing local Virtual Markets applications where Virtual Urban Markets are operational and people are transacting online (GRZ, 2015).

## CHAPTER FOUR: METHODOLOGY

### 4.0 Introduction

This chapter outlines the methods which were used to collect and analyze the data. The methodological approach, target population, sample size, sampling techniques, data collection methods and data analysis methods as well as the study limitations are presented.

### Research Approach

This research was qualitative in nature and it thus follows that the data is equally qualitative. Patton (2005) states that qualitative research is a form of research that is used to gain insight into the underlying issues surrounding a research problem, which is arrived at by gathering non statistical or non-probability feedback and opinions embedded in people's feelings and their attitudes, often undertaken from small samples sizes.

In qualitative research, the researcher needs to determine which research approach can answer their research questions (Streubert, Speziale & Carpenter, 2007). There is a considerable overlap among available qualitative approaches in terms of methods, procedures, and techniques. Such an overlap of epistemological, aesthetic, ethical, and procedural concerns can encourage a generic view of qualitative research, considering it a "family" approach in which the similarities are more important than the differences, and where the notion of flexibility becomes an important value and quest.

Miles and Huberman (1994) states that there are three important aspects of qualitative data. The first major feature of qualitative data is that it focuses on naturally occurring, ordinary events in natural settings, so that the researcher has a strong handle on what real life is like. Such understanding is strengthened by local environment attachment, meaning that the data was collected in close proximity to a specific situation, rather than through the mail or over the phone. The influences of the local context are not stripped away but are taken into account. The possibility for understanding latent, underlying, or non-obvious issues is strong. The second aspect of qualitative data is its richness and holism, with strong potential for revealing complexity. Such data provides thick descriptions that are vivid, cast in a real context, and has a ring of truth that has strong impact on the reader. The third aspect of qualitative data is with its emphasis on people's lived experience, that is, it is fundamentally well suited for locating the meanings people place on the events, processes, and structures of their lives. That is, their

perceptions, assumptions, prejudgments, presuppositions connecting these meanings to the social world around them.

#### **4.1 Research design**

The study used a case study design to answer the research questions. A case study enables the researcher to interact with the participants thereby examining the whole phenomenon in its totality. The essence of a case study is that it tries to illuminate a decision or set of decisions; why they were taken; how there were implemented; and with what results (Schramm, 1971). It is a realistic inquiry that investigates a current phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 1981). In this study the users are not just confined to the city of Lusaka but cuts across the entire country.

#### **4.2. Target population**

The target population for this study included the officials and planners from the Lusaka Province Planning Authority, Lusaka City Council, Ministry of Local Government, Ministry of Commerce and Trade and industry, Zambia Bureau of Standards, Zambia Information and Communication Technology authority and the practicing planners. The target population for this study was involved in the policy formulation regarding Urban planning in Zambia and actual implementation of plans. Hence, the reason for their involvement in the research.

#### **4.3. Sample size**

The sample size for the study was seven (07) Planners from Lusaka City Council from city planning Department, four (04) Planners from Lusaka Province Planning Authority, four (04) officials from Ministry of Local Government, five (05) officials from Zambia Information and Communication Technology Authority (ZICTA), two (02) officials from Zambia Bureau of Standards (ZABS), four (04) officials from the Ministry of Commerce and trade (MOCTA), two (02) officials from Zambia Smart Centre Data, six (06) practicing planners from various municipalities namely. The total sample size was 36 participants.

#### **4.4. Sampling procedure**

The study used non-probability sampling methods of purposive sampling in order to come up with the participants. The non-probability sampling method was used because it does not involve random selection. Rather, samples are selected based on accessibility and easier understanding of the population being studied. In this regard the researcher chose the participants purposively. Purposive sampling is a non-probability sampling method, and it occurs when elements selected for the sample are chosen by the judgment of the researcher (Patton, 2005).

The thirty-six (36) informants were chosen using purposive sampling methods. Purposive sampling was used to come up with the officials from Lusaka City Council, officials from the Ministry of Local Government and officials from the Lusaka Province Planning Authority who are responsible for physical planning in Lusaka City.

#### **4.5. Data Collection**

Data collection is the process of generating data for the purpose of analysis in the light of the research problem. This research is qualitative. There is more to undertaking qualitative-based data production than just conducting interviews, observing people or undertaking secondary analysis of archival sources (Kitchen and Tate, 2000). What qualitative data consists of are words, pictures and sounds, and these are usually unstructured in nature. Data collected using qualitative techniques is not analyzed using dreading statistics like in the case of data collected using quantitative techniques. The kind of data collected in this research is qualitative primary and secondary data. An interview guide was used to collect primary data from the Lusaka City Council officials, officials from Ministry of Local Government and Rural Development and the officials from Lusaka Province Planning Authority responsible for planning.

##### **4.5.2 Sources of Data**

Secondary sources of data included mainly e-journals and books on Virtual Markets that address challenges and opportunities of Virtual Markets in developing countries. Also reviewed in this research project are policies and legislation pertaining to the topics of sustainable development. Acts on Urban Planning that were reviewed included the Urban and Regional Planning Act no 3 of 2015, The Markets Act, the Information and Technology Act and the ZICTA Survey report of 2018, Electronics and Transactions Act.

The sources of primary data included 36 purposively selected informants. Six (06) of the eight (08) participants can be described as key informants because they were specifically and purposefully selected for their special knowledge in planning in local authorities and Government ministries. The other participants were sampled purposively based on their availability and expert knowledge as planners. They were selected for the purpose of balancing out the responses of one of the key informants on questions not specific to the study area.

#### **4.5.3 Tools of Data Collection**

Primary information used in this dissertation was collected through open ended and conversational interviews. The interview is probably the most commonly used qualitative technique. It allows the researcher to produce a rich and varied data set in a less formal setting. Interviews allow a thorough examination of experiences, feelings or opinions that closed questions could ever hope to capture. Interviews are often described as entering and maintaining conversation (Kitchen and Tate, 2000). The researcher discovered that the use of conversational interviews with open-ended questions enabled the collection of essential information that might have been missed had the interviews conducted through closed-ended questions. This further opened interactions in untested waters where the researcher and the interview shared experiences with regards to the topic under investigation.

#### **4.6. Data collection procedure**

Permission was sought from the Lusaka City Council, Lusaka Province Planning Authority, Zambia Information and Communication Technology (ZICTA) and the Ministry of Local Government before the collection of data could commence. As part of ethics in data collection, an informed consent form was filled in and duly signed by the researcher and the participants.

#### **4.7. Data analysis**

Data collected was mainly qualitative in nature, it was therefore thematically analysed. This involved the recognizing imaging themes from the various responses that answers the research questions. Thematic analysis is the process of identifying patterns or themes within qualitative data. The goal of a thematic analysis is to identify themes and patterns in the data that are important or interesting and use these themes to address the research or say something about an issue (Braun & Clarke, 2006: 79). Below is the table that summarizes the methodology.

**Table 1: Methodology Table**

Research Approach	Sampling Strategy	Sampling Frame	Sample Size	Sampling Methods	Data collection Methods	Data Analysis Methods
Qualitative Approach	Purposive sampling	LCC, MLG, PPA, ZICTA officials from LCC, officials from MLG, from PPA, Officials from ZICTA, Smart Zambia, Ministry of commerce and ZABS	36 Purposively selected participants	Key informant interviews	Semi-Structured interview guide  -Participant observations	Thematic analysis

**4.7.1 Data Analysis- Thematic analysis**

Thematic analysis is an independent qualitative descriptive approach which is mainly described as “a method for identifying, analyzing and reporting patterns (themes) within data” (Braun & Clarke, 2006: 79). It has also been introduced as a qualitative descriptive method that provides core skills to researchers for conducting many other forms of qualitative analysis. In this respect, qualitative researchers should become more familiar with thematic analysis as an independent and a reliable qualitative approach to analysis. It is further noted that thematic analysis provides a purely qualitative, detailed, and nuanced account of data (Braun & Clarke, 2006).

Themes are defined as units derived from patterns such as "conversation topics, vocabulary, recurring activities, meanings, feelings, or folk sayings and proverbs" (Taylor & Bogdan, 1989). Themes are identified by "bringing together components or fragments of ideas or experiences, which often are meaningless when viewed alone" (Leininger, 1985). Themes that emerge from the informants' stories are pieced together to form a comprehensive picture of their collective experience. The coherence of ideas rests with the analyst who has rigorously studied how different ideas or components fit together in a meaningful way when linked together (Leininger, 1985). Conostas (1992) reiterates this point when he states that the interpretative approach should be considered as a distinct point of origination.

In the thematic analysis, the interviewer gains information that allows him or herself to make inferences from the interview or therapy session. Furthermore, the researcher collects the themes and then study relevant and related literature, theme statements are then formulated to develop a story line. When the literature is interwoven with the findings, the story that the interviewer constructs is one that stands with merit. A developed story line helps the reader to comprehend the process, understanding, and motivation of the interviewer. The figure below shows the interaction of thematic analysis in the data analysis process.

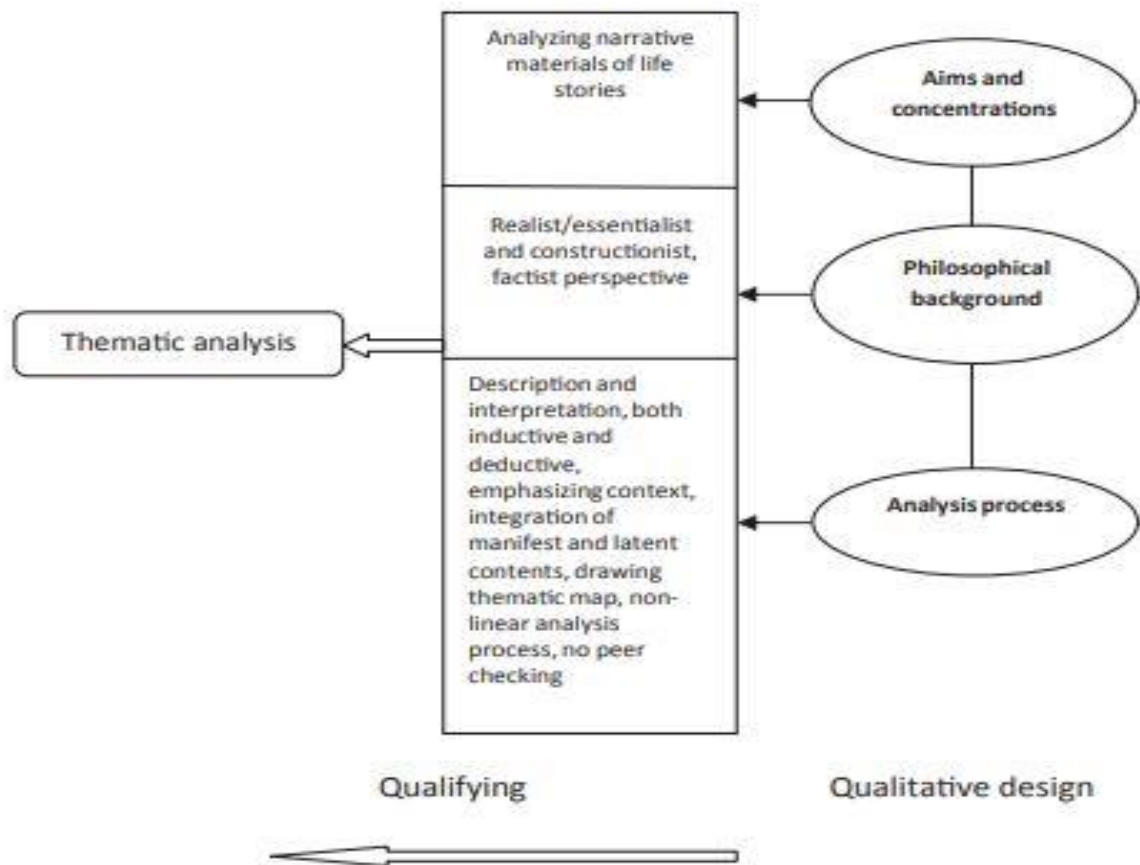


Figure 1: Thematic analysis Flow Adapted from Mojtaba Vaismoradi, 2013

## **CHAPTER FIVE: RESEARCH FINDING AND DISCUSSIONS**

### **5.0 Introduction**

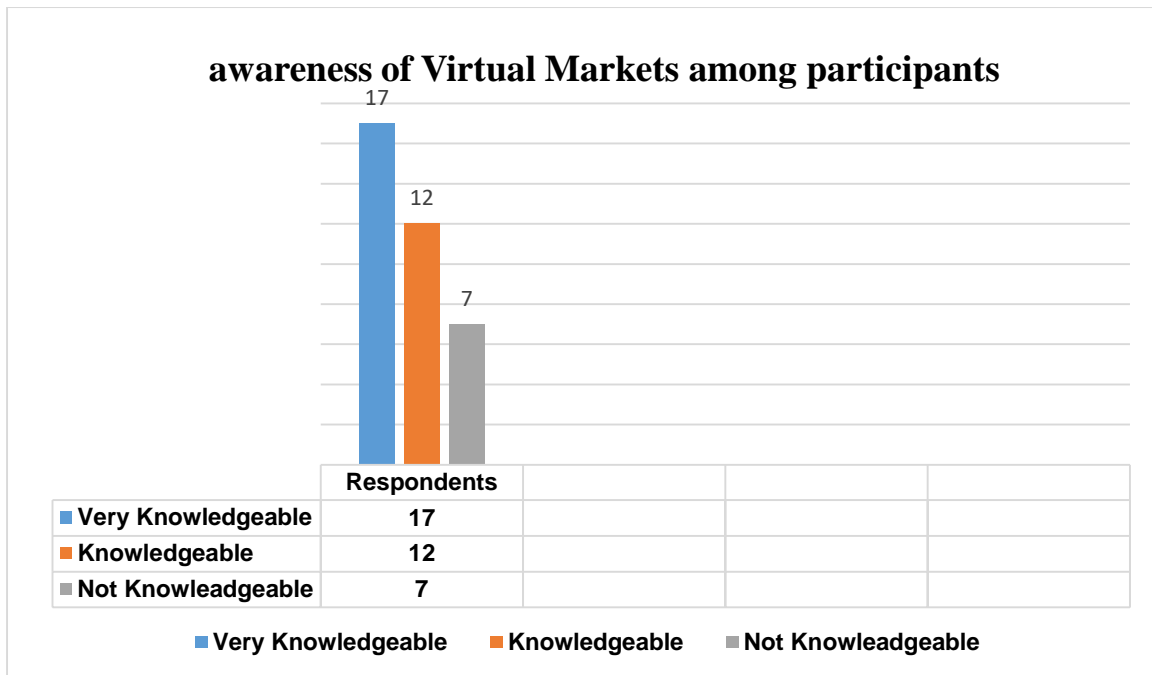
This chapter provides the findings and discussions of the study. The findings and discussions presented in this chapter were based on primary information collected from 36 participants. The informants included (21) male representing fifty-eight percent (58%) and fifteen females (15) representing forty-two percent (42%) of participants. Secondary data was derived from written literature such as journals, publications, published and unpublished dissertations.

### **5.1 Awareness of Virtual Markets among Urban Planners**

The following section looks at the awareness of virtual Markets among urban planners and the opportunities and challenges of planning for virtual Markets.

#### **5.1.1 Knowledge Level of Virtual Urban Marketing**

The majority of the key informants (25 out 36) indicated awareness of the existence of the Virtual Markets. Of the total number of participants interviewed, seventeen (17) out of thirty-six (36) expressed a great deal of knowledge on the existence of the Virtual Urban Markets while seven (7) indicated that they were knowledgeable in the Virtual Markets. It was also learnt that the majority of the participants twenty eight (28) have participated in Virtual Markets transaction. Among the common Virtual Urban Markets was the Facebook based groups (53%), while WhatsApp groups constituted about 47% of the virtual urban Markets. The online Markets which were identified by the participants included both local and international Virtual Markets which included e-bay and Alibaba while the local Facebook and WhatsApp groups included Zed Car samples including houses and property for rent and sale in Lusaka. Although the participants indicated a great level of awareness, it was also revealed that it is not up to them to change the policy directions regarding the operations of the Virtual Markets. The figure below shows levels of knowledge among participants.



*Figure 2: Knowledge levels of Informants*

*Figure 2: showing the knowledge levels of the participants on virtual Markets*

The above Figure of 29 participants indicates that the knowledge levels among the participants on the existence of Virtual Markets is quite high and the challenge therefore lies in how the planning professionals and the policy makers can engage with the emerging Virtual Markets. The results indicate that the urban planners are well abreast of the change in technology in that 30 out of 36 participants indicated that they used devices that use internet and are able to view what is happening on Virtual Markets. The results indicate that 25 out of the 36 participants indicated having participated in virtual transactions at some point in their lives and have purchased a product on virtual Market.

### **5.1.2 The Benefits of Planning for Virtual Spaces**

With regards to the benefits of planning for virtual space, the participants felt that planning for Virtual Markets is beneficial in that it can help to get tremendous visibility and exposure, which results in increased sales revenue and increased Gross Domestic Product (GDP) for the Central Government and local revenue for the local authority in form of taxes and levies. It is worth noting that physical Markets are finite while Virtual Markets have proved to be beyond the physical boundaries. Participants from Lusaka City Council felt that planning for Virtual

Markets was quite a convenience and reduced on time to advertise and Market products. One participant said:

*“Transacting on social media platforms has proved to be quite convenient as it saves on time and costs associated with movements to and fro physical Markets” (personal communication, 2019).*

Participants further felt that there was no need to make physical movements in order for one to procure or advertise services. The participants stated that they only needed internet and a smart phone to do the online transactions without spending money travelling to the physical shop. A respondent explained that:

*“it is not everything that you need to go and get from Kamwala or Soweto, or even game stores, it is just a matter of going online and order your good, be it a box of pizza or anything and have it delivered to your doorstep” (personal communication 2019).*

Another further elaborated that:

*“The physical Markets cannot accommodate everyone and every product and as such, some goods are worth buying online which is a just a matter of picking the phone and transacting without burning fuel” (personal communication, 2019).*

The study findings are in line with Wang et al. (2002) who argued that since people can now transcend time and space and “be” anywhere, Marketing organisations and individuals should adapt accordingly and embrace Virtual Markets, as a Marketing tool capable of organizing people’s knowledge about desires, about advertising and transactions. From the foregoing, it can be realised that Virtual Markets are an alternative to conventional physical Markets. Three participants from the local authority indicated that Virtual Urban Markets are convenient and cover a wide range of commodities which can be gotten within the shortest period of time and transactions can be done from the comfort of one’s home without the need to travel and queue up for products.

A respondent from Lusaka City Council Planning Department indicated that there is an increasing trend of people opting to advertise by the road side electronic billboards as compared to placements in the newspapers.

*“Nowadays, we see a lot of adverts running on road side billboards which were previously being placed in the print media”.*

Another respondent from the Ministry of Local Government indicated that even job adverts are now being done virtually as a fast mode of transmitting information.

*‘previously, job adverts were only found in print media, now with the advent of smart phones and access to internet, platforms like Go Zambia Jobs are able to advertise Jobs online’.*

A respondent from SMART Zambia Campaign indicated how various platforms are being used to advertise and sale valuable items such as cars.

*‘nowadays, one does not need to go to the showroom looking for a car to buy, one just needs a smart phone or access to a computer with internet connectivity to log on to sites that are dealing in cars both locally and internationally’.*

Another respondent cited the advent of online learning by universities and colleges that are opting to use online platforms to conduct learning virtually. This makes planning for certain land uses such as library facilities quite irrelevant as student opt to study online and download study material online.

*‘The virtual Markets have not only been used for advertising and transacting of goods but also been used by training institutions such as universities and colleges in providing virtual learning services where physical classrooms are not practically possible’.*

The findings are in line with Peterson (2011) who argued that technology development drives humans to follow the current trend of the modern internet and technology era in the way they conduct themselves in their daily lives. Furthermore, Batty (2008) argues that improvements in technology have enabled cities to provide a new wave of smart living in that it enables people to embrace technology in their daily lives. This can be seen in the way people are embracing technology in advertising their goods and services in Lusaka.

### **5.1.3 The Challenges of Planning for Virtual Markets**

Participants from the Ministry of Local Government and Rural Development expressed concerns on the challenges of planning for Virtual Urban Markets in the areas of financial and human capacity of the ministry. The study participants revealed that even when staff was trained, there was still need to have the necessary software and technology to counter the fast developing Markets whilst internet connectivity is another challenge. One participant stated that:

*‘Internet connectivity and having trained staff in ICT is still a big challenge which can make implementing and regulating the virtual Markets’ (Personal communication 2019).*

One respondent stated that there were usually some lapses in developing adequate laws to coordinate and regulate Virtual Urban Markets as technology seems to be always ahead of the law. The findings are in agreement with Preece (2000) who argued that smart city is seen as an urban space for business opportunities, followed by a network and universal technologies installed across the city, which are integrated into everyday online advertisements and transactions. This has proved to be a challenge when it came to planning for Virtual Markets.

The respondent further stated that:

*“it is practically difficult to absolutely control Facebook and WhatsApp because we are dealing with international laws where Zambia is a signatory to most of the treaties which limits our interference in controlling who is using Facebook. Thus, it is important that even as we engage the law, we make reference to international treaties” (personal communication, 2019).*

The study revealed that most participants identified Facebook as one of the platforms where most of the Virtual Markets exist. It was also established from the ZICTA officials that in dealing with Facebook and WhatsApp platforms, there is a challenge of engaging with international law as the domains for Facebook are foreign owned and it is quite challenging to completely have control over. It is imperative that laws that are formulated are in line with international laws so as not to infringe upon agreed international protocols on access to information and freedoms attributed to humans of which Zambia is a signatory to most of these international protocols and agreements. The study coincides with von der Leyden’s (2019) argument that Facebook is not a Government, yet-the current debate on the regulation of social media is framed in a number of users and as such is not an easy undertaking to completely regulate it. Neuberger (2018) further argues that individual and public opinion matters in the way Governments regulate social media as this anchor on the democratic tenets of the country.

#### **5.1.4 Challenges of Internet Connectivity**

The study further established that internet connectivity hinders implementing Virtual Markets related transactions such as the Virtual Urban Markets which affects even the Government offices and local authorities. The study further revealed that the use of the Virtual Markets was limited due to the inadequate and costly and slow internet connection speeds. Despite the

Government making efforts to increase internet coverage, there is still a big gap between the internet connectivity within the country and among the general citizens. One participant said:

*“Internet connectivity is a problem in the offices such that sometimes we are forced to use our personal Wi-Fi gadgets instead of the office internet because it is a challenge to have stable internet in offices”.*

Another Respondent stated:

*“The internet that most service providers providing is quite slow and poor in some circumstances, even downloading 50 mb of data will take an hour to complete”.*

The study further revealed that the use of Web-based applications in advertisements and transactions might increase as ICT costs reduce, but the costs of dealing with new suppliers and customers will continue to be high. One participant said:

*“ You can only use a web application if you are in possession of a tablet or a smart phone. This is not affordable to most people due to low-income levels”.*

The study further revealed that there was no clear platform for monitoring and regulating the online transactions that are conducted by individuals and firms as they are using foreign domains which are difficult to control. One participant said:

*“ it is a bit tricky to monitor WhatsApp and Facebook transactions as these are not owned by the Zambian Government”.*

The study findings are in line with Josua (2012), who asserted that internet providers have the obligation to provide internet access to both the seller and the buyer. In order for the seller and buyer to perform online transactions, they must obtain access to the internet. However, access to computers with internet access is a problem as confirmed by the findings by ZICTA which shows that only 3% of the population consistently accesses the internet using computers. Additionally, Bukowa (2014) stated that a smart phone was the most accessible method for internet use.

### **5.1.5 Challenges of Inadequate ICT Infrastructure**

The study established that the challenges surrounding ICT infrastructure particularly dominates the research on the challenges to the successful implementation of Virtual Markets initiatives in Zambia. It was evident that Government departments are technologically ill-equipped to deal with the advanced technology of online advertisements and transactions, which was

compounded by inadequate legislation to guide and regulate virtual Marketing. One participant said that:

*‘‘The department is ill equipped with regard to modern computers to enable officers execute duties that are information communication technology related.’’*

The above assertion is supported by Ebrahim and Irani (2005) who argued that for Virtual Markets to thrive, smart phones and computers, are an important component in the Virtual Markets. The inadequacy of equipment has made it difficult for planners and Government officers to work effectively in the virtual environment. This has prompted officers to resort to the use of personal gadgets in the execution of duties, which poses a threat to safety and confidentiality of Government data.

#### **5.1.6 Poor Internet Connectivity in Some Parts of Lusaka City**

This study further revealed that though mobile phone network provision is generally good in Lusaka, it is not so for internet connectivity. A respondent from ZICTA stated that:

*‘‘internet connectivity in some parts of Lusaka District is poor especially in peri-urban areas and the fringes of the city. This makes it difficult to connect online Markets by people mostly in peri-urban areas’’.*

The findings tally with the survey results published by ZICTA in 2018, which puts the internet users to be at 17% in 2018. The implication is that internet connectivity is not fully developed in the Zambian setup. Furthermore, the survey report by ZICTA cited resolution and internet speeds offered by service providers.

Accordingly and unfortunately, the research revealed that the digital divide in Zambia is wide as internet connectivity is concentrated in urban centres and most rural areas lack internet connectivity. The findings are in line with studies by Adam which puts the digital divide as one hindrance to effective implementation of e-governance programs in developing countries (Adam 1996, ECA 2003, Mutula 2002, Mutula and Ahmadi 2000, UN 2002, UN 2001). This makes it difficult to effect the deployment of ICT infrastructures which are appropriate for implementation of e-Government which is vital to the inclusion of planning for virtual urban Markets (Ndou, 2004).

The study further revealed that internet facilities are expensive to install in houses and expensive to subscribe to. One participant said:

*“ Though we have a number of service of providers dealing with communication technologies, internet connection is still expensive to install in homes and even in public places, you cannot easily connect to internet”.*

Findings of the ZICTA survey report cited the reason for non-use of the internet by individuals as lack of knowledge on how to use the internet accounting for 70.1 percent of the individuals that indicated that they had never used the internet. Other barriers to the uptake of internet services by individuals included lack of appropriate devices, lack of interest in the services as well as lack of access to the services. The findings further revealed that planning practitioners cited poor and unreliable internet infrastructure. This is in line with studies conducted by (Ebrahim and Irani, 2005) which revealed that unreliable internet Infrastructure will contribute to degrade the Virtual Markets performance of the respective Governments.

#### **5.1.7 People’s Access to Smart Phones Is not in Good Numbers**

The findings of this study revealed that one key aspect of successful Virtual Markets is access to smart phones and computers. The study further revealed that access to smart phones in Lusaka is not in good numbers. The study further found that the mobile phone is the most popular gadget of choice for access of internet and Social Media in Lusaka. This has been attributed to the high cost of purchase of smart phones which is way beyond the reach of the ordinary citizens. A respondent from ministry of commerce trade and industry indicated that:

*“Access to smart phones is still a pipeline dream for most residents in Lusaka as most of them can’t afford to purchase a smart phone”.*

The results obtained in this study are in agreement with studies by Ndou (2004) who asserts that the aspects of ICT infrastructure such as smart phones and computers still remain the main challenge for Virtual Markets and Virtual Markets (Irani, 2005). Furthermore, Bonham et al. (2001) stresses that infrastructure is a huge challenge as it is viewed by previous research as a significant barrier to the provision of Government services and transactions online. In addition, the identified barriers to increased usage of internet services by households included but were not limited to lack of skills, the cost of devices, as well as the cost of the service offers on the Market (GRZ, 2019).

### **5.1.8 The Threat of Cyber Security**

The findings of this study indicated that there were fears among Virtual Market users concerning cyber security. The participants indicated that they feared being swindled of their money as some trading sites were deemed not to be trustworthy. According to one participant from the Ministry of Local Government and Rural Development:

*“It is difficult to trust the authenticity of transacting online especially that you submit information to a person whose identity is not known”*

Furthermore, the study further revealed that there is fear of personal identity theft by unscrupulous people who might masquerade as genuine business men. A participant from Ministry of Commerce said that:

*“There are a lot of sites which are springing up on social media with fake identities advertising products which are not there”.*

These study findings are in agreement with results obtained by Bonham et al. (2001) which revealed that the challenge of Information Technology (IT) infrastructure coupled with threats of computer security, privacy and confidentiality of personal information poses a challenge to the implementation of e-Government initiatives. In addition, Gefen et al. (2002) indicates that people are resolute when it comes to disclosing personal information such as personal email addresses, phone numbers and account details to third parties when completing a transaction which poses a threat to effective transactions.

### **5.1.9 Personal Security challenges**

A respondent from ZICTA stated that currently, ZICTA is struggling with issues of identity theft and personification in many online transactions. According to the respondent, this has been as a result of lack of clear policy guidance on online transactions. one participant said:

*“Trading on Virtual Markets or Social Media in Zambia is currently like trading on the black Market where there are no rules and regulations and therefore, it is a gamble that one has to take trading on Virtual Markets’ (personal communication, 2019).*

Furthermore, from the social and technical point of view, there are problems related to security and privacy of the trader, acceptability of electronic signatures and documents, and contract enforcement. The study reveals that from the economic policy point of view, Virtual Markets or Virtual Markets are likely to bring significant effects on the structure and functioning of the

economy. Accordingly, the impact of the Virtual Markets is likely to manifest on prices, composition of trade, labor Market and taxation revenues.

#### **5.1.10 Challenge of legal and Regulatory frameworks**

The study further revealed that the impacts and policy challenges of Virtual Markets or virtual Markets can be viewed from many viewpoints. The first one being that of legal and regulatory point of view, it can be observed that the virtual environment of electronic Markets makes it more problematic to establish who the contracting parties are, where the virtual Marketer is established, and whether that Marketer is complying with all relevant legal obligations and regulatory bodies, and hence uncertainty about which jurisdiction will be competent and about the applicable laws in disputed cases will arise. One participant mentioned to say;

*“Though the Government has proposed to enact the Electronics and Transactions Act, currently it is not adequate to deal with business transactions taking place on platforms like WhatsApp and Facebook which are domains not controlled by Zambian agencies”.*

The findings by Garton Ash (2016) Schulz (2017) indicate that Social media is not media in the traditional sense, and as such it still falls under the limited accountability approach of Virtual Markets law. The recent initiatives in some European countries all continue to emphasize that the platforms are not the speakers – their users are. In as much as regulation of the Virtual Markets is concerned, it is not the platform which is a problem but the users. Hence any, law that is passed needs to put the end user in perspective.

#### **5.1.11 The Challenge of Taxation and Monetary Control**

The findings indicated that there is a mounting concern among tax authorities on the implications of growth of Virtual Markets on tax revenues. It was revealed that Virtual Markets such as Virtual Market transactions has potential to undermine domestic and national tax policies in that Virtual Markets offers the difficulty on the side of suppliers to prove the location of consumers in order to collect some taxes. One participant said:

*“it is a known fact that money exchanges hands between people when they transact online but this proves difficult for Government agencies to collect tax especially that transactions are not monitored by any agency.”*

Another policy challenge that deserves special attention relates to monetary policy. The development of Internet and Virtual Markets could modify the cyclicity of economies and how payments are made. One participant said:

*“Everyday people are advertising goods and transacting online using WhatsApp and Facebook but how payments are made is only known by the seller and the buyer which makes it hard to know the parameters of the transactions”.*

The technocrats interviewed from the ministry of commerce and trade argued that Internet related technologies could increase the speed of financial operations which raise issues as to how and when to set the interest rate. One participant said:

*“Most of the transactions taking place on Virtual Markets especially Facebook and whatsapp are regarded as informal in nature without the formal payment systems in place”.*

The finding is in line with Reddick (2013) who asserted that despite their innovative role of Virtual Markets, the adoption of Virtual Markets among local Governments has been uneven as many lags in critical service innovations such as online financial transactions or business and property registrations.

Furthermore, the participants argued that technological developments may weaken the monetary control of banks. This could occur if real time pricing and exchange of goods is permitted across the Internet without the intercession of an independent monetary system administered by a central bank or an appropriate regulatory authority to oversee the financial transactions of the Virtual Markets. One participant from the ministry of commerce said that:

*“Often times business transactions done via social media platforms are done in form of cash or other delivery means which are not regulated by financial institutions”.*

The findings are in line with study by Hanfah *et al.* (2008) who states that the growth in Virtual Markets has imposed a number of challenges on the Government administration in relation to the tax system. The Virtual Market has shaped a cyberspace trading whereby the people are engaged in a trade without having a physical presence. Furthermore, Edwards & Waelde (2000) asserts that the absence of physical presence has distorted the conventional tax principle, which is predicated on identification of physical presence.

### **5.1.12 The Barrier of English Language**

The study further revealed that English Language is another important hindrance to ecommerce adoption. Language has been identified as a socio-cultural barrier that hinders both access to information and to the internet including participation in Virtual Markets. one participant stated that:

*“It is well established that illiteracy levels are high and the high levels of uneducated people tend to have limited access to information on the web because information is either in a language, which assumed to be foreign”.*

The study further revealed that Virtual Markets are mostly used by people who are literate and have access to the computers and smart phones which have access to internet and can transact online. One participant gave an example that:

*“For a transaction to be performed, one has to login in an application with instructions in English language with no option for translating into the local language”.*

The participants from smart Zambia cited education and illiteracy levels as a hindrance to effective participation of all citizens in Virtual Marketing and online transactions. It is believed that the less educated and illiterate could not read nor understand the languages that are used to disseminate information on the internet. Therefore, many people are unaware of how the quality of their lives and their incomes could be improved by skillful use of computer technologies such as the internet and on-line advertisements and trading. One participant said:

*“Though people have access to smart phones, the only usage that they know is to make and receive phone calls despite the phones having all the necessary applications which can be used in virtual transactions”.*

In addition to what has been said by the respondent above, a correspondent from the Ministry of Commerce Trade and Industry commented that:

*“It is a well-known fact that English is the predominant language for development of Virtual Marketing and Virtual Markets and it is the main language used on Web and Virtual Markets where advertising and online transactions are taking place. Therefore, a lack of understanding of the English language is a barrier not only to communication but also to conducting business online”.*

One respondent from SMART Zambia talked about the implication of low literacy levels in the use of the Virtual Markets.

*‘it is true that literacy levels in our country are very low such that, it is not everyone who is conversant with the language that is used in the computers and phones. Therefore, not everyone able to use internet effectively to the point of making a transaction online (personal communication 2019).*

These findings tally with Lawrence’s (2002) findings that the less educated and illiterate could not read nor understand the languages that are used to disseminate information on the internet. Furthermore, William (2004) argued that many people are unaware of how their quality of lives and their incomes could be improved by skillful use of computer technologies such as the internet and on-line trading. The issue related to language is important because it is a gateway to information and knowledge transfer in the digital world. English is a primary language used in many Western countries where new technologies originate.

### **5.1.13 Challenge of Delivery Address System**

The results revealed logistical challenges in terms of the addressing systems. Once a product has been purchased via Virtual Market, there are issues of delivering the parcel to the buyer. Some addresses do not exist in the national planning network hence delivery of products becomes a challenge. One participant said:

*“Participants from Provincial Planning Authority established that the address system is not well established in Lusaka which makes it difficult for Virtual Markets to perfectly function. In other places, the geographical spread throws logistical challenges such that the kind of products being offered by providers should determine the logistics planning”.*

A participant from ZICTA further explained that;

*“it is difficult to deliver a product in Lusaka especially that the address system is not systematic as you cannot deliver a product to Kanyama or Garden compound because the streets are unmarked and therefore once a product is purchased, one has to rely on the good faith of the seller to deliver to an agreed temporal place” (personal communication, 2019).*

Another respondent from Smart Zambia explained that:

*“even in developed countries where online trading is highly practiced, the national addressing system is working properly such that all transactions that take place Virtually there is a*

*physical address attached to the transaction for the purposes of identity and security of the transactions such that it is easy to trace the seller and there is a possibility for refunds if the transactions is not successful” (personal communication, 2019).*

An online transaction has to finally conclude on the physical place where the actual goods have to be delivered for the purposes of having a trail of the transaction. The findings of this study are in tandem with the findings by Odedra-Straub (2003) whose findings indicated that there existed infrastructural bottlenecks in telecommunications, transport system, electronic payment systems, security, standards, skilled workforce and logistics which needed to be addressed, before Virtual Markets could be considered suitable for developing countries.

## **5.2 Potential for Inclusion of Virtual Markets in Planning**

This section addresses the potential of including Virtual Markets in the following subsection looking at willingness of local authorities to adopt planning for virtual Markets and inclusion of Virtual Markets in the planning processes of the Local Authorities .

### **5.2.1 Willingness of the Authorities to Adopt Planning for Virtual Markets**

The study revealed that the local authority is willing and ready to adopt the changing Market dynamics where people are opting to use Virtual Urban Markets in advertising and conducting transactions online. One participant from Lusaka City Council said:

*“The local authority is embracing technological innovations by being innovative and smart in the operations such as processing of applications online without the client necessarily visiting the offices physically”.*

This view is supported by Reddick (2013) who states that local Governments embrace Virtual Markets as the number of citizens using internet and mobile technologies increases because the public sector is constantly innovating to keep pace with the changing technologies and citizens’ expectations. In commenting on the same, Turban (2010) emphasized that the use of virtual Markets is dominated by Marketing and purchasing, and procurement activities with the view to improved external communication and improved company image.

#### **5.2.1.2 Virtual Market as an alternative to Physical Markets**

The study further revealed that it was convenient to advertise and transact online as compared to outdoor advertising and physical transacting. Outdoor advertisements take up a lot of physical space but with limited coverage whereas, the virtual adverts can reach a wide coverage

as long as one is connected to internet and is able to open the platforms of advertising. One respondent from the Lusaka City Council indicated that:

*“The city management is willing to adopt planning for Virtual Urban Markets and the local authority has started experimenting with the electronically distributed services such as Zero automation in processing of applications for planning permission”. (Personal communication, 2019).*

He further went on to explain that;

*“ and participation in public life and democratic decision-making processes can be made more flexible by the use of ICTs”(Personal communication, 2019).*

All of these technological initiatives have often been presented and accessed via internet site of the local authorities. Furthermore, another participant mentioned that:

*“it is one good way of decongesting the physical Markets because there is no way I have to travel to Soweto to buy foodstuffs but rather call someone to deliver on my doorstep” (personal communication, 2019).*

According to literature, urban planning concerns the context and the organization of human activities in a determined space via taking into account the available natural resources and the financial requirements (Campbell, 1996). It is imperative that planning for urban Markets is guided by the Urban and Regional Planning Act no.3 of 2015 and the Markets Act Chapter 290 of the laws of Zambia. It is worth noting that according to the two pieces of legislation above, planning for urban Markets requires physical space whilst Virtual Markets do not require physical space as it has no physical jurisdiction. Notwithstanding the fact that physical space is well regulated, the virtual space is equally important and needs to be taken into perspective by the current urban planning processes.

### **5.2.1.3 Virtual Markets Potential of Contributing to Local Revenue**

The study findings indicate that the local authorities are eager to implement planning and inclusion of Virtual Urban Markets in a bid to raise the revenue base as the council can collect a lot revenue through fees and charges when the entities transacting on Virtual Urban Markets. A participant from Lusaka City Council said:

*“Currently the Government and the local authority are not collecting any fees from the Virtual Urban Markets. This has been attributed to the reason that there is no system or framework of transactions.”*

Furthermore, one respondent from the Zambia Information and Communication Authority (ZICTA) said:

*“it is important that everyone transacting on social media is registered in order to enable capturing of information easy for the purposes of taxes and fees which can contribute to national coffers and local authority operations”.*

The challenges of taxing Virtual Markets is quite extraordinary as evidenced by studies conducted by Chen and Wang (2010) who states that despite current practices of engaging local taxi laws in taxing Virtual Markets, challenges are still encountered and can be universal. Ahmadu (2006) further states that given the non-geographic type of Virtual Markets transaction, “it may be impossible to resolve jurisdictional issues, distribute revenue or even collect sufficient revenues” (Berman, 2002). Furthermore, Senn, J.A. (2000) states that the local authorities face similar challenges due to the varying economies and its development progress. In addition, Chen and Wang (2010) further points out that after using the existing tax laws to tax Virtual Markets, the challenges that still remained for the tax authorities such as identification of the taxable entity and audit of sales revenue.

#### **5.2.1.4 Inclusion of the Virtual Urban Markets in the current Urban Planning Processes**

The study revealed that whilst the Government is promoting e-governance, the provision for inclusion in its program such as the use of virtual urban Markets which are Virtual Markets related have not been taken on board. One participant said:

*“In as much as the promotion of e-governance is welcome and important to the development discourse of public participation in Government programs, the use of the Virtual Markets has increased tremendously and as such need to be incorporated in the Government”.*

Arising from the above finding, there is need to deliberately include the Virtual Market in the Acts governing planning practice and in the preparation of Local development plans to include the Virtual Urban Market as a contested planning space regulations similar to physical Markets.

The study further showed that the Ministry of Commerce and Trade revealed that it has not yet started tackling the use of Virtual Markets in Government procurements and dealing with the

emerging urban Markets. One respondent indicated that they are aware that the issue of Virtual Markets is real and that it needs to be tackled. He stated that:

*“at the moment, we are only dealing with and promoting e-governance but as commerce, we are interested in Virtual Markets and to that effect, we intend to have a stakeholder’s meeting regarding Virtual Markets with stakeholders like the Ministry of Local Government, Zambia Revenue Authority, Zambia Development Agency and ZICTA under the Ministry of Communication” (personal communication, 2019).*

The results indicated that the Government was promoting governance of Virtual Markets and other Virtual Markets related activities the Government initiated the smart Zambia governance message in Government ministries and subsequently the private sector. One participant mentioned that:

*“Government has introduced production of e-pay slips as one way of promoting a smart Zambia which is paperless”.*

The participant further stated that:

*‘The Government of the Republic of Zambia is currently implementing e-governance programs in Government ministries and departments which has the potential to promote Open Government Data in the country as well as promote e-governance and Virtual Markets’.*

The findings of this study coincide with studies by Benton (2005) which reveal that local Governments have been at the forefront of Virtual Markets adoption while Manoharan and Carrizales (2010) state that local Governments in the United States as well as developing states posted important information online such as municipal codes, ordinances, and council meeting minutes, along with online transactional services. Furthermore, Reddick (2013) asserts that local e-Governments have conceptualized development in terms of stages of growth from one-way information provision to two-way interactions. It can be argued that from the above findings that local Governments are promoting the use of Virtual Markets as well as promoting Virtual Markets as a way of providing an alternative to physical Markets and physical work stations.

#### **5.2.1.5 Virtual Markets Potential to Thrive with Enactment of New Policies and Legislation on Virtual Market**

The study revealed that the Smart Zambia agenda was encouraging transparency, accountability, openness, trust, efficiency and participation in Government activities. E-

Government is more than having a Government website on the internet. A respondent from the ministry of local Government indicated that:

*‘it is possible to include Virtual Urban Markets in the planning process despite a few challenges that the ministry faces as it was a matter of policy and necessary legislation to be put in place’.*

According to studies by Chipeta (2018), the promotion of Virtual Markets or Virtual Markets is an integrated approach that places citizens at the center of Government business. In this view, e-governance takes into perspective the idea of the Virtual Market as a governance issue that needs to be tabled by relevant stakeholders. Furthermore, Manoharan (2013) states that cities and municipalities are adopting e-Government legislations and innovative technologies to improve their performance, provide relevant information and services, and better engage with citizens. In addition, Stewart (2000) explains that Planning systems are increasingly being seen as mechanisms to improve policy integration, and policy integration is increasingly becoming part of the orthodoxy of spatial planning which includes planning for ICT and Virtual Markets.

The study also identified collaboration among Government ministries and departments as a weak link in the implementation of the Virtual Urban Markets as this was shown when participants were asked if they were aware of any policy regulation Virtual Urban Markets. one participant from the ministry of commerce said that:

*“Sometimes collaboration proves to be quite difficult among Government departments and ministries when it comes to policy regulation and enforcement of various pieces of legislation. One example is that of claims that there have been complaints that one department or organization does not know what another is doing, and that programs are contradictory, redundant or both ever since governing structures began to be differentiated into departments and ministries.”.*

The findings are in agreement with the study by Peters (1998a), which indicates that calls for better integration between policy sectors are by no means new where coordination and collaboration among Government ministries have proved to be a problem. Additionally, Stewart (2000) submits that planning systems are increasingly being seen as mechanisms to improve policy integration, and policy integration is increasingly becoming part of the orthodoxy of spatial planning. The integration or coordination of sectoral policies is frequently considered as one of the main objectives of contemporary spatial planning.

### **5.2.1.6 Development of Virtual Markets Hampered by Absence of a Defined Legal Framework**

The study findings revealed that despite the existence of various Government institutions mandated to regulate Virtual Markets, the use of Virtual Markets as formal Markets has still not been actualized thereby rendering online transactions illegal and at owner's risk as there is no legal framework backing the existence of Virtual Markets. According to a participant from the Ministry of Commerce, it was revealed that currently, trading on Virtual Markets or social media platforms is illegal and at owner's risk. The participant said that:

*“Currently there is no legal framework guiding social media transactions, hence, by so doing, people are risking losing their goods and money as it has been the case where people are depositing money into non-existent and unregistered mobile numbers”* (personal communication, 2019).

It is worth noting that despite the non-existence of a legal framework and policy guiding the Marketing and subsequent transactions on Virtual Markets, people are still trading and risking their money and goods as some platforms are not genuine and not even registered by the Patents and Companies Registrar (PACRA) which makes it easy for people to be swindled and the traders to disappear without trace. It is important that every business in Zambia is registered as a form of formalization and to reduce on risks of fraud, personification and identity thefts. One respondent from PACRA revealed that:

*“business registration entails that consumers are protected from fraudsters and taxes are paid to relevant authorities”.*

The findings are in line with Branda, et al (2013) who assert that the challenge that the Virtual Market poses is that it cannot determine a fixed location, because transactions are being carried out through websites hosted on servers in various locations (other than the business owners). In addition, Chanana (2016) argues that that virtual transactions are a risk in that they make the place of business origin invisible and pose a real challenge to domestic jurisprudence.

### **5.2.1.7 Smart Zambia as a Pioneer of Innovation in the Virtual Markets**

According to officials from the Ministry of Commerce and Trade and Industry, it was revealed that in order to address the challenges of Information Communication Technology (ICT) developments in Zambia, which is an important enabler of innovation and economic development, the Republic of Zambia launched the Smart Zambia project aimed at deploying

new technology and in particular, the cloud to effectively and affordably deliver public services. One of the participants from SAMRT Zambia said:

*“The initiative by the Government to launch the smart Zambia is a step in the right direction as this will open up Zambia to be an innovative economy where citizens will be exposed to new technologies that are available”.*

The study further revealed that the Smart Zambia project has simplified compliance and enhanced overall Government efficiency. It has also helped to plug revenue leakages in the public sector which are the other benefits the current automation under smart Zambia initiative is yielding. If supported by proper policy frameworks this will enhance Government revenues. It was heard from one participant who said:

*“If the Government came up with proper laws to govern cyber Markets, the Government and councils would be getting a lot of money in form of taxes from virtual transactions”.*

The study revealed that the smart Zambia approach is targeting public service expenditure and also formalized business entities that deal with the central Government while the private sector that has been conducting businesses online has not fully been captured. It is not clear how the Government is able to collect the required revenues through the Zambia Revenue Authority from established business entities which are trading through the Virtual Markets. Furthermore, one participant said:

*“Zambia Revenue Authority and PACRA has put in plans to start working with the Local Authority in making sure that business entities conducting online business are registered and start paying taxes to the Government”.*

The study further revealed that Virtual Markets provide an opportunity for consumers to use online and social media networks to identify sellers, evaluate products and services, compare prices, and exert Market leverage. This shows that online advertisement provides a wide range of product variety to choose from as opposed to outdoor advertisement which has a limited sphere of space and catchment. One participant further said:

*“Nowadays people able to advertise and sell products on WhatsApp and Facebook without going to an advertising company which will charge more money”.*

The findings are in line with Saxena (2015) who asserts that the common perception of a Virtual Market is that it is in an online shop similar to the shops we are familiar with in real space.

Furthermore, Agrawal N (2014) argues that in the past, companies typically engaged in producing and selling products or services on a physical Market, but with the advent of the internet and cloud computing, more and more companies are implementing application ideas that allow communities of participants to interact and transact business. According to Bartlett (2017), innovation in future local Governments will be driven by use of social media as a way of engaging citizens in the daily livelihoods and information dissemination.

#### **5.2.1.8 Virtual Market as a Convenient Market Place**

The study revealed that transacting on Virtual Markets provides an extended Market reach and revenue potential for both the Government and the local authority in that jurisdiction, and a wide range of choices and convenience are for the customer. Furthermore, Geographic barriers or boundaries are removed. A merchant can reach a customer who is physically too far away. A participant said:

*“There are so many opportunities that come with shopping on virtual Market platforms as there is no distance that disrupts shopping because one can even shop from someone who is in Livingstone and transactions are made within minutes”.*

The customer on the other hand, can make purchases from a merchant who would otherwise not have been accessible to him. This presents an opportunity for local authorities to engage with the virtual world and tap into the vast Market of Virtual Markets. The implication is that there is likely to be physical Markets which are under-utilized people opt to trade online. This entails that in preparation of Development plans, analysis need to be done to include the effects of Virtual Markets on the available space. This gives planners an opportunity to plan for other competing land uses. Another participant said:

*“advertising and shopping is made easy with online shopping and as such, with a smart phone in my hands, I just have to login into my Facebook account and search for things that am in interested in”.*

The findings are in line with Edwards & Waelde (2000) who argued that Virtual Markets had introduced the world to a new mechanism of commerce which is faster and easier for people of various backgrounds to interact and trade. Furthermore, Hanefah et al., (2008) states that the rapid growth of Virtual Markets has shaped a revolution in global retail trade that is opening up new consumer Markets across borders and continents.

The study further shows that Virtual Markets provide a number of opportunities for people as many more people are getting linked and engaging with Virtual Markets through the use social media .Furthermore, the demand for centre providing internet facility or demand for devices with internet is also increasing. A participant from Ministry of Local Government and Rural Development revealed that:

*“I last bought my car on Zed Car samples which is a group on Facebook advertising second hand cars. I just had to get in contact with the seller who sent pictures to my phone, which I later viewed and made the transaction”.*

This finding is supported by schweidel’s (2017) view that social media has primarily been viewed as a channel through which Marketers can reach consumers. Milkman (2012) also stresses that social media data can serve as a source of consumer insights, enabling Marketers to learn about both individual consumers and communities.

#### **5.2.1.9 The Implications of Virtual Urban Markets inclusion in Planning and Regulations**

Findings from participants from the Ministry of Commerce and Trade established that the ministry is implementing e-governance and has not looked at the emerging Virtual Markets and that there is no policy regarding the same. One participant stated that:

*“Currently as the Ministry of Commerce, we are promoting e-governance services which concern public complaints, administrative procedures at local and at national level, job searches and public procurement and have done quite a lot of sensitizations but the issues of Virtual Markets which include online transactions have not been tabled. We intend to have stakeholder’s meetings with Zambia Revenue Authority, Ministry of Communication and local Government on the formulation of the Virtual Markets strategies” personal communication, 2019).*

Another informant stated that;

*“cyber laws have not been fully implemented in Zambia to deal with the current trending online buying and selling of products through various platforms and little education has been given especially on the vulnerable public” (personal communication, 2019).*

Other findings revealed that inclusion of planning for Virtual Urban Markets will entail enhancing or amending the Markets Acts to include provisions for dealing with Virtual Markets

and also enacting by laws by the local authority to deal with Virtual Urban Markets. One participant explained that:

*“Though there are laws such as Electronic and Transactions Act, these have not proved to be adequate in dealing with the aspect of regulation as transactions taking place on social media platforms seem to be generations ahead of our laws” (Personal Communication 2019).*

Establishment of a Market in Zambia is strongly guided by the Market Act Chapter 290 which provides for the establishment and management of the Markets; and to provide for matters incidental thereto or connected therewith. This piece of legislation enables local authorities to take, rents, fees and tolls in respect of the use by any person of any Market within the locality of the local authority. It is clear from the act that this applies to physical Markets which are planned for by the local authorities in their jurisdiction. However, the Market Act does not include operations of the Virtual Urban Markets which are advertising and transacting on social media platforms and other cyber platforms. The Act limits its operations to the physical Markets which are regulated by the local authorities and are subject to the controls and scrutiny of subsequent bye laws provided by the local councils. It is important that Virtual Markets are guided by relevant legislation to provide checks and controls on the conduct and operations of the Virtual Markets.

This finding is supported by literature which shows that inadequate laws hinder the full realization of Virtual Markets and safety of participants (Moon, 2005). Furthermore, Wang and Feeney (2016) reiterated that municipalities and citizens can find the complexity of legal issues surrounding security and privacy so daunting that it dissuades adoption of Virtual Market tools where information can easily be posted and made publicly available.

Other findings revealed that there is currently no legal framework to deal with and regulate the existence and use of Virtual Urban Markets as avenues of conducting business transactions and the necessary means of taxing and charging fees and charges to enable a conducive trading environment. The respondent stated that;

*“there is need to provide a safe and secure platform where people can pay for online transactions as the local authority derives fees and charges in order to safeguard the public interest” (personal communication, 2019).*

Another participant from Lusaka City Council added that:

*“The only standards which are there in this country regarding Virtual Markets are those that affect high value goods like cars imported from other countries where there are agreed standards for motor vehicles being imported in the country and no other goods transacted on the Zambian Virtual Markets” (personal communication, 2019).*

This study further revealed that there are no standards which have been developed by the agency regarding Virtual Markets in the Zambian context. The research revealed that the standards are there for a few products which are limited to high value products like motor vehicles. One participant said:

*“Currently, the standards that exist are only those with regard to high value goods like motor vehicles” (Personal communication 2019).*

The Zambia Bureau of Standards suggested that in order to apply standards, there is need to regulate the Market as compared to the current scenario where the Market seems to be free for all with no written rules and regulations to guide trade. It was further revealed that standards are demand driven especially by the producers or suppliers especially when there is an outcry from the general public.

*“As an agency we are not a regulatory authority but we do help in formulating standards for goods and services when called upon. Our interest is in safeguarding the standards of locally produced goods. With regard to the goods that are purchased on the Virtual Markets, the agency has not developed standards but we are working the other stake holders in developing the standards” (personal communication, 2019).*

What can be deduced from the above findings is that most transactions taking place on virtual Markets are not subjected to any standards by relevant authorities and as such, consumers risk buying products that are not fit for consumption and not of value for the money spent. The findings are supported by Shiu et al., (2015) who stated that in the electronic environment, it is difficult for consumers to assess the quality of products before making their purchases. Hence, achieving a perception of the quality of the products and/or services offered via online commercial transactions is a major daily challenge faced by online operators (Wells et al., 2011). In addition, the lack of commercial borders regarding Virtual Markets has contributed to cultural values becoming more heterogeneous, which makes it even more difficult to communicate effective quality cues for products sold via Virtual Markets (Wang et al., 2016).

### **5.2.1.10 Implications of Virtual Markets on Spatial Planning**

This study revealed that Virtual Markets have a bearing on spatial planning especially in the area of transportation planning. The findings indicate that as Virtual Markets are embraced, there is likely hood that transportation planning will be enhanced in the sense that more people are likely to park their cars home in preference to a delivery system for the goods and services. On participant revealed that:

*“With the coming of online shopping, I spent less time on the road driving to and from shopping malls. Thus, saving money for fuel which has become expensive. I just have to call pizza inn or Debonair Pizzas and the Pizza is delivered on my doorstep”. (Personal communication, 2019).*

Another participant explained that:

*“In as much as we need to open more roads due the increase in the volume of traffic, online shopping is encouraging people to drive less and rather use delivery vans to deliver the purchased goods to their homes”. (Personal communication, 2019).*

Furthermore, another participant revealed that:

*“Virtual Markets have made things easy in that every place in Lusaka is a potential Taxi Rank as people are now opting to use online applications to book taxis like Ulendo which is lessening time spent moving to a physical taxi rank”. (Personal communication, 2019).*

Campbell (1996) reveals that Urban Planning controls the development and the organization of a city, by determining the urbanization zones and the land uses, the location of various public networks and communal spaces, the anticipation of the residential areas and the rules for building constructions, the authorization of the monitoring and of the intervention procedures. Virtual Markets are becoming an important phenomenon with various potential impacts for the future development of cities. Planners are now faced with the challenge of organizing their municipal and city plans with the knowledge that Virtual Markets have a bearing on the physical environment they operate in.

The findings are supported by (Prologis, 2014) who stated that there is now a variety of Virtual Markets solutions emerging besides traditional online sales. If ‘brick and mortar’ is defined as the traditional retail store, ‘click-and-mortar’ is defined as a form of Virtual Markets in which customers shop over the internet but are also able to physically visit the retailer’s brick-and-mortar store.

Furthermore, a Virtual Market is discoursed as an important phenomenon with the potential to be a 'game changer'. According to Visser and Lanzendorf (2004) the 'distribution of goods ordered over the internet will over time provide (transport) planners with a huge challenge.' In addition, Cervero (2000) states that the cyber city of tomorrow implies (among other things) that 'with Virtual Markets, truck delivery trips will replace personal shopping trips' and that 'Virtual Markets suggest the emergence of goods distribution centers in many pockets of the city. This indicates that Virtual Market and its implications as one aspect of an ongoing structural shift that will exert strong land-use influences just as past transport innovations have done.

Furthermore, Næss et al. (2013) states that one such bearing of Virtual Markets on spatial planning refers to short-term effects on transport patterns which can replace or complement individual transport behaviour and can modify the logistic systems of businesses. In addition, Visser and Lanzendorf (2004) states that the other effect is that of long-term changes in the activity systems of people, the configurations of supply chains, the choices of location, and patterns of land use.

## **CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS**

### **5.0 Introduction**

This chapter looks at the recommendations and conclusions derived from the research on the challenges and opportunities of planning for Virtual Markets in Zambia. The chapter further looks at the areas for further studies.

### **5.1 Conclusions**

This study concludes the following as outlined;

#### **5.2 There is Awareness among Urban Planners**

This study concludes that there is awareness among urban planners on the existence of the Virtual Market and that most planners have participated in them. The results indicate that planners in all Government ministries and local authorities are generally aware of the existence of Virtual Markets so that it is incorporated in all the aspects of planning for cities and Municipalities. In addition, the information gathered can be used to enhance planning in the area of physical planning, Transportation planning and provide policy direction on Virtual Markets.

#### **5.3 Examine the Potential of Planning for Virtual Markets in Lusaka**

The study further concludes that there is potential for planning of Virtual Markets in Zambia. This is attributed to the existence of legal and institutional frameworks to deal with the regulation and management of Virtual Markets. In addition, there is awareness among urban planners making it easy to include Virtual Markets in the preparation of planning policy documents and planning law.

Based on the above conclusions, I recommend the following in order to overcome the challenges that come with planning for Virtual Markets:

- i. Ministry of Local Government and Rural Development together with ZICTA to come up with a deliberate policy of registering online firms that advertises and transact with the public.
- ii. The Local Authorities should introduce Bye-Laws on every Virtual Market created and pay directly to the council in form of a percentage or royalties.
- iii. Online companies to be registered with local authorities where they are operating from and insert provisions for payment of local taxes in the payment process.

- iv. Revenue authorities should consider requiring businesses engaged in electronic commerce to identify themselves to revenue authorities in a manner that is comparable to the prevailing requirements for businesses engaged in conventional commerce in a country.
- v. ZICTA working with Local Authorities should advocate for establishment of a physical address for the vendor for the purposes of security for the participants in the Virtual Markets. There is no point trying to sell products that cannot be delivered at reasonable cost to the buyer's desired location. Electronic transactions often raise expectations for faster delivery, making the transport infrastructure and national address system even more critical for the development of Virtual Markets and Virtual Markets.
- vi. Smart Zambia to promote the use of Virtual Markets in legal frameworks that guide local economic development.
- vii. There is need to promote the use of information and communication technologies in local authorities to enhance engagement with the Virtual Markets and thus get the much-needed revenue from the transactions that are being carried out on Virtual Markets.
- viii. Planners should be trained adequately in information and technology in order to keep up with the advancement in technology.
- ix. It is recommended that deliberate policies that guide Virtual Markets to both protect the vendors and buyers from fraud are formulated. This should be done in conjunction with the Zambia Information Communication and Technology Authority (ZICTA) cybercrimes section.
- x. The Government should also provide socialization, which promotes the "buyer beware" slogan to prevent unwanted crime of fraud from happening in the real world and in the cyber world. The "buyer beware" motto is necessary to educate the general population on conducting online transactions, including performing due diligence on the legality or the validity of the transaction.
- xi. It follows therefore that the Government should emphasize on education of the citizens in order for effective implementation of Virtual Markets in Zambia and subsequent conducting of online transactions.

### **Further recommendations**

The realisation of planning for Virtual Markets needs the institutional framework to consider linking affected institutions on how to manage Virtual Markets. The existence of ZICTA and SMART Zambia institute provides an opportunity for various local authorities to develop mechanisms that incorporate Virtual Markets in the planning and administration. To this effect, it is recommended that planning departments in local authorities be equipped with modern technological equipment and human resource personnel to develop applications that are able to monitor the emergence of new Virtual Markets and report such applications and pages that are not in line with the legal frameworks.

### **Areas of Future studies**

- One area that needs further research is the Food supply linkages in the Virtual Markets and how they affect, Transport, Physical Planning and the food supply chain in the city.
- The Virtual Local Authority Services; Challenges and Opportunities  
The advent of technological advancement has brought the need for people to avoid the physical Market in advertisement and subsequently transacting in goods and services. In the same vain, there is need to research on the possibility of having a virtual local authority that can provide services with less human interaction.

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## Appendix

**The University of Zambia**  
**School Of Natural Sciences**  
**Department of Geography and Environmental Studies**  
**Master of Science in Spatial Planning**

### Interview guide

#### A. Preliminary

*The aim of the study is to assess how current planning process can include virtual urban Markets*

I am Luapula Pasmore, a postgraduate student at the University of Zambia carrying out a research on the viability of planning for virtual urban Markets. The purpose of this study is to assess how virtual urban Markets can be included in the planning processes. The data that will be gathered will be used for academic purposes only and all the information gathered will be treated with the utmost confidentiality. Your Participation in this interview is purely voluntary and you are free to withdraw at any given time.

#### B. Basic information

1. Gender
2. Length of service
3. Department:

#### C. Awareness of virtual Markets

1. Are you aware of the existence of Market platforms on social media or other cyber platforms? Yes No (please circle)
2. If yes to the above question please give examples of such platforms

Platform	Type-Market	Products traded	Benefits	Risks

3. Have you ever participated in any of the social media platforms? Yes No (please circle)

4. Are you aware of any planning regulations for physical urban Markets? Yes No (please circle)
5. Are you aware of planning regulations for urban Markets in a virtual space/ cyber Markets?  
Yes No (please circle)
6. If No, what would you suggest is the best way for regulating the virtual urban Markets?
7. Are you aware of the existence of any policy guiding virtual urban Markets?

**D: Examine the potential for including virtual space in planning for urban Markets**

1. How knowledgeable are you in virtual planning?  
(a) Knowledgeable (b) Quite Knowledgeable (c) Not Knowledgeable
2. How can planning for virtual urban Markets be included in the current urban planning processes?
3. How can we make virtual planning cost effective and secure in the Zambian local authorities?
4. How willing are the authorities to adopt planning for virtual spaces?
5. Is the Agency taking steps to educate the traders on virtual Markets on the importance of registration with your agency?
6. Are there any online platforms who have registered with your organisations to conduct business?
7. What are the merits of having these online platforms register with your agency before conducting any transactions?.....
8. If you were to implement planning for virtual Markets, at what level would you implement?
9. What can be the merits of incorporating planning for virtual urban Markets in the current planning processes and the in the Zambian legislation?
10. What are the challenges which can be faced in relation to planning for and regulating virtual Markets?
11. How can these challenges be overcome?