

**Customer Perceptions of Community Information Centres  
in Zimbabwe**

**By**

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## ABSTRACT

The quality of products and services has become imperative to the day-to-day running of organisations. Services offered to customers need to be prompt and reliable to increase customer's commitments to its utilisation and adoption. The primary objectives of the study were to determine how customers rate the quality of the service that they expect to get at Community Information Centres (CIC) in Zimbabwe and also to determine how customers rate the quality of the service that they are receiving. The study was premised on Parasuraman, Zeithaml and Berry's (1985) Gaps model. Congruent to this model, the study used a quantitative research method. Five hypotheses related to *tangibility*, *responsiveness*, *reliability*, *empathy* and *assurance* of services were tested. Three Community Information Centres (CICs) were purposively sampled where a sample of 475 (N475) respondents were subjected to a SERVQUAL questionnaire. Both descriptive and inferential statistics were used to analyse the data. Descriptive statistics analysis was used to analyse the demographic variables of respondents and to evaluate service quality expectations and perceptions of CIC users. Inferential statistics were used to test relationships between the variables and to find confirmation for the hypotheses. Further, Structural Equation Modelling (SEM) was used to identify the relationships between independent (the SERVQUAL) dimensions and the dependant variable (service quality) and to test the hypotheses. Fit of data collected using the adapted SERVQUAL was realised and it was deemed a good instrument to measure service quality in CICs. The reliability values were above 0.8. Thus, it can be concluded that the measures used in the study are valid and reliable. Factor analysis was performed to assess convergent validity. Construct validity was determined by conducting Confirmatory Factor Analysis on all 22 items and the associated five SERVQUAL constructs, with AMOS V22 software. Findings from SEM confirmed significant positive relationships between the SERVQUAL quality constructs (tangibles, reliability, responsiveness, assurance and empathy) and service quality dimension. Descriptive statistics results indicate that clients' *expectations* of CICs services in almost all SERVQUAL constructs were higher than their actual *experiences*. Although the findings revealed some gaps between perception and expectation in all the five service quality dimensions, it can be concluded that there is a level of satisfaction among CIC users. The study will increase knowledge concerning customer expectations, something that will allow policy makers to effectively act upon the important and challenging task of running public service organisations such as CICs. The study recommends that service quality needs to be consistently evaluated to inform quality improvements.

## DECLARATION

I, Martha Mushunje, declare that this dissertation, which is being submitted for the award of PhD (Communication Management) at the University of Pretoria, is my own work and has not been submitted at any other university for any other qualification.

Signature

*M. Mushunje*

Date

03- February- 2020

## DEDICATION

I dedicate this work to my mother Joyce Chigovanyika and my late father Mathias Chigovanyika.

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I would like to thank God almighty for guiding me throughout the accomplishment of this thesis.

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## ABBREVIATIONS

ADB	: African Development Bank
BAZ	: Broadcasting Authority of Zimbabwe
CCS	: Central Computing Services
CFA	: Confirmatory Factor Analysis
CIC	: Community Information Centres
CRM	: Customer Relationship Management
DOT Force	: Digital Opportunity Task Force
EFA	: Exploratory factor analysis
HDI	: Human Development index
ICT4D	: Information Communication Technology for development
ICTs	: Information and Communication Technologies
IDRC	: International Development Research Centre
IMC	: Integrated Marketing Communication
ITU	: International Telecommunications Union
MDGs	: Millennium Development Goals
MICTPCS	: Ministry of Information Communication Technology, Postal and Courier Services (MICTPCS)
NIPF	: National ICT Policy Framework
NPM	: New Public Management
NRF	: National Research Foundation
OECD	: Organisation for Economic Cooperation and Development

POTRAZ	: Postal and Telecommunications Regulatory Authority of Zimbabwe POTRAZ
PPP	: Public Private Partnerships
SEM	: Structural Equation Modelling
SMS	: Short Messaging Service
SPSS	: Statistical Package for Social Sciences
UNDP	: United Nations Development Program
UNESCO	: United Nations Educational, Scientific and Cultural Organisation
WB	: World Bank
WSIS	: World Summit on the information Society
ZIM-ASSET Transformation	: Zimbabwe Agenda for Sustainable Socio-Economic
ZimPost	: Zimbabwe Postal Service Operators
ZIMSTAT	: Zimbabwe National Statistics Agency
ZMC	: Zimbabwe Media Commission



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## CHAPTER ONE

### INTRODUCTION AND BACKGROUND

#### 1.1 INTRODUCTION

This study focuses on service quality in Community Information Centres (CICs) in Zimbabwe. Management of quality service is a commitment from top management for continuous improvement (Kapondera and Hart, 2016). Organisations need to have the type of leadership that motivates employees to provide prompt services to customers. Use of technology can aid the deliverance of services on time. Organisations need to pay attention to service quality for both their success and sustainability. This calls for the continuous review of their activities for continued improvement. It then becomes a mandate for them to identify areas that need improvement and to realise that improvement of quality service starts with identifying areas that need intervention.

For organisations to be able to design quality means of services, views of the customers need to be understood. Tsigie (2016:43) observed that “service providing firms should also focus on measuring the level of quality of their offerings in order to identify how they perform in comparison with similar service providers and ultimately to increase their competitiveness”. Karnstedt and Winter (2015) furthermore opines that measurement of quality is dependent upon how it is defined. They elaborate that it can focus on objective or internal quality measures. The customer’s subjective perception of quality places him/her as the ultimate judge of quality. This directs the attention on how well a product or service is able to fulfil the needs and expectations of the customer. Kapondera and Hart (2016) further caution against raising customer expectations with unrealistic promises.

Markovic, Dorcic and Katusic (2016) point out that in judging service quality, customer expectations serve as a foundation for evaluating service quality. The commonly used model for measuring quality is the SERVQUAL model. The model can be used to guide innovations in e-government service delivery. The adapted SERVQUAL tool is thus, seen as the appropriate tool that can be used to collect data to appraise e-governance

strategies in developing countries (Twinomurwizi, Zwane and Debusho, 2012). One of the advantages of using this approach is its emphasis on the users of the service.

Twinomurwizi, Zwane and Debusho (2012), citing Lewis and Bloom (1983), explain the process of rendering services in organisations. They indicate that often a gap exists between what the service is expected to offer and what is offered. According to Parasuraman, Zeithaml and Berry (1998), gaps range between the recipient's expectation and the experience; what customers were told and what they experience; and what management think the service should be like and the actual experience. According to Parasuraman, Zeithaml and Berry (1998), the SERVQUAL is a service quality tool that measures customer experience of service rendered against their expectations. It has five dimensions of tangibles: reliability, responsiveness empathy and assurance. Tangibles include: equipment, appearance of service staff and visually appealing materials. Reliability includes rendering services as promised and giving error free information. Responsiveness involves providing prompt services and willingness to help. Empathy involves caring, giving individual attention and understanding customer needs. Assurance includes instilling confidence and people feeling safe about their transactions. The service evaluation process uses the SERVQUAL model, which is an appropriate tool for measuring the service quality, and identifying and analysing available gaps between service expectation and perception.

Communication Information Centres are still in their infancy in Zimbabwe and there is a need for evaluation of the quality of services rendered in these centres. Evaluations are crucial for organisations in order to gain an understanding of the needs and perceptions of the users. Hence, the SERVQUAL model has been adopted in the study to gain insight into user's perceptions and experience of the CICs. Evaluation results can be used to improve on the quality of services offered by CICs as they are implemented in districts of Zimbabwe. This study, therefore, attempts to determine how customers rate the quality of the service that they expect CICs in Zimbabwe to provide, in comparison with the quality of the service that is offered by the CICs. The results from the study would assist governments to understand the type of services that is expected and how its value is

perceived. This Chapter covers the introduction and contextualisation of the study regarding the service quality of CICs in Zimbabwe. It postulates the research problem, objectives and hypotheses. Further, a synopsis of the research methodology and design is also addressed. The thesis outline is also provided in the Chapter.

## **1.2 OVERVIEW OF THE STUDY**

This study focuses on determining how customers rate the quality of the service that they expect to get by Community Information Centres in Zimbabwe, compared to how they rate the quality of the service that they are receiving. Makanza (2015) adopts the definition by UN Habitat (2009), which defines services as goods created, provided and managed to support productive and reproductive societal activities and to contribute to human dignity, quality of life and sustainable livelihoods. Rao (2008) points out that services are intangible activities that are produced by a service provider. In association with the consumer, their quality results in perceptions and value assessments held by the consumer.

According to Makanyeza, Kwandayi and Nyakobe-Ikobe (2013), services involve understanding the needs of the customers in the target market and aligning this with the organisation's strategy and competitive intention. Mhlanga (2013:15) highlights the 4As that pertain to services, which are: accessible, affordable, adaptable and acceptable. He elaborates that services should be accessible in terms of distance and availability. Users should be able to afford services and they should also be adaptable, thus they should take into account the surrounding social and political environment, and be adapted to local needs. Services should be acceptable, which means that they should be in a form that users find accessible (be responsive to local needs e.g. culturally).

Chingang and Lukong (2010) point out the two viewpoints to services entail (a provider's and the consumer's perspective). The provider views the services as having elements of core delivery, service operations, personal attentiveness and interpersonal performance. A customer views service as "part of an experience of life which consists of core need, choice and emotional content which are present in different service outputs and

encounters that affect each individual differently”. To Kushwar and Bhargav (2014), services include all economic activities of which the output is not a physical product or of which construction is generally consumed all the time.

### **1.2.1 Service quality and service delivery**

Tsega (2016) cites Nyenya and Bukaliya (2015:45), who define service quality as an approach to manage business processes in order to ensure the full satisfaction of customers; and to increase the competitiveness and effectiveness of the industry. Parasuraman, Zeithaml and Berry (1998) further highlights that service quality is based on intangibility, heterogeneity and inseparability. Manjunatha and Shivalingaiah (2004:144) view quality as subjective, “personal and changes from person-to-person, place-to-place, organisation-to-organisation, situation-to-situation”. Methu (2015:83) views quality “as a measure of excellence or the degree to which a product is free from deficiencies, defects or significant variations”. Citing the example of Kenya, Methu (2009:76) gives a chronology of the evolution of quality service delivery. This authors further asserts that citizens’ awareness of their rights to improve the quality of services, led to the adoption of the slogan “Huduma Bora ni Haki Yako” (quality service is a right to all citizens). He further elaborates that the above statement implies that government is mandated to provide high quality services. Provision of high quality services can only come about if there is adoption of a quality service delivery approach that is based on continuous improvements through monitoring and evaluation.

Osotimehin, Hassan and Abass (2015) argue that service quality helps in holding together the relationship between customers and the organisation - a relationship they term a “two-way flow of value”. Both the organisation and the customer benefit from the relationship, as the customer derives real value, which translates into value for the organisation in the form of enhanced profitability in the long run. Kushwaha and Agrawal (2014) furthermore states that quality service is not something that can be manufactured, it appears through the communication between a service provider and the customer. Phiri and Mcwabe (2013) also point out the importance of service quality in any organisation and the important role of creating a bond between the organisation and its customers.

They point out that customers derive their perceptions of service quality based on the levels of satisfaction they experience during the service encounter.

Hirmukhe (2012) gives three distinctive characteristics of service quality, namely:

- i) service quality is more difficult to evaluate than goods quality;
- ii) quality perceptions emerge from the consumer's expectations and the perceptions of the actual service;
- iii) Service quality is perceived from the "gap" between the expectations and the perception of the service quality.

Pena, Silva, Tronchin and Melleiro (2013) further point out the nature of services which is intangibility and heterogeneousness. Services are judged by "the performance and the experience of those who use them, with the possibility of interpretation and different judgments, according to the provider and the user in question". Quinn (1997:359), as well as Naidu (2009), are of the view that provision of quality service "means being able to view services from the users' point of view and then to meet the users' expectations for service provided because users define value". For Naidu (2009:34), service quality adds to "value experienced by customers and value becomes an outcome of excellent service". Naidu (2009:33) further argues that service quality from the customer's point of view is a function of what customers expect and how well the organisation performs in providing the service. Naidoo and Muntina (2014) further point out that delivery of quality services encompasses being in compliance to customer expectations on a regular basis.

Research by Pena, Silva, Tronchin and Melleiro (2013) also points out that service quality involves the level of service effectiveness and expectations of the user. They further state that the promotion of quality service involves meeting the needs and expectations of a user effectively. Manjunatha and Shivalingaiah (2004:145) define service quality as a "comparison of what customers expect before the use of a product/service with their experience of what is delivered". Gronroos, (2000:68), as well as Manuel (2008), point out that "if the consumer's expectations are met, service quality is perceived to be satisfactory; if they are not met, it is perceived to be less than satisfactory; and if they are exceeded, it is perceived to be more than satisfactory (delighting the customer)".

This assumption has led to the conceptualisation of the “gap theory”, which is illustrated as “perceptions minus expectation (P-E)”. This gap “...put forward the variance between consumers’ expectations about the performance of a general class of service providers and their assessment of the actual performance of a specific firm within that class which drives the perception of service quality, Parasuraman, Zeithaml and Berry (1998)”.

Gaster (1995);Shahin (2006) points out the complexities of service provision as it is not simply a matter of meeting expressed needs but finding out unexpressed needs, setting priorities, allocating resources and publicly justifying and accounting for what has been done. Findings from Kaisara and Panther (2009) indicate that rather than only focusing on service quality there are a number of factors involved. They point out that there should be improvement of access to services, equal access provision and providing the services efficiently. To them, service quality focuses on the post-adoption use of e-government their study further points out the negative factors of focusing more on service quality and leaving out access and adoption factors, which are pivotal for e-government success. Shahin (2006) comments on the responsibilities and accountability of service organisations to communities and service users. The author mentions a number service agendas, rather than simply focussing on service quality. These are outlined as improving access to existing services, equity and equality of service provision; providing efficient and effective services within political as well as resource constraints. Sigwejo and Pather (2016) resonate that quality in government service delivery systems has a positive bearing on the economies of scale, reduction of costs and offering of technology-enabled user services. They further highlight how citizen’s needs and expectations for social changes will continue to spearhead improved government service delivery through the use of Information and Communication Technologies.

Nash and Nash (2004) views effective service delivery as the delivery of services to a buyer in such a way that the buyer’s expectations can be met or surpassed while at the same time the business remains viable. Effective service delivery means providing services that meet the customer’s desires, needs and expectations.

Batho (2006) in Twinomurwizi, Zwane and Debusho (2012) explains that all citizens should have equal access to services to which they are entitled. Public service delivery is commonly understood to mean provision of public goods or social education, health, economic grants or infrastructural (water, electricity) services to those who need them (or demand) them. Service delivery should be accessible, efficient and affordable to all citizens regardless of geographical location. Makanyeza, Kwandayi and Nyakobe (2013) opine that to deliver services to the people, governments need people who must be supported to deliver such services. They further highlight the importance of having employees that are customer oriented to enhance service quality. To them, this means that the right people are recruited and developed to deliver quality service and to provide the needed support within the delivery system.

Makanyeza, Kwandayi and Nyakobe (2013:5) state that “improving service delivery is primarily about improving effectiveness and efficiency of the way in which services are rendered”. One of the crucial elements in service delivery is the issue of communication. According to the Public Sector Research Centre Report (2007), the designing of a communication channel strategy should take into consideration the diversity of the customers. Focus should be on creating multiple delivery communication channels based on the nature of the public service being provided. It is of great importance that governments should strive to provide quality service delivery to citizens.

### **1.2.2 Service delivery through Community Information Centres (CICs) in Zimbabwe**

According to Marumbwa (2014), Zimbabwe is a landlocked developing country in sub-Saharan Africa with a population of over 12 million people. He further elaborates that the economy has faced a number of challenges over the past decade, which have had a great impact on service delivery. As such as at 2014, Zimbabwe was ranking at 173 out of 187 on the Human Development Index (Marumbwa, 2014). Service delivery is an important element in alleviating poverty in developing countries. According to Hernandez (2006), it is crucial to poverty alleviation and accounts for realising the Millennium Development

Goals (MDGs) in poor countries such as Zimbabwe both directly and indirectly, thereby enhancing the availability and affordability of agricultural, educational and health information.

Makanyeza, Kwandayi and Nyakobe (2013) highlight the importance of service delivery as aligned to the welfare of people. To them, service delivery has a direct influence on the quality of the lives of people in a given community and is an integral component to their survival. Therefore, having CICs as service delivery communication tools could improve the quality of life in rural communities. Zimbabwe can take a clue from the South African case as it has become clear that Community Service Centres play a major role in integrated service delivery in the various communities and across the globe in developing countries. The World Development Report (2016) adopts a positive stance towards new technologies, believing that the growth of ICTs will lead to the proficient operation of government departments in developing countries and will also contribute to information democratisation.

In Zimbabwe, the issue of service delivery is a challenge that needs to be addressed, given the low quality of service provision and the tenacious needs of the people, more specially those who reside in rural areas. According to Besley and Ghatak (2007), public services are determining factors of quality of life of its surrounding communities as well as its inhabitants. It is not measured in per capita income but is an integral part of any poverty reduction strategy. In Zimbabwe, service delivery has been eroded over the past years, as the country faced a turbulence of challenges - politically and economically (Zunguze, 2009).

Ruhode, Owei and Maumbe (2008) note that, although ICT services have become agents for change within governments globally, there is a lack of meaningfully synchronised exertions at government level to change government service delivery through e-government. For instance, most of the government ministries and departments in Zimbabwe are still undertaking business manually, despite evident prospects to increase proficiency and efficacy through ICT services. This notion is also supported by Mhlanga (2006) who observed that although governments departments have internet and email



facilities in government departments, they are grossly underutilised as information on e-governance is limited.

This in turn has led to the government department responsible for promoting effective and efficient communication channels failing to fully implement CICs as modes of communication for service delivery particularly in rural communities.

The new millennium has brought in interconnectivity and acceleration of flow of data and information. There have been initiatives such as the establishment of CICs to make sure that the marginalised communities are included in the digital world. Munyoka and Maharaj (2019:1) state that Southern African Development Countries (SADC) are adopting and implementing e-government systems to improve efficiency and effectiveness of their service delivery. Community information centres make it more plausible for information and services of governments to reach ordinary people through Information and Communication Technology (ICTs). Faroqi, Siddiquee and Ullah (2019:113) furthermore state that community information centres are defined “as access points of information and communication technologies based on services and applications”. They are viewed as an innovative way of closing the digital divide and accelerating economic development by providing value added information, knowledge and services.

Through community information centres as mode of service delivery, people, especially in rural communities, can partake in government’s decision-making processes. Such centres can be the delivery points for e-government services, among others. They can modernise and improve effectiveness in the delivery of services to the people - a notion supported by Van Bell and Trustler (2005) who reveal that correct services delivery to rural areas can empower people towards actions that can change lives, and allows a greater sense of freedom. People in rural communities rely heavily on informal sources and on non-institutional sources for their day-to-day information. Buhigiro (2012) furthermore posits that community information centres can improve the delivery of public and private sector services through e-participation, e-government and e-commerce. This aligns with Mukerji (2008) (in Buhigiro, 2012) who revealed that CICs as delivery points can lead to better local administration and improved government/citizen/business

interface leading to improved reach, transparency, responsiveness, accountability, efficiency, effectiveness, citizens' empowerment and participation.

Naik, Joshi and Basavaraj (2012:582) highlight the objectives of the e-governance plan in India and cites the establishment of Common Service Centres. They state that CSCs were set up with the objective of making all government services accessible to common man in his locality through service delivery outlets. They were also set up to ensure efficiency, transparency and reliability of such services at affordable costs to satisfy the basic needs of rural citizens. They further elaborate that the CSC scheme is envisaged to be a bottom-up model of service delivery of content, services, information and knowledge.

Naik, Joshi and Basavaraj (2012) further give a critique of the traditional flow of information from governments to citizens. The traditional process of service delivery, which uses hierarchical flow of information is time consuming and entails cost for the government. In this flow, information passes through many levels of government before it reaches rural citizens.

### **1.2.3 Information and Communication Technologies in the Zimbabwean Context**

Hikwa and Maisiri (2014) gives a chronology of ICT evolution in Zimbabwe and state that the deployment of Information and Communication Technologies (ICTs) and e-Government in Zimbabwe goes back to the early 1970s when the Central Computing Services (CCS) provided ICT services to the public services. The authors further point out that in 2009, the Ministry of Information and Technology was established after the formation of the inclusive government. The mandate of the ministry was to promote deployment and use of ICTs in order to intensify national competitiveness and growth. Marufu (2015) states that "the Zimbabwean government since 2005, has implemented a program initially to assess the country's e-Readiness (2005), to develop an ICT policy; and more recently, to develop a government strategy. The ICT policy is now in existence.

Zimbabwe inherited a twofold economy branded by a well-developed modern sector and poorly developed rural sector accommodating more than 80% of the population. This two-fold economy has also manifested in the telecommunication infrastructure of the country.

Currently, the telecommunication infrastructure is concentrated in urban cities. as a result, this has exacerbated the digital divide where urban dwellers have become more technologically advanced, while no significant progress is taking place in rural Zimbabwe (Ruhode, Owei and Maumbe, 2008). Mhlanga (2006) states that the e-Readiness survey, conducted in 2004, confirmed that there is a digital divide between the rural and urban areas in Zimbabwe. A view also supported by Chisango (2014), who posits that ICTs are biased towards urban areas, which are connected with telecommunication infrastructure, which leaves little or poor service delivery to rural areas.

According to Zinyama and Nhema (2016), the role of ICTs in development was recognised as critical by the Zimbabwean government when it embarked on such landmark measures as the e-Readiness Survey that was conducted in 2004 and the National ICT Policy Framework formulated in 2005. This commended the institution of a national Information and Communication Technology policy (2006). The Zimbabwe National Statistics Agency (ZIMSTAT) (2012) census report furthermore indicates that the Zimbabwean population is mainly rural and constitutes 67% of the total population. Considering the findings of the e-survey report about the disparities that exist in terms of ICT infrastructure, the deployment of CICs in rural areas is a natural result for the government to bridge the digital divide.

POTRAZ (2018) highlights that there has been a 2.4% decline in the number of active fixed lines recorded in 2016 to reach 1.9% in 2017. The number decreased from 267 034 to 260 183 in the second quarter of 2017, while the teledensity stands at 1.9%. Meanwhile, the mobile penetration rate increased by 7.9% to reach 102.7% in 2017 from 94.8% recorded in 2016. In 2017, the active internet penetration rate increased by 0.8% to reach 50.8% from 50% recorded in 2016. Hikwa and Maisiri (2014) point out that “a few of these subscribers reside in rural areas”. They further state that this calls for an urgent need to have facilities that enhance e-government, since having such facilities will aid communication and reduce administrative costs for the government.

The Zimbabwean government is cognisant of what ICTs can do to economic development and the delivering of social services. This is also in line with the Millennium Agenda as

echoed in MDG 8, Target 18, which calls for bringing access to ICTs to all people. The same sentiments are echoed in Goal 2 of the Connect Africa Summit, which envisaged the connection of African villages to broadband ICT services by 2015 (although this is yet to be realised). It also proposes the implementation of shared access initiatives, such as community CICs and village phones (Kigali, 2007). Most governments in Africa including Zimbabwe have responded to the need for the public to access information. Ruhode (2013) points out that “Zimbabwe is a signatory to the WSIS Declaration of Principles and Plan of Action (2003) which strongly recommended the adoption and utilization of ICTs to meet the agreed developmental goals”.

The Digital Opportunity Task Force (DOT Force) in Chilimo (2008) states that ICTs are reagent for development for they can improve communication and the exchange of information. The same sentiments are echoed by the World Development Report (2016) that highlights the numerous possibilities that ICTs can open up for people’s participation. The internet, the wireless telephone and other information and communication technologies have opened up interactive communication channels that enable people to communicate and obtain information. These new channels of communication help rural communities to obtain information that can assist in their daily lives. Information is important for people and Chilimo (2008) states that, ICTs have an important role to play in rural communities by facilitating access to information that can help in agriculture, health, education and government services.

Hikwa and Maisiri (2014) highlight the commitment of the Zimbabwean government towards e-governance and digital access. They point out the role of the Modernisation Unit that drives the “digital access and e-government agenda”. The Unit is within the office of the President and Cabinet and the Ministry of Information Communication Technology and is also guided by the ZimConnect. ZimConnect is an e-government framework which aims to provide seamless e-services to the citizens, business and government through an interconnected public service integrating people, process and technology (Zinyama and Nhema, 2016).

Taking from the COMESA e-government Web Portal (2012), Hikwa and Maisiri (2014) point out the strides made by the Zimbabwean government in the implementation of digital access and e-government.

They cite the establishment of “a National ICT/E-government Policy and Technical Advisory Committee to the office of the President and Cabinet”. This Committee constituted a variety of stakeholders and its mandate was to provide leadership and guidance in the implementation process of digital access and e-government.

According to the Zimbabwe National policy for ICT 2016, some notable key strides in the ICT sector include:

1. Liberalisation of the telecommunications, postal and courier services sector.
2. Establishment of regulatory bodies in the ICT sector, i.e. Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ), Zimbabwe Media Commission (ZMC) and Broadcasting Authority of Zimbabwe (BAZ).
3. Establishment of the Cabinet Committee on Scientific Research, Technology Development and Applications.
4. Computerisation of government ministries in the main centres of the country.
5. Creation of the Ministry responsible for ICT.
6. Increase in the internet penetration rate.
7. Enactment of the Criminal Law Amendment (Protection of Power, Communications and Water Infrastructure) Act, No. 1 of 2011.
8. The removal of duty on ICT hardware and software.

Although there have been some notable strides in the ICT sector, there have been challenges too, that hindered the full functionality of the sector. These include:

1. Inadequate communications infrastructure.
2. Inadequate ICT services.
3. Inadequate ICT skills.
4. Unsatisfactory institutional arrangements.

5. Inadequate financial resources.
6. Inadequate data management systems in place.
7. Limited high speed connectivity, or inadequate national bandwidth.
8. Not enough campaigns to make the general public aware.
9. Shortage of supply of electricity affecting unhindered utilisation of ICTs.
10. Stringent licensing regime resulting in a limited number of players in the sector.
11. Limited local ICT entrepreneurship.
12. Lack of proper and comprehensive management of internet traffic nationally and on the gateways.

Chari (2009) points out that, although Zimbabwe has made significant progress in the usage of information communication technologies, the economic meltdown, which has characterised Zimbabwe over the past years has had a negative impact on the upsurge of the adoption of ICTs and the integration of the country into the knowledge based economy. This is an impediment to the knowledge based economy that the country had envisioned earlier. Zimbabwean rural areas are characterised by low incomes, which pose a challenge for residents to access information through ICTs. Ruhode (2013) specifically highlights the plight of many rural areas of Zimbabwe which do not have electricity, which makes it impossible to introduce ICT-based services.

He further elaborates that deployment of ICTs in Zimbabwe is weighed down by inadequate electricity in rural and marginalized areas as well as power cuts in all urban and semi-urban areas.

According to Magoro (2013) rural communities often lack access to basic services such as health, transport, telecommunications, water, energy, sanitation and access to personal documentation. He further elaborates that even in cases where services are offered, community members have to travel long distances in order to apply or access these services. This makes it necessary for the Zimbabwean government to redress the existing imbalances by providing support mechanisms in the form of communal access to ICTs through CICs particularly in communities.

### 1.3 RESEARCH PROBLEM

Access to government services in the 1980s was limited to wider public and this led to frequent public cries and dissatisfaction in service delivery. The Zimbabwean government has acknowledged the need to reach the whole population with information and communication irrespective of demographic factors through the implementation of various policies and programmes as well as being a signatory to regional international conventions that talk to the promotion, effective and efficient implementation of technology usage to its citizens. For instance, the Ministry of Information Communication Technology, Postal and Courier Services (MICTPCS) in order to address the disparities to access ICT facilities rolled out community information centers. The CICs are meant to provide certain government services (e-government).

Though, the delivery of services in government departments has been and continues to attract attention from both external and internal environment it has also been fraught with a number of challenges. Kulshretha (2013) indicates that lack of transparency, efficiency and unsecure delivery of services is dominant in government ministries. Moreover, concerns have been raised that local government's services tend to incline to lack customer centric approach and are entrenched in legacy systems and processes. Furthermore, observation have been made that the system tends to focus more on its citizens completing, submitting forms manually and physically visiting departments to receive services. On the other hand, citizens as customers of government services expect and demand services by using available communication channels they find most appropriate for them at any given time.

Quality of services should be evaluated by customers and their needs taken into consideration. Hence the need to constantly measure the quality of services offered in public services. Constant measurement of the quality of services will provide valuable information to policy makers and practitioners. According to Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) evaluation of services is crucial in organisations as it allows for comparison before and after modifications. Though, e-government in Zimbabwe has occurred as a means by which government ministries, and the public

sector can partake in the new knowledge landscape for improved service delivery, there are a number of problem that have been noted. For instance, evaluating services timeously is a missing link in many organisations in Zimbabwe yet service quality is one of the factors that generates customer satisfaction and productivity in organisations. However, within the Zimbabwean context especially in rural areas this continues to be overlooked in many instances. The extant literature shows that CIS are in their infancy in Zimbabwe. As such, it has become important for the government (through the Ministry of Information Communication Technology, Postal and Courier Services (MICTPCS) to evaluate and make changes, if need be, with regard to the quality of services offered at such centres. But, it is not clear if any monitoring and evaluation has taken place hence the problem subsists.

It is also important to be knowledgeable about the characteristics and advantages of the quality of services provided by Community Information Centres (CICs), an aspect that has been overlooked once a project has been implemented. Measuring service quality in organisations guides employees on service delivery, which will in turn affect the delivered services. Sigwejo (2015) highlights the shortcomings of evaluation of the expectations of citizens with regard to e-government services and what criteria should be applied in the measurement thereof. This scholar also alludes to the importance of evaluation of e-government services, its effectiveness from the demand side as it provides a basis for understanding the needs of the citizens as well as identifying the benefits to them. However, Sigwejo (2015) also bemoans that “unfortunately, like many other ICT projects, there have been no appropriate evaluation strategies designed for evaluating e-government service effectiveness”.

In Zimbabwe, there has been a tendency to focus on providing access to CICs in communities without taking note of its proper maintenance thereafter. Moreover, it has been noted that, for continued use of the CICs, access to it is not enough. The available technology does not only need to be enhanced and innovated, which can only be realized if the quality of services offered at centres are measured there is a need of enhanced awareness of the benefits of CICs, which unfortunately is in death. In the same vein,



centres need to offer quality services that, in turn, can attract and retain users for the long-run. This calls for a balanced enterprise and pro-active approach on the part of centre employees and the management. This research study aimed to measure the quality of the services provided at three Community Information Centres in Zimbabwe.

## 1.4 RESEARCH OBJECTIVES AND HYPOTHESES

The following research objectives were formulated based on reviewed literature:

### 1.4.1 Primary research objective

To determine how customers, rate the quality of the service that they expect to get at Community Information Centres in Zimbabwe, compared to how they rate the quality of the service that they are receiving.

### 1.4.2 Secondary research objectives

1. Research objective 1: To determine whether *tangibles* are positively related to expectations and experience regarding the quality of service rendered at Community Information Centres in Zimbabwe.
2. Research objective 2: To determine whether *reliability* is positively related to expectations and experience regarding the quality of service rendered at Community Information Centres in Zimbabwe.
3. Research objective 3: To determine whether *responsiveness* is positively related to expectations and experience regarding the quality of service rendered at Community Information Centres in Zimbabwe.
4. Research objective 4: To determine whether *assurance* is positively related to expectations and experience regarding the quality of service rendered at Community Information Centres in Zimbabwe.
5. Research objective 5: To determine whether *empathy* is positively related to expectations and experience regarding the quality of service at Community Information Centres in Zimbabwe.

The next section presents the hypotheses that were formulated from the research objectives.

### **1.4.3 Hypotheses**

The following hypothesis were formulated based on the research objectives:

H0: Tangibles are not positively related to expectations and experience regarding the quality of service rendered.

H1: Tangibles are positively related to expectations and experience regarding the quality of service rendered.

H0: Reliability is not positively related to expectations and experience regarding the quality of service rendered.

H2: Reliability is positively related to expectations and experience regarding the quality of service rendered.

H0: Responsiveness is not positively related to expectations and experience regarding the quality of service rendered.

H3: Responsiveness is positively related to expectations and experience regarding the quality of service rendered.

H0: Assurance is not positively related to expectations and experience regarding the quality of service rendered.

H4: Assurance is positively related to expectations and experience regarding the quality of service rendered.

H0: Empathy is not positively related to expectations and experience regarding the quality of service rendered.

H5: Empathy is positively related to expectations and experience regarding the quality of service rendered.

## **1.5 THEORETICAL FRAMEWORK AND LITERATURE REVIEW**

This section describes briefly the theories that are used in the study. The theories are drawn from three disciplines namely Integrated Marketing Communication, Business Management and Information and Communication Technologies (Digital Communication). The theories from which the research is anchored are service – dominant logic of marketing, Expectation-Disconfirmation paradigm, Relationship marketing, New Public Management, Technology Acceptance Model and Diffusion of Innovation and these are elaborated in chapter three.

### **1.5.1 Synopsis of Theories used in the study**

Service providers have an obligation to meet the demands of customers in such a way that they are satisfied. This is done through the identification of customer needs through a communication process. In this study, the Integrated Marketing Communication approach was used. A research study conducted by the Public Sector Research Centre (2007), indicates the importance of communication between an organisation and its customers. This is because communication has always been the foundation of good customer service. The report further states that today's customers expect customer service to be accessible anytime, anywhere – and by whatever means of communication customers prefer. Hence, a need for improved channels of service delivery in CICs.

Organisations need to market their services to customers. Marketing informs, persuades and reminds customers of market offerings. It influences the behaviour of target market. The service provider's objectives are to provide offerings that satisfy the customer needs for their continued economic survival. Service providers will need to understand how customers evaluate the quality service being offered - how they choose one organisation in preference to another. Customers' satisfaction is central to customer centric paradigm and has become a key means of attaining quality improvement in services.

The study focused on the customer centric approach, which forms an integral part of organisational functioning. Customer orientation emphasises on customer satisfaction, which is crucial to governments.

Governments are required to offer high quality services that meet the expectations of the customers. To meet this expectations, there is need to adopt the customer oriented approach and also employee performance and quality measurement. Customer orientation has positive impact on employee motivation and performance. In depth, knowledge about the customer is vital and this can be drawn from demography. Innovations and continuous improvement are essential to the sustainability of public sector transformation. Communication between an organization and its customers has been a foundation of good customer service. Customers expect customer service to be accessible any time and place. Relational marketing is dealt with in detail as outlined in chapter three

Inversini, De-Carlo and Masiero (2020) asset that the concept customer centric focuses on deeply embedded mindsets and norms that prioritises customer relationship in an organization. Within this concept, employees are encouraged to engage with customers with the objective of creating value for them and the organisation. Organisational success exist in the differential value the organisation is able to offer to its customers. Customer orientations in all aspects of an organisation will build effective customer relationship that contributes to value creation for the customers and their ultimate positive behaviour. Value can be understood as the complete assessment of utility offerings according to perceptions of what is received and what is given. In customer centric, customer value is understood as the capacity of organisations to engage effectively with customers in providing the preferred experiences and weighing and handling the customers' evaluations (Inversini, De-Carlo and Masiero, 2020).

Quality of services should be evaluated by customers and their needs taken into consideration. Continuous and constant measurement of a reliable tool is strongly supported by (Chatzoglou, Chatzoudes, Vraimaki and Diamantidis 2013). Generating value in customers is important and the Service-Dominant of Marketing in the theoretical framework elaborates more on this.

Governments through the public sectors are expected to provide services that meet the citizen's demands. In this study the New Public Management (NPM) was used as one of the theories. The concept of customer centric study is dealt with in theories of relational

marketing, the customer centric and Expectation-Disconfirmation paradigm and NPM. Technology acceptance plays a role in the implementation of Community information Centres (CICs) in Communities and the Technology Acceptance Model (TAM) and Diffusion of Innovation (DOI) theories address issues of acceptance and adoption of technology. The DOI aims to analyse the characteristics of technology adopters.

### **1.5.2 Synopsis of the Literature Review for the study**

The CICs need to be fully aware of its customer's perception in relation to its offerings. If MICTPCS does not measure the level of its customers' actual perceptions of the service and make appropriate measure, the result may have a direct impact on customer retention and CIC usage. Sayareh, Iranshahi and Golfachrabadi (2016:2) highlight the importance of regular assessment of service quality as it promotes the quality of services. They stress the importance of regular assessment of quality services and having an appropriate tool for service quality measurement. They elaborate that an appropriate instrument will provide sound and accurate results to management whose future decisions for further investment are dependent upon the results. Ladhari (2009) also supports the issue of using an appropriate tool for measuring service quality. Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) point out the importance of service quality in any organization. The authors further allude to the significance of having a service quality measuring method available in organisations. The SERVQUAL model can be applied for the evaluation of service quality in various service sectors.

Studies on service quality have been conducted, as previously indicated, in different sectors that include health, telecommunications.

Twinomurwizi, Zwane and Debusho's (2012) study on "SERVQUAL as social-technical approach to measuring e-Government service quality and guiding e-governance strategies" will be applied in the Zimbabwean context using CICs. The study by Twinomurwizi, Zwane and Debusho (2012) looked at measuring quality of services in e-government service centres known as Thusong Service Centres (TSC) in South Africa. Thusong Service Centres and Community Information Centres from Zimbabwe share similar characteristics as they are both community information centres that have been

established by government in rural communities. Structural Equation Modelling (SEM) was adopted in the study and this is in tandem to “what is known, service quality is low and requires regular measurement and evaluation to inform future improvements”. Results from the study revealed that application of the SERVQUAL model in the context of e-government would assist governments to understand the type and quality of services that is expected and how its value is perceived.

A study by Negi (2009) focused on the perceived quality of mobile communications experience from Ethiopia. The research explored the causal relationship between service quality dimensions and service quality. It also identified service quality gaps as experienced by subscribers of mobile services of the Ethiopian Telecommunications Corporation. The study adopted the SERVQUAL tool. The results indicated that it is a valid tool to use in the Ethiopian mobile telecommunications sector. Saraie and Amini (2012) measured the service quality of rural ICT centres in India using the SERVQUAL model. Findings also indicated that the tool can be used to determine the quality of services offered by CICs in rural areas. The CICs in Zimbabwe are in their infancy and like any innovation technology, they have their shortcomings particularly in the beginning stages. The quality principle can be applied to take cognisance of the client’s expectations and by measuring the quality of services. Measuring the quality of services makes it possible to understand the pros and cons of the provided services in order to satisfy the clients by providing the best quality service.

Arokiasamy and Abdullah (2013) used the SERVQUAL model to measure the service quality in a cellular telecommunication service provider in Malaysia. The emerging results showed that the SERVQUAL model constructs positively influence customer satisfaction. In another study in the Pakistan telecommunication sector by Warraich, Warraich and Asif (2013) there were higher ratings on tangible dimension while, empathy rated lowly. Kakourius and Finos (2016) conducted a study on service quality perceptions of customers of a bank in the Serbian market. The SERVQUAL measurement tool was used to compare customer satisfaction with an attempt to prove a correlation between customer perceptions regarding service quality.

It could be deduced findings of the study that, there are some limitations with the use of the SERVQUAL instrument as pointed out by Kakourius and Finos (2016). These researchers pointed out that one of the challenges of the SERVQUAL model was competency and that the challenge of the use of the customer's view with regard to competency could not be understated. As the SERVQUAL model deals with customers' perception; competency is viewed from the customer's perspective. This raises a challenge, as a service provider might have competent staff that are viewed as incompetent by the customers.

For the CICs to perform better, the quality of existing services provided should be improved. Mtega and Malekani (2009) point out that this is a strategic procedure which involves the development of human resources and facilities found within the CICs. Financial stability is also key in the improvement of quality services and recommendations. Therefore, it is imperative that the CICs services should expand and include a variety of services that can aid in attracting and retaining users. Moreover, the expansion of these services offered can also increase the revenue for the CICs. It therefore becomes mandatory that the Zimbabwean government embarking on such projects need to evaluate the services to see the quality of services they offer in the CICs if they are to compete with other role players in the sector.

A study by Faroqi and Collings (2019) examined the service delivery effectiveness of Union Information and Service Centres (UISCs) in Bangladesh. Results indicated that determining the efficiency of such centres would assist in tracking accomplishments to date, in line with the objective and also the desired results that were aimed initially at the centres. Faroqi and Collings (2019) observe that governments in developing countries are confronted with challenges that include that of social and economic factors. This leaves governments with challenges of not being able to link its citizens to the digital world.

## 1.6 SYNOPSIS OF THE RESEARCH DESIGN

This section outlines the methodology and research design that was used in order to reach the research goals of the study. A comprehensive discussion is provided in Chapter Five of this study. The study used the quantitative research methodology, which Creswell (2014) describes as a method for testing objective theories by examining the associations among variables. He further elaborates that these variables are measured by instruments, so that numbered data can be analysed using statistical techniques.

A survey design was used to measure the variables of the quality of services delivered at three Community Information Centres in Zimbabwe. Creswell (2014) elaborates that survey research provides a quantitative or numeric depiction of inclinations, attitudes, or opinions of a population by studying a sample of that population.

Random sampling was used to select a sample of 475 respondents. This, according to Creswell (2014), enhances the chances of each individual in the population to have an equal probability of being selected. Random selection can be seen as a gold standard in quantitative research, as the assumption is that “randomness of the process would control for possible bias or systemic biases or systemic deviation in the sample” (Guerin, 2012:55).

For the purpose of fair representation or misappropriate participants purposive sampling was used. Nyundo (2013) state that this kind of sampling can be used to obtain a desired sample - in this study, three CICs were purposively selected. The sites were purposively selected to represent different geographical areas. A sample of 475 respondents was drawn from the three field studies and an adapted SERVQUAL questionnaire was used as the data collection instrument. Data collected were based on the user’s perceptions and expectations of the quality of service delivery in CICs. The SERVQUAL questionnaire was based on five dimensions of assurance, responsiveness, empathy, reliability and tangible. The SERVQUAL instrument was slightly modified to suit the CICs context and this is also in line with a study by Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) who states that slightly modifying the instrument ensures that it is understood by



the sample population. Modifications to the instrument included rephrasing of a number of items to suit the context of the study and a Likert scale was used in the measurement instrument.

Data analysis encompassed two statistical techniques whereby the initial data were analysed using the Statistical Package for the Social Sciences (SPSS) through a descriptive analysis to obtain the means, standard deviations and frequencies of the data. Factor analysis - a statistical procedure used to identify relations among variables in a correlation matrix - is commonly used to reduce a large number of responses or questions to a few factors. Confirmatory analysis was also carried out to test whether data fit the hypothesized measurement model, whilst exploratory factor analysis was used to identify the factor structure or model for a set of variables. Structural Equation Modelling (SEM using AMOS v24) was used to test the postulated hypothesized model.

## **1.7 SIGNIFICANCE OF THE RESEARCH**

According to the Zimbabwean ICT policy (2016:34) “Zimbabwe is lagging behind in technology research and development”. The study attempts to fill in this information gap. Studies on service quality in general in the telecommunication sector have been conducted in other countries. Cai, Wang, Xia and Wang (2019) cites Colle (2005), and Naik, Joshi and Basavaraj (2012), who observed that a number of frameworks have been established and applied to examine the service quality and effectiveness provided by the CICs. Similar studies have been conducted on customer satisfaction (Abdulwahab and Dahalin, 2010; Best & Kumar, 2008). However, one that specifically focuses on the CICs in Zimbabwe has not been extensively carried out. This study will therefore contribute to studies on SERVQUAL and CICs in developing countries with a focus on Zimbabwe. To the best knowledge of the researcher, the SERVQUAL model has not been used before to measure the quality of services at the CICs in Zimbabwe.

Practically, the study may also assist policy makers and MICTPCS with useful suggestions for CIC projects. Results from the study may be used for planning, execution and evaluation of the CIC project as it is rolled out in different districts.

While access to CICs is crucial in communities there is no assurance that they will be embraced by customers. User's perceived needs, skills and knowledge and organizational environment should be considered in the enactment of CICs.

### **1.7.1 Theoretical implications**

The results from this research, will help assess the quality of services at these CICs as they are still in their infancy as well as build on the body of knowledge to debates on the importance of user's perception of CICs. According to Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) the public sector needs to constantly measure and develop effectiveness and efficiency of superior customer service. In order to achieve this, there is need for systems that measure the customer's experiences and set specific objectives for the process developments.

Organisational operations that include tangible product or intangible service need to be accepted by customers first for improvements to be realized. The core of organizational overall performance improvement is the ability of getting customer satisfaction. This therefore calls for ongoing evaluation of services provided by organisations. Gaps identified from the study can be used by management to improve on the services offered in CICs. Since, CICs are still being implemented in different districts and according to Faroqi, Siddiquee and Ullah (2019:113), "it is recommended that strong policy and organisational support is offered to ensure smooth operations and services that ultimately determine the sustainability of the project".

As indicated by Twinomurwizi, Zwane and Debushe (2012), applying the SERVQUAL approach will give MICTPCS an opportunity to develop ways to understand what type and quality of services are expected and how its value is perceived. The adapted SERVQUAL tool can be applied to understanding customer expectations and experiences of services in CICs, thus enabling government to improve their service delivery and the government efforts in rolling out the CICs. Also, to ensure the survival of the CICs, there is a need to identify factors that ensure long-term success through continuing guidance from constant evaluations.

## **1.7 DELIMITATIONS OF STUDY**

The aim of the research is to determine how customers rate the quality of the service that they expect to get at Community Information Centres in Zimbabwe, compared to how they rate the quality of the service that they are getting with a specific focus on CIC users only. This delimited the study to users only. The study focused on three community centres that were accessible to the researcher. Thus, the sample size also formed part of the delimitation of the study. The SERVQUAL model used according to Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) fails to offer a complete view of needs, expectations and perceptions in the context of the public sector. A delimitation of time is also noted as six weeks were used for the data collection phase.

## **1.8 DEMARCATION OF CHAPTERS**

Proceedings in this study start with outlining the background of service quality and different views on CICs. Service quality in organisations is outlined and focus is zoomed in on the CICs in the Zimbabwean context. The thesis structure is discussed in this section. The thesis is composed of seven chapters that are alluded to below.

### **Chapter One: Introduction and background**

The Chapter provides the introduction and overview, the problem statement, objectives, hypotheses and the significance of the study. The research objectives and hypotheses are clearly specified. The Chapter also includes the background and status quo of the telecommunications sector in Zimbabwe, the role of CICs in service delivery. A synopsis of the theoretical framework, literature review and methodology are also included.

### **Chapter Two: Community Information Centres in Zimbabwe**

This Chapter gives the background and context of the study and it focuses on the evolution of Community Information Centres in emerging economies and Zimbabwe in particular. The communication role of Community Information Centres is discussed. The paradigm shift in the use of Community Information Centres by different stakeholders are alluded to with the focus on the delivery of services by governments in the African context.

Special attention is given to Zimbabwe and South Africa community information Centre initiative (Thusong centres).

### **Chapter Three: Theoretical framework**

This Chapter gives the theoretical framework for the study. The theories of service – dominant logic of marketing, Expectation-Disconfirmation, Relationship marketing, New Public Management, Technology Acceptance and Diffusion of Innovation that underpin the study are discussed.

### **Chapter Four: Service delivery in Community Information Centres**

The Chapter focuses on perceptions and experiences on service quality. Concepts that the study uses, such as service quality, customer expectations and perceptions, are discussed. The operationalisation of the study is covered, with a focus on the “gaps” model which was adopted as a theoretical model. The SERVQUAL and its constructs (tangibles, reliability, responsiveness, assurance and empathy) are discussed based on reviewed literature.

### **Chapter Five: Research methodology**

Meta-theoretical assumptions on which the study is based, are discussed. The research process is fully articulated. The data collection process, in which the SERVQUAL questionnaire is used to collect data from three field studies (Community Information Centres) in Zimbabwe, is discussed in detail. A total number of 475 respondents participated in the research. Means of testing the hypotheses are discussed in detail in the Chapter. Reliability and validity of the study is presented and discussed. The questionnaire design is also tabulated. Data analysis techniques are explained and these include descriptive, inferential and the SEMs.

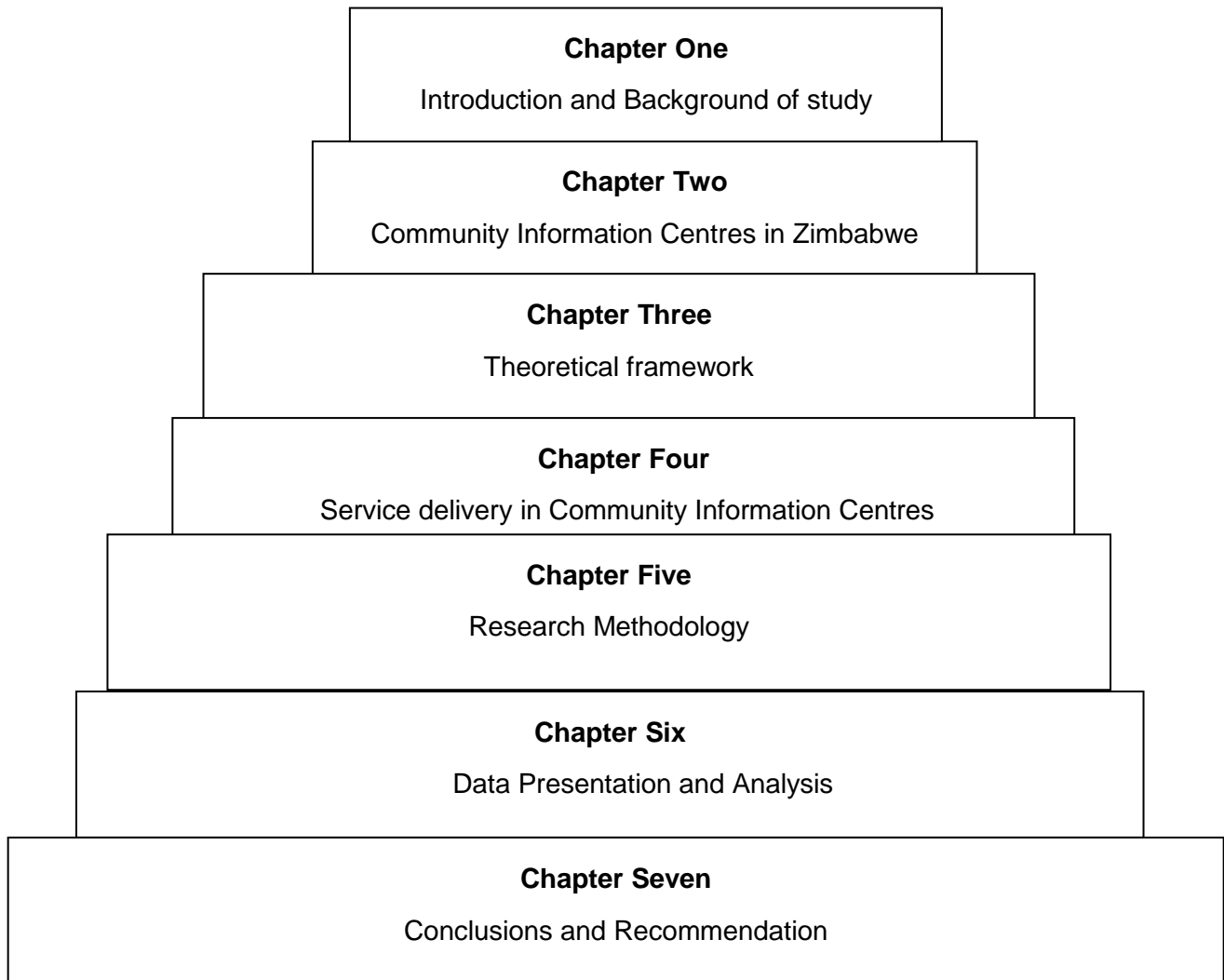
### **Chapter Six: Data analysis and presentation**

The Chapter highlights the statistical results, which include descriptive, and inferential statistics and SEM. The research results are tabulated in graphs, tables and narratives. The different SEM models are also presented in diagrams.

## Chapter Seven: Recommendations and conclusion

This is the last chapter and it sums up the study and its findings. The research objectives and hypotheses are recapped. The research limitations are also highlighted in the Chapter. Conclusions based on the findings, as well as the recommendations, are presented.

The flow of chapters is illustrated below.



### 1.9 CONCLUSION

Chapter one focused on the introduction and research background, problem statement, research objectives, hypotheses and the significance of the research.

Issues surrounding community information centres and communication and service delivery at CICs and service quality in organisations were also discussed. The chapter, also introduces the context of the study with a focus on the telecommunication sector of Zimbabwe. A synopsis of the research design, the research methodology and the literature review that the research is anchored in, were introduced. The next chapter will look at Community Information Centres in Zimbabwe.

## CHAPTER TWO

### COMMUNITY INFORMATION CENTRES IN ZIMBABWE

#### 2.0 INTRODUCTION

The chapter serves as a context and background to the study of CICs in Zimbabwe. Community Information Centres equipped with ICTs have become new ways of reaching people and delivering services in developing countries. They also provide opportunities for governments to create systems that improve public service delivery in rural communities. This enables citizens to participate in government's decision making process. In addition, community information centres play a pivotal role in information delivery systems (Sornamohan, 2009). The chapter will focus on the evolution of community information Centres and their role within the communication field, the government reforms that include e-delivery of government services through the centres. The following sections will give detailed information on the above mentioned.

#### 2.1 THE EVOLUTION OF COMMUNITY INFORMATION CENTRES

According to UNESCO (2003), shared community access to ICT services has been the optional avenue for rural communities to obtain access to information. This stems from the challenges that rural communities face that include infrastructure constraints; as well as insufficient financial resources to buy digital equipment for home use. The report further highlights the advantages of having shared community access points, which are more economical and effective in communities where ICT literacy is prevalent. The UNESCO (nd) report points out that, despite the different names used to refer to community information centres, one feature is prevalent: they bring new learning opportunities to those residing in remote areas and their main mandate is to achieve equality of access to information in those places.

Community information centres began to emerge in the early 1970s. The focal point was the acquisition, processing, storing and dissemination of information that was required by

the communities they served. In the 1980s there was a change in the way CICs operated and they began to reflect the growing importance of information and communication technology in creating, storing and transmitting information (UNESCO, 2003). The focal point was therefore, to provide opportunities to use ICT for a wide range of services beyond acquiring, processing and storing information.

Murekji (2010:10) describes community information centres as “Rural knowledge centres, information kiosks, village knowledge centres, and common service centres that seek to provide shared and mediated access to information and services by using new technologies like computers and the Internet”. CICs have many generic names. Within the Zimbabwean government initiative they are called Community Information Centres.

The CIC Zimbabwean concept paper (2016:1) refers to the CIC as a

“facility in a community that will provide a platform for access to various e-enabled services such as information for public consumption (e-government services), telephony, printing, faxing and photocopying services, imaging, document lamination services, internet and e-mail services, recreational (gaming) services and e-learning services among others”.

Community Information Centres should have appropriate information needed for community advancement. Shadrach and Sharma (2011) states that the agenda for setting up CICs goes beyond bringing in technology to marginalised communities, it is also “ensuring its actual appropriation by them to access value added information, knowledge and services to use for their overall advancement”. The approach according to Hurbert (2006) is based on dialogical or participatory approach that takes cognisance of communities needs during the implementation of ICT centres. He further elaborates the purpose of having such centres in rural communities as having an enabling factor to the rural communities to access relevant information and access to means of communication.

In addition, CICs also have the potential to integrate government departments which have been operating in departmental silos. This leads to public services that work more efficiently at lower costs.



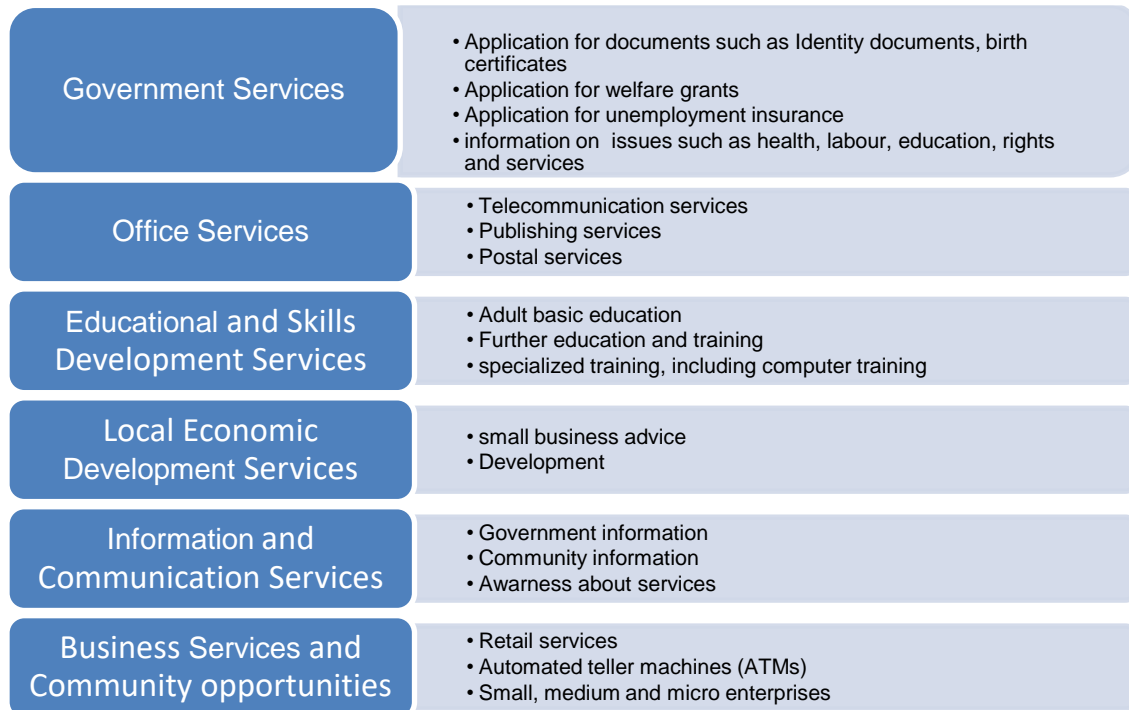
The CICs offer a kind of enforced passage point for the objective of reform programmes and the latest trends in the international development agenda for instance, the CICs consider concepts like extended service delivery, integration of services, non-state ownership, bridging the digital divide as well as achievement of Millennium Development Goals (MDGs). Rao (2008:476) defines community information centres as:

“Public-access information and communication initiatives that serve as community-gathering places where people can access communication technology and applications, learn new skills, tackle local social issues, face common challenges and empower their neighbours”.

They are crucial tools for promoting development in African countries, especially where e-access is extremely limited (Buhigiro, 2012). They also have the potential to provide benefits such as improvement in education, health, agriculture and in business entrepreneurship to deprived African communities.

Bailey and Ngwenyama, (2010) acknowledge the contribution made by the introduction of CICs in Africa. They posit that there has been an increase in social and economic development, especially in the poor and rural marginalized communities. Rao (2008) sums up the services offered in community information centres as providing access to communication facilities; providing training in the use of communication facilities and IT equipment; and allowing local communities to integrate IT in their lives and providing on-demand ICTs for development services.

**Figure 2.1: Six pillar Model of Government Service Centres in South Africa**



Source: (GCIS,2006) in Magoro 2013

### 2.1.1 Community information centres in Zimbabwe

Ndinde (2014) gives the history of community information centres in Zimbabwe. He states that

“during the 1980s, when Zimbabwe was celebrating its independence the nature of CICs began to reflect the growing importance of information and communication technology in creating, storing, transmitting and communicating information”.

The basic technology used was telephones, fax machines, photocopiers, duplicators and printers. It is unfortunate that many rural communities lacked such technology during that era. Therefore, the establishment of CICs was to close the communication gap in the 21<sup>st</sup> century and provide information needs of the local communities especially, the subsistence farmers who reside in rural areas.

World Links Zimbabwe, which is part of an international network of World Links organisations, had been actively involved in the establishment of ICT centres in Zimbabwe since mid-1999. Twelve centres have been established since then, in collaboration with the World Bank and the Ministry of Education, Sport and Culture of Zimbabwe. The centres were established near schools where they could service both the schools and communities (Rajah, 2015). This saw the birth of school based community information centres. World Links also established the “Blue Bus” which had computers installed and which drove to rural communities to encourage access to ICT services.

This approach has changed drastically over the past few years. In pursuit of the Presidential computerization programme, the Government’s economic blue print (ZIM-ASSET, which spells out Information Communication Technologies as a vehicle for development and socio-economic transformation in collaboration with Zimbabwe Posts (Private) Limited (ZimPost)) has embarked on the establishment of Community Information Centres (CICs) in rural communities (Zimbabwean CIC Concept paper, 2016). Furthermore, the Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ) has partnered with its parent Ministry of Information Communication Technology, Postal and Courier Services (MICTPCS) and Cybersecurity, as well as the main Postal Service Operators (ZimPost), in implementing a programme to install at least 210 Information Communication Technology Centres across the country (POTRAZ, nd). It is further stated that the programme began in earnest in November 2016 with 12 centres had been installed as a pilot project (POTRAZ, nd).

Kundishona (nd) states that one of the key strategies in the Geneva Action Plan which the heads of states agreed and signed during the World Summit on Information Society (WSIS) in December 2003, was to “connect villages with ICTs and community access points”. A note reiterated by the former president of Zimbabwe, President Robert Mugabe, when he officially opened the Murombedzi Community Information Centre in Mashonaland West province, who stated: “we have had a Geneva declaration in 2003, where we laid the foundation during the World Summit on the Information Society to give equal technological support to all our rural areas in our quest to bridge the digital divide”.

Machivenyika (2014) also quotes the Former President Robert Mugabe's speech when he opened the CIC at Murombedzi and states that CICs are meant to bring equity of access to ICTs to rural communities and thereby bridge the digital divide between rural and urban areas. The former President pointed out the benefits of harnessing ICTs in socio- and economic development. The CICs will aid communities in accessing e-government services and information. ZimPost has been providing government services since its inception. E-government services currently being offered through ZimPost outlets include: hospital fees, land fees, deeds office (application, registration and certification), liquor licences and mine fees (Zimpost, 2016).

Ndinde (2014) explains the role of community based information centres in rural development in that they can "meet socio-economic targets for rural people by connecting, and empowering rural populace to developmental floodgates" and thereby transform many citizens' livelihood in rural communities. In essence, the CICs are viewed as a means to use the benefits (of ICT) to raise the socio-economic conditions of the people of Zimbabwe, particularly those in the rural areas (Zimbabwean CIC Concept paper, 2016).

From this perspective, Machivenyika (2014) states that the establishment of CICs took place in response to Goal 2 of the Connect Africa Summit, which highlights the aim of ICT as follows: "Connect African Villages to broadband ICT services by 2015 and implement shared access initiatives such as community CICs and village phones". The establishment of CICs are also in line with the Zim-Assest, which treats communication in general, and ICTs in particular, as one of the pillars for economic growth. Zim-Asset was adopted by the Zimbabwean government in 2013 as an "economic blue print aimed at growing the economy through creation of jobs, improving health, social service delivery and providing affordable housing". The strategic plan states that the Information Centre will provide for several ICT related services such as Internet access, e-mail services, telephone, photocopying, printing, faxing, access to newspapers, and general secretarial and ICT related services.

Mawire (2015) quotes the Principal Director in the Ministry of Information Communication Technology, Postal and Courier Services, who highlights the objectives of the CICs as facilities meant to bring an increase in ICT access to the marginalised or disadvantaged community areas that include rural and remote farming areas. The CICs have been established to address the needs of the market by catering for schools, youths, women and girls, farmers, Agriculture Extension Officers and Small to Medium Enterprises in these areas (ZimPost). The project will increase ICT provision in rural communities nationwide. According to Chigogo (2016), the Zimbabwean government envisages to establish more CICs across the country's 52 districts. Pembere (2016) quotes the Minister of Information Communication Technology, Postal and Courier Services by stating that every district should have a CIC by 2017 and that the number should reach at least 210. He further states that young people with programming skills need to be encouraged to participate in CIC programmes and develop applications that can be used locally. This is also seen to promote technological advancement for economic growth in rural communities.

The Zimbabwean CIC Concept paper (2016) emphasises the role of the centres as they “intended to stimulate growth and job creation and serve as electronic libraries where people from remotely located areas can look for information pertaining to farming, education and health care to mention a few”. The Zimbabwean CIC Concept paper (2016) further elaborates that they are also meant to be one stop ICT access points for e-government services. Not only will they serve as e-Government access points, but they will also share an underlying purpose of achieving equality of access to information, or, at least, to reduce levels of inequality. ZimPost highlights that the “project has been envisaged to benefit the partnering organisations through the ability to provide ICT related services to the public, improve traffic flow and revenues generated, modernization of infrastructure and bridging the digital divide”.

### **2.1.2 CICs’ Sustainability**

Many CICs were built on existing infrastructure and, as such, in Zimbabwe, they are housed at ZimPost premises or Post offices.

The notion of using post offices emanated from the realisation that these are established infrastructures and are scattered throughout the country. The Zimbabwean CIC Concept paper (2016) states that it was hoped that it would be easier for the rural population to access Post Offices. POTRAZ (nd) points out that the renovations for the Post Offices were carried out by unemployed members of the communities, and those with small family businesses, under the supervision of qualified supervisors. This reduced the costs and ensured the continuous rollout of CICs - it also ensured community participation. This stance was taken to ensure that the community feels a sense of ownership towards the project, which is a missing link in most development projects where the community members were not involved at any stage of project planning and implementation.

However, despite community participation, one of the challenges facing CICs is the issue of sustainability. The Zimbabwean CICs Concept paper (2016) laid out how CICs would be sustained which will depend on the “long-term commitment of key staff, the long-term stability of finance, and the ability to remain relevant to community needs”. This view is shared by Gollakota and Doshi (2011) who point out that a number of studies have indicated that CICs did not live up to their potential, as most of the rural community did not foresee the importance of ICT. UNESCO (2003) also states that a number of centres have been established in the last four decades, but a few have survived after the initial period of funding has lapsed. A small percentage seems to be sustainable in the long term.

As such calls have been made that these centres’ aims and objectives should be aligned with the policies of communities for long term sustainability to gather support from the community. The UNESCO (2003) report further elaborates that policies may not be drawn formally but these could be entrenched in the community’s belief systems, aspirations, plans and financial commitments.

Dangal (2011) highlights that citizen’s perception of a community information centres determines its future. Positive views are pointers for future development of community information centres. He further elaborates that citizens’ views on community information centres is the reflection of their beliefs about what they can do using community

information centre services. His study reveals a positive perception towards community information centres from the community. The community perceive the community information centres as a means of overcoming the communication and information barriers, means of gaining access to a wide range of services which are cost effective and ultimately for transformation of the livelihood of rural people.

Sustainability can also be achieved if communities are provided with schools, clinics, a road network and a transport system. Currently the CIC programme is funded by the Universal Service Fund (USF). The fund was designed to ensure that clients to the CICs pay a minimal charge of \$1 per hour in urban areas and fifty cents (\$0.50) per hour in rural areas. This strategy ensured that the CICs could continue to function even if the Universal Fund's Revenues demur. The charges are levied to users in order to subsidise the cost of general maintenance and staff; as well as freeing funds in the USF to fund new installations of CICs in other communities.

ZimPost highlights other issues that need to be looked into for the success of CICs. These include: government's support in rolling out e-Government services (passport application forms, identity cards application forms, birth certificates, liquor licenses, vehicle registration and licensing), affordable bandwidth availability and backup power supply.

### **2.1.3 Impact of CICS on Zimbabwean communities**

There has been a notable impact on communities following the deployment of CICs. POTRAZ (nd) points out that other government departments were making use of the CICs; it specifically cites the use of the online application for school admissions and cited example is application for secondary school admission at form one level and this is being implemented by the Ministry of Primary and Secondary Education.

Digitalisation in banks furthermore requires that corporates and individuals conduct online banking - CICs have afforded community members places to carry out their online transactions. Community members also visit to learn how to use computers and be included in the digital world.

CICs have opened a new world to community members who lack the required academic qualifications to get basic training in the use of ICT. The community members have access to computer training, among others. Training is offered to the community through the train-the-trainer programme and large numbers of community members, such as vendors, traditional chiefs and the less privileged in society, have received the training (POTRAZ, nd). This impacts positively on society as it decreases the digital divide that exists in terms of access to ICT services. Bar et.al (2013) allude that users of CICs can reap the benefits offered by these centres if they possess some ICT skills and see the need to use the CICs. Offering ICT training skills can also lead to the sustainability of the Community information Centre operations in the long run. For example, Musiyandaka, Ranga and Kiwa (2013) in their study highlight how the computers that were donated to schools by the former President of Zimbabwe were not used. These researchers, claim that the project became a white elephant as the beneficiaries lacked ICT skills and ended up not using the equipment.

On the other hand, CICs have been lauded for playing a positive role among the youth. For instance they have a gaming corner which attracts the youth, as it provides recreation. This impacts positively on society, as they are kept busy and distanced from mischief. POTRAZ (nd) points out that the impact of a gaming corner has not yet been scientifically measured, but it is believed that spending more time in the gaming corner can pull the youths away from unfavourable activities.

In addition, CICs have provided a platform for further development and studies in the area of ICTs. From the basic computer training that the community members receive, some have developed an interest in furthering their skills in ICT and inquiries on possibilities of following advanced training modules have been received (POTRAZ, nd). As such, the community has been empowered through the deployment of CICs. According to POTRAZ (nd) CICs offer training to communities to enable them to make use of the centres and to gain ICT literacy in the process. A basic computer skills course is part of the CIC programme and it is implemented at each centre. The POTRAZ further state that computers in the centre are used for day to day activities, such as entrepreneurial and



farming activities by the communities. For community members who would like to take up careers in ICTs, the CICs offer a platform which can help in the trajectory in ICT careers. Community members are trained through the train-the-trainer programme and those trained are expected to train the rest of the community. Offering ICT training skills could also lead to the sustainability of the CICs' operations.

Ndinde and Kadodo (2014) opine that community-based information centres can act as significant trajectories in meeting social and economic targets for rural people by connecting them to developmental programs. The establishment of such centres will furthermore strengthen and empower rural people to be among global players. A view supported by Tsokota and Solms (2013) who allude to the fact that, ICT could help rationalize supply chains to better delivery of services, better-quality interactions of business and industry, as well as to enable access to information for citizens, thereby improving their decision-making. The authors further cite The Government of Zimbabwe (2012) that has recognized ICTs as one of the stakes for the anticipated economic turn-around.

## **2.2 COMMUNITY INFORMATION CENTRES AS MODES OF COMMUNICATION**

It can be noted that one of the contributing factors to the lagging behind in the peripheries of marginalised areas in Africa is the absence of points of contact to the world. The availability of such points can be lifesaving, which condenses the importance of community information centres in the developing world. This is so because community information centres are equipped with communication devices that communities can use to make contact with the world in a move that will promote their levels of seeking information for the various situations and uses. Community information centres are expected to cater for rural populations by providing access to basic ICTs and services to meet the basic necessities such as economical and communication needs of their communities (Sumbwanyambe, Neil and Clarke, 2011).

Ndinde (2014) points out the important role of information and communication activities. The author describes rural areas in developing countries as information poor.

Efficient access to information is vital for rural citizens. Community information Centres are necessary tools that are crucial in the provision of information and other content that is needed to live up to the needs of a certain community. Rural areas in Africa are particularly disadvantaged in terms of wealth and technology. This means they need social and financial empowerment, which will transform into the emancipatory resources that they need to survive. Assembling community information centres can be a way of assistance, so that people will get connected to the world, which opens up the channels of acquiring development.

A study by Msibi and Penzhorn (2010) revealed the importance of adapting to communication channels that promote the communication process. Results of the study showed that communication and specifically participatory communication plays a significant role in local government development initiatives. Furthermore this communication ensures that communities are part of the development process and that the needs, expectations and implementation of the development initiatives are inclusive and driven by the people who will benefit from them.

From his study on e-services in rural Nepal, Dangal (2011) revealed that based on the communicative role of community information centres in rural areas, citizens perceived that community information centres are an effective means for communication and accessing information. It was also noted that they aid in the facilitation of services and uplifting the socio-economic condition of the poor and disadvantaged people living in rural areas. This view is shared by Gomez (2012), who reveals how Public Access Computing (PAC) change people's lives. Users of PAC perceive that access to information helps them to build and maintain relationships, enhance learning opportunities and conduct online transactions.

ICT like internet offers valuable benefits in terms of improved vertical and horizontal communications among rural people. Dangal (2011) highlights that the "majority of the poor people living in rural and often isolated areas have no contact with the world beyond their nearest neighbours". Dangal further calls the areas they live in as information-deserted areas.

Ndinde (2014) highlights the importance of information in communities and states that the mandate of community information centres is to achieve equality of access to information. He further stated that “lack of access to information can severely constrain personal development through education”. In other others, having limited communication is cited as one of the reasons that has caused isolation and economic backwardness of rural communities. A view shared by Rahman and Bhuiyan (2014), United Nations Development Program (UNDP), 2011) who have recognized that the marginalised are poor not only because they are deprived of basic resources and socio-economic entitlements to life but they also lack access to information. This seclusion of rural communities perpetuates problems associated with socio economic deprivation such as poverty and diseases.

Undoubtedly, from the foregoing views it maybe deduced that CICs through provision of ICTs enables communication among people. Nampijja (2010:21) highlights the important role of ICTs as “medium of communication and exchange and a tool for development”. Communication is a process that links individuals and communities, governments and citizens, in participation and shared decision making. Communication has been defined as a process through which people acting together create, sustain and manage meanings through the use of verbal and non-verbal signs and symbols within a particular context (Conrad and Poole, 2012).

Bringing in CICs should not replace the informal communication channels instead it should complement or reinforce current informal communication channels. Rao (2008:474) buttresses the above and states that “information fuels knowledge, and knowledge is widely recognised as a key resource for development”. Ndinde and Kadodo (2014) highlight the role that CICs could play in rural areas. They can be “launch-pads for national debates and development at various levels and places”. This notion is further supported by Nompijja (2010) who highlights the central position of information in the development process. To him it is an essential component for development to take place. Development can therefore, be seen as considering the needs of people for the betterment of their living styles. In contrast to the linear communication of the modernization approach (one-way top-down approach), the participation approach from

the onset fosters a dialogical communication process between two parties. The parties involved are the source of innovation as the sender and the recipients of the services (community citizens).

Although it is envisioned that CICs will offer information to people, a study by Mtega and Malekani (2010) in Tanzania revealed that most of the sampled community information centres did not offer adequate information to the communities. As a recommendation, the research highlighted the importance of providing relevant information to people's needs. According to Ndinde and Kadodo (2014:49), the two-way flow of information from and to the rural based communities is an integral "pre-condition for the development of rural Zimbabwe towards eradication of widespread poverty". A study by Gopakumar (2007) on community information centres project in Kerala (India) draws on a theoretical framework on sociology of governance and takes an institutional perspective. The study brought out another perspective which not only put emphasis on the importance of an intermediary in the adoption of community information centres. The issue of an intermediary in the previous studies of community information centres was portrayed as an anchor for success of community information centres. His study brings in the element of trust, how trust amongst citizens and intermediaries at numerous levels affects the way e-governance services are conveyed through CICs.

A community information centre has the capacity to provide more than one information service which gives it more advantages than print media. It improves horizontal communication through existing media services that serve rural communities. This makes it advantageous to serve as a mode of communication in rural areas. Although, it is heralded as a mechanism that can be used as a mode of service delivery to rural communities' poor information structures. Chilimo (2008) in his study investigated ICT use by people in a rural community in Tanzania. The study used the sustainable livelihoods framework. The study revealed that a digital gap divide is prevalent in Tanzania between urban and rural areas.

The existence of the gap excludes the majority of the people from participating in the information society.

This exclusion cut off the rural communities from communicating with the rest of the world. Chilimo (2008:101) further states that “ICTs may add to the pattern of communication flows available for managing and enhancing the livelihoods framework”. Cited example of this is the vulnerability that people face which comes from lack of knowledge or information. Currently, most of the rural citizens, who normally survive on farming, have to rely on intermediaries to get information on market prices.

Several media and channels are used to disseminate information in rural areas. Maru (2003), Etta and Parvyn-Wamahiu (2001) mention radio, television, fax, internet and digital technologies, print (products of the press) and computer based or computer mediated modes as common media used in information dissemination. Conventional communication channels such as radio, video and television have been used successfully to communicate in developing countries but these have been monologue and not interactive (Kiplang’at, 2003). The interactive nature of ICTs on the other hand, leads to community empowerment (socially and economically). This then calls for approaches that combine the two so that they can be of benefit to the communities.

Community Information Centres have the potential to transform the economics of building institutional infrastructure in rural areas of the developing world by providing remote access to institutions that may be located in larger towns nearby. Thus, they have the potential to transform the biggest problem of rural political economy which is the distribution of small populations across large areas by ensuring that a single resource is distributed across an increasingly large number of users. Simply put, the CICs approach could play a role in national strategies for universal access in view of the fact that full universal service (a phone in every home) is not a realistic goal for rural communities in Africa. Rao (2008) cites the case of India whereby CICs are viewed as having the possibility for public access facilities in rural areas to make available an extensive range of low-cost communication and information services.

The National IT Task Force (India) sees CICs as information mediums and has made recommendations for the use of CICs in rural community projects.

Given this backdrop, it is expected that the CICs should be in a position to improve communication between the non-governmental organizations, government services, private sector entities and educational institutes that support rural and agricultural development. By sharing information about their activities in the fields of agriculture, rural development, forestry, fisheries, health, nutrition, and education, these agencies can better serve rural people and farmers. A study by Mkontho (2014) on “The effective government information accessibility system for a community in the remote areas of South Africa”, aimed at finding out how the community access government information. The study used a quantitative approach. Findings revealed the following variables: lack of community information centres, distance to community information centres, age, lack of education and infrastructure to be hindering accessibility of information. The study recommended the use of community information centres as a means to access e-government information. A recommendation also made was use of campaigns on awareness about the importance of access to information through CICs within the rural context.

### **2.3 COMMUNITY INFORMATION CENTRES AND GOVERNMENT REFORMS**

Literature indicates that “governments have been viewed as complex, mammoth bureaucratic establishments with a set of information silos that erect barriers to access of information and make the provision of services cumbersome and frustrating” (Coleman, 2006) (in Bwala, 2009:2). This calls for transformation on how services are delivered. Kundishora (nid) highlights the challenges of transformation facing governments in Africa. Change has been mandated by the age of network intelligence. Governments are now mandated to improve on efficiency and effectiveness of internal functions and processes within government departments and stakeholders through networking. With external reforms, Kundishona (nid) is of the view that governments need to give citizens access to government information. Stiftung (2002) (in Bwala, 2009) discusses the paradigm shift in government brought about by ICTs. This has led to change in the delivery of public services by public institutions. Bwala (2009:2) further elaborates that “ICTs in the context of e-government are looked at as a portal for information exchange or a platform through which decisions are made”.

Community information centres equipped with ICT services have become a new way of reaching the rural community and of delivering services in developing countries (Sornamohan, 2009). He further elaborates on the benefits of CICs and states that through CICs as mode of service delivery, people in rural communities can participate in government's decision making process. As such, they can be the delivery points for e-government services. This view is shared by Murekji (2010) who alludes that when they are used as delivery points for e-government, they can assist in improving government to citizen interface, and increasing reach, transparency, responsiveness, accountability, efficiency, effectiveness, citizen's empowerment and participation thereby modernising and improving on effectiveness in the delivery of services to the people. Therefore CICs are capable of providing opportunities for governments to create systems that improve public service delivery in rural communities. As such, CICs play a pivotal role in information delivery systems. ICT services through community information centres not only serve as instruments to deliver basic services in major social areas such as health and education, but are also important drivers in creating the stimulation of small businesses and enabling communication channels that make the social participation in democratic processes at community, provincial and national level possible. Therefore, CICs are important for national development.

Sornamohan (2012) furthermore posits that government reforms are currently attempted through the introduction of e-governance projects with the stated aim of improving the efficiency and effectiveness of public services. He further notes that, not only is efficiency, effectiveness and productivity achieved; there is also integration of the different government silos. For instance, the introduction of technology will enable governments to break down departmental silos, streamline bureaucracy, and integrate services. Sornamohan (2012) points out that this will lead to public services that work better and cost less. Echoing the above, is a study by Kuye and Naidoo's (2003) who that posits that new information technologies allow for integrated databases and common programme delivery. Accordingly, the authors alluded to the fact that clients will be able to face a "seamless" government in their daily interactions as part of programmes and services.

Therefore, these new information technologies offer the possibility of close and ongoing interaction between government and citizens.

However, it is important to note that technology is not a key in itself and the delivery of effective public services cannot be achieved via technology alone. Nor can it be achieved simply by imposing a policy and a regulatory framework. It requires wider change (Public Sector Research Centre Report (2007). Kuye and Naidoo (2003) also resonate that e-government is not about technology; it involves changing the way in which organisations operate. Kaisara and Pather (2011:212) view investing in technology as “not enough to improve the quality of services delivered”. Kundishona (nid) furthermore highlights that organisations should realign the way they operate, to meet up with the technology driven society. Reason being, technology has strengthened reforms in many areas, including governments.

According to Heeks (2001), there is an underlying assumption regarding the linearity between governance and development and the need for “good governance”. To some writers there is a particular logic according to which ICT is first used for e-administration (using ICT to improve administrative efficiency along the lines of neoliberal New Public Management (NPM) ideology); and e-services (using ICT to improve the delivery of routine services to citizens); and finally for e-democracy/e-society (using ICT to promote socio-economic activity) (Heeks, 2001). To Bwala (2009:2) governments are driving forces for development and based on this, ‘e-government facilitates a fast track development highway by facilitating information exchange between/amongst the different stakeholders’.

The establishment of CICs is one way in which improvements in service delivery in rural Zimbabwe has been implemented. Sornamohan (2012) states the role of CICs in providing opportunities to governments for creating systems to improve public service delivery in remote rural areas and cites the case of India. He further states that CICs enable citizens to participate in government's decision-making processes. They can be delivery points for providing e-governance services in the rural areas by making use of



the right tools and applications available. This is in line with Tsokota and Solms (2013) who allude to the fact that ICT could help rationalize supply chains to promote service delivery, better-quality interactions of business and industry, as well as to enable access to information for citizens, thereby improving their decision-making.

The authors further cite The Government of Zimbabwe (2012) that has recognized ICTs as one of the stakes for the anticipated economic turn-around. According to Sornamohan (2012), the establishment of community information centres in rural areas can improve accountability and effectiveness of government services. Of importance to note is that this could result in enhanced government service delivery for small businesses, and more importantly, it could modernise and ensure the efficient delivery of services to the citizen. This puts CICs at a central position in any information and service delivery system.

Another dimension is posited by Badsar, Samah, Hassan, Osman and Shaffri (2011) (who cite Zahurin *et al.*'s (2009) study, which is based on Malaysian community information centres). The study reveals the importance of a good delivery of quality services and how this contributes to community information centres' success. A similar view is shared by Alshehri, Drew and Alfarraj (2012:3) in their study on the analysis of e-government adoption in Saudi Arabia. They reveal the importance of ensuring positive experiences in seeding trust in e-government systems. High quality services in information centres will provide system performance that will generate superb customer experiences. Earlier studies on community information centres identified a set of factors that are prerequisites for e-governance service delivery to occur. These include the skills level of the user community, easy physical access to ICT services and relevant content in the local language.

According to Jacobs and Herselman (2005), CICs can be used to deliver needed services to communities. However, one of the challenges they pointed out in the use of community information centres in service delivery, was the absence of ongoing and continuous training for community information centre staff, as well as the maintenance of the centre's equipment.

Despite these challenges, community service centres play a major role in integrated service delivery across the globe. As a result, governments are acknowledging the contribution of CICs to local government communication; and service delivery to education, health and economic development. Gopakumar's (2007) findings on the Akshaya CICs project in Kerala, India, recommended the adoption of a multimode approach to service delivery in a bid to cater for the needs of all its clientele.

The World Bank (2004) points out the importance of economic development in the process of human development. It further points out that what is essential to the wellbeing of all people, is the effective delivery of basic services, such as health, education, livelihoods, water, and sanitation. The World Bank (2004:17) further echoes the above and points out that "by putting people at the centre of service provision, by enabling them to monitor and regulate service providers, by increasing their voice in policymaking, and by strengthening incentives for the providers, government can provide better services to its citizens and develop its service delivery framework".

## **2.4 COMMUNITY INFORMATION CENTRES AS E- DELIVERY CONDUITS**

According to Gopakumar (2007:19), community information centres are "proposed to operate as multipurpose community ICT centres offering e-governance, e-commerce and other ICT services". Gopakumar goes on to suggest the envisaged e-government services that can be offered in CICs. These include "providing information on health, education, agriculture; transactions between citizens and government; and providing entitlements" such as "certificates and licences". A close review on CICs and e-government by Garrido, Sey, Hart and Santana, (2012) and Gopakumar (2007:21) indicates that CICs are trending because they subsume concepts like extended service delivery, integration of service, non-actor ownership, bridging the digital divide, achievement of millennium development goals, and creation of an information society.

Kumar and Best (2006) found in their study that the availability of e-government services at public access facilities is positively associated with the use of certain services.

Use of these services leads to lower levels of corruption in service delivery. The study further found the increased use of birth certificate and old age pension services when residents became aware of the lower cost involved in accessing them at the internet kiosk. This included people who would otherwise not have availed themselves to the service through the traditional means. The study also reveals that e-government services led to the reduction in the intermediate channels of communication in government hierarchy, which in most cases involves cumbersome processes.

Gopakumar (2007) furthermore states that reforms in government are being implemented through the introduction of e-government projects and with the main mandate of improving efficiency and effectiveness of public services. E-government has been defined in many ways - Maumbe, Owei and Alexander (2008) have adopted a definition that encompasses the purpose of e-government. E-government is defined as the usage of any information and communications technology (ICT) grounded initiative to expand government service delivery and internal procedures. To the Government of Zimbabwe, e-government is an enabler that enables the overall application of the results-based management programme through the use of information communication technologies (ICT) to advance service delivery. Zinyama and Nhema (2016), writing from a Zimbabwean context, adopted the World Bank's definition of e-government, which refers to e-government as the use of information and communications technologies (ICT) intended to advance the efficiency, effectiveness, transparency and accountability of government processes.

Kumar and Best (2006:1) define e-government as the "use of information and communication technologies in the public sector to improve its operations and the delivery of services". Bwala (2009:10) is of the view that e-government is a channel through which governments interact with its citizens (e-citizens and e-service). E-government also improves public service delivery (e-administration) and builds eternal interactions (e-society). Bwala (2009) further mentions that e-government has been identified and adopted as the most efficient vehicle for appropriate, transparent and inclusive/participatory decision-making. Participation by citizens has been the missing link in most development or government projects in Africa and having a platform for

such debates can lead to the empowerment of citizens. Bwala (2009:5) further proposes that the “profound objective of e-government initiatives ought to be the frequent and recurring use of online services by citizens not only for obtaining information but also interacting with the government”. Below are the selected definitions of e-government

### Selected definitions of e-government

Source	Definition	Focus
<b>Bonham et al. (2001)</b>	eGovernment involves using information technology, specifically the internet to deliver government information, and in some cases, services, to citizens, businesses, and other government agencies	Internet Information and service delivery
<b>Deloitte and Touche (2002)</b>	The use of technology to enhance the access to and delivery of government services to benefit citizens, business partners, and employees.	Access Service delivery
<b>Heeks (2002a)</b>	The use of information and communication technologies (ICTs) to improve the services of public sector organizations	Improvement
<b>OECD (2003)</b>	The use of ICTs, and particularly the internet, as a tool to achieve better government.	Internet
<b>Basu (2004)</b>	eGovernment involves the automation or computerization of existing paper-based procedures in order to prompt new styles of leadership, new ways of debating and deciding strategies, new ways of transacting business, new ways of listening to citizens and communities and new ways of organization and delivering information. Ultimately, e-governance aims to enhance access to and delivery of government services to benefit citizens.	Transformation Access
<b>Ndou (2004)</b>	The use of ICT tools to reinvent the public sector by transforming its internal and external way of doing things and its interrelationships with customers and the business community.	Transformation
<b>Stoltzfus (2004)</b>	A program that utilizes internet communication technology (ICT) to improve communication, service, and transactional processes with stakeholders.	Internet communication and service delivery
<b>Chen, Chen, Haung and Ching (2006)</b>	eGovernment is a permanent commitment by government to improve the nature of the relationship between the private citizens and the public sector through enhanced, cost-effective, and efficient delivery of services, information, and knowledge.	Service delivery Public sector efficiency
<b>World Bank</b>	eGovernment refers to the use by government agencies of information technologies ...that have the ability to transform relations with citizens, businesses, and other arms of government.	Transformation

Source Maumbe, Owei and Alexander (2008)

Ruhode, Maumbe and Orwei (2008) opine that most of the definitions on e-government narrowly focus on the use of the internet to transform and improve governments. They go on to define e-government as the use of ICTs in the transition and process for

information provision, one-way interaction and two-way communication through interactive transactions. They further elaborate that most government ministries and departments in Zimbabwe are either in phase 1 or 2, where there is provision of information online or provision of downloadable forms on the internet.

**Figure 2.2: Stages of e-government development**

	Service Delivery Process		
	1	2	3
<i>Information</i>	→		
<i>Interaction</i>		→	
<i>2-way interaction</i>			→
<i>Transaction</i>			→
Provision of Information e.g citizens information website	Provision of downloadable forms	Submission of forms and applications online	Processing entire transactions online; provision of certificates, receipts for complete transactions etc.

Source: Ruhode, Maumbe and Orwei (2008)

## 2.5 SERVICE DELIVERY THROUGH E-GOVERNMENT FRAMEWORK

Service delivery is one of the many challenges confronting governments in Africa and there is currently an urgent need to find ways to meet this obligation. In Zimbabwe, the issue of service delivery remains a challenge that needs to be addressed given the low quality of service provision and the tenacious needs of the people, more specially those who reside in rural areas. The Organisation for Economic Cooperation and Development (OECD), (2010) points out the challenges of service delivery in rural areas. These are due to larger distances that have to be travelled by service users and service providers, and the small numbers of people in any location that precludes economies of scale. This makes delivering any particular service more expensive in a rural location than in urban

centres. Hence, the need to have an improved service delivery framework that cuts such costs. Service delivery is an important element in alleviating poverty in developing countries. According to Hernandez (2006) (as cited in Makanyeza, Kwandayi and Nyakobe-Ikobe, 2013) it emerged that service delivery is crucial to poverty alleviation and accounts for the realizing of the Millennium Development Goals (MDGs) in poor countries such as Zimbabwe, both directly and indirectly. According to Parasuraman *et.al.* (1985), the service industry is of great importance in the economy of many countries and this makes delivery of quality service an essential strategy for success and survival.

According to Zinyama (2012), e-governance contributes to poverty reduction through making communication easier and more affordable by enabling speedy and secure economic transactions. Sharma, Bao and Pengu (2014:82) consider e-governance “as the implementation of information and communication technologies (ICT) in order to improve public services and strengthen support to public policies”. Benefits derived from the system include reducing costs, improving service delivery and increasing transparency and communication between e-government and its citizens. E-government is of great significance for government to interact and communicate with its stakeholders, especially its citizens within the rural setup who do not have the privilege to be within the close vicinity of government structures (Zinyama, 2012).

On the other hand, Geetanjali, (2011) (in Nyundo, 2013) distinguishes the two e-government objectives which are internally focused processes (operations) and externally focused services. He further elaborates on the objectives, with the external objective of e-government being to fulfil the public’s needs and expectations satisfactorily in the front-office side, by simplifying the interaction with various online services. It also includes the use of ICT in government operations to facilitate speedy, transparent, accountable, efficient and effective interaction with the public, citizens, business and other agencies. Kuye and Naidoo (2003) opines that e-government also provides for an improved quality and cost-effectiveness of government services through the utilization of effective information sharing mechanisms and communication with its citizens. This mode of communication further allows for the development and growth of an improved set of

opportunities for participation in democratic institutions. Many governments in developing countries face a lot of challenges in terms of resources. Therefore, the adoption of e-government can alleviate problems of resource constraints that hinder improvements in government operations and delivery of services to the people.

Twinomurwizi (2012) is of the view that e-governance creates opportunities to become more efficient and effective towards the business and organisational community (government to business (G2B)) as well as internally (government to government (G2G)); and more transparent towards the individual (government to citizen (G2C)). According to Zinyama and Nhema (2016), e-government relies entirely on ICT to provide services such as: convenient access to interactive information and services; timely delivery of public services; and efficient and effective methods of conducting business transactions. Kundishora (nid) further advances that the focal point of e-government should be on the customer (customer driven) and should be service oriented, thus meeting the needs of citizens and improving the quality of life.

### **2.5.1 Stages of e-government development**

According to Makoza (2013) there are a number of process of implementing e-government, following sequences or phases. A number of different phases have been identified in the development of e-government. Sigu and Long (2006) (in Makoza, 2013) suggest six phases of e-governance, namely: presence, interaction, transactions, transformation, seamless and e-democracy. The composition of the six stage model includes: web presence, one-way interaction, two-way interaction, transaction and integration.

Kasara and Pather (2011) furthermore highlight the four stages of e-government development. The first stage is cataloguing. This phase is characterised with a government online presence that offers little more than information. Most governments in Africa are at this stage. The second phase transaction includes the setting up of ICT based two-way communication, with working databases that support transactions. Citizens could file tax returns and vehicle licensing requests.

In the third phase (vertical integration), local systems are connected to national systems and citizens access all services at the local portal. Lastly, the horizontal integration involves the integration of several services into entities based on needs and functions of citizens to provide a one-stop shop.

**Table 2.1: Conceptual Model for Level of e-government**

PHASE	Phase I	Phase II	Phase III	Phase IV
VARIABLE	Presence	Interaction	Transaction	Integrated
ELEMENTS	Static pages Catalogue presentation. Links to other sites.	Services online. Downloadable forms. Email services.	End to end electronic transactions. Cross department information sharing. Database support.	Integrated cross functions. One stop shopping for citizens. Fully networked (internal/external).

Source: Makoza (2013).

Makoza (2013) points out the possibility that the different models for e-government implementation indicate the variables which are attempting to demonstrate the strengths and weaknesses of e-government in the environment in which they are implemented. Thus, alluding to understanding the process of e-government in different contexts.

## 2.6 E-GOVERNMENT DELIVERY MODELS

According to (Rajah, 2015; Hikwa and Maisiri, 2016), there are four categories that explain e-governance, which include: government to citizen links (G2C), government to business links (G2B), government to employee links (G2E) and government to government links (G2G). Rajah goes on to state that government to citizen (G2C) links are concerned with the interaction between the citizens and the government. Some scholars view this model as the focal goal of the introduction of e-governance. Through this model, service delivery systems are tailored to suit citizen needs. E-governance using the G2C model allows government agencies or departments to interact with citizens and gives them access to government information or services instantly and conveniently whenever they are connected to the Internet (Ndou, 2004; Sigwejo, 2015). For example, G2C is cheaper, and it's not time consuming person-to-person interaction in offices



because it allows citizens to use self-service platforms. Moreover, these platforms might have online chat mechanisms to guide citizens on various government websites. With G2C, citizens can deal with government services such as paying fines, renewing vehicle or driver's licences or access travel requirements to other states online.

According to (Rajah 2015; Sigwejo, 2016), this model promotes participatory deliberative decision-making, whereby the government engages the citizens in a two-way open dialogue. Engaging with citizens allows the government to understand their views on public policy, law making and other national concerns for collective decision-making and citizen empowerment. This can be achieved through the use of web comment forms or online chats or consultations, which are archived for later reference. Sigwejo (2016) states that that this model (G2B) is inclined towards electronic interactions between the government and private businesses. Thus, the G2B paves the way for e-transaction initiatives, e-procurement and e-marketing between the business and the government. This view is supported by Ndou (2004) who further elaborates that when a business conducts online transactions with the government, there is a lessening of red tape and regulatory processes, thereby aiding the business to be competitive. G2B links have created competition amongst businesses in the procurement services, since it is cost effective and faster (Rajah, 2015).

As far as G2B is concerned, the internet is used for outsourcing products or services by governments. Such cost effectiveness can evade governments from being overcharged by tenderers if governments use e-governance, since the government will deal with service providers directly on their website. According to (Ndou 2004, Sigwejo, 2016), the (G2E) model is about the relationship between the government and its employees. Through the (G2E) model an e-learning platform is created, with networks and associated employees, thereby enabling socialisation of knowledge. Such networking and information sharing amongst employees provide them with access to work-related remuneration, benefits and employee development opportunities (Rajah, 2015).

The G2G model refers to inter-governmental relations, which can be with either national, regional or local governmental organisations (Rajah, 2015, Hikwa and Maisiri, 2016).

For a state government to be effective in service delivery, depends on other decentralised levels of government agencies within the state. Therefore, online communication plays a vital role in bringing together all agencies and departments of a government when they share resources such as databases in their day-to-day operations (Ndou, 2004, Hikwa & Maisiri, 2016). Such collaboration leads to a more efficient government. Globally, the use of G2G can improve relations between different states and exchange of information may be used for addressing issues of national security through shared monitoring of immigration checks.

**Figure 2.3: Government delivery model.**



Source: Hikwa and Maisiri (2016)

## 2.7 E-GOVERNMENT IN EMERGING ECONOMIES

Sigwejo and Pather (2016) point out that the adoption of e-government as a tool that is advantageous for changing service delivery and for better communication with citizens. According to Sharma, Bao and Peng (2014) e-government has become “popular focal points of government efforts” in many countries.

Ruhode, Maumbe and Owei (2008) furthermore state that adoption of e-government is varied within country to country and the Zimbabwean government is no exception, though it is still in its infancy in the adoption of this innovation. This tallies with what West (2006) points out, that developing countries have been lagging behind in the use of e-government.

E-government projects face challenges in developing and least the developed countries. Ochara (2012) argues that failures of e-governance in Africa are exuberated by the lack of participation of the citizenry in e-governance projects. Ochara (2012:31) is of the opinion that “stakeholder participation and irreversibility are strongly linked to e-governance sustainability”. He further states that although governments have put up websites, many government websites publish information on e-government policy, without necessarily engaging the public’s input into the process. This clearly points out non-citizen participation. Sharma, Bao and Peng (2014) observed that many government websites are not fully operational, resulting in a lack of enhancement in service delivery to the public and participatory democracy. To Sharma, Bao and Peng (2014:83),

“a fully functional e-governance website should include an e-participatory framework which offers online information on government policies, programs, budgets, laws and regularities, e-consultations mechanisms and e-decision”.

Another dimension of e-government failures in developing countries is revealed by Heeks, (2005b) (in Sharma, Bao & Peng, 2014:86) as “non-implementation of technical system, removal of technology after implementation, major goals relating to cost, implementation time frames, and capacity not achieved, and undesired results”.

Writing on the challenges of e-government in Nepal, Sharma, Bao and Peng (2014:90) propose that it becomes mandatory in the implementation of e-government to improve on “basic foundations such as literacy rate, ICT infrastructure, awareness, funding and commitment”. These are similar challenges being faced within the African context and African governments can copy these pockets of good practices from the Nepal experience.

Ndou (2004:2) points out that “e-government success entails the accommodation of certain unique conditions, needs and obstacles”. She goes on to quote Allen *et.al.* (2001) to elaborate that the adaptive challenges of the Government go beyond technology; they call for organisational structures and skills, new forms of leadership and transformation of public-private partnerships.

## **2.8 OVERVIEW OF E-GOVERNMENT IN ZIMBABWE**

According to the African Development Bank (ADB) (2015) report, the implementation of e-government in Africa, including Zimbabwe, has progressed steadily over the years. This is also in tandem with Rajah (2015:11) who points out the strides made by the Zimbabwean government in regard to e-government by highlighting that, “although an e-government program in Zimbabwe is still at the initial stages, Zimbabwe has developed relatively advanced ICT-government service delivery capabilities”. Zinyama and Nhema (2016) applauded the Zimbabwean Government for establishing Ministries’ websites which are up and running. These herald a milestone towards a journey directed at a paperless information society. For instance, the development of the 2015 ICT National Policy is now in place.

According to Zinyama and Nhema (2016), there is an increase in mobile penetration rates, which went up to over 60% in 2010 from 9% in 2008. Internet penetration rates have risen from 1.5% to between 11% and 20% during the same period. Hikwa and Maisiri (2014) point out that “very few of these subscribers were in the rural areas”. They further state that this calls for the urgent need to have facilities that enhance e-government, and that having such facilities will aid communication and reduce administrative costs for the government. These authors further advance that The Government of Zimbabwe is implementing the ‘ZimConnect’ programme, which aims to allow all Ministries, Departments and public entities to have flexibility in deploying e-applications online that reduce red tape, and eradicate corruption and other institutional bottlenecks associated with the traditional methods of public service delivery (Zinyama and Nhema, 2016). The ZimConnect (an e-government framework) aims at promoting the use of ICTs in the public sector value chains in Zimbabwe.

Its mission is to deliver seamless e-services to the citizens, business and government through an interconnected public service integrating people, processes and technology. Despite an abundance of literature on the importance of CICs, recent literature in Zimbabwe appears to be silent on how these will benefit those in rural areas.

Linked with the foregoing assertions, the ADB (2015) report that, although it is widely recognised that ICT infrastructure is a key determinant of development in the knowledge era, Africa's rural communities still lag behind and the irony is that the majority of the population reside in rural communities. Nkomo (2012) bemoans the ICT status quo of many rural areas in developing countries which lack infrastructure or platforms for e-government. This becomes an obstacle in the roll-out of e-government initiatives, yet government e-services are particularly important in rural areas. This trend needs to be reversed by intensifying heavy investments on infrastructure in this crucial period when Africans need to catch and capitalize on the opportunities offered by ICTs. According to the OECD (2010), weaker communication networks in rural areas make it difficult to deliver services effectively. The pointed communication networks include roads, telephones and broadband. This was also pointed out by Chari (2009) with regard to Zimbabwe.

Zimbabwe has distinct communications infrastructure maintained by many public and private sector players. However, the report suggests that there is a need to harmonize the infrastructure and establish a national communications backbone that reaches all corners of the country so that the rural community is not left out of the equation - this is a gap that has been identified by Nkomo (2012). Undeniably so, closing this gap or digital divide, will lead to a highway that facilitates high speed communication for improved and reliable services countrywide. Ruhode, Owei and Maumbe, (2008:13) echo the foregoing authorities and highlights the challenges that can inhibit e-government initiatives in Zimbabwe, which include "lack of funding, rigid organisation, poor ICT infrastructure, low ICT literacy rate, high human resource turnover, high impact of HIV/AIDS pandemic, limited public-private partnerships (PPP)". Marufu (2015), on the other hand, quotes Chaterera's (2012) study, that indicates that there is lack of awareness, lack of technical skills, as well as negative attitudes toward e-government.

Accordingly, Nkomo (2012) also cites the example of implementation of e-government service within the South Africa context. Thus, Nkomo's highlighted in the study that though the process it was in motion, but fraught with challenges. She mentions a number of divides that affect e-government implementation in rural communities which include digital, e-services and socio-economic divides. She further states that these "divides are best felt when comparing South African society spatially, in looking at rural versus urban communities". Rajar (2015) alludes in the literature to the major challenges that: inhibit e-Government initiatives are lack of funding, rigid organisation structures, poor ICT infrastructure, low ICT literacy rate, high human resource turnover, limited public-private partnerships. Sharma, Bao and Peng (2014:92) also highlights the issue of context when applying e-government projects. It is important to consider context, as well as the rationalities in e-government implementation.

The context-orientated approach "seems to be a more promising method to the successful implementation of e-government". Gopakumar (2014), on the other hand, mentions the prerequisites for e-government service delivery to happen, which include the skills level of the user community; easy access to ICT; and relevancy of content in local language. Governments with an e-participation framework are expected to be participatory and inclusive (Ngulube, 2007). However, despite the promises of e-government in South Africa, Ngulube (2007) points out that there are many instances whereby citizens are still obliged to visit government offices, even if they may download certain documents from government portals, as they may not be processed online. The possibility of coming face-to-face with bureaucratic red-tape practices and an inefficient or corrupt government official still exists in many countries in sub-Saharan Africa.

A notion in line with Ngulube's study, it is also highlighted by Zinyama and Nhema (2016), that most citizens in rural Zimbabwe are still physically visiting government offices in order to get basic information, complete and submit a form or to get any other services. This is a visible scenario in rural communities, whereby people have to travel to a nearby service centre to get amenities. Maumbe, Ruhonde and Owei (2008) give examples of ministries that one needs to physically visit to get services, which are: Home Affairs, Higher

Education, Local Government, Gender Affairs, Legal and Justice, Small and Medium Enterprises. Marufu (2015) also observed that most aspects of services in African governments are still manual which makes the demand for e-government overwhelming.

Despite the aforementioned limitations, the Zimbabwean government is also making great strides in the use of ICT services by introducing various e-government services to the citizenry. Efforts and investments have been made in the fields of ICT backbone infrastructure development; ICT in education, research and development; the creation of Community Information Centres; ICT governance and the training of legislators; and government officials in ICT usage (Zinyama and Nhema, 2016). Zimbabwe has an e-government development index ranking of 0, 3230 based on the United Nations e-government criteria (Zinyama and Nhema, 2016). A study conducted by Chisinga (2004) in Zinyama (2012) noted that the majority of African governments are finding their way into Cyberspace through the creation of their own websites. In other words, websites are crucial tools for governments to realise effective e-governance as suggested by Chisinga (2014).

Ngulube (2007), on the other hand, points out that “many government websites are not fully functional and they are populated with information that does not enhance service delivery or participatory democracy”. He further elaborates that, for a government website to be fully functional, an e-participation framework that provides information on policies and programmes, budgets, laws and regulations, e-consultation mechanisms and tools, as well as e-decision making, needs to be implemented. According to Kaisara and Pather (2011:212), there are issues regarding some government websites. Bertot, Jaeger, Langa and McClure (2006) further elaborate that some government websites have invalid emails addresses, do not respond to queries and automated responses are not common practice. This dilutes the whole process of two-way communication with citizens.

## **2.9 PROPOSED E-DELIVERY MODELS**

Sigwejo and Pather (2016) points out the issue of citizen-centric government service delivery in government and how it has been adopted by many governments. They further elaborate by citing Gupta (2008) on how governments are focusing on providing service

delivery through “the eyes of their citizens” taking into consideration their needs and expectations. The citizen-centric model puts the citizens at the centre stage and offers them with a single interface to access all or a range of government services.

Kaisara and Pather (2011) propose a service quality oriented model with a focus on website interface. Evaluation of e-government service effectiveness from the demand side is necessary, as it provides the foundation for understanding the needs of the citizens. Sigwejo and Pather (2016) further point out the importance of accessing the needs of the citizens before implementing e-government services. Their views are based on the challenges encountered if a government does not know how its citizens are feeling, what they are needing, or how they are experiencing a particular e-government service. In the absence of such information, the government will not be able to improve its services. Sigwejo (2015) in her study in Tanzania, highlights the factors influencing the utilisation of e-government services. The study revealed many barriers to the utilisation of services - one of the identified barriers include a gap between the citizens' expectations and the performance and service quality of electronic services offered by the government.

Kuye and Naidoo (2003) cite the example of the South African government, which has embarked on the use of new organisational models, such as the electronic model, to deliver services to all communities, inclusive of the disadvantaged rural communities. They further elaborate on the advantages of the information revolution, which reduces the need for a large physical infrastructure to deliver programmes and services to the public. The use of the electronic model will improve efficiency in the sharing of data among departments and the provision of a "single-window" of service delivery. New global opportunities can be opened up for small businesses, which will in turn lead to economic growth (Kuye & Naidoo, 2003).

Rambawan, Lubber and Klapper (2005:178) furthermore highlight the importance of electronic information. They cite Ellen (2000), who states that the increase in the “use of electronic information has paved the way to new methods of delivery services, as well as supplementing the existing ones”.



Having appropriate information service delivery to communal or rural areas in Zimbabwe can lead to the transformation and empowerment of people.

The advent of ICT has brought on new ways of communicating and delivering services to the people. The Public Sector Research Centre Report (2007) state the advantages of the internet as “delivering high-quality public services at a relatively low cost, with minimum disruption to existing public sector organisational structures”. It further points out the benefits of e-channels, which provide automated processes for streamlining services and delivering information without the need for more expensive interactions. Customers have the flexibility in how, when and where they access services, as well as enabling other, more traditional channels (e.g. face-to-face) to focus on adding value to citizens/businesses by providing support and guidance – instead of having to cope with large volumes of requests for basic information.

### **2.9.1 E-government framework: A case of Thusong Service Centres, South Africa**

There is a link between governments and development. Most governments, including Zimbabwe, have a bureaucratic form of governance. In most countries this has led to inefficiency in service governance. According to Gopakumar (2007), recommendations have ranged from prescribing that governance needs to be more market based and that silo style functioning should give way to a more citizen centric approach. Gopakumar further cites the strategic plan of Washington (1996), which gives an analogy of customers’ expectations in a shopping experience. What customers expect is a one-stop shopping experience. This is elaborated as the ability to obtain diverse services in a timely, convenient and user-friendly manner. Gopakumar compares this to citizen’s expectations of government services. Citizens expect to have easy access to government information and services at convenient places. Citizens and businesses furthermore expect access to information and government services through multiple channels such as ICT services.

Ochara (2012) highlights the need by many African governments to create one-stop-shop online services. He cites examples of initiatives such as, the building of digital villages or

“pasha centres” in Cameroon and many parts of Africa – this is one way of providing access to government services. Zimbabwe is not immune to this, because there has been an emergence of CICs. Community information Centres in Zimbabwe are meant to have the features of a one-stop ICT shop, which include providing services such as communication services, printing, laminating, scanning services. Twinomurwizi, Zwane and Debusho (2012:85) cite the example of the South African context, whereby “multi-purpose community centres (MPCCs) were established to bring government services to the people. These centres experienced numerous challenges and were later rebranded as Thusong Service Centres (TSC).

Kasara and Pather (2011) highlight how the South African government has tried to reach out to its citizenry. They further state that e-government services are delivered via a number of different public access sites, such as kiosks in post offices and multi-purpose community centres (known as Thusong Service Centres). According to Serumula, Globler and Strasheim (2014), the South African government’s vision for TSCs Centres was to provide every South African citizen with access to information and services within close proximity to their homes and in each local municipality by 2014, with the purpose of improving the quality of lives through integrated service delivery. A view affirmed by Twinomurwizi, Zwane and Debusho (2012), who point out that the TSC services “aim to give citizens access to government services within a five kilometre radius of their place of residence, while also providing electronic access to public services”. In so doing, access to services that were not within reach of communities will be opened up. Communities will participate in activities that allow for two-way communication between the government and the people (Thusong Service Centre, 2010).

Thusong Service Centres (2010) position themselves as “a primary vehicle for the implementation of development communication and information to the people”. Snyman and Snyman (2003: 97) (in Msibi and Penzhorn, 2010) point out that the focal point for the establishment of the multi-purpose community centres, was to form the backbone of development communication and the dissemination of information in municipalities. They further elaborate that the rolling-out, funding and monitoring of Thusong Service Centres is integral to municipal Integrated Development Plans (Thusong Service Centre, 2010).

Twinomurwizi, Zwane and Debusho (2012) highlight the basic services offered in the centres (social grants, health, education, passports and identity documents). They further state that the Department of Home Affairs commands so much importance and respect at the TSC which is attributed to the nature of services it offers, which include birth, marriage and death certification and identity documentation. Gopakumar (2007) recommends the use of service centres as a service from government departments, which will be offered under the same roof. Thus, the TSCs offered by government are designed to bring a "one-stop shop" to citizens to deal with government issues ranging from home affairs to social security. This study, draws a lot from the TSCs as they share similar objectives, that is, to deliver services electronically to rural citizens.

## **2.10 CONCLUSION**

This Chapter discussed the evolution community information centres in Zimbabwe and their communicative role in communities by giving the background and context of the study in detail. These community information centres were created with the aim of bridging the digital divide between developed and developing countries to give access to information to marginalised communities. Community information Centres and their relevance in government reforms especially on e-delivery of government services have been discussed in detail. The issues of government reforms and use of community information centre as places for easy access to government services are alluded to. The following chapter will focus on the theoretical framework used for the study.

## CHAPTER THREE

### THEORATICAL FRAMEWORK

#### 3.1 INTRODUCTION

This chapter covers theories that underpinned the research. Every scientific study is built upon scientific and scholarly theory and for this study, the theories that underpinned the phenomenon under study are drawn from three disciplines namely integrated communication, business management and Information Communication Technologies (Digital Communication). Theories discussed in the chapter include the Service–dominant logic of marketing, Expectation-Disconfirmation, Relationship marketing, New Public Management, Technology Acceptance and Diffusion of Innovation. The metatheoretical framework for the study is depicted in the diagram below:

**Table 3.1: Components of Meta-theoretical Framework**

<b>Meta theory</b>	System Theory		
<b>Worldview</b>	Quantitative		
<b>Epistemological Position</b>	Positivist		
<b>Ontological Position</b>	Objectivism		
<b>Primary domain</b>	Social Science		
<b>Academic discipline/field</b>	Integrated Marketing Communication	Business Management	Information and Communication Technologies (Digital Communication)

<b>Models</b>	<ul style="list-style-type: none"> <li>• SERVQUAL</li> </ul>		<ul style="list-style-type: none"> <li>• Technology Acceptance Model (TAM)</li> </ul>
<b>Theories</b>	<ul style="list-style-type: none"> <li>• Expectation-Disconfirmation</li> <li>• Service-Dominant logic of Marketing</li> <li>• Customer – Centric Approach</li> </ul>	<ul style="list-style-type: none"> <li>• New Public Management(NPM)</li> <li>• Total Quality Management(TQM)</li> </ul>	<ul style="list-style-type: none"> <li>• Diffusion of Innovation</li> </ul>
<b>Concept</b>	<ul style="list-style-type: none"> <li>• Service Quality</li> <li>• Relationship marketing</li> <li>• Customer Relationship Management</li> </ul>	<ul style="list-style-type: none"> <li>• Customer Orientation</li> <li>• Technology</li> </ul>	<ul style="list-style-type: none"> <li>• Use of Service</li> <li>• Technology adoption</li> </ul>
<b>Constructs</b>	<ul style="list-style-type: none"> <li>• Tangibility</li> <li>• Reliability</li> <li>• Responsiveness</li> <li>• Assurance</li> <li>• Empathy</li> </ul>	<ul style="list-style-type: none"> <li>• Customer Orientation</li> <li>• Competitiveness</li> <li>• Result orientations</li> </ul>	<ul style="list-style-type: none"> <li>• Perceived Usefulness</li> <li>• Perceived ease of use</li> <li>• Relative advantage,</li> <li>• compatibility,</li> <li>• complexity,</li> <li>• trialability</li> <li>• observability</li> </ul>
	<ul style="list-style-type: none"> <li>• Customer Service</li> <li>• Customer Satisfaction</li> <li>• Customer Retention</li> <li>• Customer Value</li> <li>• Expectations</li> <li>• Performance or customer perceptions</li> <li>• Disconfirmation</li> </ul>		

## **3.2 ACADEMIC DISCIPLINES AND THEORIES APPLIED IN THE STUDY**

Mertens and Wilson (2018), describes a theory as a coherent set of ideas and concepts of how the world (or parts of it) can be explained or understood. Baxter and Babbie (2004) advances that a theory deals with logical aspect of scientific enquiry. The focal point of a scientific approach lies in the theory that underpins a study. Theories help to describe relationships that researchers logically expect to predict one variable with knowledge of the other variable. To Rahi (2017) a theory is a standardized principle on which an explanation of a relationship between variable and concepts.

There are two types of scientific or scholarly theories and these are termed theories of methods and theories of understanding. With the theory of method, the focus is on how a phenomena is done whereas, the theory of understanding advocates for a description of how one should understand society, the individuals. Its objective is to describe, classify, interpret, examine a hypothesis, predict development, bring about change and point out possible actions. This study advocates for the theory of understanding as it seeks to understand the perceptions of customers with regard to the quality of services offered in the CICs. The following section discusses the theories that anchored the study.

### **3.2.1 The Systems Theory**

The social systems forms the meta-theory for the study. Arguments put forward in the theory are that social entities such as organisations can be regarded as an organism. Organisms have dynamic characteristics that make them function through interactions of their parts. A social system composition includes different components that contribute to the functioning of the whole. This study falls within the integrated communication discipline and communication is viewed as a system that has a group of interrelated components that function as a whole (Baxter and Babbie, 2004). This make the theory applicable to the study as it focuses at the interconnectedness between an organization and its customers. An organization as a system is open to external influences such as social systems and these are open systems which are constantly responding to external factors that influence what happens to it.

The systems orientation is also central to S-D logic of marketing as it looks at marketing holistically with different elements that are interconnected in the process. The systems orientation is also central to S-D logic of marketing as it looks at marketing holistically with different elements that are interconnected in the process. Line, Runyan and Gonzalez-Padron (2018) states that system in the S-Dominant Logic refers to the totality of parties involved in economic exchange working towards a mutual goal of values creating. A systems orientation sees value as a co-creating phenomenon, attained only within the context of networks composed on organisation, its customers and any other stakeholders. Vargo and Lush (2017:48) state that in the systems orientation, co-creation was ongoing interaction of resource creation and application afforded through reciprocal exchange and differential access and integration.

### **3.2.2 Integrated Marketing Communication (IMC)**

A communication process entails the planning, integration and implementation of a variety of marketing communication elements. There is the use of the outside-in approach whereby the organization starts with the customer. In this study the customers were the CIC users. The IMC takes a more inclusive systems approach to the communication planning process. Theories that fall under the IMC will be discussed in the following sections:

#### **Relationship marketing**

Relationship marketing perspectives have their roots in the Nordic school of marketing thought. It has its focus on relationship building and maintenance. Relationships have become integral in the global marketing perspective with emphasis on attracting the customer to the product or service through attributes such as price, quality, brand image, consumer services. In this study, the quality attribute becomes fundamental in the offerings of CICs services to the customers and this forms the focus for this study.

Relationship Marketing is defined as the commercial activity between economic partners, service providers and consumers. It aims to create, maintain and enhance this relationship in order to achieve mutually beneficial objectives based on profit and trust between different parties. Emphasis lies on both parties gaining from the relationship.

Thus, the objectives of the CIC users' might be satisfied by using quality services in the CICs. If both parties objectives are achieved, indications are that there is increased satisfaction from the customers which lead to customer loyalty. Customer loyalty in CICs leads to continued use of CIC services. Gronroos (2004) asserts that key processes of relationship marketing include; integrated communication; two way interaction; and value added marketing.

Relationship marketing helps to establish, maintain and enhance relationship with customers and other stakeholders at a profit, so that objectives of the involved parties are met. According to Gronroos (2004), the relationship marketing is based on the notion that on top of the value of products and/or services that are exchanged, the existence of a relationship between two parties creates additional value for the customer and also for the service provider. Therefore, it is imperative that CICs maintain an integrated perspective. As such Inversini, De-Carlo and Masiero (2020) suggest that promoting an integrated perspective means creating meaningful relationship with customers with a focus of the value creation. It is the obligation of organizations to create customer value and successively to expect some value in the form of a profit.

### **Relationship Marketing (Customer Relationship Management (CRM))**

Customer Relationship Management began in the early twentieth century and its mandate is to help organizations to gain knowledge that permits it to understand customer behavior and relationships better as a result, customer's satisfaction, retention and profitability is improved. It comprises of a set of processes and facilitating systems supporting a business strategy to build long term and a profitable relationship with specific customers. The CRM is a four staged process that involves identification, attraction, development and retention. The retention of customers is very important in any organization. According to Schaeffer and Sanchez (2020) customer retention includes action taken by organizations that promote customer loyalty and avoiding customer movement. Inversini, De-Carlo and Masiero (2020) highlight how taking into consideration the needs and wants of customers can contribute to generating customer value and enhancing organization competitiveness. The concept of customer-centric is crucial in an organization as it forms and sustains superior customer value.



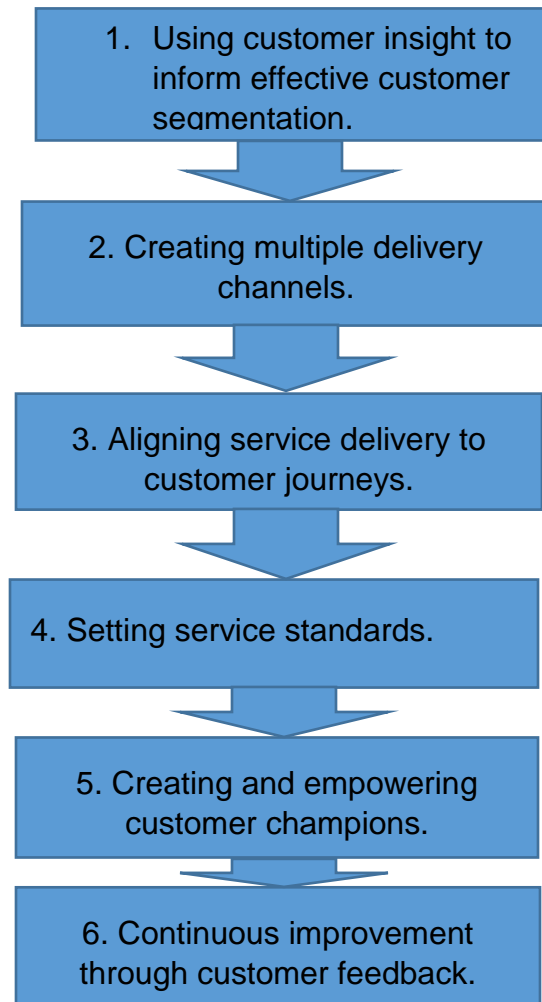
Inversini, De-Carlo and Masiero (2020:3) further describes a CRM strategy as a “cross-functional, customer driven, often technology integrated business process management strategy that maximizes relationships”. Understanding customers is the first step towards customer-centric. It is an organizational practice in which customer relationships, customer loyalty and brand value are built through marketing strategies and activities. It helps organizations to develop relationships with both established and new customers, whilst promoting efficient corporate performance. It incorporates commercial and customer specific strategies through employee training, marketing planning, relationship building and advertising.

### **Customer Centric approach**

Inversini, De-Carlo and Masiero (2020) states that customer centric focuses on deeply entrenched beliefs and norms that value and appreciate customer relationships within an organization. They further elaborate that it inspires employees to work together with customers, with the objective of producing value for them as per the terms and conditions of the organizations. Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) point out the importance of customer orientation. They argue that although it was conceived as a private sector initiative, their perspective is that it can improve customer satisfaction and loyalty which in turn increases profitability and competitiveness. In other words, customer centric approach (constructs) widens the stakeholder approach, seeking to expound value creation within the multiple stakeholder domains that form a marketing system.

Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) highlight the central position of improvement of service in numerous governments. Customer orientation is crucial in the public sector, previously this view was only prevalent in the private sector. Indications from the customer oriented approach are that it can enhance customer satisfaction and loyalty. This in turn has positive bearings on the increase of profitability and competitiveness. Public sectors are not always profit oriented, but adoption of customer orientated approaches has proved to be beneficial to the sector. The price cooper proposed six elements that can be used to enhance customer-centric approach in the public sector and this is depicted in the diagram below;

**Fig.3.1: Six Elements of a Customer-Centric Strategy**



**Price Water Cooper (nid) Customer is King: Six elements of a customer-centric strategy**

Dijcks (2012) points out that a strategic approach requires an understanding of customers and meeting their needs. This can aid governments to improve on their processes, policies, systems organizations, and culture to improve customer experience. The document prostrates eight steps to great to customer experiences as highlighted below:

- Establish a knowledge foundation;
- Empower your customers;
- Empower your frontline employees;
- Offer multichannel choice;
- Listen to your customers;

- Design seamless experiences;
- Engage customers proactively; and
- Measure and improve continuously.

This theory is applicable to the study as customer centric not only creates customer satisfaction and loyalty but it will also plays a pivotal role in use of CICs

### **The Service- Dominant (S-D) logic of marketing**

This is a perspective through which Vargo and Lush (2004) argue that value is core-created by parties (Internal and external to all firms). The core notions of the S-D are that: i) service is the fundamental basis of exchange; ii) service is exchanged for service; iii) the customer is always a co-creator of value. According to the focus of S-D logic of operant resources and understanding about primary unit of exchange is changed; the role of the customer; the determination and meaning of value; the nature of the firm-customer interaction and source of economic growth. Vargo and Lush (2004, 2008) further posit that the S-D logic proposes that the objective of marketing in organizations is to serve customers and stakeholders with a goal of total value creation for all stakeholders (organizations, customers and salient stakeholders).

Marketing in the S-D logic frame is attained through the exchange of organization's operant resources and these include knowledge and skills. It is not achieved through exchange of tangible goods. American Marketing Association (AMA), 2017 defines marketing as "the activity, set of institutions and processes for creating, communicating delivery and exchanging offerings that have value for customers, clients, partners and society at large". The definition has over years included interactive value creating as proposed by Vargo and Lush (2004) and this is more relevant to any organizational exchange. The attributes that are important as exhibited by the definition include creating, communicating and delivering value.

Line, Runyan and Padron (2018) noted a paradigm shift in the view of marketing. The view of marketing has been "business only" perspective but the shift has made it to be an interactive and value-creating process (Vargo and Lush, 2004) which is relevant to any organizational or personal exchange.

Line, Runyan and Padron (2018) highlight that although they has been some shifts, the general paradigm that operationalize the market concept has not changed (the market orientation as a reflection of customer and competitor engagement). Therefore, the CICs needs to adopt a responsive (customer led) orientation rather than proactive orientation. This is because the needs of the customers in the CICs have also changed as they now have the ability to decide what constitutes value.

Vargo and Lush (2008) highlight that S-D manifest the shift from value-in-exchange to value-in-use centric service –dominant exchange logic. Al-Ibrahim (2014) points out the value that is placed on the standards of quality and further points out that consistence or excellence of standards in products or services designates the term quality. Service is defined by Vargo and Lush (2004: 2) as “application of specialized competences (knowledge and skills) through. Processes and performances for the benefit of another entity or the entity itself”. Service in S-D logic implies applying specialized competences such as knowledge and skills through deed, processes and performance for the benefit of another actor or the actor itself. In this study, this implies benefits for the CICs and the CIC users. S-D logic uses singular term service to indicate the process of doing something valuable for and in combination with some entity rather than units of output (immaterial goods) as implied by plural services (Vargo and Lusch, 2008).

According to Gronroos (2019) a service is described as a process where many different resources such as service employees, physical resources, digital and physical systems and service users emerge in the process. To the S-D logic, it involves the application of skills and knowledge for the benefit of users. Line Runyan and Padron (2018) indicates that S-D logic is a perspective which Vargo and Lush (2004) argue that value is co-created by both internal and external parties in organizations. Vargo and Lush (2004, 2008) proposed that the role of marketing in shaping legal, social and environmental factors cannot be understated. Inversini, De-Carlo and Masiero further advance that (2020) customer-centric emphasizes that the products and services offered by an organizations are an instrumental part of the process of value co-creation engaging an organization’s and customer resources.

According to Vargo and Lusch (2007:7) “value is comparative appreciation of reciprocal skills or services that are exchanged to obtain utility; value (means) value in use”. Gronoos (2019) stipulates that the creation and co-creation of value holds a crucial role in the service logic. This is manifested through relationships that are visible between the organization and its customers. Inversini, De-Carlo and Masiero (2020) points out the importance of creating meaningful relationship with customers as it is deemed as the focal point of value creation. Organizations are therefore mandated to create customer value and then to extract some value in the form of profit.

To Inversini, De-Carlo and Masiero (2020), value can be understood as the overall assessment of utility offering, according to perceptions of what is received and given. As indicated in the D-D logic, value is created by all actors that are involved in the value process. Gronoos (2019) asserts that with the existence of proper user insight and analysis of the organization’s current state, the development process starts with the communication of a strategic intent by top management. The strategic intent should lead to a service orientated and user focused strategy that aims for strategy renewal.

Inversini, De-Carlo and Masiero (2020) asserts that organizational success is anchored on the differential values that the organization is able to provide to its customers. Customer orientations in all aspects of an organizations will form effective customer relationship that will emanate in creating value for customers and their subsequent positive behavior. Line, Runyan and Padron (2018) alludes the importance of positioning customers as prime focus of organization’s performance. This theory is significant to the study as it put focus on generating value of its customer (CIC user) which is important in the CICs.

### **3.2.3 Disconfirmation Theory**

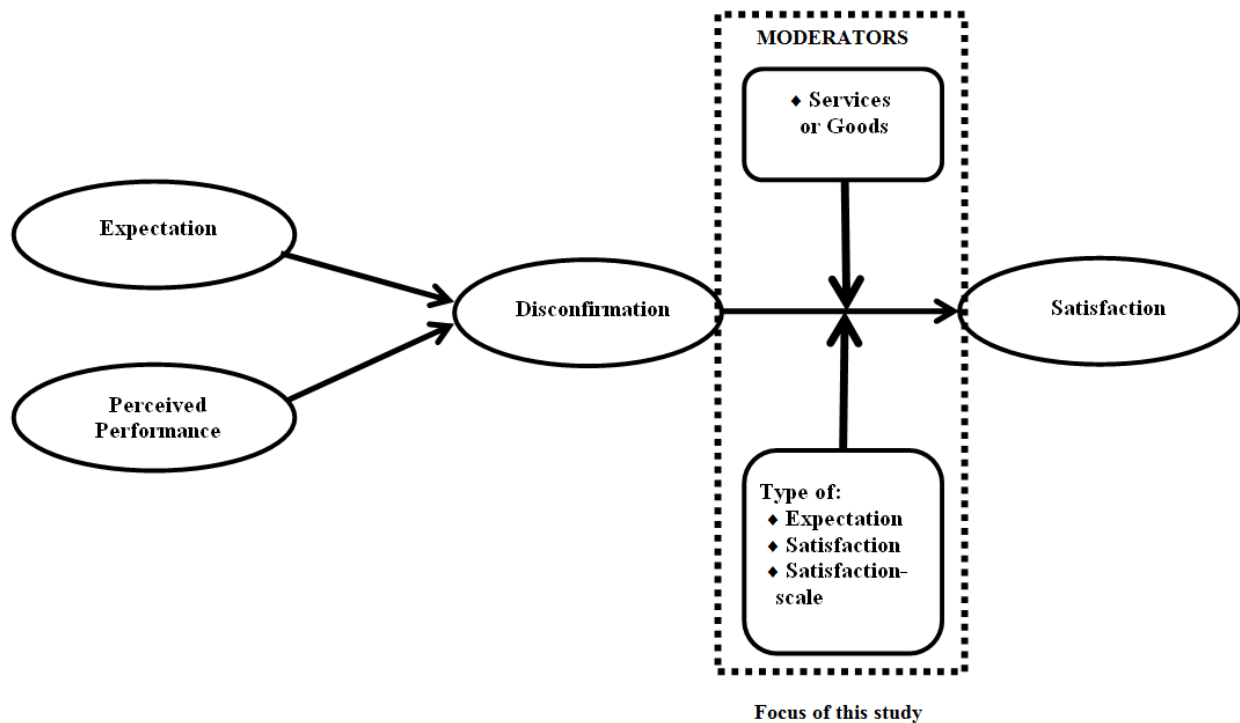
The disconfirmation theory proposes that the perception of quality results from evaluation of experienced performance with the expected performance. The theory positions much importance on the process quality and outcome quality. Customers’ experiences are mainly the encounter process and the final outcome.

Customer satisfaction is a response conceptualized as a cognitive and affective response. It implies a broad mental state, which consists of emotions that are based on the customer's experience and "disconfirmation of expectation and emotions prior to the buying experience" (Oliver, 1980, in Khattab and Aldehayyat, 2011:228). Customer satisfaction is well explained by the expectation-disconfirmation paradigm. According to Oliver (1980) (in Khattab and Aldehayyat, 2011:228), the expectation-disconfirmation paradigm (EDP) is a prominent theory predicting and explaining customers' satisfaction. He further elaborates that "customer satisfaction or dissatisfaction (CS/D) is a function of the disconfirmation arising from discrepancies between expectations and actual performance". The paradigm is composed of four constructs, namely: expectations, performance or customers' perceptions, disconfirmation and satisfaction.

Lukong and Chikang (2010) point out that the expectancy-disconfirmation approach involves identifying customer expectations and their experience. Its focus is on the comparison of service performance with customer expectations. Onyimbo (2003) and points out that there is a comparison of perceived performance against expected performance in the expectation-disconfirmation paradigm. Assessment of the customer's expectation is an aftermath of a service encounter since the customer is asked to recall the expectations. The theory assumes that a customer should possess pre-purchase expectations to be able to experience disconfirmation of these expectations. Customers need to have well-formed expectations for measurements of expectations to validate disconfirmation. If customers lack experience with a service, this may lead to tentative or uncertain expectations.

Khattab and Aldehayyat (2011:228) elaborate that "a disconfirmation between prior expectation and product performance affects customer satisfaction/dissatisfaction". For Instance, if the customer disconfirmation of a certain product or service is expressed prior to buying, and later on the product performance fulfils the expectation, customer satisfaction is attained vice-versa.

**Fig3.2: The Disconfirmation Paradigm**



Adapted: (Mishra, 2013)

This theory is relevant to this study as it highlighted the importance of ensuring that customers are entitled to have knowledge concerning the use of CICs in their communities. Furthermore, the theory was commensurate with the study because it supports adequate awareness of the use of CIC to customers so as to gauge quality service offered by the service providers.

### **3.2.3 Business Management Discipline**

The following theories falls within the business management discipline and will be discussed below:

#### **New Public Management**

Total Quality Management (TQM) and New Public Management (NPM) have been implemented in the public sector and for this study the NPM will be alluded to.

Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013:584) alludes to the objective of the NPM, which is to improve on public service quality through the adoption of a Customer-oriented approach and focusing on performance and measurement. The NPM approach advocates that customers should be active participants in service planning and provision process. Nyundo (2013:24) quote Prakash and Singh (2006), who echoes that “NPM heralds the transformation of citizens into a customer of public services, and hence, has a choice and the exit option, and the opportunity to give feedback to public service delivery.” Nyundo goes on to elaborate on the new role of modern governments that they should be customer oriented, competitive and result oriented. As such, the ICT has room to play for enhancing the effectiveness of government services. Citing the example of South Africa, Kasara and Panther (2011) state that, in the public sector, governments have also embarked on major ICT investments and internet technologies in an attempt to take advantage of the benefits of the internet in extending the channels by which services are provided to their respective citizens.

It has become mandatory for governments these days to strive to use technology to reach out to its people because many people use technology in a contemporary business and social environment.

### **3.2.3 Information and Communication Technologies (Digital Communication)**

Digital communication has great impact on the communication process. Great changes have been brought about by the interactive communication process through ICTs, such as faster and cost effective ways of communication and the processing of information. The following section will discuss the theories that are significant to the study with regards to the use of ICTs for communication.

### **3.2.4 Technology Acceptance Model (TAM)**

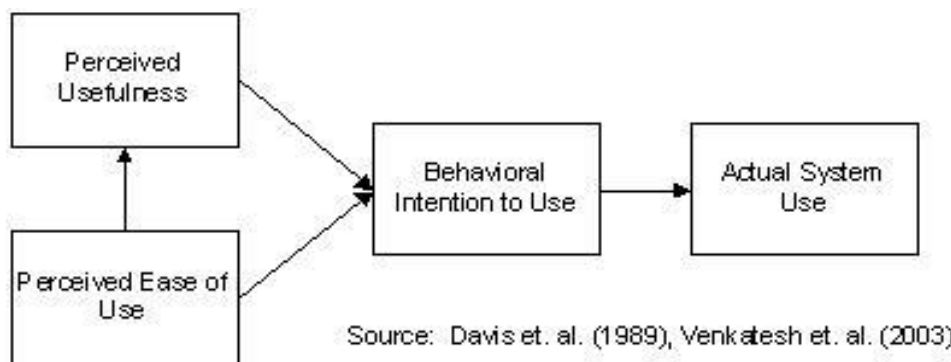
Technology acceptance theories were developed to study information technology acceptance and they are rooted in information systems literature. Park (2009) indicates that this is one of the theories that focus on technology acceptance and their use. It has two variables and these include perceived usefulness and perceived ease of use.



Based on perceived usefulness, the theory focuses on the extent to which technology will lead to better performance while perceived ease of use, the theory focuses on the efforts required to operate new technology. Long (nd) posits that technology acceptance is based on the theory of reasoned action and was developed by Davis (1989). The model is widely used in the information systems field in studying the adoption of various technologies with the aim of determining the factors that cause people to accept or reject information technology. Perceived usefulness and perceived ease of use are identified as the major individual beliefs about using an information technology. The two behavioural beliefs lead to individual behavioural intention and actual behaviour. According to Long (nd), and citing Davis (1989) perceived usefulness is a strong predictor of an individual's intention to use an information technology. Al-Majali and Mat (2010) define perceived usefulness as the perception that a given technology can help a user achieve his/her work goals. They further elaborate that an individual's attitude towards adopting and using a new technology is premised on an individual's perception of the usefulness of the technology.

Gallakota, Pick and Sathyapriya (2012) discuss the adoption and utilisation of technology - they reveal that providing technology does not warrant its use.

**Fig 3.3: Technology Acceptance Model**



Parmar, Keyson and de Bont (2010), bemoans the use of ICTs deployed in some rural communities. They cite ICT interventions deployed in rural India, which offer services such as e-governance, agriculture, education, and health care.

Reports from such centres indicate low usage and low acceptance of applications by users and this could be attributed by not finding the intervention not useful and relevant. This is pathetic as continuous quality measurement of such projects could have indicated the gaps that needed to be closed.

Gallokota, Pick and Athyapriya (2012) state that perceived outcome refers to user perceptions of the advantage that they might be able to derive from using the CICs. Perceived usefulness is determined by the quality, reliability and currency of information that can be obtained from using the CICs. These are the user perceptions of the benefits that they might be able to get from using the CICs. Venkatesh *et al.* (cited in Gallakota, Pick and Sathyapriya, 2012) reveal that performance expectancy (similar to perceived outcome), perceived usefulness and relative advantage, are more inclined to be used for the utilisation of CICs. Citing the example of computer use, the authors further elaborate that quality, reliability and currency of information that is obtained from computer use determines perceived usefulness.

Long (nd) points out the underutilization of technology in organisations and its impact on economic losses. They further caution against working on assumptions that adoption and diffusion of an innovation is an automatic process. Harris and Rajora (2006) in Bailey (2009) bring in the issue of community acceptance, which is pivotal in CIC sustainability. This implies that acceptance of an innovation by communities will lead to utilisation and safeguarding.

### **3.4 DIFFUSION OF INNOVATION THEORY**

In the 1960's, the diffusion of innovation was a natural framework to evaluate the impact of development, programmes in agriculture, family planning, public health and nutrition. In the 1970's widespread research and changes were seen in the theory and it was viewed as a wider framework in which diffusion is part of a wider range of processes beginning with a perceived problem or need.

According to Rogers (2003:5), diffusion of innovation is the process through which an *innovation* is communicated through certain channels over time, amongst members of a social system. It is a special type of communication, whereby messages are concerned with new ideas; hence the newness of the idea or innovation gives diffusion to its character. It is a kind of social change, defined as an alteration that occurs in the social system. When new ideas are invented, diffused, adopted or rejected, leading to certain consequences, social change occurs. Rogers' (2003:5) definition expresses four elements which are paramount in the diffusion of new ideas, which are the innovation, channels, time and the social system.

Rogers (2003) highlights the adoption process of an innovation and that it takes place in a social and communication context. Early adopters accept technology innovation, which is later communicated to others through social channels. Information is diffused to the majority through social systems. He further discusses the attributes that lead to adoption, which include: relative advantage, compatibility, complexity, trialability and observability.

Rowan (2003) furthermore states that the most significant attributes for CICs application include the perceived attributes of innovations; the communication aspects of the diffusion process; and the consequences of innovation adoption. Gallakota, Pick and Sathyapriya (2012) cites Roman (2004), who indicates that the perception of complexity of a community information centres has been posited as a construct that is negatively associated with the adoption of community information centres. People's perceptions of the services shape how they engage and use technology in CICs. Studies mention issues of complexity of technology as the most negative perception, exhibited by a majority of CICs. It was defined by Rogers (2003:242) as the "degree to which an innovation is perceived as difficult to understand and use". To the adopters some innovations are user friendly or easy to understand, while others are not. Innovations should bear this quality of simplicity in mind, so as to ensure a higher rate of adoption.

Rowan's framework highlights the decision-making procedure of diffusion, concentrating on the mode in which the individual and the community recognise the potential of ICTs

as a tool for social change (Prado, 2009). This model reinstates a degree of complication to the study of ICT implementation at community information centres that consents for structural, institutional, political, economic, and cultural factors to be considered in the final analysis. Prado (2009) cites (Roman (2003), who defended the use of the diffusion of innovations model in the study of CICs despite the condemnation of Latin American scholars who suggest the approach is technologically deterministic. To the Latin American scholars, the diffusion of innovation theory focuses on the material rather than the human aspect of ICT use. Servaes (2008) argues that the model's dependence on mass media (advantages centralized, linear channels of communication) prolonged a totalitarian mode of information transmission and failed to acknowledge or equalize traditional power struggles and societal inequalities.

Rogers (2003:224) define compatibility as the degree to which an innovation is perceived to match the needs, capacity and values of potential adopters. An innovation can be compatible or non-compatible, based on socio-cultural values and beliefs, previously introduced ideas, and societal needs for innovation. For example, certain innovations can be compatible in certain cultures, yet they may be rejected in other cultures due to the diverse morals, values and norms that exist across cultures and locations.

Gallakota, Pick and Sathyapriya (2012:191) used the constructs of complexibility and compatibility in their study. They argue that CICs generate "information needs compatible with traditional sources of information". Citing the example of farmers, they indicate that there is a need to have compatible information, such as cultivation techniques, that they have learned from their colleagues. These scholars further posit that if the perceived difficulties are lower, and the compatibility is bigger, then more farmers are likely to use the CICs.

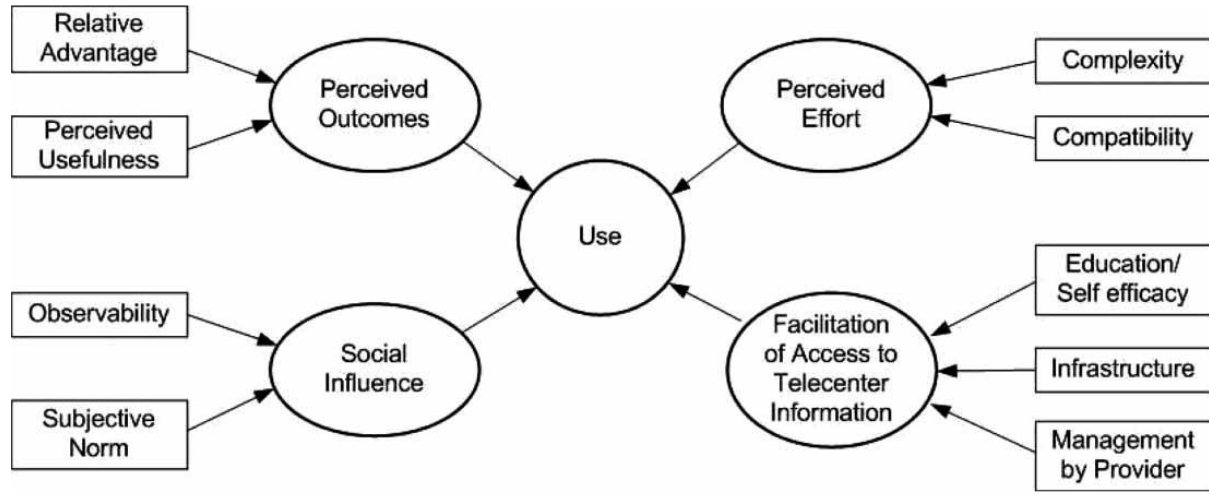
Relative advantage is the perceived costs and benefits from the adoption of an innovation, mostly in terms of economic return (Rogers, 1995:216). Rogers (2003:229) defines relative advantage as "the degree to which an innovation is perceived as being better than the idea it supersedes".

What matters is whether an individual perceives the innovation as advantageous. The greater the perceived relative advantage of an innovation, the more rapid its rate of adoption will be. If the relative advantage of an innovation is perceived by an individual to be high, it means that its rate of adoption will be high, whereas if the relative advantage is perceived to be low, then its rate of adoption is likely to be low. Therefore, the use of CICs by the rural community is influenced by whether they perceived that information from the centre as being useful; and if it has added relative advantage against the existing sources of information (Gallakota, Pick and Sathyapriya, 2012).

A study by Gopakumar (2007) on a community information centres project in Kerala (India) draws on theoretical framework on sociology of governance and taking an institutional perspective. The study brought out another perspective which does not only puts emphasis on the importance of an intermediary in the adoption of community information centres. The issue of an intermediary in the previous studies of CICs was portrayed as an anchor for their success. The study brings in the element of trust, how trust amongst citizens and intermediaries at different stages affects the way e-governance services are delivered through CICs

Previous ideas and knowledge on a subject implanted into a culture can speed the rate of adoption of an innovation or lead to the rejection of an innovation. Marketing and communication play an important role in such cases, whereby the agents of innovations are to ensure that the innovation meets the adopters' needs. Gallakota, Pick and Sathyapriya (2012) posit a conceptual model that predicts the extent of technology acceptance, and research has indicated that technology acceptance is influenced by usability and perceived usefulness.

**Figure 3.4: Framework for use of rural Community Information Centres (CICs)**



Source: Gallakota, Pick and Sathyapriya (2012)

Rowen (2003) argues why diffusion of innovations is a suitable theoretical framework for CICs stating that diffusion of innovation has the predictive potential, which makes it useful for CICs planning and design. It also provides a fertile incentive to stimulate community information centres research; and lastly, its adaptability can be adjusted to the needs of multidisciplinary inquiry. It is on the basis of this argument that the diffusion of innovation will be used in the study.

### 3.5 CONCLUSION

This chapter focused on the theoretical framework that underpinned the study. The Meta-theory of the study, which is the systems theory is discussed. In almost all the theories discussed the customer-centric approach was prevalent under the disciplines of Integrated Communication Management and Business Management. The chapter also gives justification on the theoretical frameworks that anchored the phenomenon under study. The following chapter will look at concepts concerning service quality and the operationalisation of the study

## CHAPTER FOUR

### SERVICE DELIVERY AT COMMUNITY INFORMATION CENTRES

#### 4.1 INTRODUCTION

This chapter looks at how the delivery of quality service is fundamental for survival and success in a competitive business environment. It also discusses the operationalisation of the study with the focus on the SERVQUAL model. Organisations face challenges on a daily basis and need to satisfy their customers' demands. Services offered to customers need to be prompt and reliable to increase customer's commitments in the utilisation and adoption of services. This mandates organisations to have proactive strategies to maintain high standards of service delivery. Ganesan-Lim, Russel-Bennett and Dagger (2008:12) highlight the importance of organizations if they are to remain competitive in a globalised village. This can be done by evaluating and improving on service quality. They further state that organizations must be able to "develop and refine their services to meet the needs and preferences of different consumer segments".

Against this background, Osotimehin, Hassan and Abass (2015) give a scenario of the status quo of the environment in which organizations are currently operating. They state that the "current competitive environment induced by globalization and advances in information technology have forced companies to focus on managing customers' relationship and in particular customer satisfaction and customers' loyalty". This is to enhance efficiency and maximize revenue. This, therefore, makes delivering quality service that is customer focused, an essential strategy for success and survival in today's competitive environment. Nyundo (2015) affirms the importance of delivering quality services in this information technology age. Citing Zeithmal, *et.al*, (1990) he mentions how delivering quality service contributes to the survival of an organisation in a competitive environment.

Methu (2009:76) highlights the changing demands for quality services by citizens; this to him has prompted governments to implement measures in service delivery.

He further states that governments are “adopting service delivery approaches that are competitive and satisfying by responding to citizens’ needs as best as possible”. A view supported by Kasaira and Pather (2009) who points out the shifting demands of citizens placed on the quality of services rendered by governments. It is now a government obligation to meet up with these shifting demands. Linked with the foregoing assertions, this chapter gives an outline of the quality of services delivered in the CICs.

## **4.2 THE SERVICE QUALITY CONCEPT**

Saraei and Amini (2012:571) highlight that “innovation technology community information centres have their own shortcomings in the beginning stages”. They further suggest that to recognise the client’s expectations, the quality principle can be used by measuring the quality of services. In doing so, one is able to understand a client’s perception of a given service. According to Ladhari (2009) (cited in Saraei and Amini, 2012), service quality features intangibility, heterogeneity and inseparability. Just like Saraei and Amini (2012), this study adopted the definition by Parasuraman, Zeithaml and Berry (1985) which defines service quality as the discrepancy between a customer’s expectation of a service and a customer’s perception of the service offering. Gronroos (1984) (cited in Dewan and Mahajan, 2014) defines perceived service quality as a consumption process in which the customer is part of the service process that leads to an outcome or result.

Emphasis is on the way the customer perceives the process at the time of the service, rather than on the outcome of the service. Lewis and Blooms (1983) (in Twinomurwizi, Zwane and Debusho, and 2012:19) points out that the extent to which a service experience meets the expectation is one way to define service quality. They further define service quality as a fair representation of the distinction between what an individual expects prior to experiencing a service and the perceptions or satisfactions after experiencing the service. According to Chingang and Lukong (2010) there is difficulty in measuring service quality, because of its intangible nature and also because it deals with expectations and perceptions of consumers which is difficult as well to determine due to the complexity of human behaviour.



Chingang and Lukong (2010) discuss the expectation of the customers in the service quality literature and cite Parasuraman (1995:49). This scholar points out the critical component of service quality as “consumers’ expectations which is seen as what they feel the service provider should offer and this is influenced by his or her personal needs, past experience, word of mouth and service provider’s communications”. This view is shared by Nyundo (2013:15), who states that “product/and or service failures are also followed by negative word of mouth, underutilisation and replacement with another care service as well as legal action”. Therefore, it is important to assess the perceptions of the customers regarding service quality. With regards to CICs, there have been calls of underutilisation, which then calls for the assessment of service quality for long-term success.

Saraei and Amini (2012) highlight that studies on service quality began in the 1980s and have its roots in the marketing domain. The first model to measure service quality was developed by Gronroos in 1984. This model focused on three service quality components, which are: technical, functional and image. The technical quality component focused on the outcome (what is delivered); the functional quality focused on how it is delivered (process of delivery); and the image component dealt with corporate image and had both the technical and functional qualities embedded in it.

Service quality research, which has its roots in the marketing domain, was originally conducted by Parasuraman, Zeithaml and Berry (1985) in a study which primarily focused on service quality and the extent to which it was possible to measure the degree of customer satisfaction with an organisation's performance. This was done by measuring the consumer's expectations and perceptions of service quality (Kasara & Panther, 2011). Saraei and Amini (2012) point out that the

“quality principle can be used to recognise the client’s expectations and by measuring the quality of service, it would be possible to understand the pros and cons of provided service in order to satisfy the clients by providing them with the best quality service”.

Twinomurwizi, Zwane and Debushe (2012) further revealed that it is of great importance that service quality is regularly measured and evaluated to inform future improvements.

This view is also supported by Saraei and Amin (2012) who suggest that measuring service quality can help management to provide reliable data that can be used to monitor and improve service quality. A study in Tanzania by Sigwejo (2015) highlights the importance of measuring service quality in projects that involve communities. There is always the danger of missing the link if projects fail to involve community participation. Citing the example of e-government in Tanzania, Sigwejo (2015:170) points out that the government “has not been involving development and deployment of e-government services which are specifically intended for the citizens”. This has resulted in a drawback on the adoption of e-government services as initiatives are not implemented with the understanding of what citizens actually need and want.

### **4.3 SERVICE QUALITY AND SERVICE DELIVERY**

Manjunatha and Shivalingaiah (2004:144) view quality as subjective, “personal and changes from person-to-person, place-to-place, organisation-to-organisation, situation-to-situation”. Methu (2015:83) views quality “as a measure of excellence or the degree to which a product is free from deficiencies, defects or significant variations”. Citing the example of Kenya, Methu (2009:76) gives a chronology of the evolution of quality service delivery. Citizens’ awareness of their rights to improve the quality of services, led to the adoption of the slogan “Huduma Bora ni Haki Yako” (quality service is a right to all citizens). He further elaborated that the slogan implies that government is mandated to provide high quality services. Provision of high quality services can only come about if there is adoption of a quality service delivery approach that is based on continuous improvements through monitoring and evaluation.

Osotimehin, Hassan and Abass (2015) argue that service quality helps in holding together the relationship between customers and the organisation - a relationship they term a “two-way flow of value”. Both the organisation and the customer benefit from the relationship, as the customer derives real value, which translates into value for the organisation in the form of enhanced profitability in the long run. Kushwar and Bhangav (2014) furthermore states that quality service is not something that can be manufactured, it appears through communication that takes place between a service provider and the customer.

Phiri and Mcwabe (2013) also point out the importance of service quality in any organisation and the important role of creating a bond between the organisation and its customers. They point out that customers derive their perceptions of service quality based on the levels of satisfaction they experience during the service encounter.

Hirmukhe (2012) gives three distinctive characteristics of service quality, namely: i) service quality is more difficult to evaluate than goods quality; ii) quality perceptions emerge from the consumer's expectations and the perceptions of the actual service; iii) service quality is perceived from the "gap" between the expectations and the perception of the service quality. Pena, Silva, Tronchin and Melleiro (2013) further point out the nature of services as intangibility and heterogeneousness. Services are judged by the performance and the experience of those who use them, with the possibility of interpretation and different judgments, according to the provider and the user in question. Quinn (1997:359), as well as Naidu (2009), are of the view that provision of quality service "means being able to view services from the users' point of view and then to meet the users' expectations for service because users define value". For Naidu (2009:34), service quality adds to "value experienced by customers and value becomes an outcome of excellent service". Naidu (2009:33) further argues that service quality from the customer's point of view is a function of what customers expect and how well the organisation performs in providing the service. Naidoo and Muntina (2014) further point out that delivery of quality services encompasses being in compliance to customer expectations on a regular basis.

To Pena, Silva, Tronchin and Melleiro (2013), service quality involves the level of service effectiveness and expectations of the user. They further state that the promotion of quality service involves meeting the needs and expectations of a user effectively. Manjunatha and Shivalingaiah (2004:145) define service quality as a "comparison of what customers expect before the use of a product/service with their experience of what is delivered". Gronroos,(2000:68), as well as Manuel (2008), point out that

"if the consumer's expectations are met, service quality is perceived to be satisfactory; if they are not met, it is perceived to be less than satisfactory;

and if they are exceeded, it is perceived to be more than satisfactory (delighting the customer)”.

This assumption has led to the conceptualisation of the “gap theory”, which is illustrated as “perceptions minus expectation (P-E)”. This gap: “...put forward the variance between consumers’ expectations about the performance of a general class of service providers and their assessment of the actual performance of a specific firm within that class which drives the perception of service quality”.

Shahin (2006) points out the complexities of service provision and cites Gaster (1995) who states that because service provision is complex, it is not simply a matter of meeting expressed needs but finding out unexpressed needs, setting priorities, allocating resources and publicly justifying and accounting for what has been done. Findings from Kaisara and Pather (2009) indicate that there are a number of factors involved, rather than only focusing on service quality. They point out that there should be “improvement of access to services, equal access provision and providing the services efficiently”. To them, service quality focuses on the post-adoption use of e-government. For instance, they point out the negative factors of focusing more on service quality and leaving out access and adoption factors which are pivotal for e-government success.

Shahin (2006) comments on the responsibilities and accountability of service organisations to communities and service users. The author mentions numerous service agendas, rather than simply focussing on service quality. These are outlined as improving access to existing services, equity and equality of service provision; providing efficient and effective services within political as well as resource constraints. Sigwejo and Pather (2016) resonate that quality in government service delivery systems has a positive bearing on the economies of scale, reduction of costs and offering of technology-enabled user services. They further highlight how citizen’s needs and expectations for social changes will continue to spearhead improved government service delivery through the use of ICTs.

Nash and Nash (2004) views effective service delivery as the provision of services to a buyer in such a way that the buyer’s expectations can be met or exceeded while at the

same time the business remains viable. Effective service delivery means providing services that meet the customer's desires, needs and expectations. Batho (2006) explains that all citizens should have equal access to services to which they are entitled. Public service delivery is commonly understood to mean provision of public goods or social education, health, economic grants or infrastructural (water, electricity) services to those who need them (or demand) them.

To Makanza (2015), service delivery is “about assessing the needs; planning and designing the services; executing; and post implementation. Service delivery should be accessible, efficient and affordable to all citizens regardless of geographical location. Makanyeza, Kwandayi and Nyakobe (2013) opines that to deliver services to the people, governments need people who must be supported to deliver the services. They further highlight the importance of having employees that are customer oriented to enhance service quality. To them, this means that the right people are recruited and capacitated to deliver quality service and provide the needed support in the systems.

Makanyeza, Kwandayi and Nyakobe (2013:5) state that “improving service delivery is primarily about improving effectiveness and efficiency of the way in which services are rendered”. One of the crucial elements in service delivery is the issue of communication. According to the Public Sector Research Centre Report (2007), the designing of a communication channel strategy should take into consideration the diversity of the customers. Focus should be on creating multiple delivery communication channels based on the nature of the public service being provided. It is of great importance that governments should strive to provide quality service delivery to citizens.

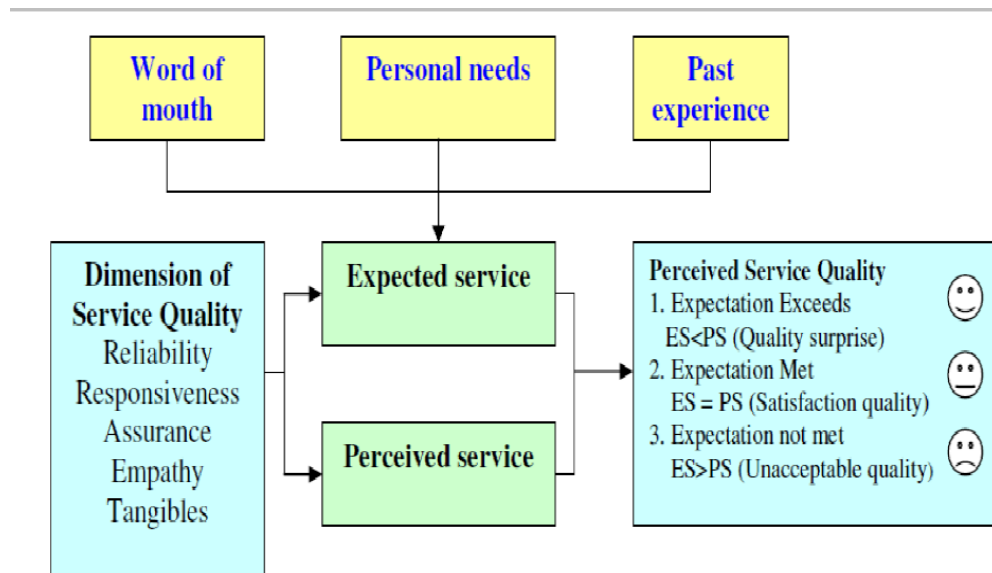
#### **4.4 CUSTOMER EXPECTATIONS OF SERVICE QUALITY**

Chingang and Lukong (2010) identified consumer expectation as one of the critical components of service quality. They define consumer expectation as “what they feel the service provider should offer” and is based on “personal needs, past experiences, word of mouth and service provider's communication”. They further elaborate on the difference in meanings of the word “expectations” in service and customer satisfaction literature.

In the customer satisfaction literature, it is defined as predictions made by a customer about what is likely to happen during an impending transaction. These are the desires or wants of consumers - their feelings about what should be offered by the service provider - rather than what would be offered.

Chingang and Lukong (2010) in their study defined expectations as desires or wants of customers and they further elaborate that adoption of this definition allowed them to know exactly what service providers should offer based on past experience and information received. Osotimehin, Hassan and Abass (2015) elaborate that customer’s expectations of a specific service are based on recommendations, personal needs and past experiences. Phiri and Mcwabe (2013:97) further postulate that customers’ expectations “function as standards or reference points against which performance is judged”. Customer expectations have an important role to play in the customer evaluation of services and it is therefore important to understand factors that affect them. As depicted in the model, there are three factors that impact on expected service, which are: word of mouth, personal need and past experience.

**Figure 4.1: Perceived Service Quality**



Source: Zeithaml, Parasuraman and Berry (1990).

Phiri and Mcwabe (2013) point out the different types of expectations that are inherent in customers. Expectations can be termed as desired service and adequate service. Citing Zeithaml, Bitner and Gremler (2009:77), they describe the desired level as what the customer hopes to receive (what service can be or should be). They further elaborate that the customer's expectations "signal the level of customer hopes and wishes and belief that they may be fulfilled, thus failure to meet these expectations may result in customers cutting down on purchase". Adequate service on the other hand pertains to the level that is acceptable to the customers. This infers that, customers accept that sometimes services cannot be performed according to their expectations. Nguyen (2015) views customer expectation as what the customers think an organisation should provide. The author further provides the following factors that influence customer expectations: explicit and implicit service performance; word of mouth; past experiences; and positioning strategies used by service providers.

There are four types of expectations, which are: i) ideal (what performance can be); ii) expected (what performance will be); iii) minimum tolerable (what performance must be); iv) desired (what performance should be). Expectations are as a result of different sources'; prior exposure to service, word of mouth, expert opinion, publicity and communications controlled by a firm or institution. Hirmukhe (2012) indicates that public expectations are increasing on a daily basis and that this does not tally with the normal infrastructure, which then will not meet up with the demand from people. As a result, this has widened the gap between expectations and experiences. In the same line of thought, Osoimehin, Hassan and Abass (2015) points out that customer's expectations of a service and the perceived service, might not balance, which creates a gap. This gap is viewed as the difference, imbalance or disparity which exists between customer's perception of a firm's performance and their prior experience.

Nyundo (2013) states that knowledge of customers' expectations is an integral part of the process of delivering quality services. He further states the importance of identifying the differences between customer expectations and the organisation's perceptions of their customer expectations of quality. This helps to point out the level of quality of services provided. Nguyen (2015) sums up that customers' expectations are influenced "by

explicit, implicit service performances, word-of-mouth, past experiences, as well as positioning strategies employed by service-providers”. He further explains how these factors create a picture of the expected services in the customers’ minds. Sigwejo (2015) reaffirms the importance of understanding the different needs and expectations of citizens by government. She points out that it is of great importance for governments to understand the demographics of populations who are willing and able to use the government services. She further reinforces the importance of having the capacity to implement the required services to meet the citizen’s identified needs Due to a number of challenges faced by governments in developing countries. For instance most governments face challenges of lack of awareness of which services are wanted by their customers.

Sigwejo and Pather (2016) highlight citizens’ expectations of what is offered by governments. They further state that citizens have high expectations of services on offer from the government. Citizens believe that the services will lead to improvement in their quality of life and also meet their needs. With regards to e-government, they expect to derive benefits that include saving on money and time. Sigwejo and Pather (2016) furthermore highlight the impact that experiences and expectations have on services. They point out that when experiences exceed citizens’ expectations, it will lead to user satisfaction. This in turn leads to the utilisation of services and mandates the need for governments to understand customer needs and expectations. Better or quality services need to be provided that meets the expectations at least on a minimum level. Offering of better services not only leads to acceptance of e-services and expectations, but it also leads to the adoption and utilisation of services.

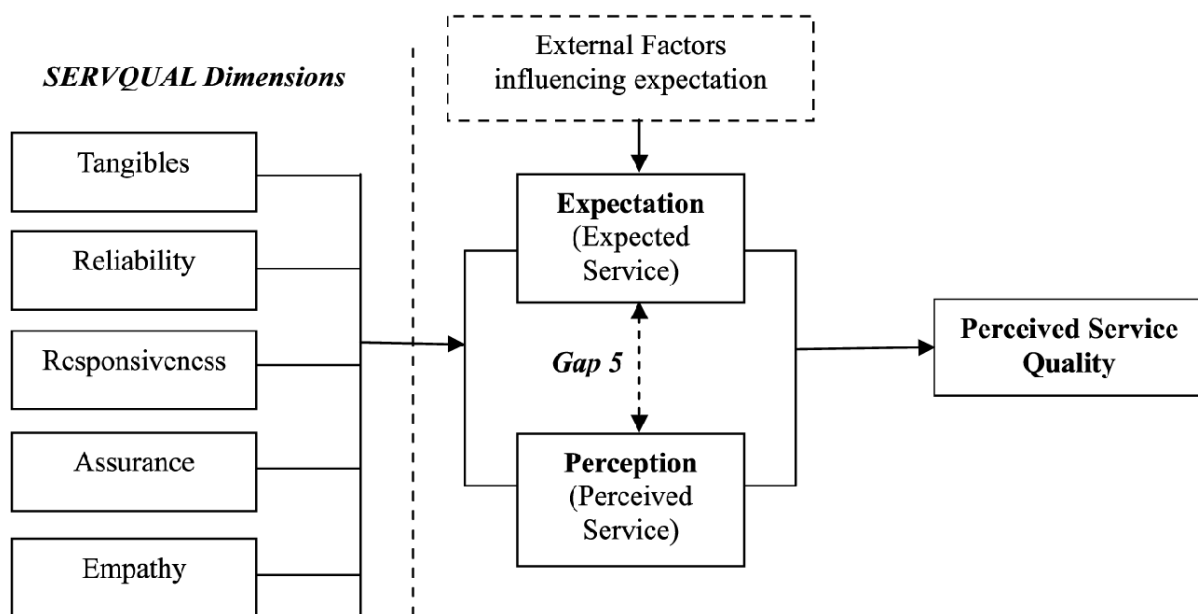
#### **4.5 PERCEIVED SERVICE QUALITY**

Kushwar and Bhargav (2014) states that perceived service quality is an attitude that originates from comparison of expected service and perceived service. Citing Gi-Du Kang, (2006), he further elaborates that it is developed by consumers based on the superior performance of service. Service quality perceptions are a result of “a comparison of consumer expectations with actual services rendered”.



Nguyen highlights the differences in expectations amongst customers. These are based on their personal needs, past experience, as well as the interaction between them and external factors. Perceived service quality will be dependable on the gap between customer's expectations and perceived service. Nguyen further points out that the differences between the expected service and perceived service will divulge how customers perceive service quality. This is illustrated in the diagram below.

**Figure 4.2: Measuring service quality using SERVQUAL model**



Source: (Parasuraman et.al, 1988).

#### 4.6 CUSTOMER SATISFACTION AND PERCEIVED QUALITY

Customer satisfaction is an important attribute of customer loyalty for certain products and services, even at a point of market substitution. Perhaps customer satisfaction provides strategic ground for the word-of-mouth marketing of services and products. Customer satisfaction can be understood by a customer's judgement of quality of products or service for a specific reason. It can also be described as the fulfilment the customer gets from certain products or services. Customer satisfaction is attained when prior disconfirmation of the product is replaced by feelings of satisfaction after buying, and more especially with product performance.

Khattab and Aldehayyat (2011) cite Tse and Wilton (1988), who views customer satisfaction as an evaluation or judgement upon both the good performance of a service or product and the fitness of a product and service for a given purpose. Methu (2015:77), (citing studies by Anderson & Sullivan, 1993; Boulding, Kalra, Staelin and Zeithaml, 1993) observed that “customer satisfaction will lead to greater customer loyalty which in turn leads to a better achievement of goals and a better revenue base”. This, he further, is applicable to government services that aim at achieving economic growth and social development.

Priem (2007) (in Khattab and Aldehayyat, 2011:228) allude that “the customer is the real arbiter of service quality”. They further elaborate that from a marketing perspective, customer satisfaction is attainable when “the customer needs and wants are fulfilled”. Many studies have focused on the service attributes such as customer needs and wants. Khattab and Aldehayyat (2011) cite Lang and Zhang (1999) who, in their study on assessing customer’s expectations and perceptions of service quality, identified a gap between the customer’s expectations and perceptions of service quality. In concurrence to this, Methu (2015) points out that the quality aspect should consider consumer perspectives that include customers’ needs and wants. He further states that the reason for considering consumer perspectives is because the consumer determines what to consume, thus influencing the producer’s product.

Osotimehin, Hassan and Abass (2015) point out that high customer satisfaction yields repetition of store visits, as well as repeat product purchases, and word-of-mouth promotion to friends; whilst low customer satisfaction has been associated with complaining. According to Saravan and Rao (2007), customer satisfaction is based on the level of service quality delivered by the service provider, and is determined by customers’ overall experiences with the service encounter. Manjunatha and Shivalingaiah (2004) highlight the importance of the need to deliver quality services, which is essential for every organisation to improve. To them, a satisfied customer plays an integral role in business success. They further elaborate on the importance of focusing on the customer in service delivery. Kaisara and Pather (2009) opine that perceived quality is “an antecedent to satisfaction” - as such, it has been pointed out by some scholars that it

leads to satisfaction. Satisfied consumers are more likely to remain with an organisation. However, Sigwejo (2015) alludes to the effects of a lack of understanding of service quality by management, which in most cases leads to customers seeking better service elsewhere.

She reinforces the importance of understanding service quality by management, as it leads management to accurately interpret the users' desires, which in turn lead to an uptake of services. Sigwejo further points out the sustainability role played by service quality. Service quality has a role in the sustainability of an organisation and is a driving force for its achievements.

A question arises as to what happens if the customers are not satisfied. Twinomurwizi, Zwane and Debusho (2012) state that customers in any business organisations leave when they perceive services to be poor, while citizens are often unable to choose an alternative government service point. In the case put forward by Twinomurwizi, Zwane and Debusho (2012), Osotimehin, Hassan and Abass (2015) argue that it is of great importance that organisations strive to promote initiatives to provide quality service every time, but also to recover early from service mistakes when they do occur. Yi and La (2004), and Osotimehin, Hassan, and Abass (2015), categorise conceptualisation of satisfaction into transactional-specific satisfaction and cumulative satisfaction. Citing Boshoff and Gray (2004), they define transaction-specific satisfaction as a customer's evaluation of his or her experience and reaction to a particular service encounter.

Cumulative satisfaction is defined as referring to the customer's overall evaluation of the consumption experience to date. Kumar, Murerji, Butt and Persaud (2007:69) highlight that "a series of previous uses that resulted in very positive transaction-specific satisfaction could lead to overall satisfaction, which could possibly induce adoption". Using the example of e-government adoption, they point out that for e-government to be adopted, "it requires that citizens show higher levels of satisfaction with the online service provided by the government". They further mention that success of e-government efforts to a large extent is anchored in how targeted citizens or users make use of them.

Twinomurwizi, Zwane and Debusho (2012:89) postulate the importance of citizen's perception and degrees of satisfaction or dissatisfaction in services offered by the government. It is important to understand the extent to which citizens are experiencing the value of service. Singwejo and Pather (2016) point out that it is a challenge for governments to improve and sanction measures in the implementation of e-government services. Improvement of e-government services is important in order for the intended benefits to be realised. They further elaborate that if a government is ignorant of the citizens' feelings, needs or experiences of a particular e-government service, it will not be able to improve the service.

#### **4.7 SERVICE EVALUATION AND SERVICE QUALITY**

The starting point for developing service quality is to analyse and measure the existing service quality. Information on service quality can be used as diagnostic measure to assess performance and to make adjustments where required. Shahin (2006) highlights that the major negative gaps combined with assessment of where expectations are highest, expedites prioritisation of performance improvement. Pena, Silva and Tronchin (2013) mention the complexities involved in evaluating a service. They give a comparison of a product and a service. To them a product is easier to evaluate, because of its tangibility and if there are defects they can be detected, its functioning assessed and its durability compared. A service on the other hand has to be first purchased, produced and consumed. It is only after this process that nonconformities are produced and experienced.

A view also shared by Methu (2015), who points out that service quality is more difficult for the consumer to evaluate than goods quality. He further points out that quality evaluations of the delivery process are not only concluded based on the outcome of the service but also on the delivery process. Citing Juran (1989), Osotimehin, Hassan, and Abass (2015) point out that there are two dimensions of measurement of quality in a service organisation. These are classified as internal and external measurement. In this case, internal measures the internal process, whilst the external is the measurement that is based on customer satisfaction.

Manjunatha and Shivalingaiah (2004:151) state that “customers attach top priority to reliability of services and responsiveness from service personnel”. This calls for a better understanding of customer preferences. Understanding customer preferences along service quality dimensions reveal their priorities and addressing the same would reduce gaps in service quality. They highlight the importance of the management of service quality in order to improve services - a view also shared by Shahin (2006). Shanin highlights the importance of measuring and understanding customer expectations and how to explain it to top management. Identifying gaps in service quality assists management to come up with cost effective ways of closing service quality gaps and of prioritizing which gaps to focus on. Lovelock (2007) (in Njura, 2010) highlights the importance of measurement. Measurement of service quality points out the gaps, where they exist, and what potential corrective actions should be taken. Measurement is also needed to determine whether goals for improvements are being met after changes have been implemented.

Chingang and Lukong (2010) share the same sentiments on the importance of understanding and measuring customer expectations. They mention that it assists in identifying gaps in the delivery of services that are of quality and that can lead to satisfaction. Customer satisfaction plays a pivotal role in any organisation and it is therefore mandatory for organisations to strive to offer quality services. Methu (2015) also points out the importance of a quality service approach. He elaborates that this approach emphasises the continuous improvement of quality services through monitoring and evaluation. This helps to inform decision-making and to meet the ever-changing needs of citizens.

Saraei and Amini (2012) indicate that measuring service quality helps management provide reliable data that can be used to monitor and maintain improved service delivery. Pana, Silva and Tronchin (2013) concur with Saraei and Amini (2012) and indicate the importance of monitoring the quality of services. Monitoring and evaluation of service quality permit the planning of assertive, highly effective strategies of intervention. Shahin (2006) points out the benefits of knowledge about the customer’s perception of service quality. To them, being able to measure service quality can benefit an organisation in both

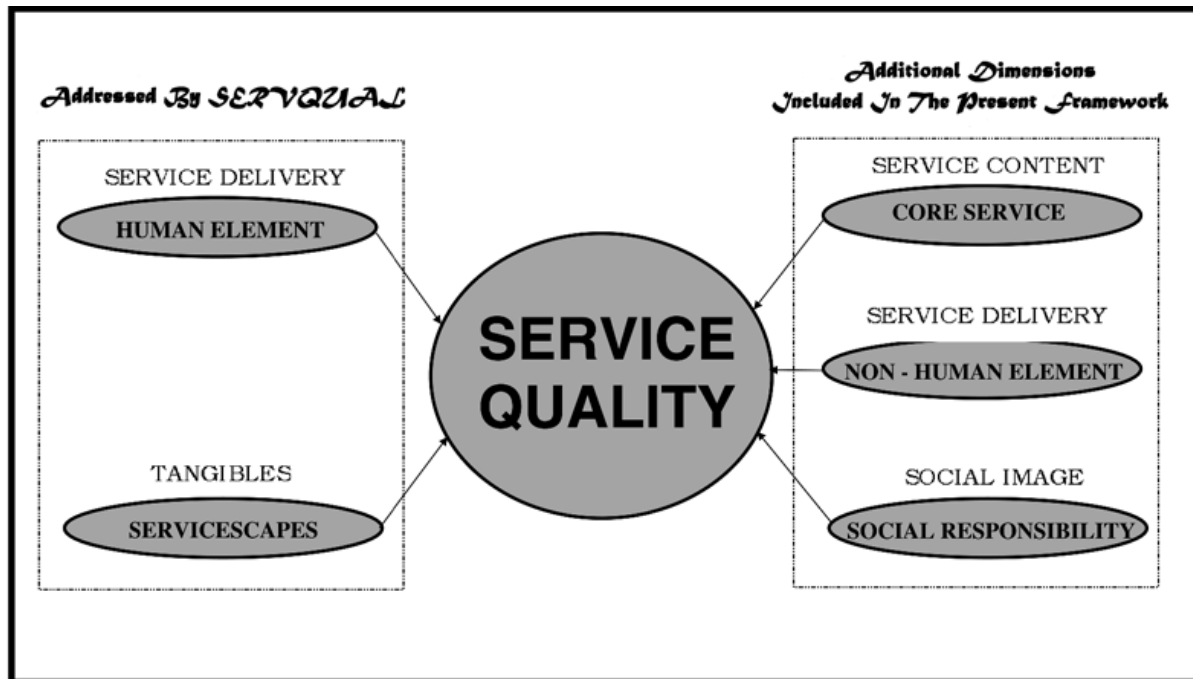
qualitative and quantitative ways. Shahin (2006) also points out that measurement of customer perceptions of service may increase expectations. The author further points out the flip side of frequent measuring, measuring too often may well result in customers losing their motivation to answer correctly.

According to Saravanan and Rao (2007:440), there are six critical factors that customer-perceived service quality is measured by. The six factors include:

- i) Human aspects of service delivery (reliability, responsiveness, assurance, empathy);
- ii) Core service (content, features);
- iii) Social responsibility (improving corporate image);
- iv) Systematization of service delivery (processes, procedures, systems and technology);
- v) Tangibles of service (equipment, machinery, signage, employee appearance); and
- vi) Service marketing.

There are more explanations to the dimensions which are found in the instruments for measuring quality of service. The service product is the first one which is also called the core service. It portrays the content of a service in terms of what and how the service is delivered - these influence service attributes and customer perceptions. Secondly, the systemisation or standardisations of service delivery, which has two distinct features which explain the 'how' part of a service. These are the human elements of service delivery and the processes, procedures and technologies that make a smooth service. The third one is social responsibility of the service organisation, which helps with the corporate social responsibility of an organisation by ensuring ethical behaviour, leadership, as well as, fostering for equality among consumers. The different components are illustrated in the diagram below:

Figure 4.3: Components of Service Quality



Adapted: Saravanan and Rao (2007)

Hirmukhe (2012:1), citing Yi (1990), states that “customer satisfaction is a collective outcome of perception, evaluation and psychological reactions to the consumption and experience to a product or service”. She further elaborates on the changing dynamics in people’s expectations and the widening gap between people’s expectations and experience. Methu (2015) highlights that customer satisfaction can only be achieved if customer needs are met through the provision of services that meet customer’s quality specifications.

Chieochankitkan and Suukpatch (2014:57) indicate that customer satisfaction is dependent on a measure of how the product offered meets or exceeds customer expectations and then to form an opinion. Measurement of service quality allows for comparison before and after changes, for the location of quality related problems, and for establishment of clear standards for service delivery. Kushwaha and Agrawal (2014) also states the importance of the evaluation process in the building up of perceptions by consumers. The author elaborates on the whole evaluation process and points out that

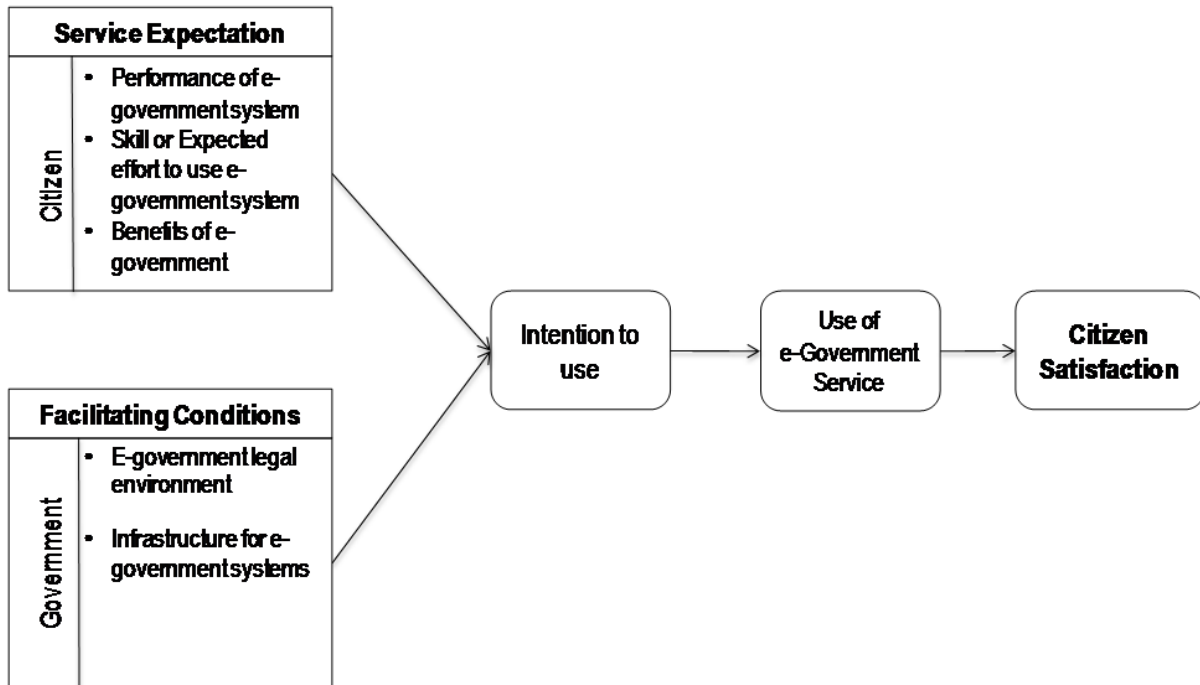
process quality is evaluated during the service provision, while the outcome is evaluated once the service is provided.

Phiri and Mcwabe (2013) also affirm the importance of continual evaluation of customers' expectations of service quality in order to curtail dissatisfaction. While, Shahin (2006) points out the importance of measuring service quality as it allows for "comparisons before and after changes, identifies quality related problems, and helps in developing clear standards for service delivery. Citing the example of use of government websites, Al-adawi (2005) (as quoted by Kaisara and Pather), points out the importance of gauging citizen's attitudes and willingness to adopt services provided through these websites. The author points out that although governments are investing heavily in improving their websites, they should be cautious about measuring citizens' attitudes and willingness to adopt services provided through these websites. Sigwejo and Pather (2016) bemoan how the importance of e-government evaluation has been bypassed in literature. Citing Kamatula (2012), Sharif *et al.*, (2010) posit that e-government services are rarely evaluated. Thus the need for better monitoring and evaluation of e-government projects.

Sigwejo and Pather (2016) propose an e-governance framework, in which effectiveness of e-governance services would be indicated by citizen satisfaction protectively. They argue that the strengthening of expectations on service delivery and improving the e-government systems would provide grounds for effectiveness in e-government services. The proposed model provides guidelines to understand citizens' service expectations through performance of e-government systems; the skills to utilize e-government systems; and benefits of using e-government. Consequently, this becomes a determinant of citizen intention to use the service; actual use of the service; and satisfaction with the e-government services. On the same note, facilitation conditions are determined by the government environment, infrastructure for e-government's systems and organisational efforts, which further affects citizen's intention to use the service; actual use of the service; and finally satisfaction.



**Figure 4.4: E-government Citizen Satisfaction Framework (ECSF)**



Adapted: Sigwejo and Pather (2016)

#### 4.8 CUSTOMERS' PERCEPTIONS OF SERVICE QUALITY

Njura (2010) states that perceptions of service quality by customers will enable service providers to identify the activities that require improvement. Ganesan-Lim, Russel-Bennett and Dagger (2008) point out that service quality may be dependent upon the characteristics of the service or service type. Many definitions of perceptions have been given in literature. Gobalobolokwe and Hulela (2014:2) define perception as “a psychological concept essential in social sciences to examine people’s beliefs, opinions, values and awareness of new innovation”. Loudon (1997) (in Njura, 2010), defines perception as “the process of receiving and delivering meaning from stimuli present in an individual’s internal and external environment”. The definition suggests that to perceive is to see, hear, taste, touch, smell or sense intensely something, an event or relation and to organize, interpret and derive meaning from the agreement.

Meanwhile, Strydom, Jooste and Cant (2000:84) (in Manuel, 2008), define perception from a customer's viewpoint and point out that "customer perception is the process of receiving, organising and assigning meaning to information or stimuli detected by the customer's five senses" and opine that "it gives meaning to the world that surrounds the customer". They further elaborate that perceptions are the end result of a number of observations by the customer. According to Chingang and Lukong (2010) the consumer's perception is what he/she experiences. Consumers' expectation, what citizens think, should be offered in the CICs - therefore, citizens' perceptions will be what they experience in the CICs.

Manjunatha and Shivalingalah (2004) allude to the fact that success of an organisation is anchored in customer's perception or judgement of the quality of services provided. They further elaborate on the constructs of perception of quality and customer satisfaction. To them, customer satisfaction and perception of quality depend on the extent to which customer expectations are matched by services delivered. This refers to services delivered by the CICs. Customers' perception of quality services is attained, after the satisfaction level is attained, while the perception of customers is based on what they receive from a service provider. According to Chingang and Lukong (2010), determinants of service quality require the customer to have had some experience in order to evaluate their level of service quality ranging from ideal to completely unacceptable quality. Twinomurwizi, Zwane and Debusho (2012) points out the importance of citizen perceptions and the degree of satisfaction or dissatisfaction. These are important to ascertain, in order to determine to what extent citizens are experiencing the value of services.

Customers' perception of service quality is based on services provided and the satisfaction attained. Service quality and customer satisfaction form the focal areas of organisations as they want to quantify or measure it. Organisations' focus on quality service and customer satisfaction is that belief that organisations can differentiate themselves by means of providing better service quality and overall customer satisfaction. Zeithmal, Bitner and Gremler (2009:102) point out that "satisfaction is influenced by specific products or service features, perceptions of product and service quality and

price”. The authors highlight the direct bearing that perceptions of service quality have on customer satisfaction.

They also point out that perceptions are formed through assessment of the quality of service provided by a company and whether they are satisfied by overall service. Service encounter is when the customer experiences the service and they affect a customer’s experience negatively or positively. A negative experience will lead to a negative perception about a service quality on offer from a service provider.

Njura (2010) highlights the importance of developing a system to identify the perceived quality of services. This is important in developing effective strategies and achieving sustainable competitive advantage. She further elaborates that it is important for an organization to determine the perceptions of its users of its quality of service, which is pertinent to meeting its objectives. It is in the best interest for an organisation or service provider to understand the perception of consumers in order to achieve their organisational objectives in service quality. Njura (2010) highlights the importance of perception, especially to marketers since it involves the constitution of the users’ feelings about particular stimuli and helps in developing strategies towards users meeting that which the user perceives as important. Phiri and Mcwabe (2013) who describes consumers as having become sophisticated, educated, assertive and knowledgeable which has led to high expectations of services.

Khattab and Aldehayyat (2011:226) in their study on perception of service quality in Jordanian Hotels revealed the importance of service quality in business performance “through direct effect on customer satisfaction and indirect effect on customer loyalty”. Ganesan-Lim, Russel-Bennett and Dagger (2008:01) state that “service quality perceptions differ according to level of contact inherent to the service. They also view service quality perceptions as based on the service type.

## 4.9 DEMOGRAPHICS AND SERVICE QUALITY

Dewan and Mahajan (2014) state that customers differ in their perceptions of quality of offered and its dimensions. They further elaborate that the difference in these perceptions may be due to some demographic factors. This view is supported by Hirmukhe (2012) who opines that different customer or stakeholder groups may well have different expectations of the same service or have different service priorities and could be based on gender, age, level of education, or marital status. Bennett and Dagger (2008:01), citing Brauss (1990), point out that the perceptions of customers regarding quality service may differ in segments of the population, because individuals perceive service quality differently. Different people ascribe different levels of importance to the dimensions of service quality. They further (2008:11) posit that perceptions of the dimensions of service quality differ by level of contact, gender, age and income.

Dewan and Mahajan (2014) highlight the importance of demographic information in the measurement of service quality and they cite the example of the retail industry. Although they focused on the retail sector, this is applicable to all sectors as this helps to discover the relationship between demographic information and service quality dimensions. Demographic information has an effect on dimensions such as reliability. Ganesan-Lim, Russel-Bennett and Dagger (2008:01) highlight the fundamental role of demographic information. It is important for segmentation and targeting, understanding the effects of key demographics such as age, income and gender on customer perceptions of quality. Nafisa, Dion and Penciliah (2014) reveal that demographic characteristics significantly affect perceptions of experiences of customers. As for adoption of new technology, demographic factors are important variables that have an impact on use and adoption.

Females and males also have different needs and wants which affect their perceptions of service quality. Ganesan-Lim, Russel-Bennett and Dagger (2008:5) state that gender may affect perceptions due to “gender role socialisation, decoding ability, differences in information processing and the importance placed on the core or peripheral services. Gender perceptions could be attributed by the socialisation of people such as stereotyping. Women perceive service quality ranging from the environment to tangible

cues in their evaluation of service quality. Ganesan-Lim, Russel-Bennett and Dagger (2008) point out that women are more sensitive to the quality of the service environment. Income also affects consumers' perceptions of service quality. Ganesan-Lim, Russel-Bennett and Dagger (2008) suggest that the level of income affects perception of service quality, with those with higher incomes seeking quality in service interactions.

Ganesan-Lim, Russel-Bennett and Dagger (2008:5) point out that age is a powerful determinant of consumer behaviour. They further state how it impacts on behaviour such as interests, tastes, purchasing ability, political preferences and investment behaviour. Different age groups value efficiency and systems in service delivery differently. They further allude to the difference in efficiency and systems in service delivery that is perceived by different age cohorts. Sigwejo (2015), however, cite how context also influences how perceptions are formed. She reveals how different contexts influence perspectives and experiences of citizens and how perceptions are formed.

#### **4.10 OPERATIONALISATION**

The following section will discuss the operationalization for the study and the SERVQUAL model will be discussed.

##### **4.10.1 The SERVQUAL model and its five constructs**

According to Sayareh, Iranshahi and Golfakhrabadi (2016), there are many models and theories for measuring service quality, but the most prominent models are those that view the service quality as multidimensional or multi-attribute construct. Chikang and Lukong (2010) point out that service quality can be measured in different ways and this includes: 1) expectancy-disconfirmation approach, 2) performance only approach, 3) technical and functional dichotomy approach, 4) service quality versus service satisfaction approach and 5) attribute importance approach. In this study as indicated earlier on, the SERVQUAL model was adopted for the operationalization of the study as it provides detailed information about the customer's perceptions on the quality of service.

#### **4.10.2 Rationale for use of the SERVQUAL Model**

The “gaps” model was adopted as a theoretical model where concepts of quality service delivery in community information centres (CICs) were discussed. The model is grounded in the GAP theory of service quality and is derived from services marketing. It was chosen for the study as it provides more reliable survey information in terms of measuring the gaps between user expectations and perceptions (Marnane, 2004, cited in Naidu, 2009). The SERVQUAL instrument was chosen to enable the researcher to assess service quality in the CICs. The model helps one to understand the difference between consumers’ expectations of CICs and their perception of such centres (Chingang & Lukong, 2010). As far as the researcher could determine, the SERVQUAL model has not been used before to measure the quality of services in the CICs in Zimbabwe, hence the need to address this research gap. As such the researcher envisaged that the model would assist to assess the quality of service at these centres, as they are still in their infancy.

The SERVQUAL scale is the most broadly applied scale in the evaluation of service quality. Hongxiu and Reima (2009) (in Nguyen, 2014) describe the SERVQUAL model as a multi-item scale, which measures the customer’s perceptions about service delivery and quantitative measures that are used to gain insights from users. Sigwejo (2015) points out the two advantages of the SERVQUAL model as its advanced managerial indicative capability in a gap measure; and the conceptual matching of the SERVQUAL dimensions with IS settings. Selvakumar (2015) states that in the SERVQUAL model, gap analysis can be used to find the differences between perceptions customers have of expected service performance and actual service performance. The determinants accounted for in the model for measuring service quality has been found to be reliable and used in different sectors such as banking, hospitality, telecommunications and healthcare.

The SERVQUAL model is a framework primarily used to measure customer service quality in the retail sector. Parasuraman, Zeithaml and Berry (1988) propose a SERVQUAL model - SERVQUAL meaning service quality. Kasara and Panther (2011) points out that the SERVQUAL model was conceptualized by Parasuraman, Zeithaml and

Berry (1988) and was thus offered as a means to measure service quality in traditional brick and mortar business environments. According to Chingang and Lukong (2010), the Parasuraman (1985) model came after studying four service settings, namely: retail banking, credit card services, repair and maintenance of electrical appliances and long distance telephone services. In this model, quality is measured from the client's perspective. Ten dimensions that define service quality were first identified by Parasuraman, Zeithaml and Berry (1988). These were: tangibility, reliability, responsiveness, communication, credibility, security, merit, politeness, appreciation of client and accessibility. These were later reduced to five dimensions after a realisation that they were overlapping with each other, which are: reliability, responsiveness, empathy, assurance and tangibility. An illustration of the comparison is shown below.

**Table 4.1: Original model compared to the restructured model of the five dimensions of Parasuraman, Zeithaml and Berry (1988)**

<b>Original Model</b>	<b>Restructured Model</b>	<b>Description</b>
Tangibility	Tangibility	Physical aspects of what is provided to users
Reliability	Reliability	Ability to fulfil what was promised accurately
Responsiveness	Responsiveness	Ability to attend the users and provide the services promptly, capturing the notion of flexibility and ability to adapt to these needs of the service users
Competency Courtesy Credibility Safety	Assurance	Competency and courtesy extended to the users and the security provided by the operations
Access Communication Competency of user	Empathy	Individualised attention to users

Source: Parasuraman, Zeithaml and Berry (1998).

The five dimensions of the SERVQUAL restructured model all address different components of the model. Tangibles mean the company's physical surroundings, personnel appearance and condition of their machinery and equipment. Dewan and Mahajan (2014:45) are of the view that this dimension enhances the image of the organisation and "provides a more positive image in the way the customer perceives the services". The second dimension, reliability, is used to mean an ability to respond consistently and accurately with agreed performance levels. In this dimension the organisation fulfils its promises with regard to the delivery of service, the price and solving customer's problems (Dewan and Mahajan, 2014).

Responsiveness on the other hand, means willingness to help customers quickly and without delays. This includes dealing with customer complaints and problems as they arise and it also involves flexibility with the customer's demands. Assurance in this model connotes to knowledge and courtesy of employees and their ability to inspire trust and confidence. To Dewan and Mahajan (2014:45), this involves the ability to deliver services at a professional level. Finally, empathy refers to carefulness and personal attention the firm offers to its customers. Dewan and Mahajan (2014) sum this up as being able to build a relationship with the customer, understanding their needs and providing him/her with personalized services.

The SERVQUAL model, according to Parasuraman, Zeithaml and Berry (1988), attempts to show salient activities of the service organisation that influence the perception of quality. Nyundo (2013:32) further elaborates on this view and specifies the interaction between these activities and identifies the linkages between the key activities of the service organisation or marketer which are pertinent to the delivery of a satisfactory level of service quality. The model and the different gaps are illustrated below:

**Gap 1:** Expectation-perception gap, which is the difference between the consumers' expected service and the service provider's perceptions of the expectations;



**Gap 2:** Quality specification gap, which is the difference between the service provider's perception and the customer's perception on service quality specification;

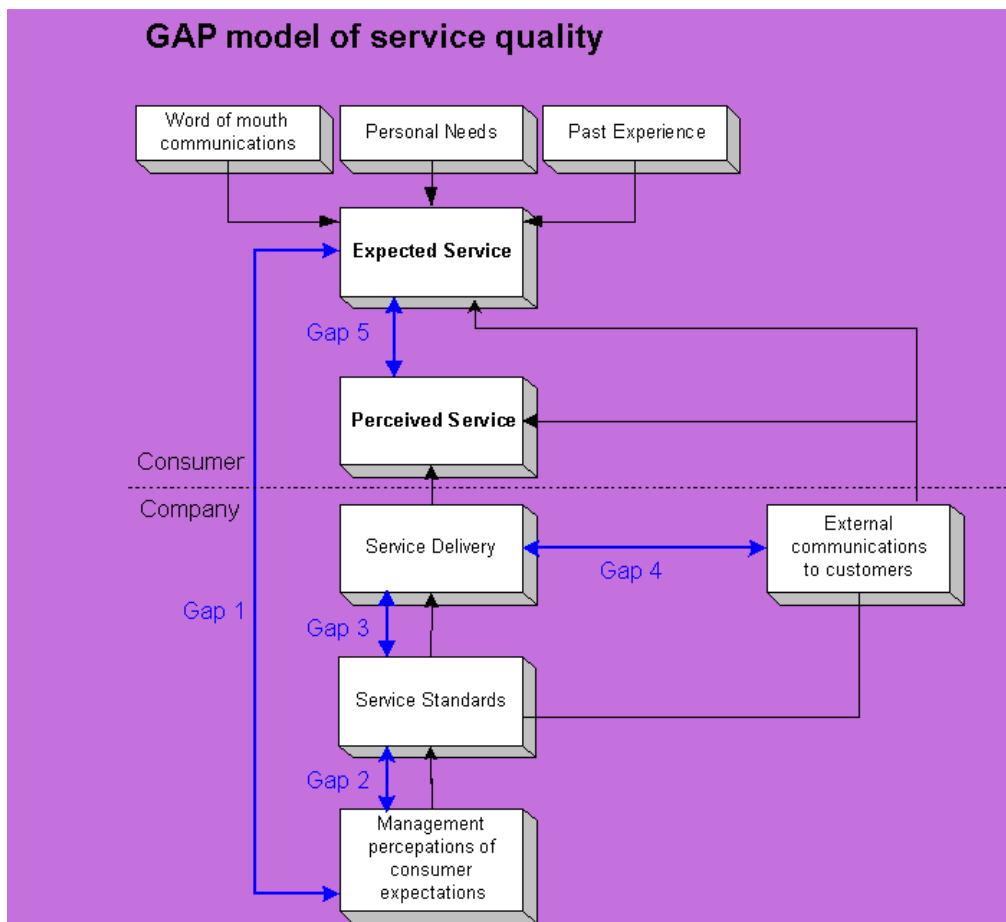
**Gap 3:** Service performance gap, which is the difference between the service standards and the actual delivery;

**Gap 4:** Marketing communication gap, which is the difference between the actual delivered service and the commitment to customers;

**Gap 5:** Perceived service quality gap, which is the difference between the actual service perception and the expectation of service by consumers.

This study focused on gap five, which refers to the discrepancy between user's expectations of service quality and their perceptions of the actual service delivered.

**Figure 4.4: GAP Model of Service Delivery**



Source: Hisam, Sanyal, and Ahmad (2016).

According to Mauri, Minazzi and Muccio (2013:139), “the SERVQUAL model has been widely adopted and used globally to measure customers’ perception of service quality in a spectrum of service industries”. They further point out that this model is a multi-item scale, which is also used to measure the customers’ perception about service quality. Moreover, it demonstrates the practicality in assessing the gap between expected service and perceived service (Gap 5). Hence, it is also termed gap analysis, for it measures the gap between what is expected and what has been achieved in terms of a client’s fulfilment. Twinomurwizi, Zwane and Debusho (2012:95) point out the different gaps and go on to elaborate that “the gap is dependable on standards used to measure the quality of service, difference between recipient’s expectations and experience and difference between what customers were told and what they experience, and the difference between what management think the service experience will be like, and the actual experience”.

Chingang and Lukong, (2010:11) state that the model represents service quality as the discrepancy between a customer’s expectations of services offered and the customer’s perceptions of the service received. A view shared by Onyimbo (2015:36), who established that the “SERVQUAL scale effectively determined the gap between expected and perceived services”. Thus, it measures the gap between customer expectations and customer’s perceptions making it an attitude measure. A focus on issues of service quality and customer satisfaction serves to improve the performance of organisations, while for this study, the focus was on the improvement of the efficiency of CICs as mode of e-delivery service in Zimbabwe.

#### **4.10.3 Review of Previous Studies Using SERVQUAL**

Research has been done in service industries such as telecommunication, education, restaurants, banking and health, but is limited on CICs using the SERVQUAL model within the Zimbabwean context. A study by Saraei and Amin (2012) used the SERVQUAL model due to the novelty of ICT rural centres in Rasht, Iran. The main purpose of that study was to determine how applicable the SERVQUAL model was implemented in the context of rural centres, how clients perceived service quality and whether they were satisfied with services offered in the centres in Iran.

The study examined five hypotheses based on tangibility, accountability, guarantee, empathy and reliability of service. The results also revealed that the SERVQUAL model could be used to determine the quality of service offered in the CICs in rural areas. For the justification of the study, Saraei and Amin (2012:572) cite Ladhari (2009) and state that:

“it was recommended that the SERVQUAL model was a good scale to use when measuring service quality in various specific industries, but it was appropriate to choose the most important dimensions of this model that fit to that particular service being measured in order to assure reliable and valid results.”

A view shared by Chingang and Lukong (2010), who also view the SERVQUAL model as a good scale to use when measuring service quality in different sectors. However, they highlight the importance of choosing dimensions of the model that fit to a particular service and thus increase the validity and reliability of the results. In the same vein, the research adopted the model as it takes into consideration the customer’s expectations and perceptions of the services in the CICs in Zimbabwe.

The study by Chingang and Lukong (2010:10) sought to determine “how applicable the SERVQUAL model is in grocery stores and empirically describe how consumers (students) are satisfied with the services offered by these stores in Umea”. Results showed that the SERVQUAL model was not a good instrument to measure service quality because some items under the dimensions overlapped and regrouped under different dimensions from the factor analysis carried out. It also emerged that overall quality perceived by consumers was not satisfactory, meaning expectations exceeded perceptions and all dimensions showed higher expectations than perceptions of service. Consequently, the results show that the use of the SERVQUAL model is not the best in grocery stores. They further highlight the difficulties in measuring service quality. This is due to the intangible nature of service quality and also expectations and perceptions of consumers which is difficult as well to determine due to the complexity of human behaviour.

Dewan and Mahajan (2014) used the SERVQUAL model in their study on “perceived service quality and its dimensions in private sector banks”. The objective of the study was to explore how the customers of the private sector perceive the different dimensions of the service quality. An adapted SERVQUAL questionnaire was used and results indicated the importance of service quality in banks. The main features that emerged from the results was the issue of periodically accessing and monitoring service quality as it is important for developing and maintaining enduring relationships with their customers. In essence, having good relationships with customers not only retain customers, but it also leads to increased organisational performance.

Twinomurwizi, Zwane and Debusho (2012) used the framework to measure quality in South African e-governance service centres. They adopted a socio-technical approach in viewing government which composed of people data, processes, hardware and software interacting together in enabling government services and interactions. They used SERVQUAL methodology and its value to build the elements of the e-government needed to deliver effective and efficient services. Twinomurwizi, Zwane and Debusho (2012) postulate that the SERVQUAL emphasis is on the users of services and could be adopted to assist in enabling efficient and effective government. The objectives of their study were to provide an understanding of how the SERVQUAL framework can be adapted to the e-government context, based on a study of the Thusong Centres in South Africa. The study also sought to answer the question “How can service quality and citizen perceptions of the value of e-government be measured? Results indicated that the adapted SERVQUAL tool can be applied to understand customer expectations and experiences of e-government at citizen service centres, thus enabling governments to improve their service delivery and e-government efforts.

#### **4.13.4 SERVQUAL Model and its Limitations**

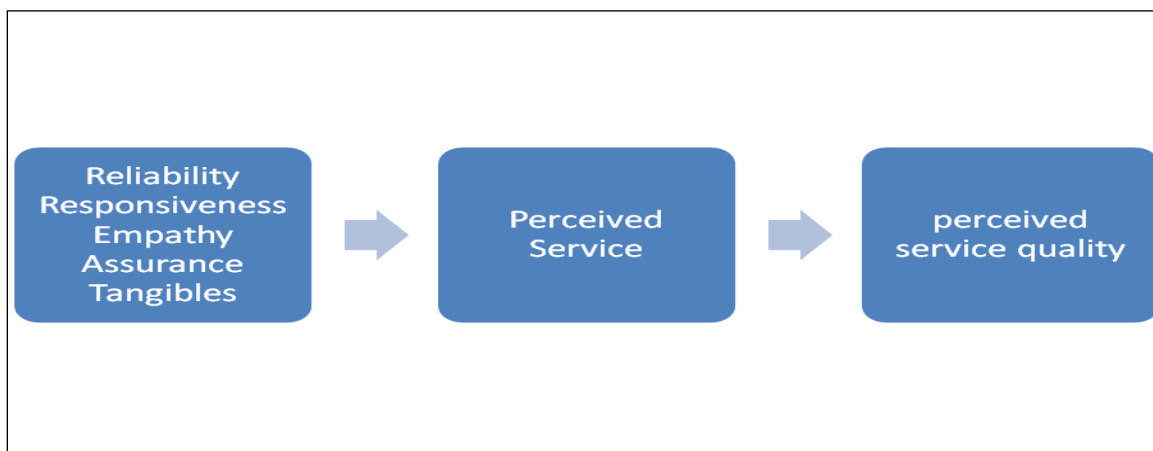
Quoting Buttle (1996), Twinomurwizi, Zwane and Debusho (2012) cite limitations of the SERVQUAL model and point out that theoretically, the model does not draw from established theory. Moreover, it has also been observed that the model does not consider the outcomes of service encounters and dependence on context. Operationally, the expectations are regarded as vague. This has also been observed by Gronroos (1990)

(in Oanda, 2015) who states that the SERVQUAL focal point is on the service delivery process and does not address the service encounter outcomes.

The limitations of the SERVQUAL model have led to modified and new models and one of the new models that emerged is a model by Cronin and Taylor (1992). They proposed the SERVPERF model as an alternative to the SERVQUAL. This model uses the performance approach which looks at the client's feelings towards a service. The focus of this study will also be on measuring service quality based on customer's feelings towards services offered. This makes it advantageous in measuring quality. However, it is important to note that this model does not "provide information on how customers prefer the service to be in order for service providers to make improvements" (Chingang & Lukong, 2010:11). According to Dewan and Mahajan (2014) there are similarities between the SERVQUAL and SERVPERF models.

SERVPERF focuses on (service performance) and it uses the same 22 item scale to measure service quality. But, the difference is in the number of times the service quality is measured. In the SERVPERF (Cronin & Taylor, 1992) model, the 22 item scale is used once to measure the perception of service quality; whereas in the SERVQUAL, the scale is used twice. The measurement is done once to measure the expected service quality and again to measure the perceived service quality. The SERVPERF model by Cronin and Taylor (1992) is shown below.

**Figure 4.6 SERVPERF Model**



Adapted from Cronin and Taylor (1992).

Al-Ibrahim (2014) supports the use of SERVQUAL in the public sector as it measure service quality from view of the customer. He further states that it encourages comprehensive customer input across a variety of different quality areas in a single exercise. Use of the model allows services to focus on improving a specific area. The model can be used as a comprehensive statistical analysis tool which facilitates the user to interpret data accordingly .It is an exceptional way of obtaining an image of service performance at a specific moment in time, which would allow the user to create a milestone to measure the improvements made based on the responses to the preliminary administration of questionnaire. The SERVQUAL has proved to be successful in refining relationships between organisations and customers as it places more appreciation of customer satisfaction that is around social values.For the purpose of this current study, the SERVQUAL instrument was deemed to be more suitable.

#### **4.13.5 The Five SERVQUAL Constructs**

Nguyen (2015) states that five dimensions of service quality affect customers' perception and quality of services. The five dimensions as postulated by the SERVQUAL model are tangibility, reliability, responsiveness, assurance and empathy. The five dimensions are discussed below:

##### **❖ Tangibles**

This dimension includes appearance of physical facilities, equipment, personnel, and communication materials. Oluseya (2009) states that this condition of the physical surroundings is tangible evidence of the care and attention to detail exhibited by the service provider. Tibebe (2011:2) states that this dimension, which constitutes the image of service, is used by customers to evaluate quality. Kakourious and Finos (2016) observe that modern looking equipment might be a central tool that allows functionalities of services for the endowment of fast and reliable delivery which is error free. Hossain and Leo (2009) in Qatar, using four variables of reliability, tangibles, competence and empathy to measure customer perception of service quality in retail banks. Their research findings indicate that the tangibles had high ratings on service quality in banks.

Phiri and Mcwabe (2013) in their study conducted with a supermarket in Pietermaritzburg, South Africa, found that physical appearance has a great impact in drawing people to an organisation or it can act as a push factor for clients to seek services at competitor organisations. Krishundutt and Parumasur (2009) indicate that physical facilities, equipment, personnel, printed and visual materials have a highest mean which reflects a positive impression by the customers. However, tangibles were viewed as having the second least impact on service quality. Negi (2009), examined the significance of customer-perceived service quality in determining the overall satisfaction of customers in the context of mobile services.

The results indicated that tangibles were relevant factors to evaluate service quality in an organisation. The aforementioned findings are also in line with Agbor (2011) whose results confirm that there is indicate a relationship between tangibles and service quality. Twinomurwizi, Dwane and Debusho (2012) also confirmed a positive relationship between tangibles and service quality.

The following hypothesis was proposed based on literature:

- ❖ H0: Tangibles are not positively related to expectations and experience regarding the quality of service rendered; and
- ❖ H1: Tangibles are positively related to expectations and experience regarding the quality of service rendered.

### **Reliability (Delivering on promises)**

Zeithaml *et. al.*, (1990) state that this is the promised service that is performed dependably and accurately. The services offered are accomplished on time, in the same manner and without errors every time. It means that the organisation delivers on its promises, which include promises on delivery, service provision, problem resolution and pricing. Customers favour organisations that keep their promises. The reliability dimension in the SERVQUAL model has consistently shown to be the most important determinant of perception of the service gap ( Zeithmal, Bitner and Gremler 2006). This is also supported by Negi (2009:708) who also highlights that reliability dimension is the “most critical determinant to overall service quality”.

Naidoo and Muntina (2014) indicates the importance of offering prompt and reliable services as this is the basis on which the reliability of a service is judged or evaluated.

Negi (2009) indicates that reliability is one of the relevant factors to evaluate Service quality. Qanda (2015 citing) a study by Berry (1994) advances that reliability is highlighted as is the essential central part of service quality. Qanda (2015) points out that that “other dimensions will matter to customers only if a service is reliable” this resonates with Zeithaml et al., 2006, 106-107) who observed that reliability has been shown consistently to be the most important dimension in service quality.

Osotimehin, Hassan, and Abass (2015) highlight that “providing prompt reliable and improved service will increase customer’s commitment to services and in the case of e-government, will lead to the adoption of services. Consequently, poor user experiences, according to Alshehri, Drew and Alfarraj (2012:3), will lead to poor adoption of e-government services by citizens. Kasaira and Pather (2009) furthermore highlights factors that influence e-government success which are “service quality dimensions in the online environment; and citizens’ attitudes towards e-government and their expectations in respect of government responsibilities in enabling access and adoption thereof”. According to Kaisara and Patther (2009) implementation of e-government should consider service quality as this has an impact on the adoption and use of services by all citizens.

The findings are in line with Krishundutt and Parumasur (2009) who observed that reliability is the core of good service and organisations are supposed to be accurate and dependable so as to provide the promised service. Kumar et al. (2010) found that reliability greatly influences customer perception of bank service quality in Malaysia. This is also in line with Agbor (2011) whose results confirm that there is a relationship between reliability and service quality. Twinomurwizi, Dwane and Dabusho (2012) also confirmed a positive relationship between reliability and service quality. Yarimoglu (2014) highlighted reliability has bearing on how service quality is perceived by clients. This will be based on communication, speed and timeliness during the delivery of a service.



Prompt and reliable services are important to attract, serve and retain customers. Based on the literature, the following hypothesis was proposed:

- ❖ H0: Reliability is not positively related to expectations and experience regarding the quality of service rendered; and
- ❖ H2: Reliability is positively related to expectations and experience regarding the quality of service rendered.

❖ **Responsiveness (Willing to help)**

According to Abdullah, Suhaim, Saban, and Hamali (2011) responsiveness designates the desire, willingness and readiness of service providers to assist customers and deliver prompt service. There is emphasis on attentiveness and promptness in dealing with requests, questions, complaints and problems from customers. It is communicated to customers by: length of time they have to wait for assistance; answers to questions; or attention to problems. It captures the notion of flexibility and ability to customise the service to customers' needs. Kumar *et al.*, (2009) results indicate that the ability to conduct transaction in a short waiting period greatly influence customer perception of service quality and results in the reduction in loss of customers' loyalty and the opportunities of cross-selling as well as customer attrition.

Responsiveness is critical for customer perception of service quality and that, it is mandatory that organisations are quick to respond in all fronts of customer engagements (Abdullah, Suhaim, Saban, and Hamali, 2011). Negi (2009) indicates that responsiveness is one of the significant factors to evaluate service quality. This is also in line with Agbor (2011) whose results confirm that there is a relationship between responsiveness and service quality. Yarimoglu (2014) highlighted that responsiveness has bearing on how service quality is perceived by clients. This will be based on problem solving and complaints handling during the delivery of a service.

According to Saraei and Armini (2012), being slow to respond to clients requests impacts negatively on organisations. As in the case of their study in Iran, the negative behaviour emanating from staff led to a decrease in the users of the centres.

Staff inefficiency, poor administrative systems and a lack of coordination have also been identified as factors that can contribute to a decrease in the clients. This supports the notion that personnel should have training or need to be motivated. The administrative system also needs to be improved as it affects the morale of staff. Twinomurwizi, Dwane and Dabusho (2012) also confirmed a positive relationship between responsiveness and service quality. The following hypothesis was formulated based on the literature;

- ❖ H0: Responsiveness is not positively related to expectations and experience regarding the quality of service rendered; and
- ❖ H3: Responsiveness is positively related to expectations and experience regarding the quality of service rendered.

❖ **Assurance (Inspiring trust and confidence)**

According to Kumar et al. (2010), assurance presumes that employees have acquaintance about the products and services, are courteous toward customers and can encourage trust and confidence among customers. The dimensions of assurance include: competency to perform the service; politeness and respecting customers; effective communication with customers' and the general attitude that the server has the customer's best interest at heart. This dimension is particularly important for services that customers perceive as high risk or for a service were they feel uncertain about their ability to value outcomes for example, medical, banking.

In the service context, the organisation seeks to build trust and loyalty between key contact managers, employees and customers (Zeithmal, Bitner and Gremler 2006). Kumar et al. (2009) observed that assurance impacted on perceptions on service quality in Malaysian banks. Kumar et al., (2009) further alludes that the manifestation of respect, appreciation, friendliness and willingness to assist customers in the service arena culminate in customer judgment of service quality. Citing studies by (Petridou *et al.*, 2007 and Glaveli *et al.*, 2006) assurance was found as a highly significant service quality dimension in Greece and Serbia. This resonates with Negi (2009) who observed that assurance is one of the significant factors to evaluate service quality.

This is also in line with Agbor (2011) whose results confirm that there is a relationship between assurance and service quality. Twinomurwizi, Dwane and Debushe (2012) also confirmed a positive relationship between assurance and service quality.

Krishundutt and Parumasur (2009), observed that lack of courtesy amongst personnel can be detrimental to an organisation. It is important for employees to show courteous and friendly behaviour when delivering services to customers in order to increase their satisfaction rate towards the organisation's services. Moreover, it is crucial to employees in the CICs to demonstrate courteous and friendly behaviour when delivering services to clients in order to raise their contentment towards the CICs as reliable services have a strong impact on client's judgements.

Therefore, the following hypothesis was proposed:

- ❖ H0: Assurance is not positively related to expectations and experience regarding the quality of service rendered; and.
- ❖ H4: Assurance is positively related to expectations and experience regarding the quality of service rendered.

❖ **Empathy (Treating customers as individuals)**

This implies the provision of caring and individualised attention to customers. It features are being approachable, sensitive and making an effort to understand the customer's needs. Zeithmal, Bitner and Gremler (2006) state that the essence of empathy is conveying personalised or customised services that recognise that customers are unique and special and their needs are understood. Customers want to feel understood by the organisation and their worth needs to be recognised. Twinomurwizi *et.al* (2012) indicates that citizens view empathy as a central part in the success of e-government. They further elaborate that empathy is a learned skill that can be easily implemented with the complement of ICTs.

In the case of the CICs, it can be complemented with the use of ICT services that are housed in the centres. In Saraei and Armini (2012), empathy was ranked as ideal and staff in the centres in Raski in India had enough empathy with their clients.

Empathy in CICs was most satisfactory as compared to other dimensions which is also observed by Negi (2009). Negi (2009) is of the view that empathy is one of the significant factors to evaluate service quality. This is also in line with Agbor (2011) whose results confirm that there is a relationship between empathy and service quality Twinomurwizi, Dwane and Dabusho (2012) also confirmed a positive relationship between empathy and service quality.

As eluded to earlier, one needs to know their customers as customer service is an integral part of organisational survival. Knowledge of customers' preferences and their choice of services form part of meeting customers' expectations. Customers form part of the most important stakeholders of an organisation as organisational success depends on them. Their activities influence the operations of an organisation and therefore they need to be treated as unique and special. This can be achieved by knowing the client's name, their preferences and needs. Twinomurwizi, Zwane and Debusho (2012) indicate that citizens expect the personnel in the centre to understand their needs and to make them feel unique.

Empathising with clients might include have operating times that are convenient to them. Kakourious and Finos (2016) in their study reported that customers in the sampled banks were not satisfied with the operating hours. They suggested prolonging working hours by adding new personnel. Accordingly Patricio, Leal and Perreira (2016), indicate the benefits of extending operating hours it bears on the customer's satisfaction and it is the basis on which the quality of services is judged. They further elaborate that despite accompanying charges that comes with the extension of operating hours, it still institutes a vital measure to fulfil customer's requirements. Twinomurwizi, Zwane and Debusho (2012) indicates that citizens view empathy as a central part in the success of e-government. They further elaborate that empathy is a learned skill that can be easily executed with the complement of ICTs.

Based on literature, the following hypothesis was proposed:

- ❖ H0: Empathy is not positively related to expectations and experience regarding the quality of service rendered; and

- ❖ H5: Empathy is positively related to expectations and experience regarding the quality of service rendered.

#### **4.10.6 Correlational Relationships between Constructs**

There have been correlations between the SERVQUAL constructs and as indicated in Chapter 6, there are correlational relationships between the SERVQUAL constructs. This is in tandem with Agbor (2011) who also pointed out positive correlations between constructs. In a study of Arab Bank in Jordan, Al-Azzam (2015) found positive correlations between the constructs. The greatest relationship was between reliability and responsiveness, followed by empathy and tangibles then with empathy and reliability. In reviewing service quality models, Yarimoglu (2014) highlighted reliability and responsiveness having a bearing on people behaviour especially through problem solving, complaints handling anticipation, politeness, neatness, dress, tone of voice, attitude, friendliness, warmth, communication, speed and timeliness.

Ganiyu (2016) in Nigeria also found high correlations between these constructs, with the greatest being between responsiveness and assurance, followed by responsiveness and reliability. In the freight industry in South Africa, Govender and Naidoo (2011) found a strong positive correlation between reliability and responsiveness, as well as, a moderate correlation between tangibles and responsiveness. Neupane and Devkota (2017) found that in private hospitals in Nepal, there existed strong correlations between reliability and tangibles, empathy and assurance, responsiveness and assurance, as well as responsiveness and reliability.

In a study by Krishundutt and Parumasur (2009) responsiveness surfaced as the dimension with the least impact on service quality. This may be due to the overlap in meaning between reliability and responsiveness; as also noted by Zeithaml *et.al* (1990) who also observed an overlap in meaning on reliability and responsiveness. In a life insurance study in India, Banne and Bhola (2014) found that assurance was ranked first in terms of service quality, whilst empathy was ranked last. In India, Al-Azzam (2015) found that empathy had the highest significant relationship to customer satisfaction. However, in a study focusing on service quality of container operators, Sayareh, Iranshahi

and Golfakhrabadi (2016) found that there was actually less differences in empathy relative to assurance in the expected service quality relative to the experienced. This was because of overlap between the two constructs. Similar findings were found by Bagherzadeh and Bagherzadeh (2010), in a study focusing on higher education service quality in Tabriz, where there was less difference in assurance but highest difference in empathy.

#### **4.10.7 Mapping SERVQUAL dimensions and e-Government**

Providing excellent services is very important in order to be able to achieve greater performance in an organisation while retaining and attracting customers.

Sigwejo (2015) cites Butler and Collines (1995:83), who state that “introduction of service quality rhetoric in the public is a recent phenomenon that can be traced to the (NPM) movement”. Dewan and Mahajan (2014) postulate the importance of maintaining effective customer relationships, as it helps in building and retaining customer relationships, which is an integral component in any organisation. Citing Slu and Mou (2003), Dewan and Mahajan (2014:44) indicate that improvements in service quality can increase market share and higher returns for any organisation. However, measuring and managing effective government services are a concern for most governments. Chutimaskul *et.al.* (2008) (in Mahalik, 2015:36) affirmed that “e-government has been developed without considerations of the quality of e-government services and the requirements of citizens.”

According to Mahalik (2015), quality of e-government services plays a pivotal role in improving e-government efficiency and it increases citizens’ satisfaction. Sigwejo (2015) highlights the importance of evaluating e-government services’ effectiveness from the demand side. Evaluating from the demand side provides a foundation for understanding the needs of the citizens. It also helps to identify what would be beneficial to the citizens. This scholar calls for evaluation strategies that give feedback on citizens on issues that relate to uptake, use and benefits of e-government services. According to Twinomurwizi, Zwane and Debusho (2012), application of the SERVQUAL model in the context of e-government would assist governments to understand the type and quality of services that are expected and how its value is perceived.

As depicted in the table below, the authors adapted the different dimensions of the SERVQUAL model to the context of e-governance.

**Table 4.2: Mapping SERVQUAL dimensions to E-government**

<b>SERVQUAL dimension</b>	<b>Mapping to e-governance</b>
Reliability	E-services should be given fully, based on detailed and correct information. Explanations and/or options should be given for services not rendered.
Empathy	E-services should be given with empathetic consideration. The citizens have a right to services and should find the e-services easily accessible and communicated clearly.
Assurance	Information should be available about what government delivers and how it operates. E-services should be given in trust and confidence, and should therefore be credible and secure.
Responsiveness	There should be an awareness of the expected quality of the services and the benefits of ICT access to e-service. Users should be consulted about the quality of e-services rendered and given a choice about the e-services offered. Affordable e-services should be offered.
Tangible	The ICT infrastructure and appearance of personnel should be above a minimum standard.

Adapted Twinomurwizi, Zwane and Debusho (2012).

#### **4.14 CONCLUSION**

This chapter gave an outline on how the quality of products and services has become more important to the day-to-day running of businesses in the world. Despite the differences in the nature of products and services, it is quite evident that their requirements are the same as explained above. They have various demands, which range from their manufacturing processes, presentation of the product to consumers, as well as how the organisation treats the outside environment. All these affect customer perceptions of the products and services rendered to them. Positive perceptions of services, especially technology, not only lead to utilisation, it also leads to the acceptance thereof. Quality services has led to customer satisfaction, which in turn has a positive bearing on retention of customers. Customer satisfaction on quality services also becomes a pull factor for new customers to use the services.

Customer experiences and expectations on services furthermore positively influence the uptake and utilisation of services. The following chapter will give the detailed methodology applied in the study.

Monitoring and evaluation of services provide management with insights of what needs to be improved. Gaps identified will lead to refinement of services provided. It is important that service providers strive to focus on quality services in order to gain utilisation and adoption of services. The operationalisation of the SERVQUAL gap model was also discussed. Justification on how this model has become a popular measuring tool for assessing service quality in the private sector grounded in the "Gap Theory of Service Quality" was also given and how it helps the service providers understand both customer expectations and perceptions of specific services, as well as quality improvements over time while focusing on improvement, and training opportunities for staff. A notion that is of great importance in the implementation and adoption of CICs, which are in their infancy in Zimbabwe. The following chapter will look at the research methodology used in the study.



## CHAPTER FIVE

### RESEARCH METHODOLOGY

#### 5.1 INTRODUCTION

This chapter presents the methodology adopted in the study on the quality of services offered at community information centres situated in selected rural communities in Zimbabwe. Kothari (2004:8) defines research methodology “as a way to systematically solve the research problem”. Rajasekar, Philomithan and Chinnathambi (2013:5) also state that research methodology is a systematic way to solve a problem and it is the science of studying how research is to be carried out. It is an important aspect of understanding the different concepts, theoretical models, paradigms and approaches used in carrying out a research study. Research methodology also refer to those procedures by which researchers go about their work describing, explaining and predicting phenomena (Rajasekar, Philomithan and Chinnathambi, 2013:5).

There are various types of research approaches (quantitative, qualitative, mixed methods approach and historical approach) that can be used in trying to get a deeper understanding of a research inquiry. Various methodological approaches use different philosophical underpinnings and analytical connotations to discover answers to a research problem. The following discussion will highlight the merits and demerits of the stated components: ontological and epistemological assumptions, axiology, research paradigm, design, and population, sampling procedures, data analysis, research ethics and theoretical framework.

#### 5.2 ONTOLOGICAL ASSUMPTIONS

Wills (2007) states that ontology specifies the nature of reality as viewed by the researcher. This view is shared by Tomazos (2016), who posits that an ontological position has vital implications for the research study, since it views knowledge as inseparable from actions.

Moreover, people interpret and make their own meaning of events because they are distinctive and cannot be generalised. There tends to be a number of perspectives aligned with one incident. That is, participants are able to interpret a situation according to how they perceive it (Mack, 2010). Cohen, Manion and Morrison (2007) assert that the nature of social phenomena is interpreted through senses and experiences, which result in different views. Therefore, ontology raises the question why researchers need knowledge (Briggs and Coleman, 2007). Klenke (2014:15) adds that ontology seeks to address the nature of reality, which has resulted in qualitative and quantitative researchers viewing reality through different lenses. Therefore, by identifying the ontology of the study right from the beginning, assists the researcher to choose a research design to be adopted in seeking answers to the research questions (Jackson, 2013). For instance, qualitative research is noted by Klenke (2014:16) as having multiple and dynamic realities that are context dependent and embrace ontology that denies the existence of an external reality.

Reality is viewed by qualitative researchers as existing within the interpretations and analysis of people. As such, the way people view and perceive the world is termed reality and their views can be influenced by people's traits such as their values, beliefs and norms. Therefore, qualitative research is often used to answer questions about the multifaceted nature of a phenomenon, usually with a determination of describing and understanding this phenomenon from the participants' point of view (Leedy and Ormrod, 2005).

In qualitative research, reality cannot exist outside people's interpretations and perceptions. This, therefore, denies a singular state of reality existence because people are viewed as various and diverse. The status of things are socially constructed by people because it accommodates multiple perspectives and versions of truth. On the contrary, quantitative researchers view reality as singular, and objectivity is critical (Creswell, 2015). In addition, unlike qualitative research for which reality is diverse due to its observance of people's different interpretations of reality, quantitative researchers note that reality is singular in that reality is seen and perceived in a definite particular manner. This singular nature of reality in quantitative research is enabled by testing theory and hypotheses, looking at cause and effect, and making predictions so as to come up with

objective findings that will influence the nature of reality. Thus, quantitative methods are pre-determined and researchers use the research design to test objective theories by examining the relationship among variables (Creswell, 2015).

Furthermore, quantitative research does not allow the thoughts of people to affect the study, as this will lead to a diverse and complex perception of reality. In quantitative research, the researcher seeks to know if the predictive generalization of theory is true. Therefore, the theory is tested to come up with findings that can determine whether the theory holds true or should be refuted. Quantitative research is objective as the researcher does not interfere with the study or influence the results of the study. This is supported by Maree (2007) who states that in quantitative studies, researchers are separated from the subject matter, pointing to its objective nature in approaching the problem, hence it seeks to use precise measurements and analysis of target concepts to answer the inquiry. Landridge (2004:13) (cited in Guerin, 2012) sums up quantitative research as “research that concerns the quantity or measurement of some phenomenon”.

Moreover, the characteristics of this approach include aiming to produce findings that are unaffected by external influences. In other words, it has generalised findings that can be applied to other populations (Lichtman, 2006; Johnson & Christensen, 2008). This is because the concern is more about being able to predict behaviour rather than simply describing it, using structured methods and experimentation. Nguyen (2014) further points out that quantitative research can be descriptive or experimental - this study adopted the descriptive approach. The author further elaborates that the focal point of this approach is on examining the situation, as it exists in its present state.

### **5.3 EPISTEMOLOGICAL ASSUMPTIONS**

Epistemology is about knowledge and is a crucial foundation for research in both the natural and the social sciences (Wills, 2007). Epistemology addresses the question of how we get to know what we know and addresses the relationship between the knower and what is known leading to the question of where does knowledge come from (Klenke,

2014). Epistemological research is concerned about how the researcher gets to know the information obtained.

According to Mack (2010), knowledge is gained through personal experience. It should be noted that epistemology deals with all claims made about knowledge. Every researcher is subjected to either the objective or subjective attitude (Miller 2002). Furthermore, Miller (2002) states that objectivists believe that the social world should be understood and explained through the study of phenomena to analyse and evaluate their regular patterns and causal relationships, upon which new knowledge is developed. Epistemology assumes that knowledge is gained through a strategy that "...respects the differences between people and the objects of natural sciences and therefore requires the social scientist to grasp the subjective meaning of social action" (Bryman, as cited in Grix, 2004:64). It is a quest of determining the relationship between what a researcher claims to know and understanding how he/she gets to find the knowledge. Furthermore, it seeks to determine how knowledge is recognised and how it is used when found (Briggs and Coleman, 2007). In this study, the epistemological stance taken was guided by the interest of the researcher to understand the interactions taking place in a particular community, as the title of the study suggests: *Customer perceptions of Community Information Centres in Zimbabwe*.

When the epistemology of the researcher is objective, it is usually associated with quantitative research, since it expressly focuses on how knowledge is obtained through empirically observed, tested and verified methods. In quantitative research reality is seen as objective, hence the researcher ought not to influence the findings of the research by his or her own values, beliefs and emotions - methods of data collection are therefore scientific. On the other hand, qualitative research subscribes to subjectivism, whereby the researcher gets to know information about the phenomena under study by understanding the opinions, experiences, perceptions and ideas that people have about the phenomena under study. This is conducted in respondents' natural environment where the study normally uses a wide angle lens to examine the breath and the depth of phenomena, rather than conducting the study in artificially contrived settings as is done with a

quantitative study (Willis *et al*, 2007:235) where a narrow angle is used to test a specific hypothesis.

#### **5.4 AXIOLOGY**

Sheridan (2008:42) notes that axiology involves the study of values, value judgments and ethical systems. Axiology addresses the issue of the researcher's values and ethics in the study - the study can either be value laden or value free. Axiology primarily refers to the "aims" of the research. In other words, axiology attempts to clarify whether the researcher is trying to explain or predict the world or only seeking to understand what transpires around it (Lee, 2016). Creswell (2013:20) furthermore postulates that in qualitative research, the nature of the study is value laden and bias is reported based on the information gathered from the field. The term value laden in qualitative research implies that the values of the researcher can affect the study that is conducted, thereby paving the way for biased results.

On the other hand, axiology represents the influence of values in research; meaning that quantitative research should be value free (epistemic), hence personal values, beliefs, morals, and ethics should not affect the way research is carried out. Quantitative research does not create relationships with participants, hence values should not influence how reality is interpreted, unlike in qualitative research, which is value-laden (non-epistemic) as personal values are likely to influence the way reality is interpreted. Contrary to axiological assumptions of qualitative research, quantitative axiology embraces a different notion in which it asserts that the study is value free and not affected by the bias of the researcher. The values of quantitative researchers are neutral to the study - the research study is not affected by the researcher's values and as a result, bias is eliminated.

Ontology, epistemology and axiology form the building blocks for research paradigms discussed in the following section. It was of paramount importance that the researcher choose a paradigm that assists her throughout the research process. Ontology, epistemology and axiology illuminate how they are integrated within a research paradigm

and why they are a central feature within a research study, because they shape and define the conduct of an inquiry (Tuli, 2012).

## **5.5 RESEARCH PARADIGM**

The selection of the paradigm for this study was influenced by the nature of the problem that was being investigated. This study investigated the quality of services offered in three community information centres in Zimbabwe, to have a more holistic view of how stakeholders perceive and expect the services in community information centres. McKenzie and Snipe (2006) cite Mertens (2005) and Bogdan and Biklen (1998), who posit that “the choice of paradigm determines the intent, motivation and expectations of research”. The same view is shared by Chilimo (2008:135), who states that “the ontological and epistemological positions of two research paradigms in turn influence the choice of methodology and the data collection methods employed in a research project”.

Attempts to define paradigm have been varied. Creswell (2013) states that other scholars have termed them epistemologies and ontologies. Mackenzie and Snipe (2006) adopt the definition by Bogdan and Biklen (1998:22), who state that, this is “a loose collection of logically related assumptions, concepts or propositions that orient thinking and research.” Maree (2007) furthermore defines a paradigm as a set of suppositions or principles regarding basic features of actuality that give rise to a specific worldview. It then can be regarded as a lens through which reality is understood. It is of paramount importance that every research study be conducted within a paradigm (De Vos, Strydom, Fouche & Delport, and 2005:40). Wimmer and Dominick (2003) define a paradigm as “an accepted set of theories, procedures and assumptions of how researchers look at the world” and its focal point is knowledge claims. According to Baxter and Babbie (2004), communication researchers use a variety of paradigms to organize how they understand and inquire into communication. Babbie (2001:42) (cited in De Vos, Strydom, Fouche and Delport, 2011:231) refers to a paradigm as the fundamental frame that is used to organise our observations and reasoning.

According to Creswell (2014), paradigms are encircling systems of interconnected practices and philosophy that define for the researcher the nature of their inquest along three dimensions, namely: ontology, epistemology and methodology. According to Taylor, Kermolde and Robert (2007), Weaver and Olson (2006), and Blaikie (2009), a paradigm is a principal model or a broad view, or perspective of something. It is based on beliefs and practices that regulate inquiry within a discipline by providing an outline, lenses, and processes in which a research study is accomplished or takes place. By nominating a paradigm from the onset, the researcher is setting the basis for subsequent choices regarding methods, literature and design. Moreover, there is a number of paradigms that the researcher can choose from to underpin their study namely: interpretivism, positivism and post-positivism. This is illustrated in the table below.

**Table: 5.1: Categories of paradigms**

Positivist/ Post-positivist	Interpretivist/ Constructivist	Transformative	Pragmatic
Experimental Quasi-experimental Correlational Reductionism Theory verification Causal comparative Determination Normative	Naturalistic Phenomenological Hermeneutic Interpretivist Ethnographic Multiple participant meanings Social and historical construction Theory generation Symbolic interactionism	Critical theory Neo-Marxist Feminist Critical Race Theory Freirean Participatory Emancipatory Advocacy Grand Narrative Empowerment issue oriented Change-oriented Interventionist Queer theory Race specific Political	Consequences of actions Problem-centred Pluralistic Real-world practice oriented Mixed models
Adapted from Mertens (2005) and Creswell (2003)			

## 5.6 PARADIGM GUIDING THE STUDY (POSITIVISM)

For this study, a positivism paradigm was adopted. Positivism is based on the ideas of August Comte's observation and reason as means of understanding human behaviour. The French philosopher posits that true knowledge is derived from experience of the senses, which comes after observations and experiments. To the positivist, the scientific method of knowledge generation is advocated, which results in beliefs being rooted within the framework of supposition and science. De Vos, Strydom, Fouche and Delpont (2011) give caution on many definitions that have been proposed on positivism and argue that it "entails a belief that the methods and procedures of the natural sciences are appropriate to the social sciences".

According to Babbie and Mouton (2012), the key assumption of positivism is that the social sciences should follow the lead of the natural sciences and model its practices on that of successful science. Mey (2000) highlights that the positivist paradigm normally uses quantitative methods of research. The author further elaborates that the research techniques engaged in, provide methods through which a phenomenon can be quantified and classified. Thus, the role of the researcher is limited to data collection and interpretation through the objective approach. From this perspective, observation and measurement is the core of the scientific endeavour. Empirical research techniques, such as the experiment, attempt to discern natural laws through measurements and observation. This means that, this paradigm has an atomistic, ontological view of the world as comprising discrete, observable elements and events that interact in an observable, determined and regular manner.

This is in tandem to Neuman (1994), who posits that positivism defines social science as an organized method of combining deductive logic with precise empirical observations of individual behaviour in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity. The study uses the deductive approach as the research is derived from existing theories and the theory used is from "The SERVQUAL model".



In other words, the positivist paradigm is based purely on facts and considers the world to be external and objective, therefore, common sense should not be allowed to bias the research findings. Social theory to the positivists means how people define it and there is an assumption that people share the same meaning despite the diversity in society. Mey (2000:6) highlights that “positivists believe that social theory should be similar to natural science theory with deductive axioms, theorems and interconnected causal laws”. Against this background, positivism is rooted within the beliefs of natural science. Positivists assume an objective world in which scientific methods gauge and search to predict and describe causal relations among key variables.

Babbie and Mouton (2012) highlight that scientific knowledge is driven by the truth (epistemic imperative) which calls for the most valid or best approximation to the world. Thus, to the positivists a hypothesis has to be proved or refuted. Positivism holds a position that the goal of knowledge is to explain the phenomena that we experience. The reason for science is basically attached to what can be observed and measured. Numerical forms are mainly used to understand and explain this social phenomenon. Thus, knowledge outside that will be held as impossible by a positivist. Methods used in the positivist paradigm include quantitative research methods such as experimental studies or statistical procedures. A deductive approach in the positivist paradigm involves the collection of data by means of survey instruments, identifying concepts, operational definitions and doing the research in a systematic manner.

Chilimo (2008) states that on ontological issues, quantitative researchers view reality as objective and independent of the researcher. On epistemological issues, quantitative researchers hold a positivist epistemology and believe that the researcher should remain distant and independent from what is being researched. These observations are aligned to the study, which has adopted the SERVQUAL model and are also supported by Chingang and Lukong (2010) who observed that this “strategy will permit measurement of variables derived from the SERVQUAL model adequately”. This will result in fine differences between people in terms of assessing their perceptions about service quality. They further point out how quantitative methods can be a benchmark for making

distinctions and a base for making more precise estimates of degrees of relationships between variables. This in turn attributes to valid and reliable findings.

## **5.7 RESEARCH PHILOSOPHY**

In research, three philosophies have been identified, namely: the qualitative, quantitative and mixed method approach. According to Chingang and Lukong (2010) use of qualitative and quantitative methods is dependable on the nature of knowledge i.e. reality, how one understands knowledge, and the process of acquiring knowledge and knowledge about reality. This study adopted the quantitative research strategy, as it is suitable when one wants to count or measure variables. Chingang and Lukong (2010), and Nguyen (2014), observed that this strategy support the measurement of variables derived from the SERVQUAL model adequately. This results in fine differences between people in terms of assessing their perceptions about service quality. They further point out how the use of quantitative methods can be a yardstick for making distinctions and act as a base for a more precise estimate of degree of relationship between variables. This in turn attributes to valid and reliable results. This approach is also termed the traditional or experimental approach, where there is manipulation of variables and control of the natural phenomena. This research used the quantitative design as it involves testing objective theories by examining the relationship among variables.

According to Du Plooy (2009:87), the methods of reasoning can be both inductive and deductive. The research used deductive reasoning and as Du Plooy (2009:87) puts forth: "...quantitative designs are usually based on deductive reasoning." A hypothesis is formulated at the beginning, which leads to the identification of constructs, variables and relationships to be measured. This is a research study which started with a general assumption (major premise) on the basis of which a minor premise is argued and it derives a conclusion about particular instances as they relate to the initial generalisation. Hedge (2015) points out that deductive reasoning is based on well-founded theories, principles and laws. As in the case of this study, the results are tested against founded theories. Hedge (2015:22) further elaborates that there is an attempt to study possible relationships in quantitative research, be they associative or causal.

The study adopts the correlation approach, whereby there is an attempt to determine the degree of relationship between two or more variables through the use of statistical data. Relationships between variables are sought and interpreted. According to Du Plooy (2009:51), the objective of quantitative design is to “describe, predict and explain quantities”. Therefore, there was a need to identify an appropriate research design that would align with the phenomena under study. Bryman and Bell (2007) state the different types of research designs, which are longitudinal, case study, comparative, experimental and cross-sectional or social design. Citing Fowler (2008), and Creswell (2014), further survey research includes cross-sectional and longitudinal studies. This study adopted the cross sectional design or social survey design. Du Plooy (2009) points out that one of the characteristics of this type of study is that it is done over a short period of time.

Creswell (2014) points out that the numerical description of trends, attitudes or opinions of people are provided. Ngulube and Lubbe (2005:160) furthermore posit that quantitative research methods are designed to quickly help researchers understand people and the social and cultural context within which they live. They further cite Maxwell (1994), who also alludes to the importance of understanding a phenomenon from the point view of participants and its particular social and institutional context in research. The table below depicts the different philosophies and their orientation.

**Table 5.2: Differences between quantitative and qualitative approaches**

<b>Orientation</b>	<b>Quantitative</b>	<b>Qualitative</b>
Assumption about the world	A single reality, i.e., can be measured by an instrument.	Multiple realities
Research purpose	Establish relationships between measured variables.	Understanding a social situation from participants' perspectives.
Research methods and processes	Procedures are established before study begins. A hypothesis is formulated before	Flexible, changing strategies. Design emerges as data are collected. A hypothesis is not needed to begin research. Inductive in nature.

	research can begin-deductive in nature.	
Researcher's role	The researcher is ideally an objective observer who neither participates in nor influences what is being studied.	The researcher participates in and becomes immersed in the research/social setting.
Generalisability	Universal context-free generalisations.	Detailed context-based generalisations.

Adapted from Adam (2010)

## 5.8 RESEARCH DESIGN

A research design is defined as “a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings” (Burns & Grove, 2003:195). The research design refers to the overall strategy chosen to integrate the different components of the study in a coherent and logical way, thereby, ensuring that the research problem is addressed effectively (De Vaus, 2001). Survey research is also described as a set of orderly procedures specifying what information is to be obtained and from whom and how. It provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of the population.

Kothari (2004) describes it as the conceptual structure within which the research is conducted and includes an outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data. Kothari (2004) further elaborates that research design is an important or integral element of research as it facilitates the smooth functioning of the various research operations, thereby making research as efficient as possible by yielding maximum information with minimum expenditure of effort, time and money. Guerin (2012:51) states that the process of research design involves making decisions about specific elements of the research process.

A point to note is that the research problem determines the type of design one can use, not the other way around. Creswell (2014:12) points out that these are “types of inquiry within the qualitative, quantitative and mixed methods approach that provide specific direction for procedures in research design.” Kothari (2004) also states that the purpose of the inferential approach to research is to form a data base from which to infer characteristics or relationships of the population. This is usually done through survey research.

According to Maree and Petersen (2007), the characteristics of surveys include big samples; many variables, which are measured; and the testing of multiple hypotheses. These characteristics align with the variables that the research will adopt for this study, which are the five SERVQUAL dimensions for service quality. The five SERVQUAL dimensions will be the independent variables, whilst service quality denotes the dependent variable. Maree and Petersen (2007) further state that the different ways of obtaining information are: interviews, telephone calls, questionnaires and observations. The questionnaire is usually used to gather information. Some of the objectives of the quantitative design include: “to describe, predict and explain quantities, degrees and relationships and to generalise from a sample to the target or accessible population by collecting numerical data” (Du Plooy, 2009:87).

A survey allows researchers to have more control over the research process. The study adopted the survey research design, as it helps in collecting data from members of a population in order to determine their current status in that population with respect to one or more variables. Babbie (2004), on the other hand, highlights the weakness of survey research and mentions the difficulties in probing insights relating to the causes of or processes involved in the phenomena being measured.

The survey research design was used in this study, as it provides “a numeric description of trends, attitudes or opinions of a population by studying a sample of that population”. A view supported by Nguyen (2014), who cites Saunders *et al.* (2009:144), and states that surveys allow researchers more control over the research process and it “generates

the data of representative respondents from a whole population which is highly economical”. A questionnaire was used in this study, because it includes a wider audience in comparison to other data collection methods used in research, such as interviews. Creswell (2014) points out that questionnaires are ideal to use in quantitative studies, as they identify statistical relationships. The questionnaire for this study was used as a method of collecting numerical data on the quality of services provided at three established community information centres in Zimbabwe.

## **5.9 POPULATION AND SAMPLING**

Mertens (2010) defines a population as the group, or people, or things, to whom the researcher applies the results of his/her study. Springer (2010) sees a population as the entire representative group of individuals that a study is intended to investigate. Babbie (2004) furthermore define the population of a study as a set of objects which are the focus of the research and about which the researcher wants to determine some characteristics. It is also termed as the theoretically precise aggregation of the elements in a study, from which a sample is actually selected. The target population for this study consists of users of three selected community information centres based in rural communities in Zimbabwe.

### **5.9.1 Sampling procedures**

Sampling is a procedure that involves selecting units of analysis from a population (Du Plooy, 2004). It is described as a key aspect of quantitative research and is the process by which a sample is selected from a population. Kothari (2004:52) defines sampling as “the selection of some part of an aggregate or totality on the basis of which judgement or inference about the aggregate or totality is made”. Nieuwenhuis (2007) also defines sampling as the process used to select a portion of the population for study. Sampling refers to the process of selecting people or elements from a population for inclusion in a research study (Patton, 2015). Thompson (2012) views sampling as “a process that involves selection of groups from a population of interests in order to observe and estimate patterns and develop analysis and results which can be applicable for the whole population”.

The author further points out the importance of sample selection as all the insights and data come from the selected group. Furthermore, it is of great importance to select a group that best serve the purpose of the study, in order to provide relevant and useful information regarding the topic or subject of interest. This research required collecting data from a wide scope of rural citizens who make use of community information centres.

Leedy and Ormrod (2013:152) elaborate that a sample should also provide “how much validity exists in the phenomenon under investigation”. There are three categories of sampling namely: probability, quasi-probability and non-probability. With probability sampling (also referred to as random sampling or chance sampling) each unit has equal chance of inclusion in the sample (Kothari, 2004). Creswell (2014) points out that with random sampling, each individual in the population has an equal chance of being selected.

Non-probability sampling is advantageous in providing convenience and insight. Shortcomings of non-probability sampling is that the sample will not represent the “target population and therefore has no external validity” (Du Plooy, 2001:122) and generalisations cannot be made to the whole population. Maree and Pieterse (2007) point out the challenges of non-probability sampling. These authors argue that this sampling technique does not make use of random selection of population elements, which makes it difficult to depict significance about a population. It is therefore, not advised to limit the use of non-probability sampling. Despite this drawback, it is advantageous to use this sampling method in situations whereby “not much time is available, the measuring instrument needs to be tested and preliminary studies have to be done in the development stage of the survey, not much money is available, and the population is difficult to find” (Maree & Pieterse, 2007:176). They further mention the four types of non-probability sampling methods, which include: convenience, quota, snowball and purposive sampling. This study adopted convenience sampling for the selection of the respondents. Purposive sampling was used to select the community information centres for this research.

## 5.9.2 Sampling methods used in the study

Leedy and Ormrod (2013:152) assert that purposeful sampling is used when the researcher selects a sample that will “yield the most information about the topic under investigation”. Kothari (2004:115) states that purposive sampling involves “deliberate selection of a particular unit or universe for constituting a sample which represents the universe”. Treadwell (2014) further elaborates that purposive sampling is based on the idea that a specific person or media content will meet specific criteria the researcher has. Purposive sampling involves deliberately selecting the items for a sample (Kothari, 2004). Babbie (2004:183) describes it as “a type of non-probability sampling technique, in which a researcher selects units to be observed on the basis of his/her own judgement of which one will be the most useful or representative”.

Non-probability is advantageous in providing ease and insight. Shortcomings of non-probability sampling is that the sample will not represent the “target population and therefore has no external validity” (Du Plooy, 2004:122) and generalisations cannot be made to the whole. Prado (2009), in his research, he used the criteria of regional location, launch phase and distance from nearest urban centre to purposively select a Community information Centre. Chilimo (2008) used purposive sampling of CICs based on the location, service offered, Community information Centre maturity and mode of operation, as the criteria. This becomes the focal point of this research as functional community information centres in the eastern region of the Zimbabwe.

Convenience sampling was used to choose respondents who were asked to complete the questionnaire. Respondents were chosen because of their availability in the community information centres. Maree and Pieterse (2007) state that it is a sampling method whereby the population elements are based on availability. Baxter and Babbie (2004) in tandem to this, state that convenience sampling relies on available participants. This makes it a risky method to use to generalise the results to a larger population. The sample might also be biased as there could be over selection, under selection or missed selection of people. Despite the risk, it has greater feasibility and it is useful in exploratory research where the researcher’s interest is mainly focused on getting inexpensive and



quick approximation of truth. It is also useful in pilot studies, where few respondents are involved, to test a questionnaire. The study adopted this method as it is easy to administer and low in expenses.

Snowball sampling was also adopted, as few respondents were frequenting the community information centres during the period of data collection, as school children and their teachers (as the frequent users) were on school holidays. This method was adopted as it yields better results at a lower cost, as compared to other traditional sampling methods that require extensive search efforts to get sufficient numbers of respondents. In snowball sampling, the researcher first identifies a few people who are relevant and then ask them to locate other useful informants.

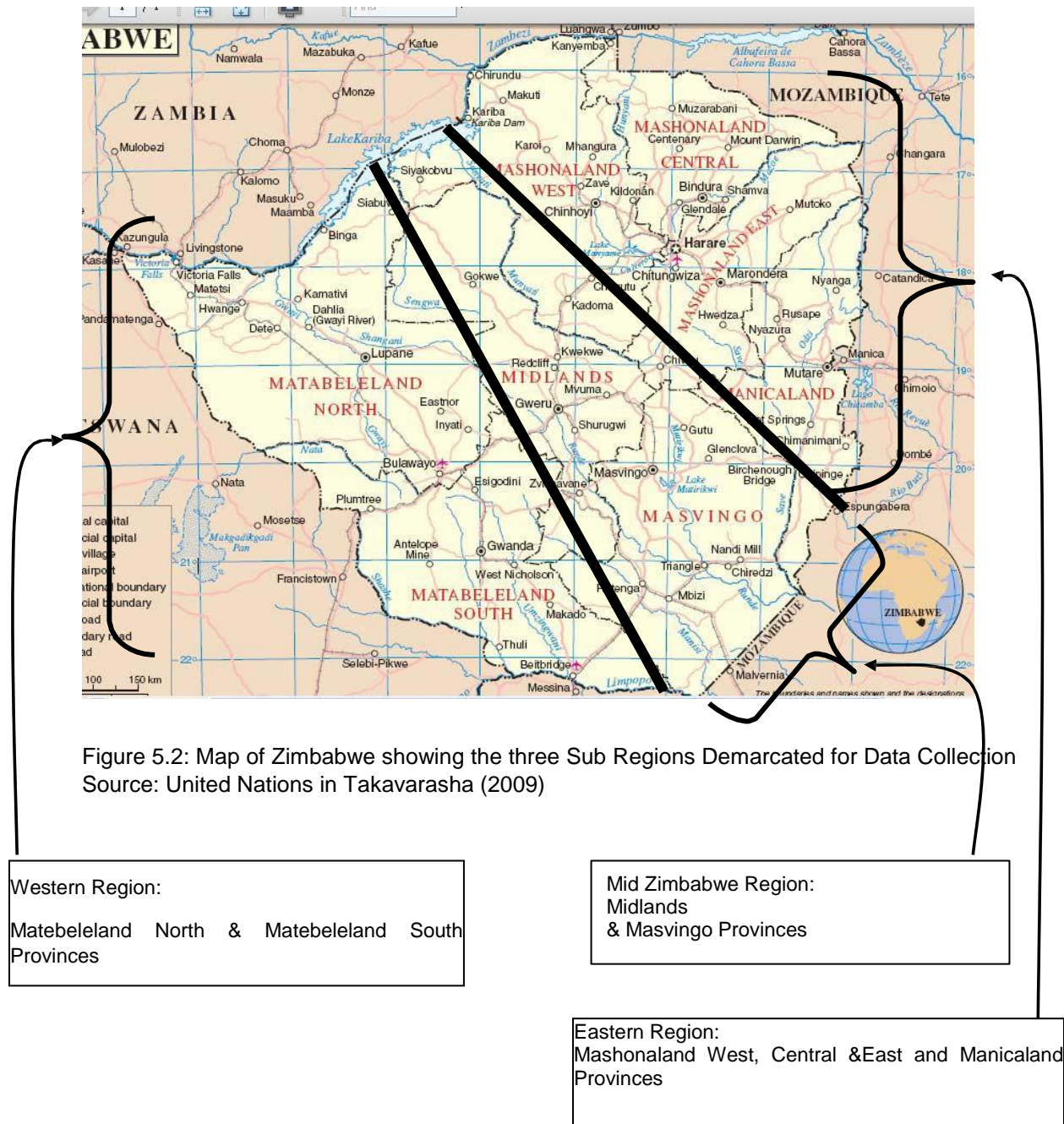
In the case of this study, the respondents who had come to the CIC during the period of data collection, were identified as first respondents, who then led the researcher to the other respondents who also use the community information centres. A notion supported by Hair, Black and Babin, (2009:323) posits that “it involves identifying a set of initial prospective respondents who will in turn help the researcher identify additional people to the study”. It is advantageous in cases where a researcher is researching sensitive issues. In the case of this study, the researcher was referred to someone already known by the first respondent. It is disadvantageous in that it limits the variation in the samples as informants will belong to the networks of the index cases. As put forth by Hair, Black and Babin (2009:323), it allows bias to enter the study, as there are “significant differences between people who are known in social circles and those who are not”. Another drawback of snowball sampling is that the ability to generalise the results is also limited.

### **5.9.3 Sample size**

The study consisted of information community centres’ users and a purposive sample of three centres were selected on the basis that they are representative of all the functioning centres in the country. A sample of 475 responded to the questionnaire.

This research study adopted the criteria used by Prado (2009) and as such selection was based on the launch phase, distance from nearest urban centre and regional location.

The selected centres are located in Mashonaland West (Murombedzi Community Centre) and Central (Muzarabani Community Information Centre) and Manicaland (Rusape Community Information Centre) provinces (see map below).



## **5.10 DATA COLLECTION PROCEDURES AND INSTRUMENTS OF THE STUDY**

Springer (2010) supports the use of multiple sources of data collection and instruments, saying that they allow both triangulations of data, as well as offering the opportunity for self-reflection. However, the researcher used the questionnaire as the only data collection instrument for the study. Below is a brief description of the research instrument used in the study.

### **5.10.1 Questionnaire**

According to Cohen, Manion and Morrison (2000), a questionnaire is a document containing questions designed to solicit information appropriate for analysis. A questionnaire is defined as a “formalised framework consisting of a set of questions and scales designed to generate primary data”. Hair, Black and Babin (2009) states that questionnaires are intended to collect meaningful data to test a hypothesis and as such questionnaire design is important. A self-administered questionnaire was used in this study to obtain data from 475 respondents. Alshehri, Drew and Alfarraj (2012) state that questionnaires are “a widely used data collection instrument for recording participants’ responses to research related questions presented in a predetermined order”. A structured questionnaire was used, and was adapted from Twinomurwizi, Zwane and Debusho (2012).

The respondents in the study were required to choose responses from a predetermined set of responses. The format of the questions was structured and respondents were limited to the alternatives available. All the respondents from the three fields completed the same questions and all questions were presented to the respondents in exactly the same order, which leads to standardization. This is to ensure that all respondents reply to the same set of questions.

Advantages of using such a questionnaire are that they are simple and fairly cheap to analyse (Kothari, 2004; Saraei and Amini, 2012). According to Ngulube and Lubbe (2005) the objectives of using a questionnaire are the maximisation of the percentage of potential respondents answering the questions and also one obtains precise information from the survey. Hair et.al (2009) point out the popularity of such questions with researchers as

interviewer bias is eliminated because the respondent simply checks boxes or line circles a category. Sensitive questions are easily answered. Respondents check the correct response and put in their answer. A questionnaire is furthermore advantageous in reducing bias error. Questionnaires also reduce the bias that might emanate from the personal characteristics of interviewers. They ensure confidentiality as the respondents remain anonymous - this assurance of anonymity is of great importance in surveys that deal with far-reaching issues. This study adopted the questionnaire as a data collecting tool as it allows “measuring of variables derived from a SERVQUAL model adequately and come up with the differences between people in terms of assessing their perceptions about service quality” (Chingang and Lukong, 2010:21).

The questionnaire was constructed using the SERVQUAL approach and it included three sections, which consisted of structured questions developed from the SERVQUAL model. Section One included biographical items and two more sections represented the indicators. The second section consisted of users’ expectations, which covers the information respondents think should be offered to users in the community information centres. The third (and last) section included items on the measures perceived. Adopting Chingang and Lukong’s (2010:19) stance on being objective, the study did not seek to understand each respondent’s perceptions; instead it wanted to “get a general answer on consumer’s perceptions and expectations by users on the quality of services in community information centres based on an already designed model”.

The disadvantages of the use of a questionnaire as a data collection tool include the nature of the research tool. Questionnaires are informal in nature, which requires that simple questions are asked (Kothari, 2004), therefore, the instrument can be used as a data collection instrument if the questions are simple and straight forward. Bryman (2004) mentions the drawbacks on the use of questionnaires with closed questions as they do not have a chance to probe further and one has to settle for the given answer. This results in the researcher not having control over the environment and there is no assurance that the correct people will complete the questionnaire.

Questionnaires also sometimes receive low response rates. The author further mentions that questionnaires measure views rather than actions.

Bell (2005) gives six types of closed questions, which include: list, ranking, category, quantity, grid and scale. The five-point Likert scale was used in this study. Kothari (2004) gives the advantages of using a Likert scale in research. He mentions that it is relatively easy to construct as compared to other types of scales, specifically the Thurstone-type scale. Another added advantage of using the Likert scale is that it is more reliable, as respondents answer each statement included in the instrument, thus providing more information. Likert scales allow the use of statements that are not patently related to the attitude being studied.

Maree and Pieterse (2007) point out that this scale provides ordinal measures of a respondent's attitude. Respondents are asked whether they agree or disagree with a statement. Four to seven categories are used. Use of the Likert scale is more convenient if a researcher wants to measure a construct. In this study, the five constructs in the SERVQUAL model were measured. A series of Likert scale questions were asked and then a total score calculated for each respondent by assigning the values 1 to 5 to the categories (Maree & Pieterse, 2007). The authors further elaborate that each respondent's five values are then added based on their responses. See appendix 3 for detailed questionnaire.

## **5.11 VALIDITY AND RELIABILITY**

The following section will look at the validity and reliability of the study.

### **5.11.1 Validity**

According to Kumar (2005), the concept *validity* refers to quality and can be applied to any aspect of the research process. It relates to whether a research instrument is measuring what it sets out to measure (Dahlberg and McCaig, 2010). Validity is an important component of any study, such that, if not carried out well, might affect the outcome of the results, to be valid or invalid. Kothari (2004:90) states that, "it is the extent to which differences are found with a measuring".

The author further highlight the types of validity, which include content, criterion-related and construct validity. Content validity is the “extent to which a measuring instrument provides adequate coverage of the topic under study” (Kothari, 2004:91), while criteria related validity relates to “our ability to predict some outcome or estimate the existence of some current condition”. Construct validity is “based on the logical relationship among variables” (Baxter and Babbie, 2004:127). It emphasizes two logical relationships (convergent construct and discriminant construct validity).

In convergent construct validity, “the researcher demonstrates that the measure converges or correlates positively with measures of theoretically related variables (Baxter and Barbie 2004:127). Whilst discriminant construct validity, “the measure diverges from or correlates negatively with measures of theoretically different variables” (Baxter and Barbie 2004:127). In any quantitative study, validity is a critical issue and might be improved through careful sampling, appropriate instrumentation, and appropriate statistical treatment of the data (Mertens, 2010; Babbie and Mouton, 2005). Prado (2009) alludes to the challenges that survey protocol poses to validity.

The format, language, content and manner in which the questionnaire is conceived and administered can impact its validity. Citing Fink (2006), Prado (2009) points to four different criteria of instrument validity, which are: predictive, concurrent, context and construct validity. The instrument reflects true differences among the variables being tested. To ensure validity, the questionnaire for the study was sent to a statistician who verified it against the research objectives and hypotheses. It was also modified to suit the context of the study. To ensure internal validity, all respondents in the three community information centres used the same questionnaire. Construct validity was determined by conducting Confirmatory Factor Analysis on all 22 items and associated five SERVQUAL constructs with AMOS V22 software (Results show a measurement model with five correlated factors (see Fig 6.14).

### **5.11.2 Reliability**

According to Cohen *et al.*, (2006:117) reliability is “essentially a synonym for consistency and replicability over time, over instruments and over groups of respondents.

It is concerned with precision and accuracy”. Creswell (2014) posits that reliability is a measure of consistency over time and over similar samples. The ability to produce the same results in similar situations. In terms of reliability, the researcher was concerned with whether different respondents understood specific questions in the same way. The questionnaire that was used has been comprehensively tested in previous studies and its reliability and validity is reputable. That is, it measures what it is supposed to measure and can be replicated and yield the same results (Naidu, 2009). Accordingly, the validity of research leads to answering specific research questions. If the results are considered to be invalid, then they cannot be used to answer research questions (Nguyen 2014).

The researcher made sure that the supervisor and the statistician edited and corrected the instrument to ensure its reliability. The aim was to edit the language of each item so that the items were to be relevant and to cover all the constructs of the SERVQUAL model. The supervisor reviewed the items with respect to their readability, clarity, format, ease to understand, and adequacy to gather reasonable responses. The implication is a reliable instrument which is likely to yield similar data from similar respondents repeatedly if the same methods and instruments were to be used in a similar situation, as advocated by a quantitative study.

These sentiments are supported by Kothari (2004), who states that “a reliable measuring tool does not contribute to validity, but a reliable instrument need not be a valid instrument”. This therefore means that a highly reliable test conducted at present will generate the same data in future, or two observers using the same observation schedule will account for similar data. An instrument that is reliable but not valid is of no use to the researcher as it would only measure reliably something other than what was intended. However, Nguyen (2014) points out that there are four common types of threats to reliability, which include: subject or participant error, observer error, subject or participant bias and observer bias. A measure of internal consistency (reliability) for all the constructs was used, namely Cronbach Alpha.

## 5.12 DATA ANALYSIS

Nueman (2001) define data analysis as the search for recurrent patterns in behaviour. It involves “sorting, categorizing, evaluating, comparing, synthesising and contemplating the coded data as well as reviewing the raw recorded data”. It involves examining, categorising and rearranging collected data with the purpose of finding a solution to the research problem. Henczel (2000) (in Nkosi, 2008) describe data analysis as the process whereby information that has been gathered and analysed. Data were analysed using descriptive and inferential statistical techniques. Aldrich and Cunningham (2016:110) define descriptive statistics as that “branch of statistics that you use when the data collected is to be described”. It was performed to observe the characteristics of the participants and the measured variables. Kothari (2004) states that descriptive statistics is used for the development of certain indices from the raw data. Descriptive statistical techniques for data reduction and summarization include generation of frequency tables, graphs and scatter plots. Inferential statistics use sample data to generate approximations of unknown values in the population.

Inferential statistics assisted in drawing conclusions about the population from the study of a sample drawn. Data were analysed using statistical methods that include the use of the Statistical Package for Social Sciences (SPSS), AMOS version 22. AMOS computer program was used because of its suitability to conduct structural equation modelling. Statistical techniques used to analyse data include Cronbach’s alpha, exploratory and confirmatory factor analysis and Pearson correlation analysis.

### 5.12.1 Factor analysis

Factor analysis is defined as ‘a statistical procedure used to identify relations among variables in a correlation matrix and is commonly used to reduce a large number of responses or questions to a few meaningful groups known as factors’ (Gay et.al 2011:368 in Tsige, 2016). Tsige (2016) further elaborates that it involves a kind of statistics that groups related correlated variables so that a meaningful understanding can be deduced from the group variables.



According to Williams, Brown and Onsmann (2010:2), “factor analysis is the method of choice for interpreting a self-reported data questionnaire and is a multivariate statistical procedure that has many uses”. Mahalik (2015:40) view factor analysis “as a data reduction or structure detection method”. Factor analysis falls into two categories, which are: exploratory factor analysis (EFA) and confirmatory factor analysis (CFA).

According to Williams *et al.* (2010:2), the nature of EFA is investigative and the researcher using EFA has no understanding of the underlying structure of the data. They further point out that it is also used to build a theory using the hidden constructs. EFA identifies the factor structure or model for a set of variables. On the other hand, CFA is used to find the fit of the data to a theoretical model. Substantiation of the measurement model for this study was conducted by using CFA. Hair *et al.*, (2010) (in Diedericks, 2016:184) highlight that “CFA models are used to evaluate the role of measurement error in the model, validate a multifactorial model and group effects on factors”.

Further, Williams *et al.* (2010:2) point out that confirmatory factor analysis, is done to test the theory and it differs from EFA in that it makes assumptions regarding the factors developed and looks to factors that fit well with the theory. It is used to confirm a hypothesis (Yong and Pearce, 2013). Brown (2006:1) defines CFA as a type of structural equation modelling (SEM) that deals specifically with measurement models, that is, the relationships between observed measures or indicators (e.g., test items, test scores, behavioural observation ratings) and latent variables or factors.

Drawing from Hurley *et al.* (1997), Diedericks (2016:179) highlights four major purposes of CFA analysis. These include psychometric evaluation measures: construct validation; relationship between constructs; testing method effects; and measurement invariance. The current research focused on determining construct validity and examining the relationship between constructs. The study used CFA to find the model fit and also as a comparison between expectations and perception of service quality in CICs. Sayareh, Iranshahi and Golfakhrabadi (2016) recommends the use of second order factor analysis

for confirmatory factor analysis of SERVQUAL model. Both the first order and the second order factor analysis were conducted.

### **5.12.2 Structural Equation Modelling (SEM)**

The Structural Equation Modelling (SEM) approach was adopted to test the hypotheses, as it explores relationships between latent and observed variables. Ulman (2001) describes the SEM as a combination of exploratory factor analysis and multiple regression. Shreiber, Nara, Stage, Barlow and King (2006) state that SEM is more of a confirmatory technique but can also be used for exploratory purposes. They further state that the focus point of structural equation modelling is estimated relationships among hypothesized latent constructs. It may also be used to test experimental data in which one or more variables could have been manipulated. SEM gives scope to researchers to test theoretical propositions on the subject of new constructs that are theoretically correlated and on the directionality of important relationships.

MacCallum and Austin (2000:202) state that SEM is used to specify and estimate models of linear relationships among variables, which include measured variables (MVs) and latent variables (LVs). LVs are the hypothetical constructs that cannot be directly measured. They describe SEM as a “hypothesized pattern of directional and non-directional linear relationships among a set of MVs and LVs”. The purpose of the model is to account for variation and co-variation of the MVs. MacCallum and Austin (2000) argue that the use of SEM should not only be restricted to observational studies but can also be used in experimental studies to great advantage. This argument stems from the misconception that SEM is only applicable to observational studies. The current study uses a cross-sectional design; and MacCallum and Austin (2000) observed that SEM application can be used for manifest variables, latent variables or measurement.

Most models in cross-sectional studies indicate the directional influences between variables. Shreiber, Nara, Stage, Barlow and King (2006) indicate that it allows for the testing of a theoretical proposition on how constructs are theoretically linked and the directionality of significant relationships.

As depicted in the diagram (Fig 6.14), the SEM analysis was used to test structural paths between the SERVQUAL dimensions (tangibility, reliability, responsiveness, assurance and empathy). Gupta and Kaushik (2017:4) state the advantages of SEM as “it allows evaluating causal relationships between these latent variables and testing and developing the theoretical model put forward”. This has a great benefit in the research studies from the social sciences and marketing, as their theory is based on hypothetical structures. This makes it a challenge to determine intangible concepts such as intelligence, motivation, emotion, attitude, intention, satisfaction, loyalty, service quality and the relationship between them.

Diedericks (2016:182) explains SEM as a multivariate procedure that combines multiple regression and factor analysis to describe the interrelationships between observed variables and the basic goal of providing a quantitative test of the theoretical model. Tyagi, Singh and Maurya (2018:4) point out “that association of characters as determined by the simple correlation coefficient may not provide an exact representation of the relationship between yield and yield attributes”. Path coefficient analysis looks at specific direct and indirect effects of characters and measures the relative significance of each of them in determining the ultimate goal yield. They further elaborate that it is a standardized partial regression analysis and it measures the direct authority of one variable on the other. This results in separation of correlation into direct and indirect effects.

Tyagi, Singh and Maurya (2018) state that the techniques of path analysis were originally proposed in the 1920s to analyses data in social studies. It then spread to fields such as agronomic and environmental studies Twinomurwizi, Zwane and Debusho (2012:84) concur with the use of SEM in social studies as they indicate that “use of SEM is consistent with what is known, service quality in (TSC) is low and requires regular measurement and evaluation to inform future quality improvements”.

### **5.12.3 Model fit**

Bentler and Wu (2002), and Hair *et al.*, (1998) (in Kumar *et al.*, 2016), state that there are a number of indicators of goodness-of-fit and most SEM scholars advocate evaluating the models by observing more than one of these indicators.

Yilmaz, Ari and Gürbüz (2017) state that in assessing the consistency of the obtained model for the research model, different goodness-of-fit indices, which have different statistical functions, can be used. The most often used indices among those proposed, are the likelihood ratio chi-square statistic, RMSEA (Root Mean Square Error Approximation), GFI (Goodness of Fit Index), AGFI (Adjusted Goodness of Fit Index), CFI (Comparative Fit Index), NFI (The Normed Fit Index) and SRMR (Standardized RMR). Marsh *et al.* (1998) (in Kumar et al, 2016) propose that the criterion “for ideal fit indices is relative independence of sample size, accuracy and consistency to assess different models and ease of interpretation aided by a well-defined pre-set range”.

Gupta and Kaushik (2017) state that, to confirm a model there are generally three fitness indices checked. These include the Absolute, which includes: GFI (Goodness of Fit Index), RMSEA (Root Mean Square Error of Approximation), Incremental fit like CFI (Comparative Fit Index) and Parsimonious (Chisq/ df), which are checked. They further highlight some other values like NFI (Normed-Fit Index), TLI (Tucker-Lewis Index) and AGFI (Adjusted Goodness of Fit). Highlighted values of the indices indicate that the “GFI lies between 0.8-0.96 (permissible value is > 0.9), AGFI lies between 0.845-0.95 (permissible value is > 0.8), NFI lies between (0.9-0.95) (permissible value is > 0.9) and RMSEA lies between 0.01-0.08 (permissible value <0.08)”.

Goodness of fit measures were used to assess the sufficiency of the model. These measures establish the suitability of a model being tested.

#### **5.12.4 Correlation analysis**

Van Schalkwyk (2011) highlights that a correlation coefficient helps to establish the strength of the linear relationship between two ranked or quantifiable variables. According to Leedy and Ormrod (2010), the potency of the relationship is indicated by the size of the correlation coefficient. A view also supported by Van Schalkwyk (2011), who states that a correlation coefficient helps to determine the strength of the linear relationship between two ranked or quantifiable variables. If two variables are closely associated with a strong correlation, getting to know the level of one variable allows one to predict the other variable with substantial precision.

Rohman et al. (2003) (in Tyagi, Singh & Maurya, 2018) elucidate correlation as measuring the extent and direction (positive or negative) of an affiliation taking place between two or more characteristics. Basically, it is the overall relationship between two or more characteristics under study. Correlation can be positive or negative. In a positive correlation, as one variable increases, another variable will also increase. A negative correlation takes place when one variable decreases; the other variable will also decrease. Van Schalkwyk (2011) indicates that the coefficient ( $r$ ) ranges between -1 and +1.

#### **5.12.5 T- test**

Tsege (2016:89) describes a t-test as a type of parametric statistics that is usually employed to test if there are statistically significant differences between two means. The t- parametric test is used to establish whether two groups, representing nominal-level attributes of an independent variable, differ on some dependent variable, measured at the interval or ratio level of measurement. Kothari (2004) describes a t-test as based on t-distribution. It is considered an appropriate test for judging the significance of a sample mean or for judging the significant difference between the means of two samples in case of a small sample when population variance is not known.

T-tests can be categorised as an independent or dependent test. With regard to an independent t-test, data are sourced from two different sources, whereas a dependent t-test comes from one group that responds to two different events, e.g. pre and post-test values. As in the case of this current study, the dependent t-test is used to highlight the significant differences between the expectation and experiences of CIC users. The dependent t-test was statistically adopted as data were collected from one sample, but looking at two issues, which are expectations and experience. Gupta and Kaushik (2017) point out that the t-test helps to highlight the differences between expectations and perceptions and in this current study the t-test helped to recognize significant service quality items and dimensions to the surveyed CIC users.

### 5.13 ETHICAL CONSIDERATIONS

Ethical considerations are present in any kind of research in order to meet the goals of the study and to maintain the rights of the research respondents. Creswell (2003) states that the researcher has a responsibility to revere the rights, needs, values and desires of the informants. Cooper and Schindler (2003:120) define ethics as “norms or standards of behaviours that guide moral choices about our behaviours and our relationships with others”. Sigwejo (2015) states that social-technical research not only involves technology, but it also involves people and the “human element is at the centre of meaning and a major source of insight”. As such, it has to comply with ethical research practices. This study, as it is also social-technical, has to comply with research ethics. This is alluded to by Creswell (2003), who points out that a researcher has a responsibility to respect the rights, needs, values and desires of the respondents. Adams (2010) alludes that suitable steps should be engaged to follow to strict ethical guidelines in order to uphold participants’ privacy, confidentiality, dignity, rights, and anonymity.

The research process was followed in accordance with research codes of ethics of the University of Pretoria (Appendix A). A clearance letter was sought from the Ethics committee of the University before going to the field. The researcher adhered to the code of conduct by seeking consent from the Ministry of Information Communication Technology, Postal and Courier Services (MICTPCS) to conduct research in the community information centres (see Appendix B) in three of the provinces. Before distributing the questionnaires, the purpose of the study was clearly explained to the respondents and consent for participating in the research was sought from them. To ensure anonymity, the respondents were requested not to write down their names on the questionnaire. This was to ensure that respondents remained unidentified so as not to connect them with responses that they gave.

Confidentiality is an ethical issue in every research study, since the collection and use of information generated through research might encroach on other people’s lives or can against their will expose people’s private lives. Issues of confidentiality were adhered to, as it was emphasized to the respondents that the information sourced will only be used

for research purposes. Respondents were also informed that participation in the research was voluntary and that they were approached individually to complete the questionnaires at their convenience. The researcher explained to all respondents the purpose of the study, and how the questionnaire was to be completed.

#### **5.14 CONCLUSION**

The Chapter outlined the research methodology and this includes ontological, epistemology and axiology assumptions. Discussions on the research philosophy, design, paradigm, and population as well as the sample and sampling methods used in the study were done. A synopsis of data analysis is also alluded to in the chapter, which include the descriptive and inferential statistical techniques. The subsequent chapter presents result for the study.

## CHAPTER SIX

### DATA ANALYSIS AND PRESENTATION

#### 6.1 INTRODUCTION

This Chapter presents the data that were collected from three community information centres (CIC) in Zimbabwe from a sample of (N475) respondents. The respondents completed survey questionnaires designed to measure the quality of services provided at these centres. The chapter comprise two sections, which consist of the descriptive and inferential statistical analyses respectively. Descriptive analysis is useful in providing a numerical summary of data with respect to a given variable. Descriptive statistics were used to illustrate the demographic profile of respondents and to evaluate quality of service expectations and perceptions among CIC users. The second section deals with inferential analysis. According to Kothari (2004:131) the two major purposes of inferential statistics are: “estimation of population parameters and testing of statistical hypotheses”. In this study, inferential statistics were primarily used to test statistical hypothesis indicated in chapter one of this thesis.

#### 6.2 DESCRIPTIVE STATISTICAL ANALYSIS

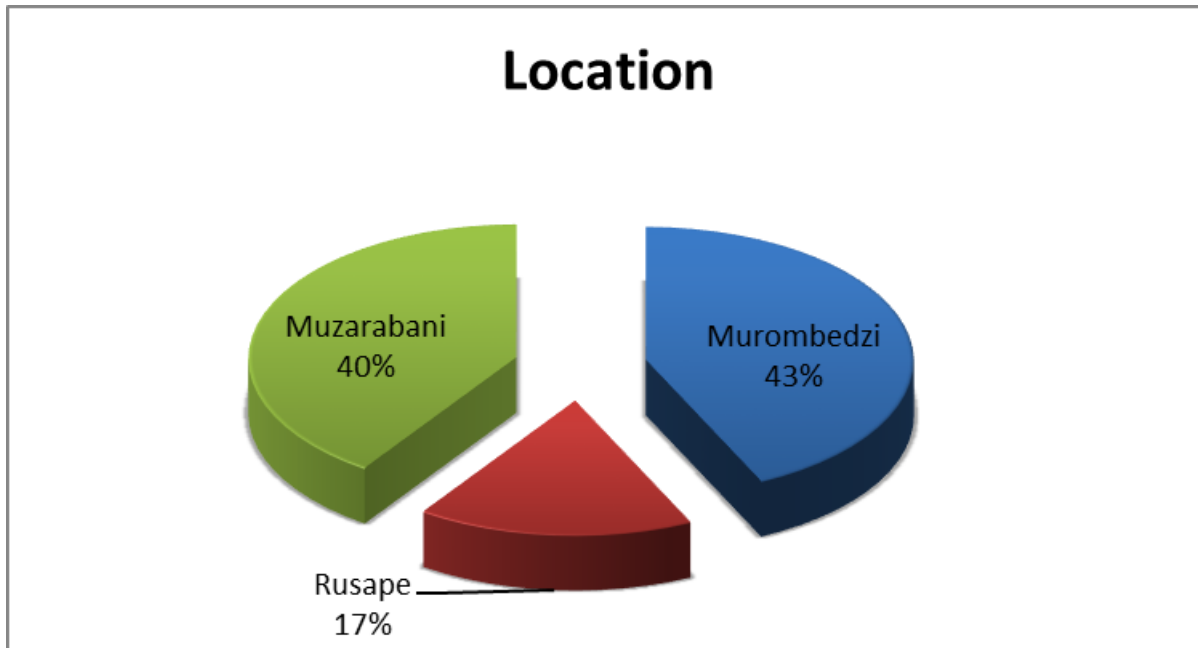
The study considered the demographic characteristics of the respondents, which include sample response rate, location, gender and age. These were computed using descriptive statistics and the results are presented in the following subsections.

##### 6.2.1 Sample response rate

A total of 475 respondents completed the questionnaires from the three selected CICs as depicted in Fig 6.1.



**Figure 6.1: Distribution of sample response rate**

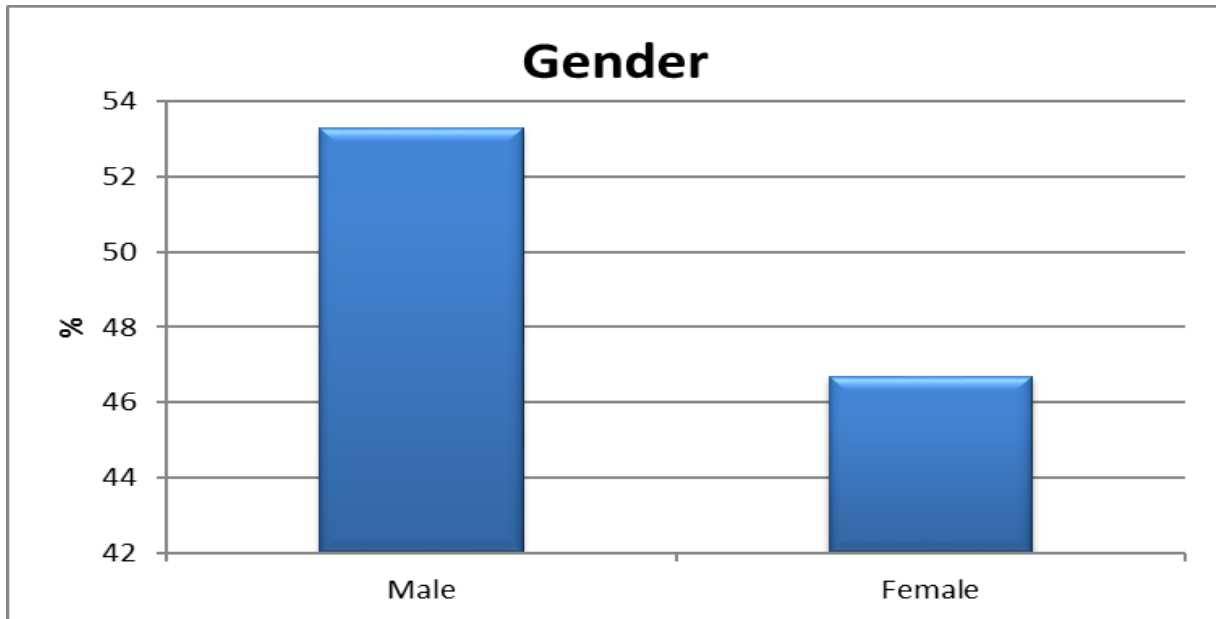


Three CICs were sampled in different locations as indicated in the figure above. Murombedzi had the highest number of respondents (43%), followed by Muzarabani (40%) and Rusape had the least, with 17% of the total population. The Murombedzi Community Information centre was one of the pioneer community information centres to be launched in 2014, hence, it had gained popularity with the respondents, while Rusape (launched late 2016) had not gained much popularity with the community at the time of data collection.

### **6.2.2 Gender of respondents**

The study looked at the gender distribution of the respondents in order to examine the type of gender that patronises the sampled CICS. The distribution of respondents by gender is presented in Figure 6.2

**Figure 6.2: Gender of respondents**

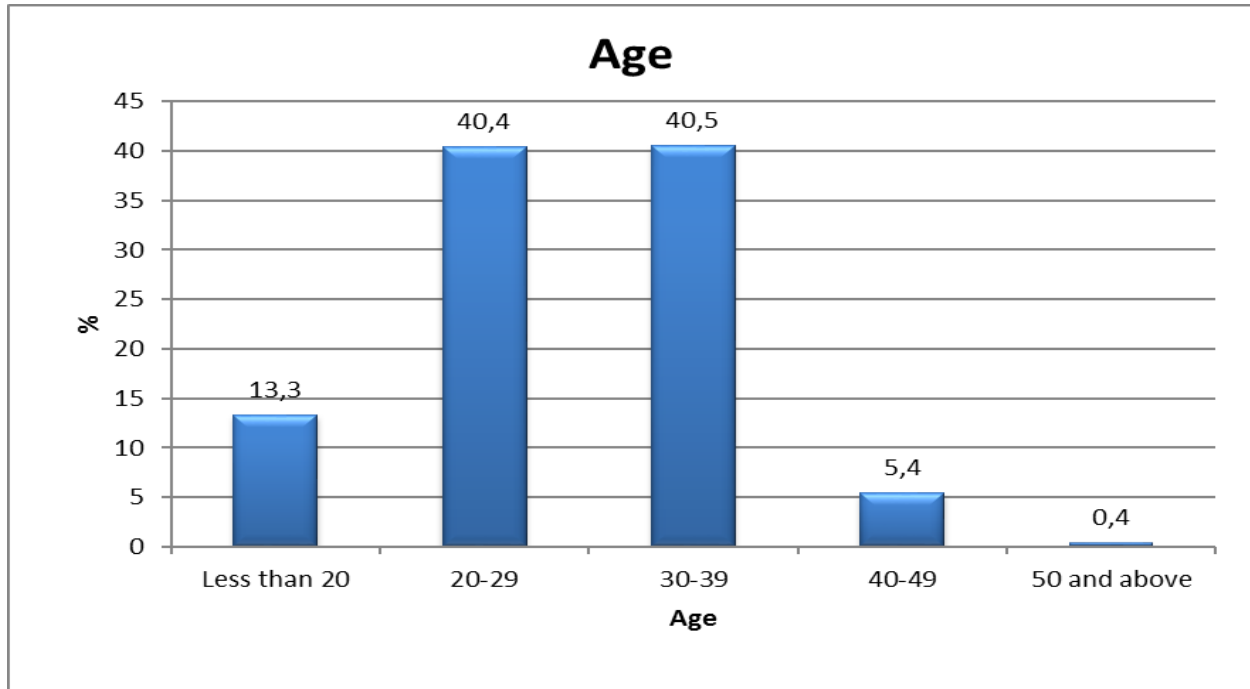


The results in the figure above show that the majority of the respondents were males (53%) and the females were 47%. This implies that males frequent the CICs more than females, which could be attributed to the cultural values in the study area, as well as the educational background of the respondents.

### **6.2.3 Age of respondents**

This study assessed the distribution of respondents by age. This was important because age has a high likelihood of influencing the use of services in CICs. The results of the age distribution among the sample are presented in Figure 6.3.

**Figure.6.3: Age of respondents**



As illustrated in the figure above, the age groups of the respondents ranged between twenty and fifty years. Two age groups were almost equally represented, that is, the age group between 30-39 years (40.5%) and age group between 20-29 years (40.5%). Therefore, the age group between twenty and thirty nine years were the majority (80.9%). These age categories constitute age groups that fall under the workforce as well as the job seeking young adults. Those less than 20 years constituted only 13.3% of the respondents and were mostly of school going age. Among the school going respondents, it was observed that, during their visit the CICs they would mostly play video games. This imply that their focus on entertainment as compared to other things.

Notably also, the age group between 40 and 49 years (5.4%) and those above 50 years (0.4%) constituted the minority. The latter age cohort included elderly people, who in most cases sought to be assisted with their pensions services at the centres. Based on these results, we can decide that the customers visited the CICs for different reasons, such as entertainment, education and financial assistance.

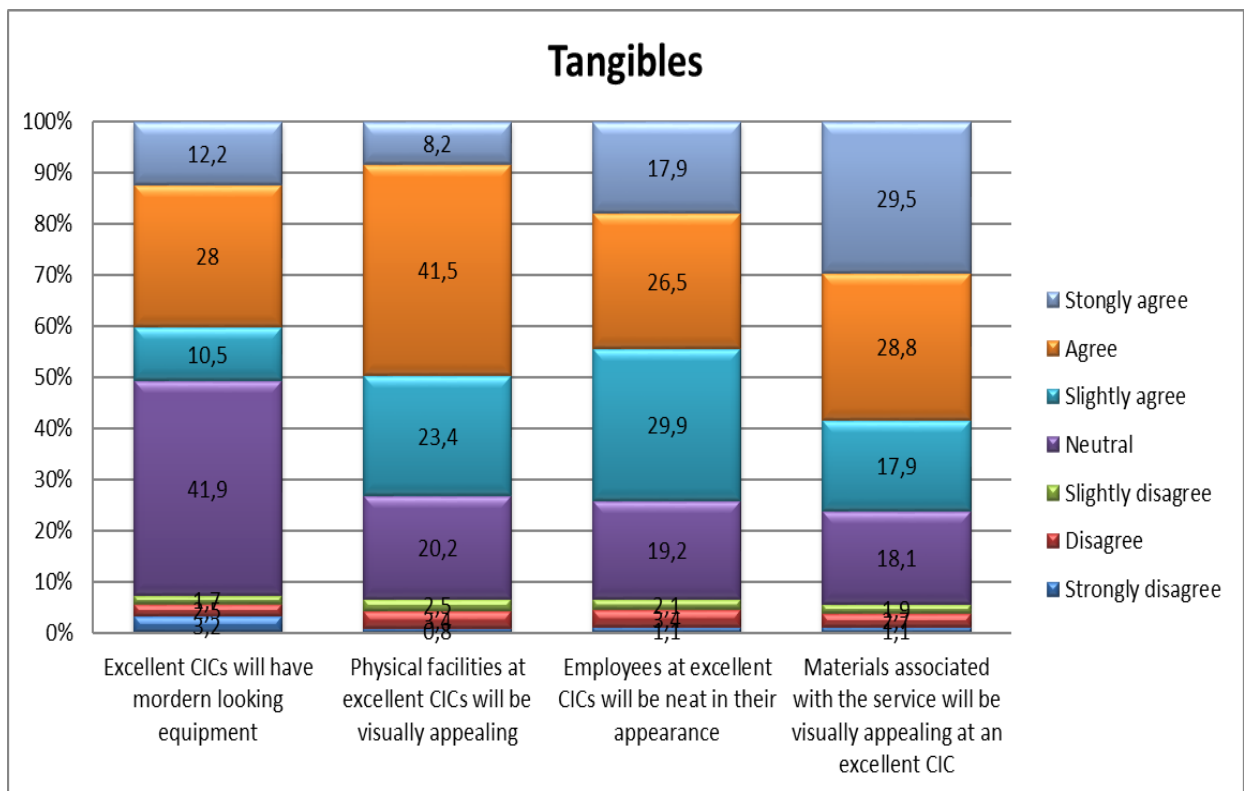
### 6.3 RESPONDENTS' EXPECTATIONS OF CICs

In this section, the respondent's perceptions are presented within the constructs of the SERVQUAL model, which are tangibles, reliability, responsiveness, assurance, and empathy. The following subsections entail this presentation.

#### 6.3.1 Respondents' expectations on tangibles

Mamo (2015) describes tangibles as physical facilities, appearance of personnel, tools or equipment used to provide the service and it also involves communication material. Tangibles in this study were measured using the Likert scale where respondents ranked their expectations on a scale ranging from strongly disagree to strongly agree. The results of the rankings are presented in Figure 6.4 below.

**Figure 6.4: Respondents' expectations on tangibles**



In response to the statement “materials associated with service will be visually appealing at an excellent CIC”, the majority of the respondents (29.5%) strongly agree, 28.8%

agree, 18.1% do not refute or agree to the statement, 2.7% disagree, 1.9% slightly agree, and 1.1% strongly disagree to the statement.

In responding to the statement “employees at excellent CICs will be neat in their appearance”, the majority of the respondents (29.9%) slightly agree, 26.5% agree, 17.9% strongly agree, 3.4% disagree, 2.1% slightly disagree, and 1.1% strongly disagree to the statement. This indicates that the appearance of employees is important to the majority of respondents.

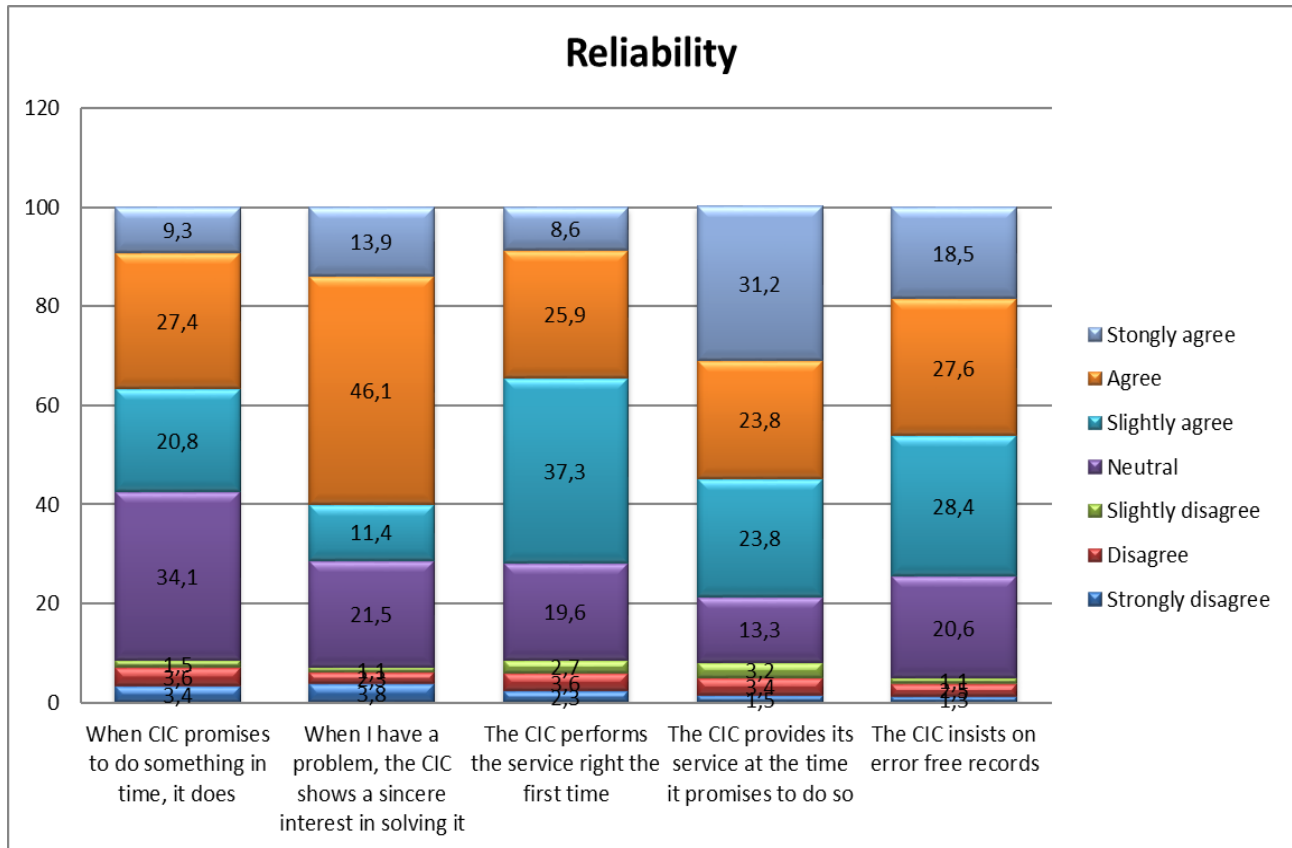
In response to the statement “physical facilities at excellent CICs will be visually appealing”, 41.5% agree, 23.4% slightly agree, 20.2% are neutral, and 8.2% strongly agree. Those in agreement represent higher percentages, whereas those in disagreement have lower percentages (0.8% who strongly disagree, 3.4% disagree, and 2.5% slightly disagree).

The statement, “excellent CICs will have modern looking equipment” had the highest percentage (41.9%) of responses neither agreeing nor refuting the statement. To the contrary, 28% agree, 12.2% strongly agree, and 10.5% slightly agree. The minority of the respondents are not in agreement with the statement, with 3.2% strongly disagreeing, 2.5% disagreeing, and 1.7% slightly disagreeing.

### **6.3.2 Respondents’ expectations on reliability**

Reliability of the CIC is important to the users. Krishundutt and Paramour (2009) argue that reliability is the core of good service provision. Thus, organisations are supposed to be accurate and dependable in providing the promised service. Chingang and Lukong (2010:63) indicate that customers are sensitive to how reliable and assuring a store is in providing good and quality products and services to them. Studies by Saraei and Amin (2012), Twinomurwizi, Zwane and Debusho (2012) used this variable. In this study, the respondents were asked to rank their expectations regarding the reliability of the service at the CICs. The results are presented in Figure 6.5.

**Figure 6.5: Respondents' expectations on reliability**



While responding to the issue of “reliability of the CIC”, 27.4% of the respondents strongly agree, 20.8% agree and 9.3% slightly agree, that “when CIC promises to do something in time, it does”. To the contrary, however, 34.1% is neutral about the statement on the delivery of service. Grains of negative responses are also observed where 3.4% strongly disagree, 3.6% disagree, and 1.5% slightly disagree with the statement.

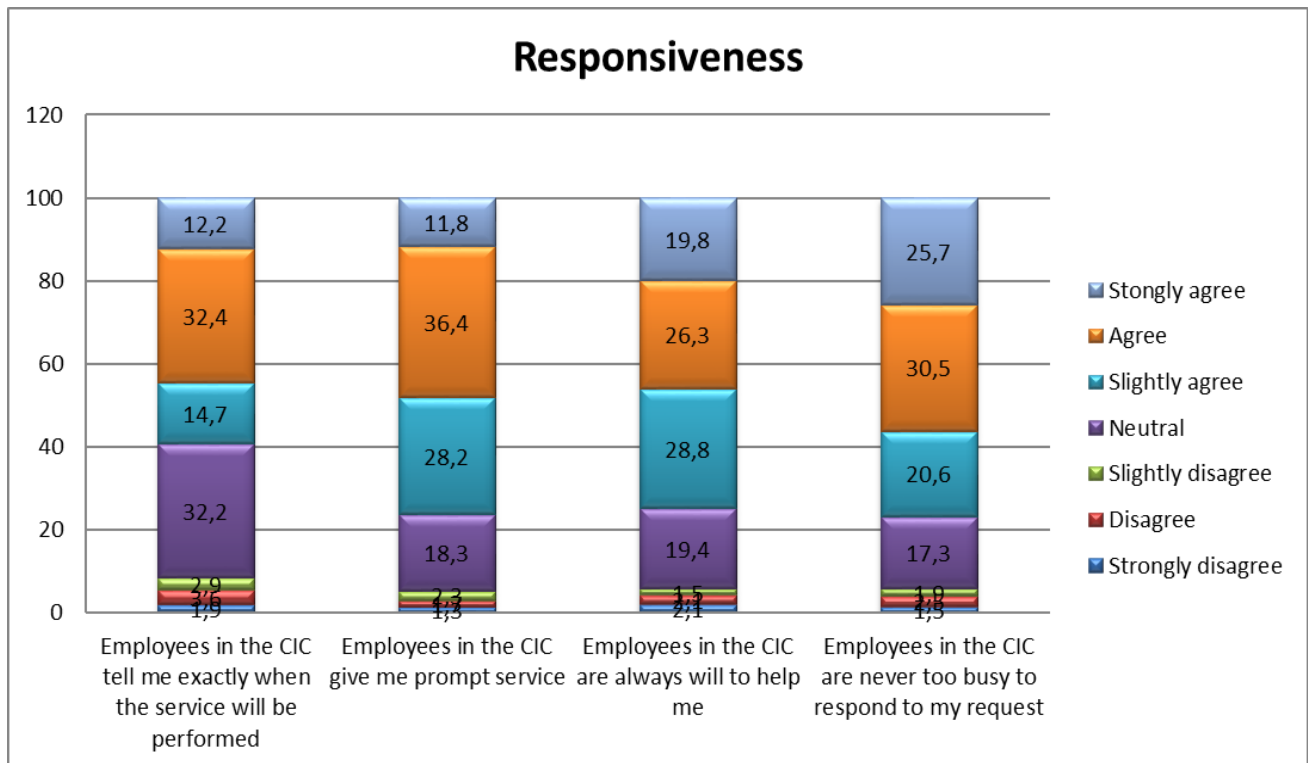
In response to the statement, “when I have a problem, the CIC shows a sincere interest in solving it”, a higher percentage of respondents (46.1%) agree, 11.4% slightly agree, and 13.9% strongly agree with this statement. On the other hand, 21.5% of the respondents neither agree nor disagree to the statement, whilst the minority (2.3%) disagree, 3.8% strongly disagree, and 1.1% slightly disagree decent.

In response to the statement, “the CIC performs the service right the first time”, the majority of respondents (37.3%) slightly agree, 25.9% agree, 8.6% strongly agree, and 19.6% are neutral to the statement. However, 2.3% strongly disagree, 3.6% disagree, and 2.7% slightly disagree, as they do not expect the CIC to perform the services right in the first occurrence.

### 6.3.3 Respondents’ expectations on responsiveness

Responsiveness is based on how an organisation deals with the customer’s requests, questions, and complains. An organisation is responsive when it communicates to its customers, and how long it will get answers or have their problems dealt with. Responsiveness should be viewed from the customer’s perspective, rather than from an organisation. A key element in responsiveness is keeping customer relations. Responsiveness is one of the constructs for the SERVQUAL model, and for this study it was measured through a Likert Scale. Four statements listed in Figure 6.6 were included in the responsiveness questions. The results are presented in Figure 6.6.

**Figure.6.6: Respondents’ expectations on responsiveness**



In response to the statement, “employees in the CIC are never too busy to respond to my request”, the majority of respondents (30.5%) agree, 25.7% strongly agree, and 20.6% slightly agree, while 17.3% neither agree nor refute the statement. The minority (2.5%) disagree with the statement, with 1.9% slightly disagreeing, and 1.5% strongly disagreeing.

As illustrated in the figure above, and responding to the statement “employees in the CIC are always willing to help me”, the respondents in agreement to this constitute higher percentages, with 26.3% agreeing, 19.8% strongly agreeing, and 28.8% slightly agreeing, while (19.4%) stand are neutral. The minority of the respondents were in disagreement with the statement, with 2.1% strongly disagreeing, 2.1% disagreeing, and 2.9% slightly disagreeing.

In response to the statement, “employees in the CIC give me prompt service”, 36.4% agree, 28.2% slightly agree, and 11.8% strongly agree that they receive services of the CIC promptly. To the contrary, 18.3% is neutral, 1.3% disagree, 1.7% disagree and 2.3% slightly disagree with the statement.

The statement “employees in the CIC tell me exactly when the service will be performed” 32.4% agree, 14.7% slightly agree, and 12.2% strongly agree, whilst (32.2%) of the respondents are neutral. Further, 3.6% disagree, 2.9% slightly disagree, and 1.9% strongly disagree with the statement. This indicates that the majority of respondents expect to be informed of the schedules on the upcoming events or activities in the CIC prior to the date and time.

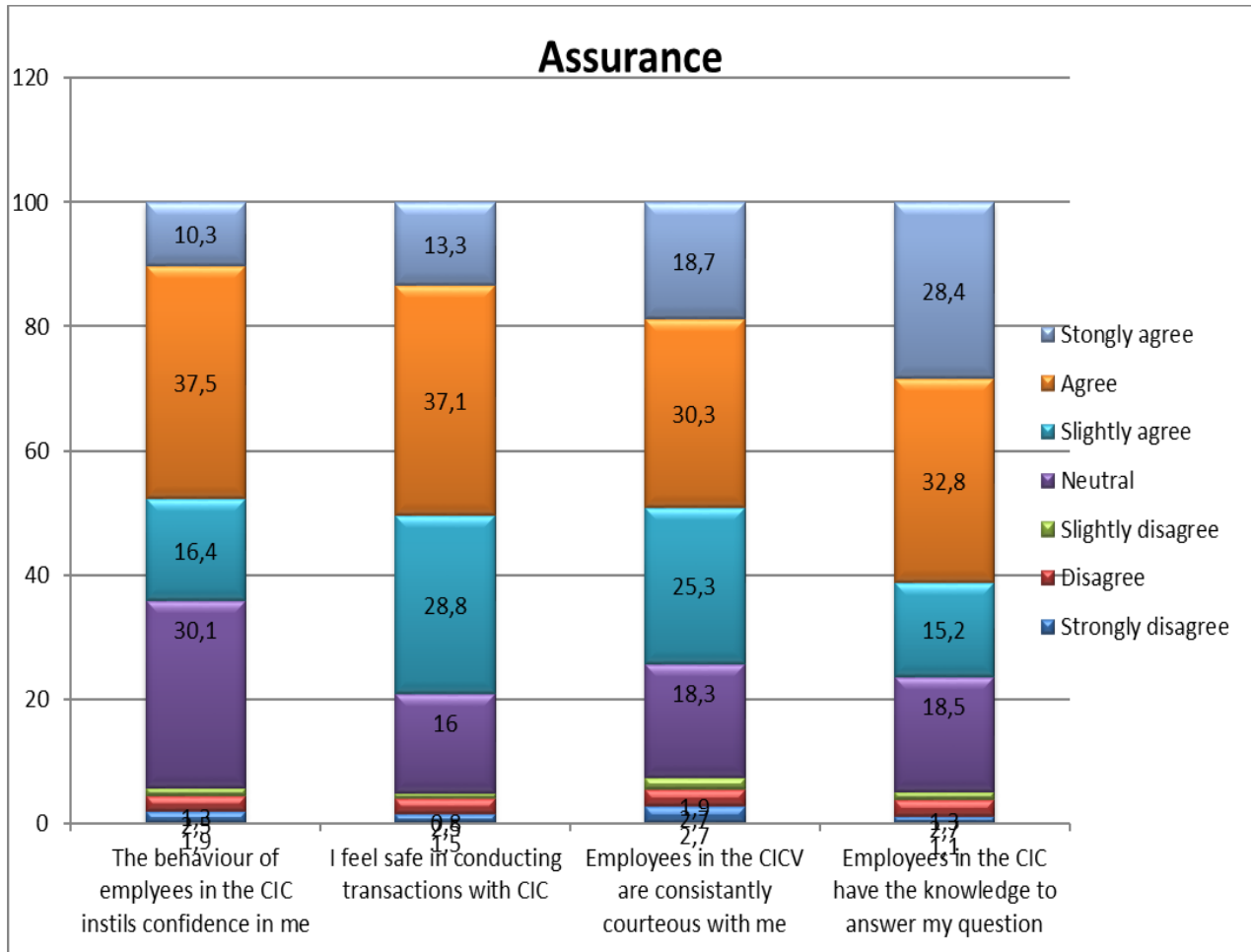
#### **6.3.4 Respondents’ expectations on assurance**

Assurance is exhibited by employees as they give an expression of the service quality in client’s eyes. Measures need to be taken with regard for employee awareness about their job and behaviour in securing service experience expected by the customers (Adat, Noel and Pencelia, 2014). According to Saraie and Armin (2012), Adat, Noel and Pencelia (2014) assurance is important to clients and in this study, it is measured through the



statements listed in Figure 6.7. Issues raised in the statements include the installing of confidence in the clients, safety in the CIC, courteousness and knowledge of the employees in the CIC. Figure 6.7 presents the results of this SERVQUAL construct on assurance.

**Figure 6.7: Respondents' expectations on assurance**



In responding to the statement, “the behaviour of employees in the CIC instils confidence in me”, the majority of the respondents (37.5%) agree, 16.4% slightly agree, and 10.3% strongly agree, but 30.1% indicated a neutral position. This indicates that the respondents feel confident in using the services of the CICs. However, the minority (1.9%) strongly disagree, (2.5%) disagree, and (1.3%) slightly disagree with the statement. As illustrated in the figure above, responding to the statement “when the participants were asked if they

feel safe in conducting transactions with CIC”, the higher percentage of the respondents (37.1%) agree, 28.8% slightly agree, and 13.3% strongly agree. On the other hand, 16% are neutral. The lower percentage of the respondents (1.5%) strongly disagree, 2.5% disagree, and 0.8% slightly disagree that they feel safe while conducting transactions with CIC.

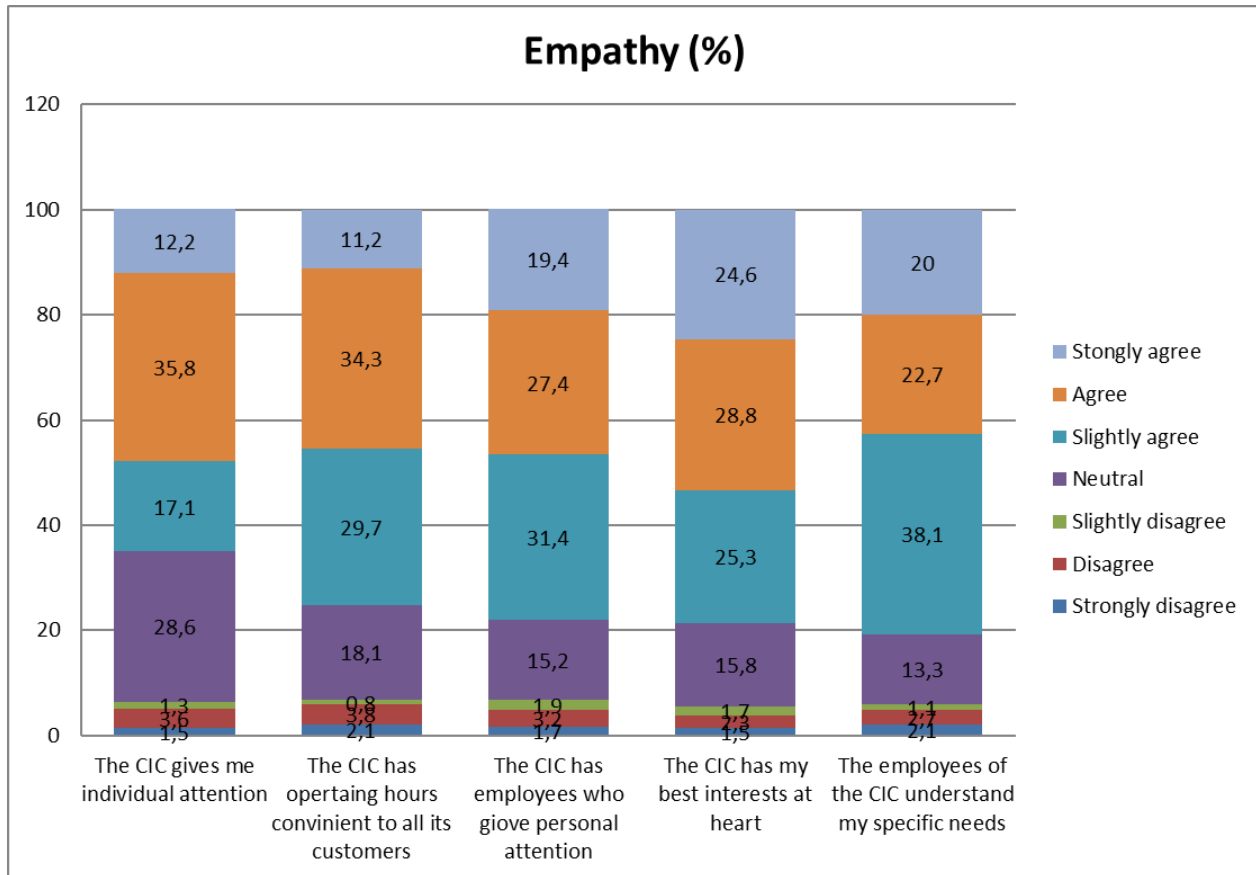
In responding to the statement, “employees in CIC are consistently courteous with me”, the majority of respondents (30.3%) agree, 25.3% slightly agree, and 18.7% strongly agree. Nonetheless, 18.3% of the respondents are neutral and the minority of the respondents also had a different opinion on the statement as 2.7% strongly disagree, 2.7% disagree, and 1.9% slightly disagree.

Responding to the statement, “employees in the CIC have knowledge to answer my questions”, the majority of the respondents (32.8%) agree, 28.4% strongly agree, and 15.2% slightly agree. However, 18.5% of the respondents are neutral. Moreover, some respondents disagree with the statement as 1.1% strongly disagree, 2.7% disagree and 1.3% slightly disagree.

### **6.3.5 Respondents’ expectations on empathy**

According to Mamo (2015), empathy is the openness, ease of access and attempt taken to understand customers' needs. Empathy can be described as the caring and individual attention of the CIC towards its clients. Clients expect centres that cater for their needs and that are accessible to them. The SERVQUAL model measures this construct using a Likert scale and the statements are listed in Figure 6.8 were posed to the respondents. The results of this construct are presented below.

**Figure 6.8: Respondents' expectations on empathy**



In response to the statement, “the CIC gives me individual attention”, 35.8% agree, 12.2% strongly agree, and 17.1% slightly agree. This exhibits the high level of commitment by employees to assist their clients at an individual level. To the contrary, 28.6% of the respondents are neutral, whereas a lower percentage of the respondents refute the statement, where 1.5% strongly disagree, 3.6% disagree, and 1.3% slightly disagree.

A higher percentage of the respondents are in agreement with the statement, “the CIC has operating times convenient to all its customers”. This is because 34.3% agree, 11.2% strongly agree, and 27.9% slightly agree. Notably, however, 18.1% of respondents were neither in agreement nor disagreement with the statement, and a minority of the respondents were not in agreement with the statement, hence 2.1% strongly disagree, 3.8% disagree, and 0.8% slightly disagree.

In response to the statement, “the CIC has employees who give personal attention”, a higher percentage responded in agreement, with 27.4% agreeing, 19.4% strongly agreeing, and 31.4% slightly agreeing. Notably, 15.2% of the respondents neither refuted nor agreed to the question (neutral). A minority of the respondents (1.7%) strongly disagree, 3.2% disagree, and 1.9% slightly disagree with the statement.

The statement “the CIC has my best interest at heart” received high percentages of responses in agreement, with 28.8% agreeing, 24.6% strongly agreeing, and 25.3% slightly agreeing. However, 15.8% of the respondents are neutral. A smaller percentage does not agree with the statement, as 1.5% strongly disagree, 2.3% disagree, and 1.7% slightly disagree.

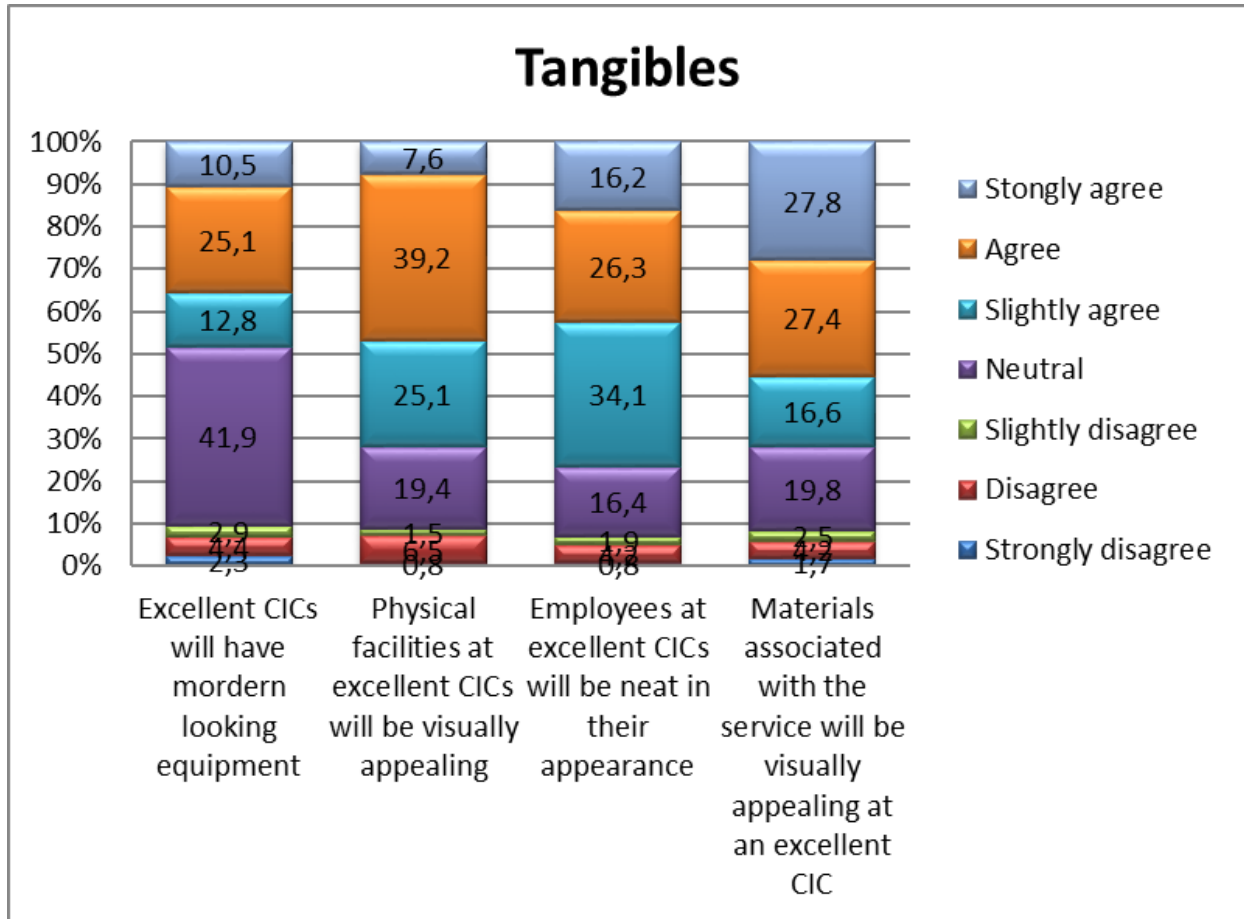
#### **6.4 RESPONDENTS’ EXPERIENCES IN THE CICS**

The SERVQUAL constructs (tangibles, reliability, responsiveness, assurance and empathy) on the experience are presented in the following subsections.

##### **6.4.1 Respondents’ experience with tangibles**

The SERVQUAL construct (tangibles) is one of the constructs that customers judge the service quality of an organisation. Appearance of employees, equipment in CICs and materials used is of great importance if one is to attract and retain clients in a business, because clients value the appearance of materials in organisations. In this study, tangibles were measured using a Likert scale on the statements listed in Figure 6.9. Percentages for each statement does not necessarily add up to 100% due to missing values. Furthermore, due to rounding in the SPSS package used, percentages can add up to 99.9 or just over 100%.

**Figure 6.9: Respondents' experience with tangibles**



Responding to the statement, “materials associated with the service will be visually appealing at an excellent CIC”, a higher percentage of respondents (27.8%) strongly agree, 27.4% agree, and 16.6% slightly agree with the question. To the contrary, 19.8% are neutral. A minority is in disagreement with the statement, with 4.2% disagreeing, 2.5% slightly disagreeing, and 1.7% strongly disagreeing.

As illustrated in the figure above, responding to the statement, “employees at excellent CICs will be neat in their appearance”, 34.1% slightly agree, 26.3% agree, and 16.2% strongly agree. On the other hand, 16.4% of the respondents were neutral on this statement, while 4.2% disagree, 1.9% slightly disagree, and 0.8% strongly disagree.

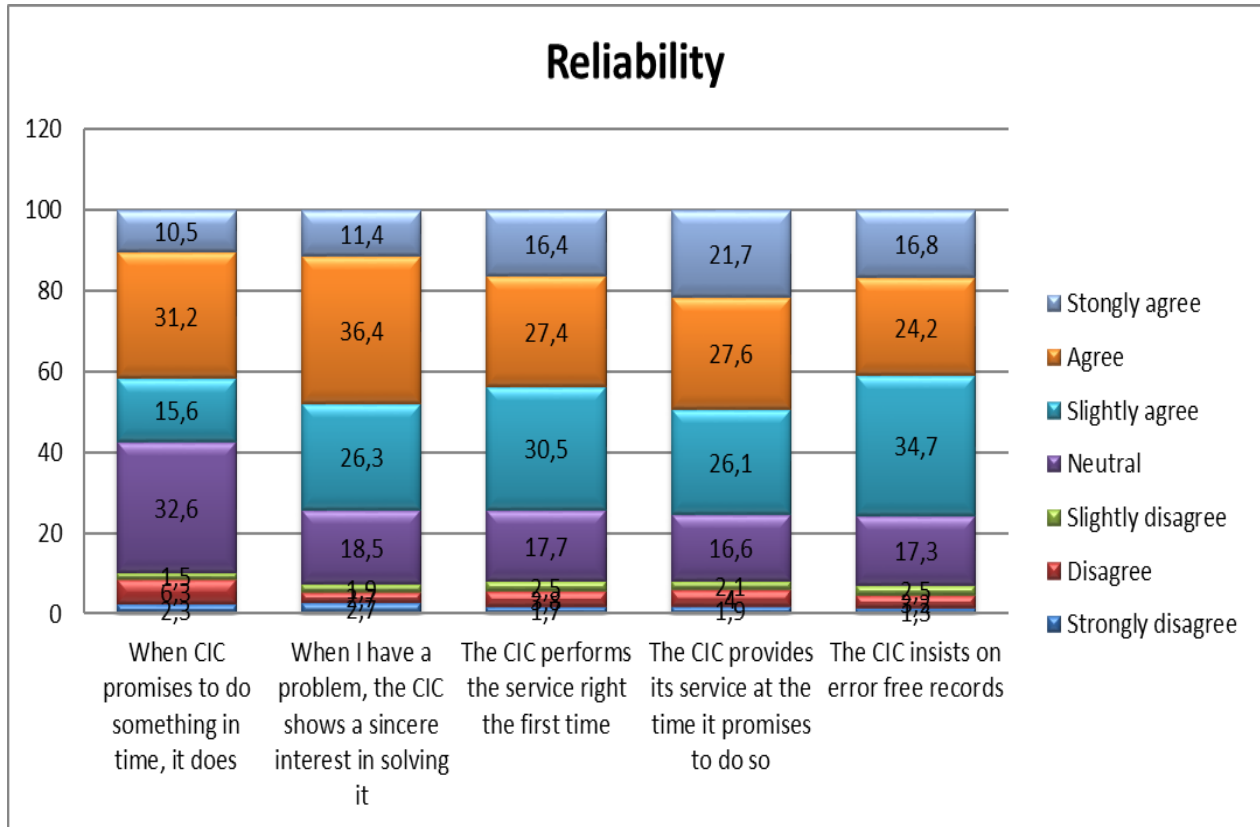
While responding to the statement, “physical facilities at excellent CICs will be visually appealing”, the majority (39.2%) agree, 25.1% slightly agree, and 7.6% strongly agree. Further, 19.4% are neutral, while 6.5% disagree, 1.5% slightly disagree, and 0.8% strongly disagree with the statement.

In response to the statement, “excellent CICs will have modern looking equipment”, most of the respondents are in agreement, as 25.1% agree, 10.5% strongly agree, and 12.8% slightly agree. Responses also indicate a higher percentage of respondents (41.9%) who neither agree nor disagree with the statement. A smaller segment of the respondents are in disagreement, with 4.4% disagreeing, 2.9% slightly disagreeing, and 2.3% strongly disagreeing.

#### **6.4.2 Respondents’ experience of reliability**

The reliability dimension has more bearing on customers as they would like to deal with organisations that keep their promises. This is done usually by communicating with the organisation’s customers. Reliable services have a strong impact on customer’s judgement of an organisation. Delivering of quality services is dependent on conforming to customers’ expectations on a consistent basis. In connection to this, Naidoo and Muntinta (2014:223) propose that organisations need to develop systems and procedures that standardize service production to ensure that core services delivered are reliable and consistent. Results on the reliability construct are presented in Figure 6.10.

**Figure 6.10: Respondents' experience of reliability**



While responding to the statement, “when CICs promises to do something in time, it does”, 31.4% agree, 11.4% strongly agree, and 15.6% slightly agree. On the other hand, 32.6% are neutral, 6.3% disagree, 2.3% strongly disagree, and 1.5% slightly disagree.

In response to the statement, “when I have a problem, the CIC shows a sincere interest in solving it”, a high percentage of respondents (36.4%) agree, 11.4% strongly agree, and 26.3% slightly agree to the statement. To the contrary, 18.5% are neutral, 2.7% disagree, 2.7% strongly disagree, and 1.9% slightly disagree to the statement.

Responses on the statement, “the CIC performs the service right the first time” indicate that a higher percentage (30.5%) slightly agree, 27.4% agree, and 16.4% strongly agree. However, 3.8% disagree, 2.5% slightly disagree, and 1.7% strongly disagree with the statement, while 17.7% are neutral.

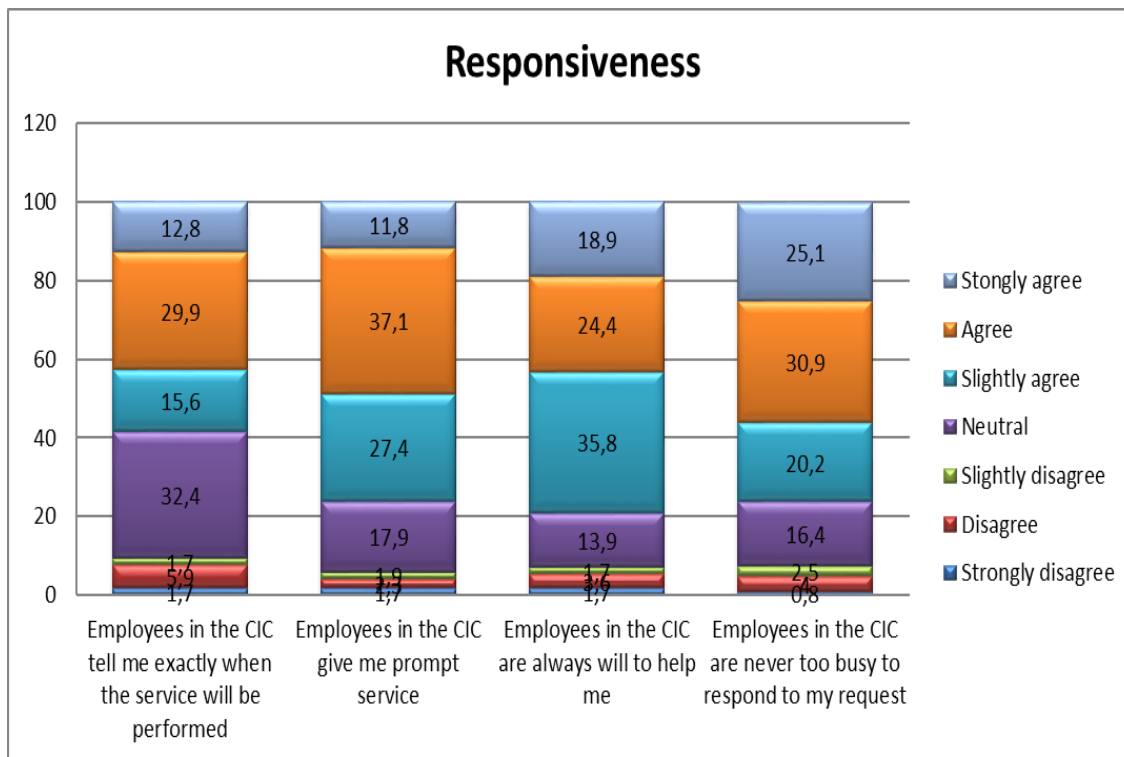
In response to the statement, “the CIC provides its service at the time it promises to do so”, 27.6% agree, 26.1% slightly agree, and 21.7% strongly agree to the statement. Further, 16.6% of the respondents are neutral, 4% disagree, 2.1% slightly disagree, and 1.9% strongly.

As illustrated in Fig 6.10, 34.7% slightly agree, 24.2% agree, and 16.8% strongly agree with the statement that, “the CIC insists on error free records”. However, 17.3% are neutral, disagree 3.2%, 2.5% slightly disagree, and 1.3% strongly disagree.

### 6.4.3 Respondents’ experience of responsiveness

Responsiveness of any service is important to consumers. High level of responsiveness can communicate an organisation’s trustworthiness to the clients. Prompt and reliable services are important to attract, serve and retain customers. A Likert scale was used to measure responsiveness in this study. Four statements as shown in Figure 6.11 were posed to the respondents. The results for this construct are presented in Fig 6.11.

**Figure 6.11: Respondents’ experience of responsiveness**





The statement, “employees in the CIC are never too busy to respond to my request” had a higher percentage of respondents (30.9%) agreeing, 25.1% strongly agreeing, and 20.2% slightly agreeing. However, 16.4% are neutral. A smaller segment of the respondents (4%) disagree, 2.5% slightly disagree, and 0.8% strongly decent with the statement.

The statement, “employees in the CIC are always willing to help me”, 35.8% slightly agree, 24.4% agree, and 18.9% strongly agree. To the contrary, 13.9% are neutral, 3.6% disagree, 1.7% slightly disagree, and 1.7% strongly disagree.

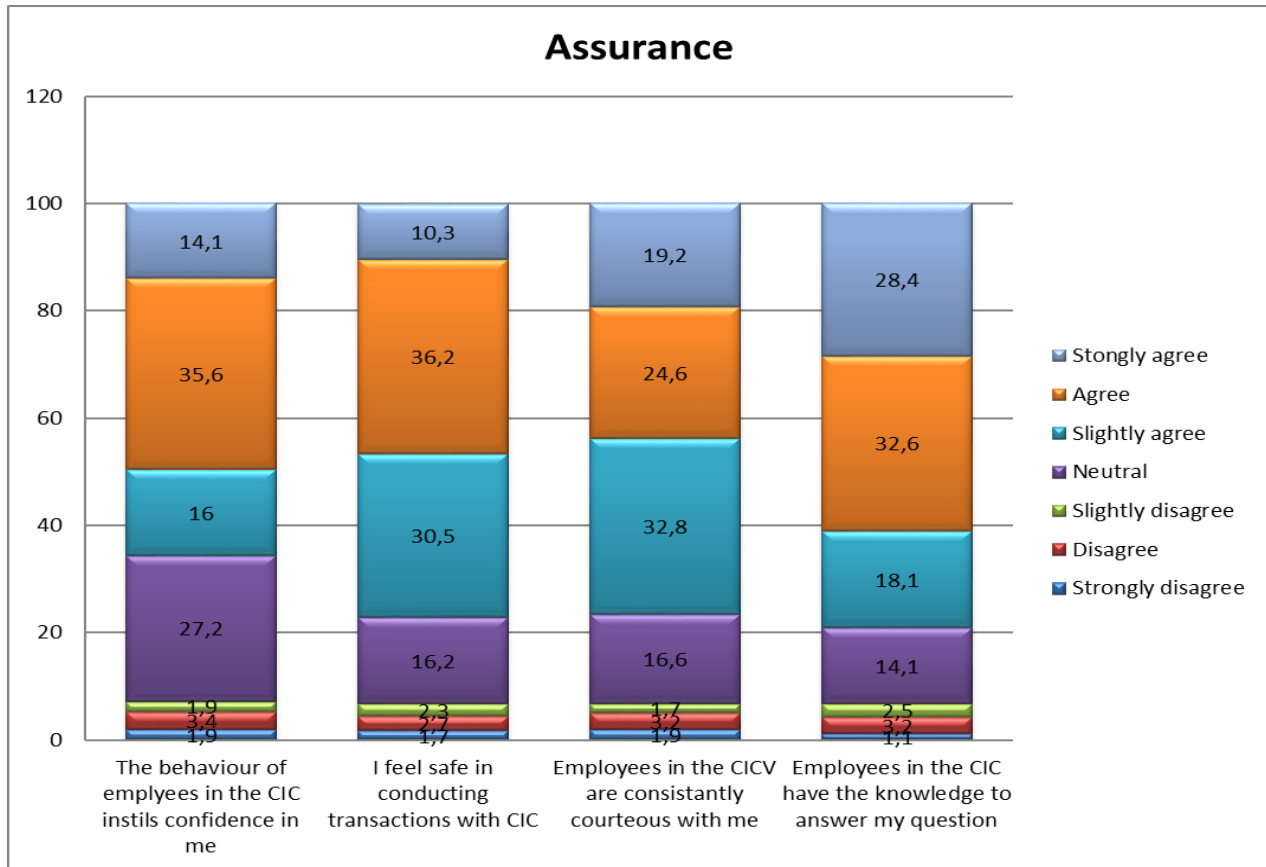
As illustrated in Fig 6.11, responding to the statement, “employees in the CIC give me prompt service”, 37.1% agree, 27.4% slightly agree, and 18.1% strongly agree. However, 17% of the respondents are neutral, 2.3% disagree, 1.9% slightly disagree, and 1.7% strongly disagree with the statement.

In response to the statement, “employees in CIC tell me exactly when the service is performed”, 29.9% agree, 12.8% strongly agree, and 15.6% slightly agree. On the other hand, 32.4% are neutral, 5.9% disagree, 1.7% slightly disagree, and 1.7% strongly disagree with the statement.

#### **6.3.4 Respondents’ experience with assurance**

Employees’ capability and abilities in delivering the service is decisive for the organisation survival. Actions, behaviour and moral of employees influence the service quality and this affects customer’s perceptions on services offered. According to Saraie and Armin (2012), assurance is vital for providing ICT services in centres. The lack of assurance thereof can lead to inefficiency in the provision of services. In this study, assurance was measured using the Likert scale and the results are presented in Figure 6.12.

**Figure 6.12: Respondents' experience with assurance**



As illustrated in Fig 6.12, responding to the statement, “the behaviour of employees in the CIC instills confidence in me”, the majority of the respondents (35.6%) agree, 16% slightly agree, and 14.1% strongly agree. Comparatively, 27.2% of the respondents are neutral, while a minority of the respondents (3.4%) disagree, 1.9% slightly disagree, and 1.9% strongly disagree are of the contrary opinion.

Whilst responding to the statement, “I feel safe in conducting transactions with CIC”, 36% agree, 30.5% slightly agree, and 10.3% strongly agree they feel safe. Despite the positive responses 16.2% are neutral and the minority disagree as indicated by, 2.7% disagree, 2.3% slightly disagree, and 1.7% strongly disagree.

Responding to the statement, “employees in the CIC are consistantly courteous with me”, a higher percentage of the respondents (32.8%) slightly agree, 24.6% agree, and 19.2%

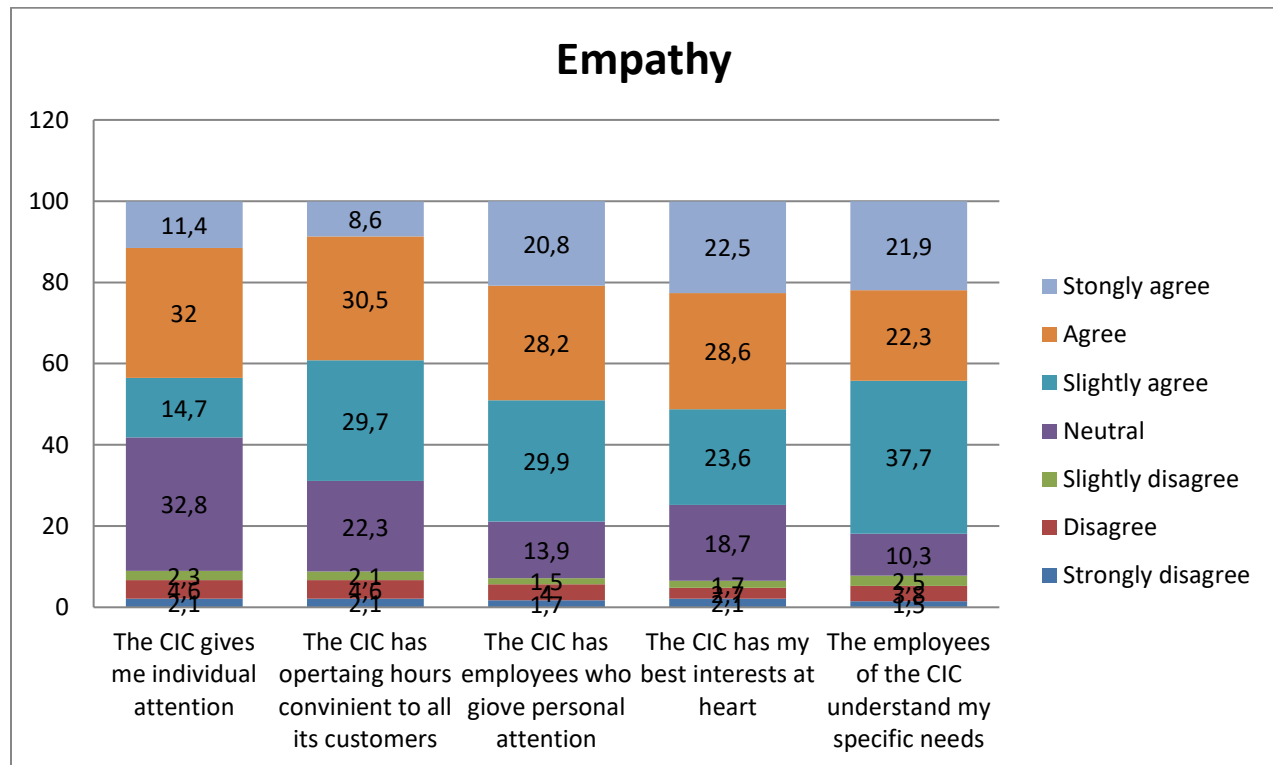
strongly agree. However, 16.6% are neutral, 3.2% disagree, 1.7% slightly disagree, and 1.9% strongly disagree.

In response to the statement, “employees in CIC have the knowledge to answer my question”, the majority of the respondents (32.6%) agree, 28.4% strongly agree, and 18.1% slightly agree. To the contrary, 4.1% are neutral, 3.2% disagree, 2.5% slightly disagree, and 1.1% strongly disagree with the statement.

### 6.3.5 Respondents’ experience with empathy

Phiri and Mcwabe (2013) point out the importance of being knowledgeable, technically able and constantly courteous with customers, which keeps them satisfied. They view empathy as one of the most important factors of service quality, as customers want to deal with people they can trust. In this view, the SERVQUAL construct on empathy was measured using a Likert scale and five statements were posed to the respondents as depicted in Figure 6.13. The results for this construct are presented in Figure 6.13.

**Figure 6.13: Respondents’ experience with empathy**



As illustrated in Fig 6.13, responding to the statement, “the CIC gives me individual attention”, 32% agree, 14.7% slightly agree, and 11.4% strongly agree. On the other hand, 32.8% were neutral, while 4.6% disagree, 2.3% slightly disagree, and 2.1% strongly disagree.

In response to the statement, “the CIC has operating hours convenient to all its customers”, 29.7% slightly agree, 28.2% agree, and 20.8% strongly agree with the statement. However, 22.3% are neutral, while 4.6% disagree, 2.1% slightly disagree, and 2.1% strongly disagree with the statement.

In response to the statement, “employees at CIC understand my specific needs”, results indicate that the majority of respondents are in agreement, with 37.7% slightly agreeing, 22.3% agreeing, and 21.9% strongly agreeing. To the contrary, 10.3% are neutral, whilst 3.8% disagree, 2.5% slightly disagree, and 1.5% strongly disagree.

Responding to the statement, “the CIC has my best interests at heart”, the majority of respondents (28.6%) agree, 23.6% slightly agree, and 22.5% strongly agree. Comparatively however, 18.7% are neutral, whilst 2.7% disagree, 2.1% strongly disagree, and 1.7% slightly disagree that CIC have best interests at heart.

## **6.5 INFERENCE STATISTICS**

This section focuses on the presentation of the inferential statistical analysis. The goodness-of-fit indices, which was derived from confirmatory factor analysis (CFA) results for both *expectations* and *experiences* are tabled. Exploratory factor analysis (EFA) and standardised regression weights will also be presented in this section. As noted earlier on in this chapter, inferential statistics are used to test statistical hypotheses.

### **6.5.1 First SEM Results**

Broadly, Structural Equation Model (SEM) is a numeric modelling technique, which is often used to assess and modify theoretical models in behavioural sciences (Anderson and Gerbing, 1988). In this study, SEM analysis was adopted to test structural paths between the service quality (SERVQUAL) dimensions which was measured using five

latent constructs, namely: tangibility, reliability, responsiveness, assurance and empathy. The SEM depicts the relationship between hypothetical constructs represented by the structural paths coefficients among other factors. The items on the SERVQUAL questionnaire, which respondents had to rate based on their expectations and perceptions of community information centres (CICs) constitute the observed or measured variables in this study.

The SEM adequacy was tested using goodness-of-fit measures. The set of measures included were the fit indices CFI, IFI, TLI, RMSEA and CMIN/df. Theoretically, CFI, IFI and TLI values should be above the acceptable threshold of .90 (Raykov and Marcoulides, 2006) with the RMSEA value below .08 (Schreiber, Nora, Stage, Barlow and King, 2006:330). The other measure is CMIN/df, which should show a value of less than 3 (Schreiber, Nora, Stage, Barlow and King, 2006:330).

To test whether the measurement model explains the SERVQUAL theory, Confirmatory Factor Analysis (CFA) was conducted using AMOS 22. The CFA is a confirmatory technique driven by theory. The CFA results on *expectations* from the CICs are presented in Figure 6.14a below. Figure 6.14a indicates a measurement model with five dimensions under service quality. Five constructs namely: tangibility, reliability, responsiveness, assurance and empathy are represented by four, five, four, four and five indicator items, respectively, hence five latent variables (i.e. constructs), are measured by twenty-two (22) indicator variables. The extent to which indicators of a specific construct converge or share a high proportion of variance in common, is measured by the convergent validity. The factor loadings of the latent observed or measured should be greater than 0.50 (Hair et al., 2010). Both first and second order models were tested as service quality has been tested in previous literature (Twinomurwizi, Zwane and Debusho, 2012; Rathee, Rajain and Isha 2016) either first or second order models. For a second order model to be accepted over the first order model, a target coefficient of over 0.9 should be achieved (Hong and Thong, 2013).

The extent to which indicators of a specific construct converge or share a high proportion of variance is measured by the convergent validity. The factor loadings of the latent to be observed or measured, variables should be greater than 0.50 (Hair *et al.*, 2010).

Figures 6.14a and 6.15a fit statistics for *expectations* and *experiences* show that the data did not fit the model adequately. Moreover, very high covariance values (in the case of the first order model) between the five SERVQUAL constructs and very high standardized regression weights (i.e. structural path coefficients) in the case of the second order models imply multicollinearity, and thus poor discriminant validity. Hence, Exploratory Factor Analysis (EFA) was conducted to examine the underlying factor structure of the data.

**Figure 6.14a: First Order CFA for Expectation**

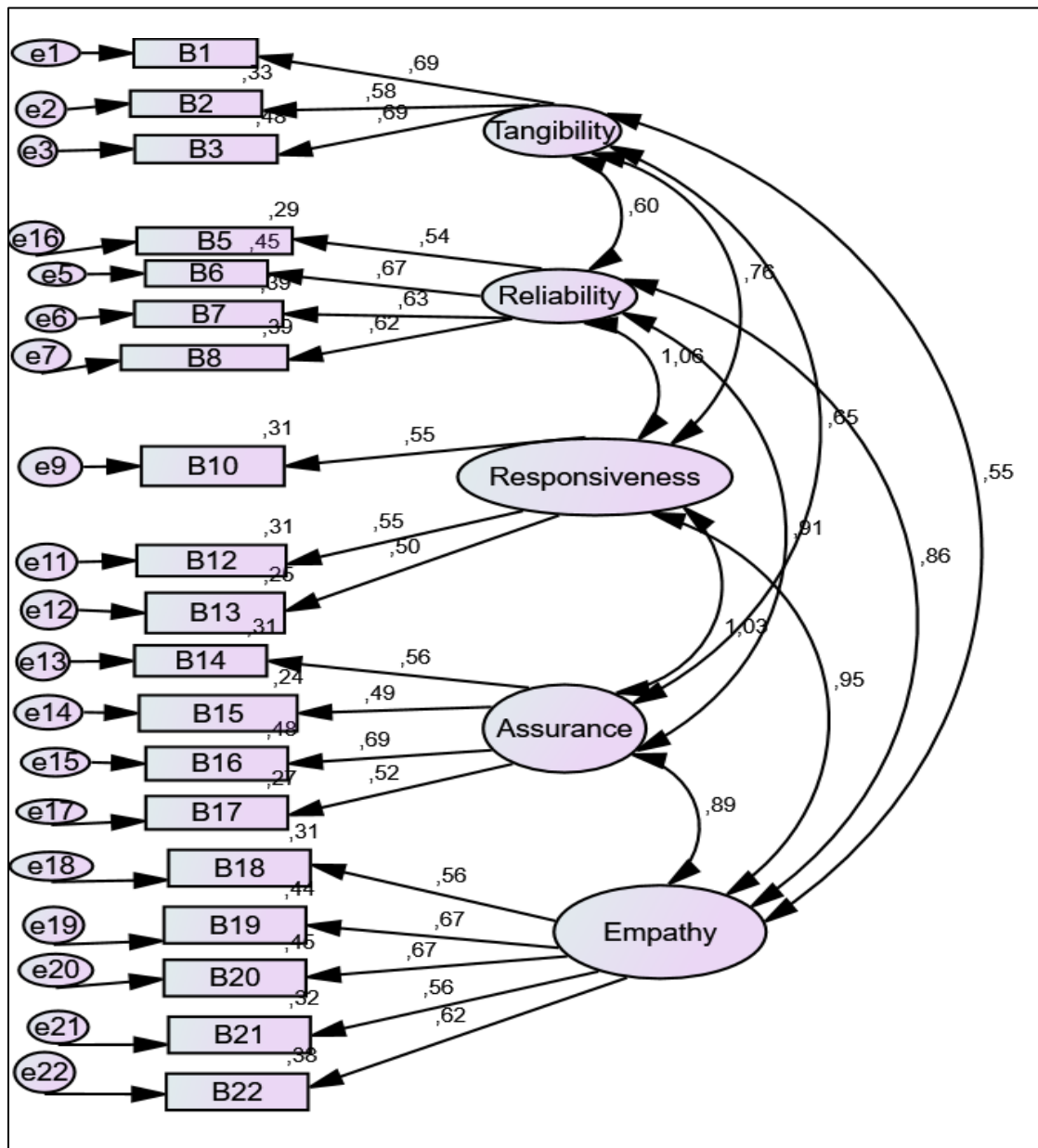


Figure 6.14b: Second Order CFA for Expectation

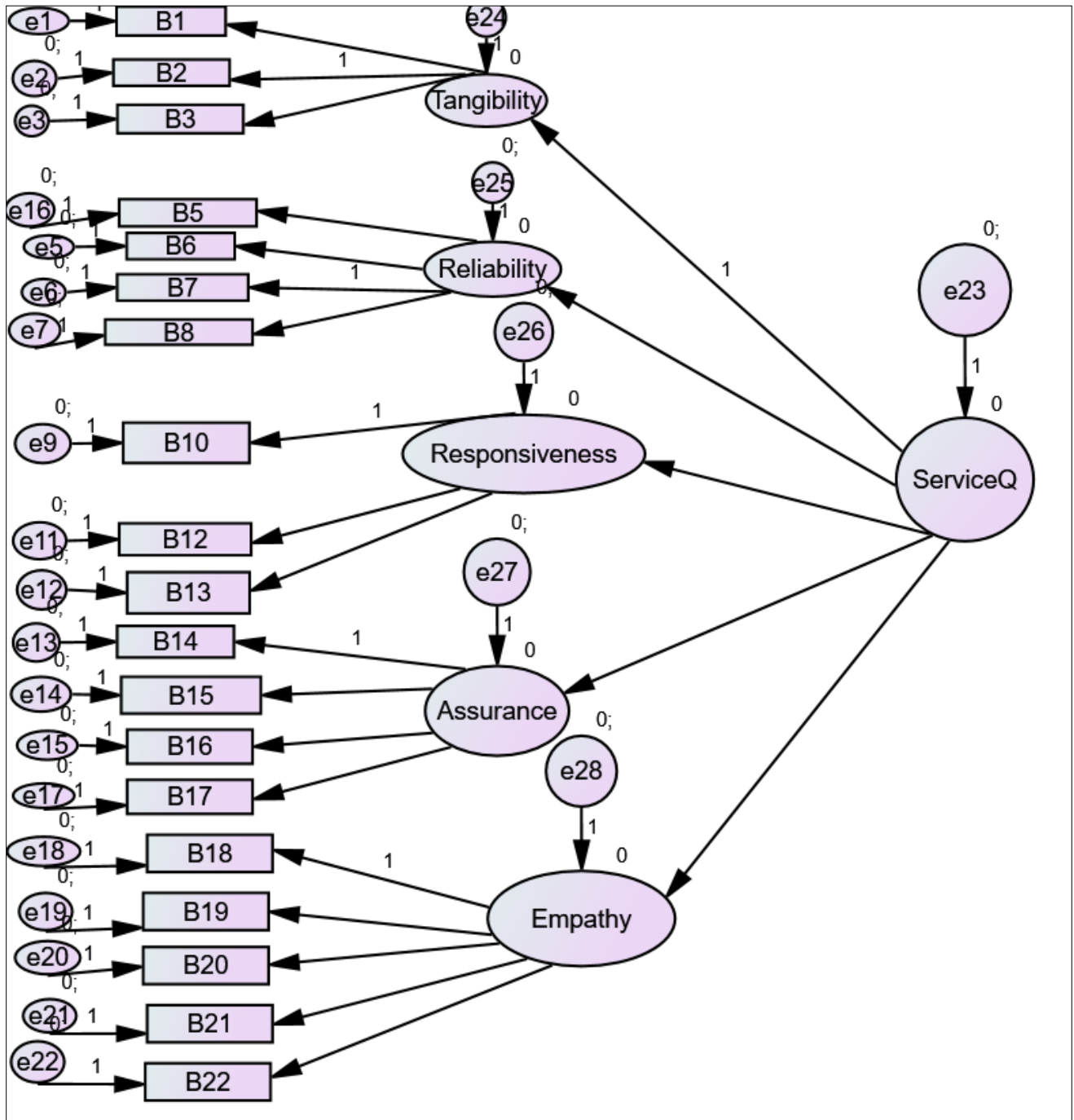


Figure 6.15a: First Order CFA for Experience

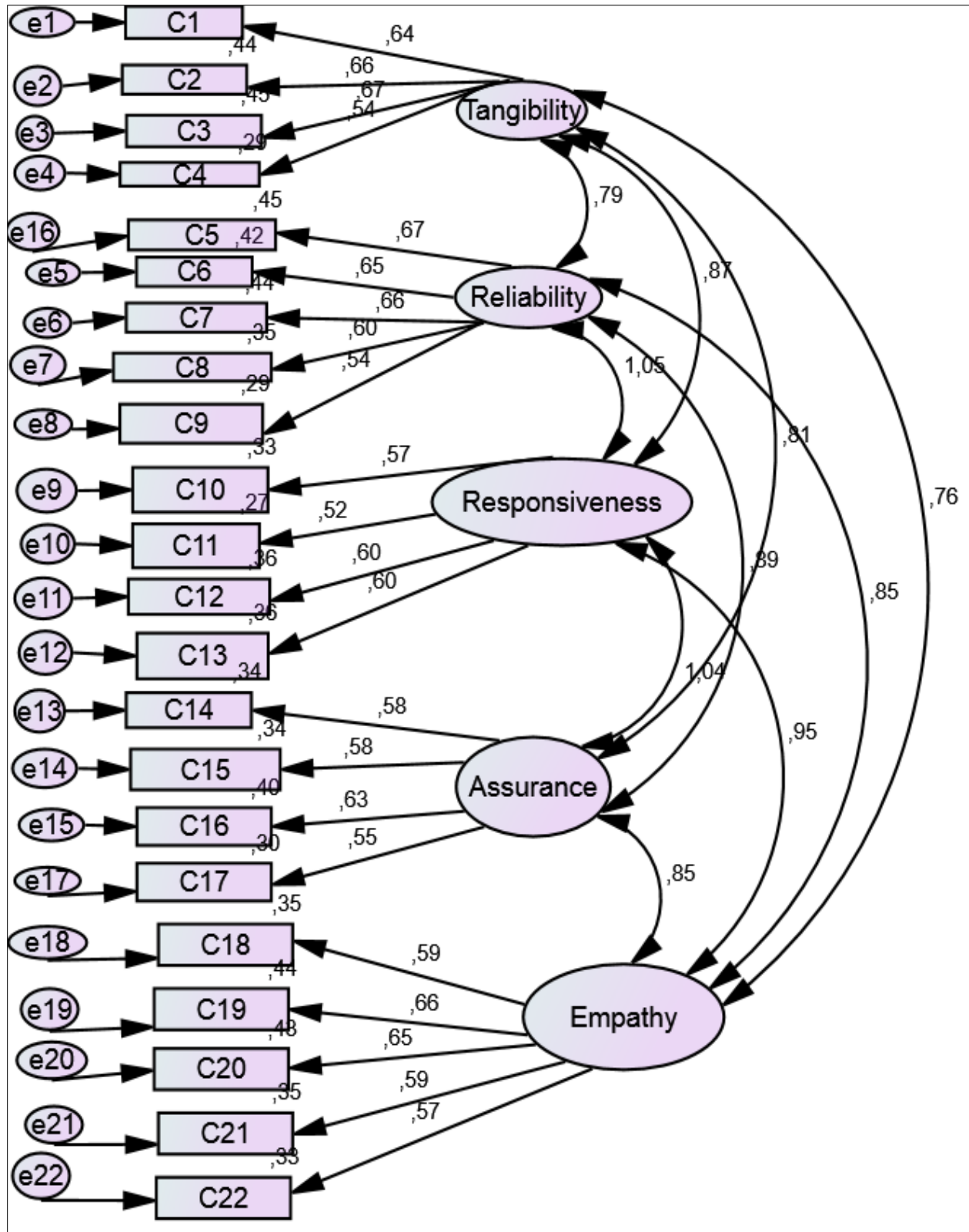
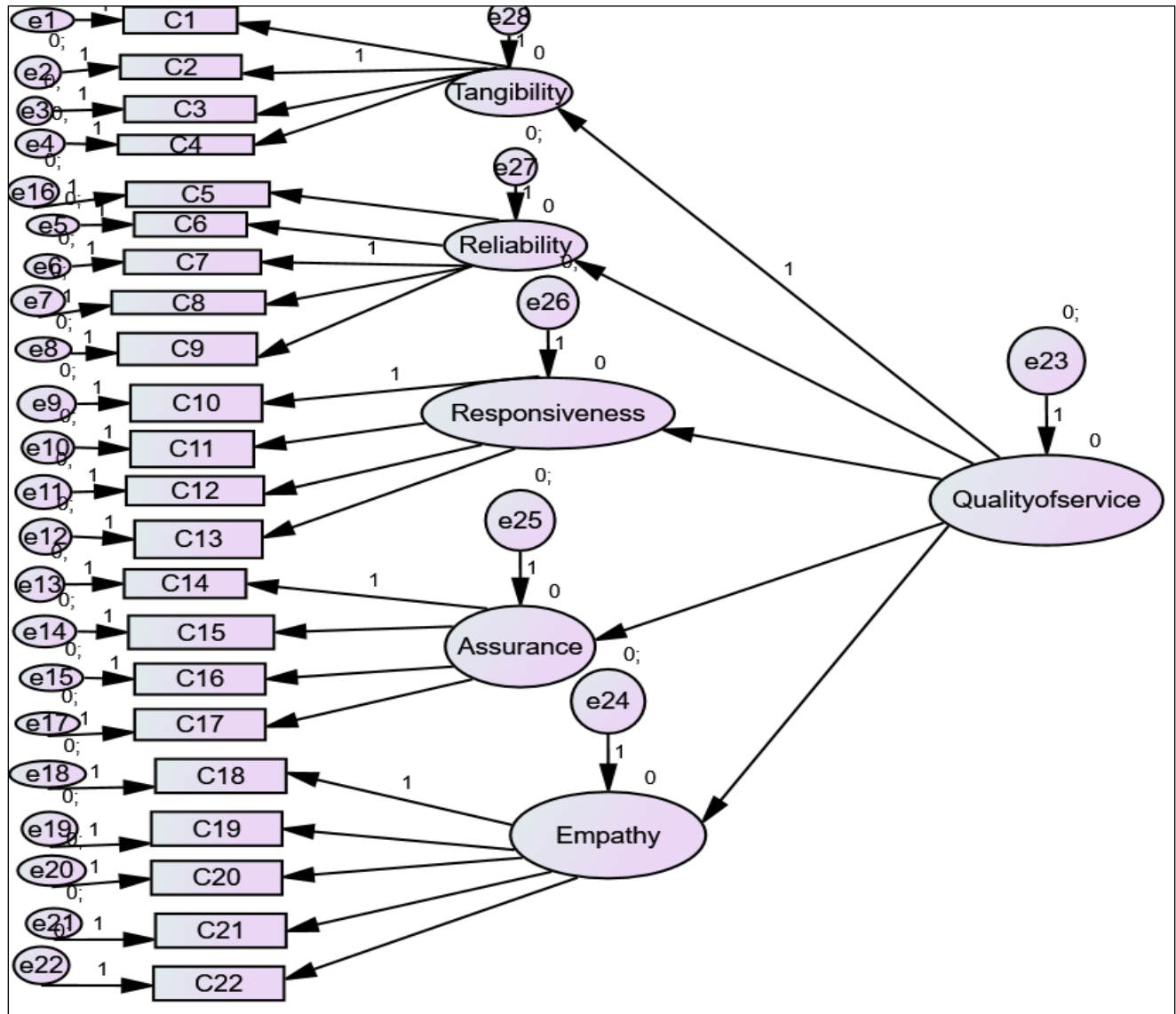




Figure 6.15b: Second Order CFA for Experience



### 6.5.2 Confirmatory Factor Analysis Fit Indices

The Confirmatory Factor Analysis model fitness can be explained by several indices such as Normed Chi-Square (CMIN/DF), Comparative Fit Index (CFI), the Goodness of Fit Index (GFI), Incremental Fit Index (IFI), Tucker Lewis Index (TLI) and Root Mean Square of Error Approximation (RMSEA). An acceptable fit for data can only be accepted when CFI, GFI, NFI and TLI are equal to or above 0.9, CMIN/DF smaller than 3 and when RMSEA value is below 0.08.

Table 6.1 presents the goodness-of-fit indices for the first and second order model on *expectations* and *experiences* of respondents on the CICs. The values of CFI, TLI, IFI and RMSEA are 0.76, 0.72, 0.72, and 0.093 for the first order *expectation*; 0.79, 0.75, 0.76 and 0.094 for the second order *expectation*; 0.77, 0.74, 0.78 and 0.098 for the first order *experience* and 0.78, 0.75, 0.78 and 0.097 for the second order *experience* respectively. All normed chi-square values were above 3. Since the values are not very close to the threshold values indicated in the last row of Table 6.1, the models do not represent an acceptable fit.

**Table 6.1: CFA Model Fitness (First and second order model)**

<b>Model Goodness of Fit Indices</b>	<b>CFI</b>	<b>CMIN/DF</b>	<b>IFI</b>	<b>TLI</b>	<b>RMSEA</b>
Expectation first order	0.795	5.331	0.797	0.755	0.096
Expectation second order	0.794	5.202	0.796	0.762	0.094
Experience first order	0.774	5.532	0.776	0.739	0.098
Experience second order	0.775	5,420	0.776	0.746	0.097
<b>Indicate acceptable fit</b>	≥0.9	< 3	≥0.9	≥ 0.9	<0.08

### **6.5.3 Structural Equation Modelling (SEM) BASED ON GAP Discussion**

The results of the SEM conducted on the conceptual models for service quality expectations and perceptions of CICs among the study respondents is presented in this section. The SEM adequacy was tested using goodness-of-fit measures. The set of measures included were the fit indices CFI, IFI, TLI, RMSEA and CMIN/df. Given the CFA and EFA results tabled above for both expectations and experience, shows non adequacy of fit (CFA) and an underlying factor structure (EFA) that did not correspond exactly with the original dimensions in the literature, a decision was taken to study the SERVQUAL gap between expectations and experience similar to the approach of Twinomurwizi, Zwane and Debusho (2012).

### 6.5.4 Testing the expectation-experience gap

The following figures show the SERVQUAL gap first and second order SEM conceptual model fitted to the data. The items used were the result of the difference between the expectation and experience rating for each of the 22 items. The endogenous variable ServiceQ was modelled using latent constructs *tangibility* measured by four items (L1, L2, L3 and L4); *reliability* measured by three items (L5, L6 and L8); *responsiveness* measured by three items (L10, L11 and L12); *assurance* measured by three items (L14, L16 and L17) and *empathy* measured by two items (L20 and L22).

**Table 6.2: CFA Model Fitness (Expectation-experience gap)**

Model	TLI	IFI	CFI	RMSEA	CMIN/df
<b>Goodness of fit indices</b> <b>1<sup>st</sup> Order</b>	0.876	0.909	0.907	0.057	2.531
<b>Goodness of fit indices</b> <b>2<sup>nd</sup> Order</b>	0.886	0.911	0.909	0.054	2.405
<b>Indicate acceptable fit</b>	≥.9	≥.9	≥.9	≤.08	<3

The SEM first order model goodness-of-fit indices indicate 0.876 for TLI, 0.909 for IFI, and a value of 0.907 for CFI for the second order model. Further, 0.886 is for TLI, 0.911 for IFI, and a value of 0.909 for CFI for the second order model. In both models, these indices' values are above the acceptable threshold of 0.90 apart from TLI whose value is below 0.90 (i.e. 0.876 and 0.886). The model also shows a RMSEA value of 0.057 and 0.054 for the first and second Gap model respectively, which is below the acceptable threshold of 0.08. These values indicate an acceptable structural model fit for service quality. An additional measure for the goodness-of-fit, is the CMIN/df value of 2.531 and 2.405 for the first and second model respectively, which is below the acceptable value of less than 3. It must be noted that two error covariance, between statements L8 and L14, and between L11 and L20 were added for improved fit. These additional covariance can be theoretically justified as there have been significant correlations.

The second order model's results will be used for hypothesis testing purposes as the target coefficient is  $199.986/201.995 = 0.99$  which is above 0.90.

**Figure 6.16: SERVQUAL Gap First Order Model**

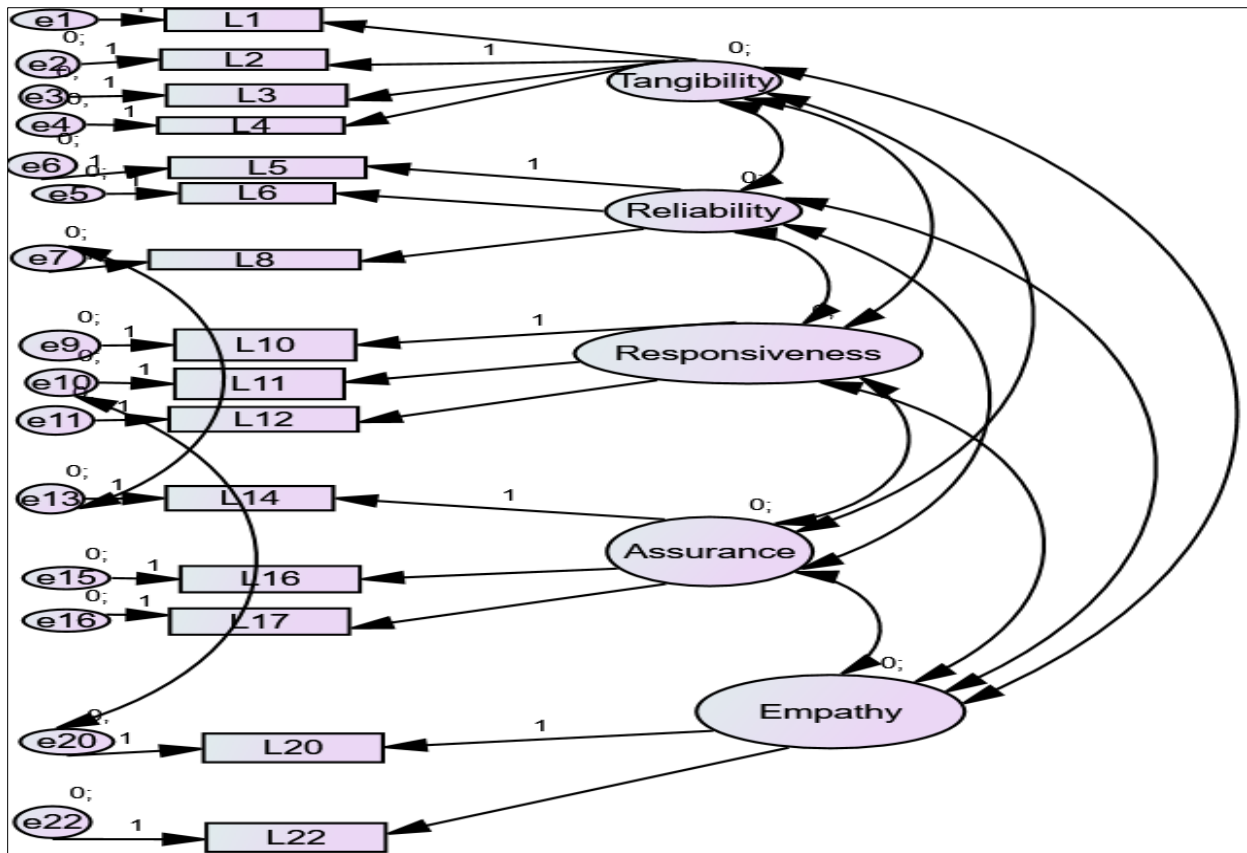
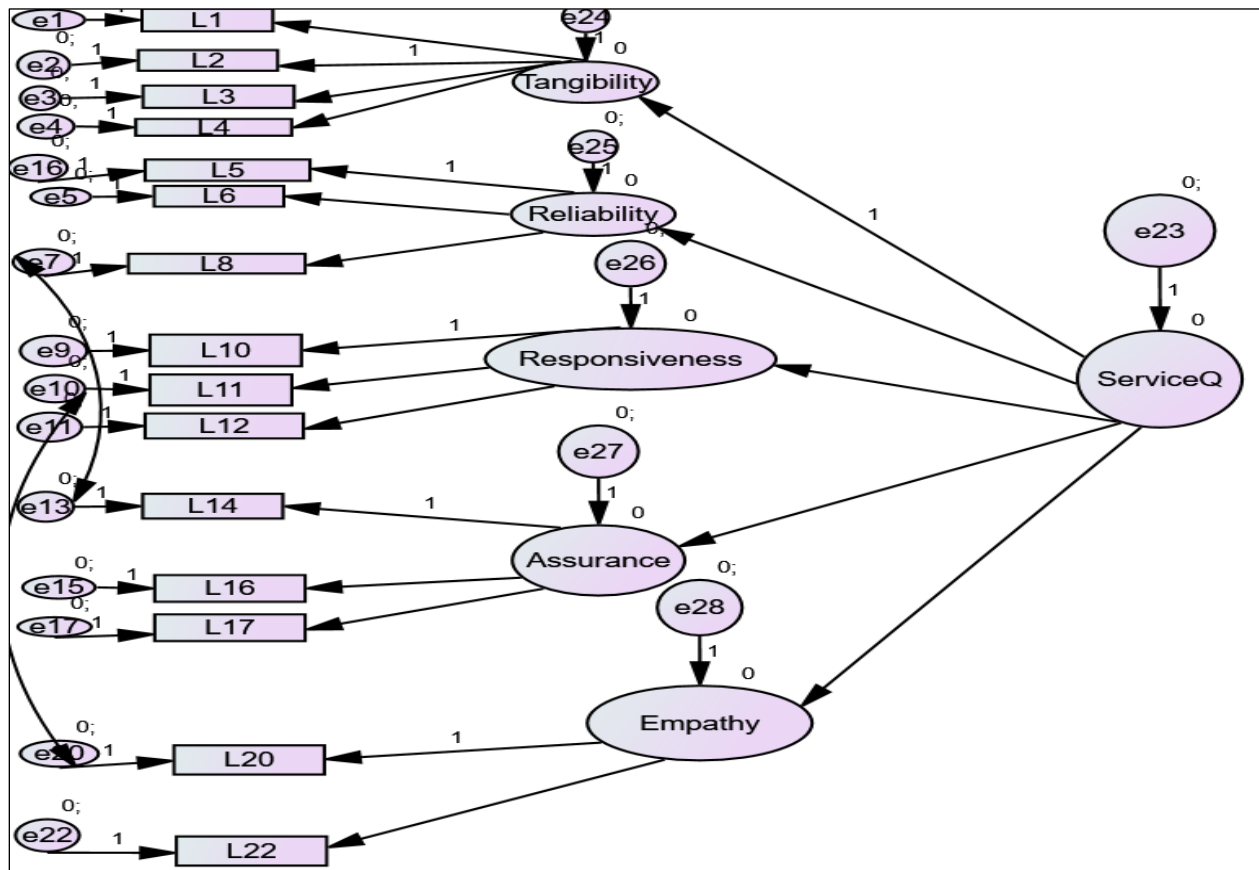


Figure 6.17: SERVQUAL Gap Second Order Model



### 6.5.5 Hypothesis Testing

The following section will focus on the testing of the hypothesis. Hypothesis is a “tentative assumption made in order to draw out and test its logical or empirical consequences”, (Kothari,2004:33). Agbor (2011) further elaborate that it consists of two statements, the statement that the parameter takes a value (H0) and the statement that the parameters fails in some alternative (H1). The SEM was used to determine the structural path coefficients, thereby enabling us to test the postulated hypotheses as indicated below:

H1: Tangibles are positively related to expectations and experience regarding the quality of service rendered.

H2: Reliability is positively related to expectations and experience regarding the quality of service rendered.

H3: Responsiveness is positively related to expectations and experience regarding the quality of service rendered.

H4: Assurance is positively related to expectations and experience regarding the quality of service rendered.

H5: Empathy is positively related to expectations and experience regarding the quality of service rendered.

Table 6.4 shows the regression weights for the SEM on expectation and experience gap. The standardised regression weights indicate high positive weights for tangibility, reliability, responsiveness, assurance and empathy. The table shows that responsiveness had the highest weight, followed by reliability, assurance, tangibility and empathy respectively. The hypothesis that tangibility, reliability, responsiveness, assurance and empathy have effect on service quality is thus accepted because of the high positive, statistically significant regression weights, thus affecting the gap between experienced and expected service quality.

**Table 6.3: Regression weights for Gap SEM**

			Unstandardised regression weights				Standardised regression weights
			Estimate	S.E.	C.R.	P	Estimate
Tangibility	<---	ServiceQ	1,000				,749
Reliability	<---	ServiceQ	1,016	,134	7,576	***	,967
Responsiveness	<---	ServiceQ	1,406	,157	8,985	***	,973
Assurance	<---	ServiceQ	1,028	,130	7,903	***	,898
Empathy	<---	ServiceQ	,624	,128	4,856	***	,552
L6	<---	Reliability	1,337	,160	8,348	***	,592
L10	<---	Responsiveness	1,000				,641
L16	<---	Assurance	,840	,120	6,976	***	,443
L14	<---	Assurance	1,000				,567
L4	<---	Tangibility	,925	,093	9,903	***	,597
L2	<---	Tangibility	1,000				,649
L3	<---	Tangibility	,784	,087	8,972	***	,524
L1	<---	Tangibility	1,090	,098	11,128	***	,661
L8	<---	Reliability	1,129	,144	7,821	***	,536
L11	<---	Responsiveness	,633	,078	8,087	***	,455

			Unstandardised regression weights				Standardised regression weights
			Estimate	S.E.	C.R.	P	Estimate
L12	<---	Responsiveness	,693	,084	8,242	***	,465
L5	<---	Reliability	1,000				,494
L17	<---	Assurance	,780	,121	6,460	***	,399
L20	<---	Empathy	1,000				,488
L22	<---	Empathy	1,602	,296	5,406	***	,785

Upon assessing the structural coefficients of the final structural model, the following is found:

### **Relationship between tangibles and service quality**

#### **Hypothesis:**

Null Hypothesis= H0: Tangibles are not positively related to the quality of service rendered.

Alternative Hypothesis=H1: Tangibles are positively related to the quality of service rendered.

Results in Table 6.3 indicate that there is a high standardized regression weight of 0.749 that is statistically significant at the 0.001% level between tangibles and service quality. This therefore means that H0 is rejected as a strong positive relationship exist between tangibles and service quality dimension. There is evidence of tangibility positively relating to service quality.

### **Relationship between reliability related and service quality**

Null Hypothesis=H0: Reliability is not positively related to the quality of service rendered.

Alternative Hypothesis=H2: Reliability is positively related to the quality of service rendered.

Results in Table 6.4 indicate that there is a high standardized regression weight of 0.967 that is statistically significant at the 0.001% level between reliability and service quality. This therefore means that H0 is rejected as a strong positive relationship exist between

reliability and service quality dimension. There is evidence of reliability positively relating to service quality.

#### **Relationship between responsiveness and service quality**

Null Hypothesis=H0: Responsiveness is not positively related to the quality of service rendered.

Alternative hypothesis=H3: Responsiveness is positively related to the quality of service rendered.

Results in Table 6.4 indicate that there is a high standardized regression weight of 0.973 that is statistically significant at the 0.001% level between responsiveness and service quality. This therefore means that H0 is rejected as a strong positive relationship exist between responsiveness and service quality dimension. There is evidence of responsiveness positively relating to service quality.

#### **Relationship between assurance and service quality**

Null Hypothesis=H0: Assurance is not positively related to the quality of service rendered.

Alternative hypothesis=H4: Assurance is positively related to the quality of service rendered.

Results in Table 6.4 indicate that there is a high standardized regression weight of 0.898 that is statistically significant at the 0.001% level between assurance and service quality. This therefore means that H0 is rejected as a strong positive relationship exist between assurance and service quality dimension. There is evidence of assurance positively relating to service quality

#### **Relationship between empathy and service quality**

Null hypothesis=H0: Empathy is not positively related to the quality of service rendered.

Alternative hypothesis=H5: Empathy is positively related to the quality of service rendered.



Results in Table 6.4 indicate that there is a high standardized regression weight of 0.552 that is statistically significant at the 0.001% level between empathy and service quality. This therefore means that H<sub>0</sub> is rejected as a strong positive relationship exist between empathy and service quality dimension. There is evidence of empathy positively relating to service quality.

All the hypothesized relationships in the proposed model relating to service dimensions and service quality were empirically expounded. Positive relationships were found to exist between tangibles, reliability, responsiveness, assurance and empathy and service quality. Based on the path coefficients and the regression results, the null hypothesis was rejected in each case. Findings confirmed significant positive relationships between the SERVQUAL constructs and service quality dimension. The findings are in line with Twinomurwizi, Zwane and Debusho (2012), whose study focused on the SERVQUAL and Thusong Service Centres (TSC) in South Africa. This study domain draws a lot of in reference from the mentioned study. Similarities have been observed, as the findings indicate that the five SERVQUAL dimensions have a statistically significant effect on the quality of service. The null hypothesis was rejected in each case and confirmation was obtained that there is a causal relationship among the SERVQUAL dimensions and the quality of services rendered in the TSC (Twinomurwizi, Zwane & Debusho, 2012:97).

The study compares with Agbor's (2011) study on the relationship between customer satisfaction and service quality in three sectors in Umea. The main purpose was to examine the relationship with respect to service dimensions. The results are in tandem with this study, as they indicate a relationship between reliability, responsiveness, empathy and the service quality dimension.

The study findings further compares with Wang and Hi-po (2002), who used the SERVQUAL model in measuring service quality by testing hypotheses for relationships between service quality dimensions and service quality. The results indicated that there is also a relationship between the constructs and the service quality dimension.

Saraei and Armin (2012) indicated that their hypothesis elements of the SERVQUAL model were scientifically associated with the service quality dimension. This was observed in a study that measured the service quality in CICs in Iran. Saraei and Armin (2012) further indicated that SERVQUAL can be used to determine the quality of services offered by CICs in rural areas of Iran. This is also in tandem with Negi (2009) who indicated that there is a positive relationship between the constructs and service quality, in a study conducted in the telecommunication sector.

**Table 6.4: A summary of hypotheses**

<b>Objectives</b>	<b>Hypothesis</b>	<b>Conclusion</b>
To determine whether <i>tangibles</i> are positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered	H0: Tangibles are not positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered H1: Tangibles are positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered	Reject H0
To determine whether <i>reliability</i> is positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered	H0: Reliability is not positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered H2: Reliability is positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered	Reject H0
To determine whether <i>responsiveness</i> is positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered	H0: Responsiveness is not positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered H3: Responsiveness is positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered	Reject H0
To determine whether <i>assurance</i> is positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered	H0: Assurance is not positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered H4: Assurance is positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered	Reject H0
To determine whether <i>empathy</i> is positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service	H0: Empathy is not positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered H5: Empathy is positively related to <i>expectations</i> and <i>experience</i> regarding the quality of service rendered	Reject H0

\*NB results from Table 6.4 show that there are positive relationships between all the dimensions (tangibles, reliability, responsiveness, assurance and empathy) on service quality, and it is only the magnitude of these relationships that is different.

## 6.6 EXPLORATORY FACTOR ANALYSIS

This section focuses on the exploratory factor analysis. Exploratory factor analysis is used to identify a potential underlying factor structure for a set of variables. In this study, the confirmatory factor analyses conducted using a set of fit statistics for *expectations* and *experience* that the data did not fit the model adequately. Results indicate very high covariance values (in the case of first order model) between the five constructs and very high standardised regression weights (structural path coefficients in the case of second order models). This, therefore, indicate multicollinearity and thus poor discriminant validity. Based on this outcome, EFA was conducted to determine the underlying factor structure.

Exploratory factor analysis was conducted using principal axis factoring as extraction method and promax as rotation method. Hair et al. (2006:154) state that “the appropriateness for conducting factor analysis is assessed with the Kaiser-Meyer-Olkin (KMO) measure and Bartlett’s sphericity test. For expectations and experience, the KMO measures, which were above 0.6 shows adequacy for factor analysis.

The Bartlett’s Test of Sphericity where  $p < 0.05$  were statistically significant, showing that the data was appropriate for factor analysis. In the case of *expectations*, four factors were identified from the data with Eigenvalues more than 1 and a cumulative percentage variance of 52.51%. The four factors identified are *responsiveness*, *reliability*, *tangibles* and *empathy*, with factor loadings of more than 0.3 (as shown in Table 6.5). There is a satisfactory association between the four factors i.e. responsiveness, reliability, tangibles and empathy. The factor loading results are presented in the tables below, with the circled results showing the loadings for each factor.

**Table 6.5: Exploratory Factor Analysis (expectations)**

**Factor 1: Responsiveness**

	1	2	3	4
Materials associated with the service (pamphlets or statements) will be visually appealing to an excellent CIC	0.562			
Excellent CICs will provide the service at the time they promise to do so	0.516			
Employees of excellent CICs will give prompt service to customers	0.566			
Employees of excellent CICs will never be too busy to respond to customer's needs	0.730			
Employees of excellent CICs will have the knowledge to answer customer's questions	0.625			
Excellent CICs will have their customer's best interest at heart	0.645			

**Factor 2: Reliability**

An excellent CICs will do something what they promise to do by a certain time		0.537		
Employees of excellent CICs will tell customers exactly when services will be performed		0.710		
The behaviour of employee in excellent CICs will instil confidence in customers		0.756		

**Factor 3 Tangibles**

In general, excellent CICs will have modern looking equipment			0.640	
The physical facilities at excellent CICs will be visually appealing			0.512	
Employees at excellent CICs will be neat in their appearance			0.578	

**Factor 4 Empathy**

Excellent CICs will have employees who give customers personal service				0.692()
The employees of excellent CICs will understand the specific needs of their customers				0.330

	Factor correlation			
1Responsiveness	1.000	0.483	0.330	0.528
2reliability		1.000	0.428	0.578
Tangibles			1.000	0.287
4Empathy				1.000

Four factors were identified from the data for experience, with Eigenvalues more than 1, with a cumulative percentage variance explained of 52.51%.

**Table 6.6 Exploratory Factor Analysis (experiences)**

	1	2	3	4
Materials associated with the service (such as pamphlets or statements) are visually appealing at the CIC	0.656			
The CIC provides its service at the time it promises to do so	0.581			
Employees in the CIC are never too busy to respond to my request	0.719			
I feel safe in conducting transactions with the CIC	0.541			
Employees in the CIC have the knowledge to answer my questions	0.653			
The CIC has operating hours convenient to all its customers	0.526			
The CIC has my best interests at heart	0.719			
When the CIC promises to do something by a certain time, it does so		0.647		
Employees in the CIC tell me exactly when the services will be performed		0.608		
The behaviour of employees in the CIC instils confidence in me		0.664		
The CIC gives me individual attention		0.676		
The CIC has employees who give me personal attention		0.507		
The employees of the CIC understand my specific needs		0.610		
The CIC that you visit regularly has modern looking equipment			0.690	
The CIC's physical features are visually appealing	0.521		0.509	
The CIC's reception desk employees are neat in appearance			0.419	
The CIC performs the service right the first time				0.497
The CIC insists on error free records				0.414
<b>KMO and Bartlett's Test</b>				
<b>Factor correlation</b>				
1 Assurance	1.000	0.542	0.401	0.434
2 Responsiveness		1.000	0.540	0.468
3 Tangibles			1.000	0.345
4 Reliability				1.000

The KMO measure which is above 0.6 and the Bartlett's Test of Sphericity for which  $p < 0.05$  is statistically significant showing that the data is adequate for factor analysis. Four factors could be identified from the data with Eigenvalues more than 1, with a cumulative percentage variance explained of 55.23%.

Using Cronbach's alpha, the internal reliability for the four factors was found to be ranging between 0.604 and 0.839, which is deemed to be acceptable (Tsega, 2016), thus, reliability was considered satisfactory. Tsega (2016) states that coefficient alpha values are pegged at 0 and 1.0 and that the cut-off point that indicates a reliable alpha value is at 0.7. She further elaborates that in effectiveness tests on alpha below 0.7, a value of about 0.6 is acceptable. Grobler, Joubert, Rudolph and Hajee-Osman (2012:8) point out that coefficient conveys important information regarding the proportion of variance contained in a scale.

## 6.7 CONCLUSION

The chapter entail the presentation of the results on how customers, rate the quality of the service that they expect to get at Community Information Centres in Zimbabwe, compared to how they rate the quality of the service that they are getting. The demographic profile of the respondents was used to gain understanding in the profile of the CICs users. In order to achieve the objectives of the study, descriptive and inferential statistics were performed. The formulated hypothesis was tested using statistical techniques.

Results indicate disparities among the users of the CICs. The majority of the CICs users are between the ages of 20-39 years and 30-39 years, whilst the elderly is the minority group that uses the CICs. It was also observed that more males use the CICs more than females. The descriptive analysis demonstrated the respondents' level of disagreement and agreement on the 22 statements as depicted in the adapted SERVQUAL questionnaire. Results indicate that the respondents have high *expectations* in some SERVQUAL dimensions such as tangibles.

SEM analysis was also conducted to test structural paths between the service quality (SERVQUAL) dimensions, which was measured by five latent constructs, namely: tangibility, reliability, responsiveness, assurance and empathy. To test whether the measurement model expounds the SERVQUAL theory, Confirmatory Factor Analysis (CFA) was conducted using AMOS 22. Exploratory Factor Analysis (EFA) was conducted, using principal axis factoring as extraction method and promax as rotation method to identify the factor structure or model for a set of variables. In this study, the fit statistics for *expectations* and *experiences* show that data did not adequately fit the model. This led to conduction of EFA to determine the underlying factor structure of the data.

Correlations coefficients were calculated to test the relationships between the SERVQUAL constructs. Results indicate significant positive structural relationships between the SERVQUAL constructs. Regression analysis was also conducted to determine which of the SERVQUAL constructs contributed significantly to service quality. The results indicate that there is statistical significance and strength of the relationships between the five SERVQUAL and service quality.

The subsequent chapter provides the discussion, conclusion and recommendations of the study.

## CHAPTER SEVEN

### DISCUSSION, RECOMMENDATIONS AND CONCLUSION

#### 7.1 INTRODUCTION

This Chapter provides the discussion, implications, limitations, recommendations and conclusion of the study, based on findings from the data collected from three CICs in Zimbabwe. The Chapter provides the conclusion to the most significant findings that were generated in the study. The study identified some key areas for recommendation for policy makers, management and CICs contact employees as well as its clientele to increase the level of public service.

Community Information Centres have changed and paved the way for bridging the digital divide in developing countries. These centres, equipped with ICTs, can now provide government services more effectively and efficiently. Naik, Josh and Basavaraj (2012) state that by bridging the gap between businesses and the rural population, CICs can become the front end and change the nature of service delivery. Reviewed literature indicates that there is scanty information that shows evidence of monitoring and evaluating service quality in CICs in the African context. This research study examined the service quality of CICs in Zimbabwe.

From this perspective, it was important to understand service quality in CICs as they are still being implemented across the country. Moreover, the findings of the study revealed that it is also important to have regular assessment of service quality as it promotes the quality of service offered to the customers while pinpointing where and how the CICs need to improve to enhance its services. Furthermore, it emerged that effective communication cannot be understated as it contributes to a better relationship as well as management between CICs and the community that it offers its service quality to. Therefore in this study one of the critically contributes was not only identifying service quality gap between the CICs and its customers, it was also to identify pockets of



excellence as well as the strategies that would promote effective and efficient implementation of the CICs.

Studies by (Naik, Josh and Basavaraj (2012); Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013); Saraei and Armin (2012); and Twinomurwizi, Zwane and Debusho (2012) have been conducted on CICs and their effectiveness such as CSCs in India; UISCs in Bangladesh and Iran; and Thusong Service Centres in South Africa, Citizen's Service Centres in Greece to mention a few - no study has been conducted in the rural context in Zimbabwe. Zimbabwe was the focal context for this study and this makes it unique. The results can be a springboard for future research regarding the service quality of CICs in rural areas in developing countries. Providing quality services in organisations are one of the key elements that management needs to take cognisance of and this makes the study distinctive in this particular context.

A total of 475 respondents participated in this study and they were drawn from Murombedzi, Rusape and Muzarabani Community Information Centres. Quantitative research was adopted and survey research was embarked upon. A slightly modified SERVQUAL questionnaire was used to gather information. The questionnaire consisted of items that were linked to the five SERVQUAL constructs (tangibles, responsiveness, reliability, assurance and empathy). Data were analysed through statistical techniques (descriptive and inferential) and were presented in graphs, tables and diagrams.

Five hypotheses were formulated at the beginning of the research, with the aim of analysing the relationship between the SERVQUAL constructs and service quality. Significant relationships were confirmed between the constructs of tangibles, reliability, responsiveness, assurance and empathy, and service quality. Results, as depicted in Table 6.4, indicate relationships between the constructs, which will be discussed in this Chapter.

## 7.2 DISCUSSION OF FINDINGS

In the questionnaire, one of the sections was directed at obtaining demographic data. This data played a critical role in understanding the profile of the CICs users. The following section will discuss the descriptive findings obtained from demographic data.

### 7.2.1 Findings from the descriptive data

From the demographic data, results indicate that the main users of the CICs were between the ages ranging from 20-29 and 30-39. These findings imply that the younger were the main users of the CICs in the study domain. This is in line with Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) who also indicate that CSC in Greece seem to serve the dynamic part of the young and educated. This is because the majority of them are computer literate, and they use the internet for varied reasons. On the other hand, the elderly age groups are not computer literate and they could find the use of computers and the internet challenging.

Therefore, the results of the study suggest that usage of technology is centered on acceptance by the customer. For example, the TAM theory looks at the rate of adoption of a new technology or innovation by customers. Preference of a user to use or not to use a new technology is determined by one's attitude which is influenced by two beliefs that are the perceived usefulness and perceived ease-of-use (Davis, 1989). The theory stresses that an individual's decision to accept a new technology or innovation is motivated by one's intention and trust in the technology. Perceived usefulness and ease of use influence how customers adopt an innovation. This implies that, customers if they find technology to be useful, they are likely to use it. And in this case the young age groups in most cases find it easy to use innovations. This supports the notion that when technology is easy and user-friendly, potential users will be inherently inspired to adopt it.

According to Bailey and Ngwenyama (2009), and Bugihiro (2012), the majority of the adult people in rural areas do not know how to read and write, which has an effect on the use of CICs facilities. The literature review identified low levels of education and lack of technology skills as challenges that affect CICs use in rural areas especially in developing

countries. For example, observations have been made that people who do not have the skills to use technology, find themselves excluded from the information world unless measures are put in place to accommodate them. The challenge of using English as a medium of communication also hinders the use of CICs by the majority of the adults.

Mtega and Malekani (2009) observe that the bulk of people residing in rural areas have low levels of literacy in terms of using ICTs and therefore it is not surprising that most users of the CICs are those that have been schooled. The young users see the potential for employment and this makes them early adopters of the services offered by CICs. Rogers (2003) point out the process of adopting a new innovation and the process of adopting an innovation by people. Five categories of the adopters are given and these include the innovators, early adopters, early majority, late majority, and laggards. Rogers (2003) postulates that when a technology is considered complex to use, the adoption of the technology will be affected.

According to Bailey and Ngwenyama (2009), literacy plays a role in the utilization of CICs, presenting both challenges and a means of inspiration to its users. Against the above background, results from this research also indicated imbalances in the use of CICs between the three centres, with Murombedzi commanding the majority of the users at 43% of the local population. Bugihiro (2012) suggests that the creation of appropriate public awareness about CICs opportunities and the benefits it provides to the communities. Thus, the research under study suggests this could be done by coming up with different platforms for enhancing communication channels such as (radios), conducting ongoing training and workshop in the surrounding villages; church meetings with local leaders and distribution of leaflets and posters written in local languages so as to capture a wider audience. In simple terms using integrated marketing communication channels can assist in this regard. Integrated marketing communication involves choosing reliable, efficient and effective marketing communication channels and skills that support and match one another while addressing the needs of its users.

A study by Mtega and Malekani (2009) reports that CICs managers point out that the services of their centres are not known to the community due to financial constraints in the marketing and publicity of the centres.

Most CICs operators find it difficult to publicize their services to areas that are not in close proximity to them, this is further compounded by their incapability to travel to a wide catchment area for that purpose. Thus, the target audience is not accessible and remains excluded. On the other hand, Mtega and Malekani (2009) observe that communities close to a centre are the main users of centres, as they are aware of them. Communities that are far away from the centres might not be aware of them, hence the non-use of the services.

In previous studies, gender imbalances have been recorded in the use of CICs and this has also been noted in the study domain. A total of 47% of the CICs users in Zimbabwe were females. The extant literature reveals that women commonly benefit the least from technological interventions. This is exacerbated by social factors that include education, employment and income. Chilimo (2008) furthermore observe that ICTs continue to be viewed as the purview of men and that women are mostly housewives who are dependent on their husbands for support. Against this background, Lesame and Seti (2014) observe that rural women specifically in the Eastern Cape Province, South Africa, lack knowledge of the benefits that they can derive from using such centres.

In addition research conducted by Mukerji (2010); Dangal (2011); Chisango (2014); and Kapondera and Hart (2016) also observe that women seem to gain less from opportunities that CICs offer. Buhigiro (2012) further states that this could be caused by a myriad of social factors that include perceptions that women have towards such places. More males frequent the CICs due to culture and gender roles. Women have multiple roles and domestic responsibilities, which leave them with less time for leisure as compared to their male counterparts.

### **7.3 DISCUSSION AND CONCLUSIONS RELATING TO OBJECTIVES AND PROBLEM STATEMENT**

In this section, discussions and conclusions relating to objectives and problem statement are presented below.

### 7.3.1 Conclusions relating to Secondary Research Objectives

The conclusions for the study are drawn based on specific objections as presented below;

The secondary research objectives of the study are discussed below.

#### **Secondary Research Objective 1:**

To determine whether *tangibles* are positively related to expectations and experience regarding the quality of service rendered at Community Information Centres in Zimbabwe.

Mamo (2015) describes tangibles as *physical facilities, tools or equipment used to provide the service, appearance of employees and communication material* used in the organizations. Findings from the structural coefficients indicate that there is a significant relationship between tangibles and service quality. This was also observed by Agbor (2011); Abdullah, Suhaim, Saban (2011) and; Negi (2009); Saraei and Armin (2012); and Twinomurwizi, Zwane and Debushe (2012). All the items on the tangibles construct have an impact on the *expectations and experience* of clients on service quality in the CICs” Items in the questionnaire pertaining to the tangible construct included modern looking equipment, visually appealing physical facilities, visually appealing communication materials and these will be alluded to in the following paragraphs.

Results presented in Section 6.2.1 show that the clients expected excellent CIC to have modern-looking *physical facilities* so that it can provide efficient services to communities. What the respondents were expecting from CICs with regards to modern-looking technical equipment was significantly higher than what they experienced. It therefore shows that on average, the service quality in terms of modern technical equipment was not adequate in meeting the respondents’ expectations. This, therefore, means that a large gap exists between the expected and delivered performance on tangibility. This tallies with Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) who also points out that tangibles perform at satisfactory level in the CSCs. In the same line of thought, Al-Azzam (2015), advances that customers can evaluate facilities’ design and sufficiency. Thus, clients’ experience in the CICs with regard to tangibles has been

satisfactory. The findings of the study suggest that management's focal point should be on purchasing new equipment and ensuring that the facilities at the CIC are well maintained. In addition, it is paramount that management needs to keep abreast with technology by purchasing new gadgets as the need arises.

Results indicate that the expectations of respondents in terms of visually appealing *physical facilities* were also higher than their experiences. This shows that the service quality in relation to visually appealing services did not meet the respondents' expectations. For instance, it could be deduced that, the expectations were high in terms of physical facilities but the perceptions were very low. The findings imply that there should be more investment in the improvement of the infrastructure and equipment. This is despite that fact that part of the results indicated that there is satisfaction with visually appealing physical facilities, although the CICs might still need to improve on its facilities.

Results also indicate that clients expect the CICs to have *tools or equipment* that gives quality services, such as computers with speed internet connections. From the results of the study, it is clear that the clients do not perceive the equipment in the CIC as modern. Therefore, the CICs under study should have modernised equipment as this is perceived by customers as important to enable functionalities of services in terms of speed and efficiency.

However, management needs to bear in mind the costs that can be incurred in the investment of equipment. Therefore, it would be encouraged to determine what needs upgrading and to then focus on these tangibles. Having modern looking equipment can influence perception about the quality of services. This is in line with Disconfirmation theory, which suggests that perception of quality results from a comparison of experienced performance with the expected performance (Gronroos, 2000).

The *appearance of employees* is important, as they portray the image of an organisation. Clients visiting an organisation will relate at a better level with employees, who in most cases are neat in appearance. The dress code and the surrounding environment should also be considered in the upgrading of the tangibles. Neatly dressed contact employees not only present the organizational image, but they can also be used as a marketing tool

for the CICs. Literature indicates that corporate image has a strong impact on perceived service quality (Tsige, 2016). Contact employees need to have branded clothing as a marketing strategy to attract new users. As observed, in this study, employees in the CICs had uniforms.

Visual appearance of organisation's *communication material* used is of great importance if one is to attract and retain clients in business. Clients value the appearance of materials in the CICs. Results indicated that there were higher expectations than experiences on communication materials. Communication material has an impact on the corporate image. As such, it is advisable that organizations need to invest in visually appearing communication material to market their services. For instance one of the shortcoming on CICs as observed in literature, was the issue of low usage and this could be emanating from lack of awareness from communities. Applying marketing communication should lead to behavioural changes in the target market in the purchase of products or loyalty to the brand. In other words, use of communication materials can enhance the visibility of an organization.

In summary, findings indicate that respondents have high expectations with regard to tangibles and this underlines the need for further improvement. Appearance of materials used in the CICs were also outlined as of great importance if one is to attract and retain customers for the centres. This also indicates the importance of maintaining the appearance and status of the physical facilities at CICs. Thus, an increase in modern-looking technical equipment, suitably dressed and neat CICs staff and visually appealing pamphlets will induce an increase in perceived tangibility.

**Secondary Research Objective 2:**

To determine whether *reliability* is positively related to expectations and experience regarding the quality of service rendered at Community Information Centres in Zimbabwe.

Reliability can be described as the ability of the CIC to perform the promised service accurately. A key approach for organisations is to deliver high quality services to

customers. Chingang and Lukong (2010:63) indicate that customers are sensitive to how reliable and assuring a store is in providing good and quality products and services to them. One can conclude that it is of great importance that organisations need to have a sense of accuracy and dependability, and that they provide the service that they promised to provide to the different customers. The reliability dimension has more bearing on customers, as they would like to deal with organisations that keep their promises. Thus, effective communication contributes to better relationship management between CICs and the community that it offers its services to. Building and maintaining relations is crucial and relationship marketing aims to build mutually long term relationships with key constitutes in order to earn and retain their business hence CICs need to be reliable in the eyes of the customers.

Reliable services have a strong impact on customers' judgement of an organisation. Deliverance of quality service is dependent on conforming to customers' expectations on a consistent basis. Based on the structural coefficients, results indicate that there is a significant relationship between reliability and service quality. This is in line with Negi (2009); Krishundutt and Parumasur (2009); Twinomurwizi, Zwane and Debushe (2012); Kuma, Tat Kee and Taap Mansor (2010); and Yarimoglu (2014). All the statements on the reliability construct have an impact on the *expectations* and *experience* of clients on service quality in the CICs. Items in the questionnaire pertaining to the reliability construct included: *keeping promises*, *timeliness*, *solving problems* and *keeping error free records*. These will be discussed in the following paragraphs.

Organizations need to keep promises made to their clients. With regard to *keeping promises* that are made during marketing communication campaigns, it can be stated that the former should be maintained to keep the relationship with customers. The goals set also need to be realistic and achievable. This increases the level of reliability in the eyes of the customers. In connection to this, Naidoo and Muntinta (2014:223) propose that organizations need to develop systems and procedures that standardize service production to ensure that core services delivered are reliable and consistent. Organizations are supposed to be accurate, dependable and live up to the promises made to their customers.



Delivering the promised services accurately and at the right time can eliminate the challenges of non-usage of CICs as observed in literature. In this study, the respondents indicated that they expect that the CIC must provide customers with acceptable service the first time they visit the centre. Hirmukhe (2012) also alludes to the reliability dimension with reference to *timeliness* of the service. Customers expect their services to be delivered in a professional manner the first time they are in contact with CICs. Literature (Hirmukhe, 2012; Adat, Noel and Pencelia, 2014) indicate that organisations needs to consider the possibility of investing in training and resources so that the promised deadlines for the delivery of the different services can be adhered to. Employees should show the ability and desire to offer the customers effective solutions from the very first contact. Performance of service at the promised time also shows that what the respondents expected was higher than what they were experiencing at the CICs. This implies the quality of service in terms of timeous delivery of service was perceived as less adequate.

A higher percentage of respondents expect the CICs to be able to *solve their problems*. Adoption of the customer-centric approach at CICs could assist in solving customer problems. Adopting a customer–centric approach in solving problems ensures that customers' views are considered in the service process. Vargo and Lush (2008) states that the philosophy of customer-centric involves more than simply being consumer orientated, it means co-operating with and learning from customers and being adaptable to their individual and dynamic needs. In the S-D logic of marketing, customer focus is central to the marketing concept, and the goal is to serve customers with total value creation.

Results indicate that the respondents were given assistance in cases were they had problems in using the services found within the CICs. Literature points out that assisting clients an the organisation increases their perceived service quality. It also attracts and retains clients to use the CICs. This is also in line with customer relationship management, which should be focused on refining a deeper understanding of customer motivation (Twinomurwizi, Zwane and Debusho, 2012). The emerging findings also showed that there were high expecations on CICs being able to solve problems and this could be

attributed by the clientele base that needs assistance with CIC services. Meanwhile, *Accurate record keeping* also emerged as having a bearing on how clients perceive an organisation. Maintaining accurate records in organisations is important and results indicated that the majority of respondents value the accuracy of records. This, therefore, compels the CICs to maintain records that are accurate. Accurate records can be used by management to monitor the trends on CIC usage, as well as project customer needs.

In summary, reliability was found to be positively related to experiences about the quality of service rendered in the CICs. Clients in the CICs expect a reliable service to be offered in the centre. Reliability dimension emerged as having high performance in the study. This is in line with Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) who points out that CSCs in Greece achieved significantly high levels of the reliability dimension. A reliable service can influence the perceptions regarding the services. According to Gronroos (2019) a user's expectations has a decisive impact on a customer's quality perception. The more the experienced service meets the user's perception, the better the quality judgement is and the higher the quality is perceived. Negi (2009:708) indicates that "reliability, emerged as the most critical determinant to overall service quality." Whereas, Zeithaml *et al.* (2006, 1990) attest that reliability is the most important determinant of service quality, offering a fulfilment of promise for service delivery, timeously and consistently. This can be complemented by prompt service delivery, emphasising attentiveness and flexibility in customising customers' needs.

**Secondary Research Objective 3:**

To determine whether *responsiveness* is positively related to expectations and experience regarding the quality of service rendered at Community Information Centres in Zimbabwe.

As alluded to earlier on, responsiveness is based on how an organisation deals with the customer's requests, questions, and complaints promptly. It is defined as the willingness to assist clients and provide a swift service. Mamo (2015) posits that responsiveness is the willingness of staff members to assist in a pleasing and effective way. A key element in responsiveness is keeping high quality customer relations.

High levels of responsiveness can show in an explicit manner an organisation's trustworthiness to the clients (Al-Ibrahim, 2014). It is also important to note the overlap of the responsiveness and reliability constructs.

This was observed by Parasuraman *et al.* (1990). Findings from the structural coefficients for this current study, indicated that there is a significant relationship between responsiveness and service quality. This was also observed by Agbor (2011); Abdullah, Suhaim, Saban and Hamali (2011); Negi (2009); Saraei and Armin (2012); and Twinomurwizi, Zwane and Debusho (2012). All the statements on the responsiveness construct have an impact on the *expectations* and *experience* of clients on service quality in the CICs. Items in the questionnaire pertaining to the responsiveness construct included: *prompt service*, *timely response*, *continuous updates* and *willingness to help clients*. This will be discussed in the following paragraphs.

Provision of *prompt services* is important in an organisation and precedence should be given by management to staff schedules to guarantee that adequate staff is on duty to offer clients prompt services. The study showed that the provision of prompt services as part of the service experience was higher than what was expected. This shows that, in terms of service quality, the CICs were experienced to be more than satisfactory in the provision of prompt service. Customers would want to be involved with organisations that keep their promises and this generally involves communicating with the organisation. Results indicate the value of doing activities on stipulated times.

Naidoo and Muntinta (2014) state that prompt services are important to attract, serve and retain customers. From the current study there are indications that the CICs in Zimbabwe need to maintain their promises to deliver services to the community at the stipulated time. This indicates the importance of retaining clients by observing scheduled time for activities, which attracts and retains clients to use the CICs. This, therefore, could indicate that CICs need to continuously offer training to its employees so that they are able to deliver services to clients timeously. Efficiency is important in any organisation because this attracts and retains its customers.

There is an indication from the results that the majority of the respondents had experienced prompt service from the CICs. This is an attribute that clients value and often leads to recurrent use of the services. In-house training for employees on how to respond to clients' requests timeously is advocated for, this will result in the reduction of waiting period for a problem to be resolved which is vital for every organisation.

Employees should be prepared and able to deliver *timely* and substantive *responses* to customer inquiries and complaints. A service provider is deemed responsive if they are punctual in service delivery, is willing to help customers and has service employees who respond to customer needs. The CICs should focus on consideration and readiness in dealing with customers' needs, queries and timely resolutions to grievances. Results indicate that the respondents received a timely response rate in CICs. There was also an indication that the majority of the respondents had experienced timely services from the CICs. This is an attribute that clients value and often leads for recurrent use of the services. Dangal (2011) observe that some of the drawbacks to community information centres usage in Nepal included: absence of skilled employees, efficient operational rules, and guideline and grievance handling procedures. Management is mandated to make sure that the employees are capable of making key decisions concerning customers' requirements at their level, thereby providing adequate responsiveness (Rahhl, 2015). Therefore, it may be deduced from the findings of the study that it is of vital importance that a culture of punctuality and customer understanding among employees is cultivated.

An organisation is considered responsive when it communicates with its clients on how long it will take to have their queries dealt with and it should be viewed from the customer's perspective rather than from the organisation's view. Moreover, it is important to know that customer relationships mainly involve communication. Based on the respondents' experience, it could be deduced from their responses that there were *continuous updates* of events at the CICs in line with services that were being offered, which is a good practice in any organisation. Keeping clients abreast of any news is important for an organisation and based on the respondents' experience, It builds up trust and Naik, Joshi and

Basavaraj (2012:583) state that it “increases the trust of citizens in the community information centres.

In terms of CICs, ICTs can facilitate responsiveness through keeping citizens informed particularly on the status of services they have applied for (Twinomurwizi, Zwane and Debusho, 2012). They further elaborate that ICT can reduce the time in which every matter can be resolved. In cases where there are delays in meeting the timelines, affordable SMS services can be used to recurrently keep citizens informed of the status of the process. The use of text messages to inform citizens on the status of processes applied for, instils the sense of a dependable and responsive organization in the citizens. Twinomurwizi, Zwane and Debusho (2012) further state that keeping abreast of the trail of activities would make citizens aware that their matters are being processed. Employees should prepare, and have the capacity and desire to provide clients with helpful resolutions on the first contact whenever feasible.

Organizational employees must have an attitude of willingness to help clients. It then becomes important that the employees exhibit willingness to help to the clients. Findings emanating from the study indicated that there is high level of expectations on the item of willingness to help. Helping clients goes a long way in customer satisfaction and perceived service quality.

There is a level of satisfaction from the respondents with regard to the responsiveness construct in this study. Service quality and customer satisfaction are critical strategies which are imperative for reinventing the public sector. Phiri and Mcwabe (2013) caution that responsiveness is lacking in some organizations and this is caused by focusing more on training that emphasizes “product knowledge, technical skills and administrations”. This leaves out training that inculcates a positive attitude in employees regarding dealing with customers. In the case of this study, the majority of the responses on the perception of the responsive construct revealed a level of satisfaction. Krishundutt and Parumasur (2009) state that customers need to feel satisfied with the way they are treated by the service provider.

From the findings it can be concluded that the majority of the respondents, with regard to responsiveness in CICs in Zimbabwe, had high expectations in relation to the construct. Therefore, employees in the CICs should be equipped and capable of delivering timely and substantive responses to client's inquiries and complaints to meet the expectations from the clients. The majority of the respondents indicated that they were satisfied with the responses they received in the CICs. Customers need to feel satisfied with a service and in the case of CICs, having satisfied clients can increase usage of these facilities. Provision of high quality goods is an ethical thing to do in business moreover, it is cost-effective and profitable for any organization. Therefore, CICs can profit from positive impact of the knowledge that it is providing high quality services (Al-Ibrahim 2014).

**Secondary Research Objective 4:**

To determine whether *assurance* is positively related to expectations and experience regarding the quality of service rendered at Community Information Centres in Zimbabwe.

Assurance refers to the trust in knowledge and proficiency in the CIC. It includes *instilling of confidence in the clients, safety in the CIC, courteousness and knowledgeable of organisational service offerings*. Dewan and Mahajan (2014) opine that assurance is the ability to deliver services in a professional manner. Naidoo and Muntinta (2014:223) highlight that the assurance construct signifies the *knowledge and courtesy of employees* and their ability to *inspire trust and confidence* in their customers. Assurance is exhibited by employees as they give an expression of the service quality in clients' eyes. Measures need to be taken with regard for employee awareness about their job; their behaviour; and securing service experienced and expected by the customers. Employees' capability and abilities in delivering the service performance is decisive for the CICs' survival. Actions, behaviour and the morale of employees influence service quality and this affects customers' perceptions of services offered.

Based on the structural coefficients of this current study, results indicated a significant relationship between assurance and service quality. This is in tandem with Negi (2009), Krishundutt and Parumasur (2009), and Twinomurwizi, Zwane and Debusho (2012).

All the statements on the assurance construct have an impact on the *expectations* and *experience* of clients on service quality in the CICs. Items in the questionnaire pertaining to the assurance construct included: *instilling confidence in customers, knowledge of organisational service, safety in conducting transactions* and *being courteous with customers*.

*Instilling confidence* in the clients in the use of CICs, is one of the integral mandates of CIC employees. It is important that the CIC as a service provider inculcates confidence in customers during the course of service provision. Organizations need to use strategies that assure customers, which include creating trust and confidence through the knowledge and skills of contact personnel. Findings indicate that the respondents felt confident to use the services in the centres and this could be emanating from the courteous behaviour of the employees in assisting their clients in the use of the CICs services. This could also be stemming from the handling skills that employees exhibit towards clients' queries.

Employee *knowledge of organisational service* offering is imperative. Findings further indicated that the majority of respondents highlighted that they expected staff in the CICs to be competent and knowledgeable about the operations in the CICs. The results suggest that the CICs needs to educate staff to improve on product information to respond to customers' queries.

The majority of respondents also indicated that the level of experience with regard to assurance is satisfactory. Assurance has been found to relate positively to consumer expectations regarding the quality of service rendered by CICs. With regard to assurance, Kakouris and Finos (2016) opine that one of the important traits of a service provider, as viewed by customers, is for staff to be competent and knowledgeable. The CICs needs to train staff to improve on knowledge of the product offered as well as to answer to customers' queries. Inclusive in the CICs should be technical expertise. Kapondera and Hart (2016) propose that there should be one staff member employed as a technician in the centres. This staff member can be one hired from outside or a staff member can be

capacitated within the existing staff. Users of CICs services have a need to secure service experience and the CIC has to consider this aspect as the service provider.

Providing a *safe environment* in organizations is important. Having a safe environment can lead to more people frequenting the centres. Issues of safety are important for the clients and everyone would prefer to visit organisations that consider the safety of its clients. For clients *feeling secure*, what respondents expect and their actual experience is significantly different. Results from the study indicated that the CICs are labelled as safe places.

According to Saraie and Armin (2012), assurance is vital for providing ICT services. Lack of such services can lead to inefficiency in the provision of services. Thus, the significance of staff training is paramount. These scholars further state in their study there was a lack of adequate competence from staff in the sampled area, which is a key ingredient in the efficiency of the centres. Lack of competency can lead to mistrust among clients. Moreover, it is crucial to employees in the CICs to demonstrate *courteous* and friendly behaviour when delivering services to clients in order to raise their contentment towards the CIC as reliable. This is because services have a strong impact on a client's judgement. Findings from the study also indicated that the employees are courteous in dealing with the customers. If customers are met with courteous and helpful employees, they would be prone to give positive evaluation.

Phiri and Mcwabe (2013) also point out the importance of being *knowledgeable*, technically able and constantly *courteous* with customers to keep them satisfied. They view assurance as one of the most important factors of service quality, as customers want to deal with people they can trust. It, therefore, becomes imperative that organizations find ways that can help them earn trust from customers.



**Secondary Research Objective 5:**

To determine whether *empathy* is positively related to expectations and experiences regarding the quality of service at Community Information Centres in Zimbabwe.

Empathy can be described as the caring and individual attention of the CIC towards its clients. Mamo (2015) suggests that empathy is the openness, ease of access and attempt taken to understand customers' needs. Findings from the structural coefficients in this study indicated that there is a significant relationship between empathy and service quality. This is in tandem with Agbor (2011), Saraei and Armin (2012), and Twinomurwizi, Zwane and Debusho (2012). All the statements on the empathy construct have an impact on the *expectations* and *experience* of clients on service quality in the CICs. Items in the questionnaire pertaining to the assurance construct included: *convenient operating hours, giving individual attention to clients, understanding the specific needs of their clients and being empathetic to clients*. The items will be discussed in the following paragraphs.

Customers expect organisations to have *convenient operating times*. The highest performance rate from the study was on the convenience of the operating time. In terms of operating hours, the respondents' expectations appeared to be more than what they experienced. For instance, CICs operate during formal government working hours which is convenient to most people, as they are able to visit CICs when they come to the business centres. In essence, the service quality is not adequate in terms of convenience regarding operating hours of CICs. According to Patricio, Leal and Perreira (2016), extension of operating hours might have a positive influence on customer satisfaction. The respondents further elaborated that, despite associated costs that come with the extension of operating hours, it still constitutes a vital measure to fulfil customers' requirements.

Customers form part of the most important stakeholder groups of an organization, as organizational success depends on them. Their activities influence the operations of an organisation and therefore they need to be treated as unique and special. Giving *individual attention* to clients is of great importance to an organization.

Furthermore, individualising customer attention and being approachable and sensitive to customers' needs tends to have an impact on service quality (Zeithaml *et al.*, 2006). One needs to know their customers as customer service is an integral part of organizational survival. Knowledge of customer preferences and their choices of services form part of meeting customers' expectations. In order to facilitate the exchange process and build effective relationships, service providers need to examine the needs and wants of the customers and develop services that satisfy these needs (Vargo and Lush, 2008)

Getting individual attention in the use of services in the CICs boosts morale and confidence in clients. This in turn increases the usage of CICs' services and how clients perceive the CICs services. The respondents tend to expect more than what they really experience. This is in line with Saraei and Armin's (2012) findings. The service quality is thus, not congruent with what is expected. The individual attention offered to clients was said to be significantly lower than what the respondents were expecting. Therefore, the findings inferred that the service quality was not meeting the expectations of the respondents. In the case of the CICs, service quality can be complemented with the use of ICT services that are available in the centres (Twinomurwizi, Zwane and Debusho, 2012).

Twinomurwizi, Zwane and Debusho (2012) indicate that citizens expect the personnel in the centre to *understand their needs* and to make them feel unique. Analytically, the CICs perform at a satisfactory level. Understanding clients' needs is important to organisations as it helps to tailor the needs of the clients in the services offered. This can be achieved by knowing the client's name, their preferences and needs. According to Hirmukhe (2012), employees must try to understand the customers' problems and endeavour to implement activities that consider the customers' interests. For example, the CICs staff should be trained in customer care as poor staff attitudes can be a drawback in the use of CICs. The CICs needs to carry out market research to find out what the customers' needs are. By seeking information on the needs of customers, the CICs are more likely to recognize opportunities to address customer needs and create value for the centres (Line, Runyan and Gonzalez-Padron (2018).

There should be creation of value and customers need to be principal drivers of organizational performance. The CIC needs to adopt a responsive (Customer-led) orientation.

An organisation can offer training to employees that makes them be more *empathetic towards* the customers. In the CICs the elderly and women might be assisted to use the ICT services and workshops can be held that capacitate them on the use of these services. As eluded to earlier on, fewer women use CICs due to socio-economic factors that include their level of education, and income level among others (Mtega & Malekani, 2009). All these challenges call for contact employees to be trained in handling the different clients in the CICs. This is in line with Kapondera and Hart (2016) who also point out poor staff attitude as a challenge in the CICs. They further suggest that customer care training be offered to employees in the centres as this increases usage of services, as well as assist an organization to remain competitive in the market.

In terms of providing a *comfortable environment* to clients, what the respondents experience was significantly lower than what they expected. The environment was not comfortable and this impacted negatively on service quality. Servicing the interests of the clients help in creating client satisfaction with CIC services. Satisfaction leads to attracting and retaining clients in an organisation (Phiri and Mcwabe, 2013). Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) states that one should consider how satisfaction with a given service is formed. There is need to ensure that services are meeting the needs of the customers. According to Al-Ibrahim (2014), once customers' needs are met, their perceptions of an organization's credibility are increased

The emerging findings also indicated that there is a high level of expectation with regard to empathy which could be attributed to the fact that the majority of people in the rural areas need assistance with the use of the services offered in CICs. Thus, they would expect employees to be empathetic to their needs. However, there is also a satisfaction level of responses from the respondents with regard to the construct empathy. The conclusions for the study are drawn based on specific objectives as presented below.

### 7.3.2 Conclusions relating to Primary Research Objective

The following section will address conclusions drawn from the study based on the primary research objective.

#### **Primary Research Objective**

The primary objective of this study was to determine how customers rate the quality of the service that they expect to get at Community Information Centres in Zimbabwe, compared to how they rate the quality of the service that they are receiving.

According to Tsighe (2016) quality involves a constant evaluation of activities for continuous enhancement. Improvement of activities is only attained if management is able to detect areas that need intervention. This is achievable when customer needs and views are understood and problems of performance are known. This makes it mandatory for evaluation of service quality in CICs. Tsighe (2016) further elaborates that organisations should focus on measuring the level of quality of their offerings in order to gauge their performance and also compare their offerings with their competitors. Evaluation of service quality can lead to detecting whether gaps exist between customer's expectations and experiences and henceforth to work on refining the quality of services they offer. Negi (2009) citing Parasuraman *et al.* (1994) suggested that the gap analysis is precise in recognizing service gaps in an operation. Addressing these identified gaps means underpinning design strategies to warrant customer experiences that are consistent with their expectations. Evaluation of services in CICs will project the gaps and interventions based on expectations and experience of its clients. Hence the study adoption of SERVQUAL model as it provides a strong diagnostic power.

Addressing the primary research objective, descriptive statistics results indicated that clients' *expectations* of CICs services in almost all the SERVQUAL constructs were higher than their actual *experiences*. This therefore means that there are gaps between the client's *expectations* and *experiences* with regard to CIC services. This shows that the quality of services rendered in CIC was perceived by clients as not meeting their expectations. The results from the SEM also indicated that tangibility, reliability,

responsiveness, assurance and empathy have effects on service quality. High regression weights have been observed thus affecting the *experienced* and *expected* service quality. This confirms results from Twinomurwizi, Zwane and Debusho (2012) whose study has been replicated in a different context (CICs in Zimbabwe).

### **7.3.3 Conclusions relating to Problem Statement**

The research problem the study sought to address was “a need of enhanced awareness of the benefits of CICs”. This is because communication between an organisation and its customers has been a foundation of good customer service, and raising awareness of organizational services. Inversini, De-Carlo and Masiero (2020) suggest that supporting an integrated perspective means creating meaningful relationship with customers with a focus of the value creation. Therefore, organisations need to create customer value and successively to expect some value in the form of profits. Effective communication contributes to better relationship between the CICs and the customers. It was therefore, important to determine the service gap.

For organisations to be able to design quality services, views of the customers are important and need to be understood. The customer’s subjective perception of quality places him/her as the ultimate judge of quality. The SERVQUAL model used in the study assisted in gaining insight into user’s perceptions and experience of the CICs thus addressing the research problem. Measuring service quality in organisations guide employees on service delivery, which will in turn affect the delivered service in CICs. The findings of this study can be used as a diagnostic measure to improve on the quality of services in CICs. This study used theories that promotes customer-centric approaches to advocate for high quality service in CICs in Zimbabwe. The study to some degree has emphasized customer satisfaction, which is crucial to governments’ service delivery.

## **7.4 CONTRIBUTION OF THE STUDY TO NEW KNOWLEDGE**

The following section is based on the study contributions, which are categorised under theoretical and practical contributions.

#### **7.4.1 Theoretical contribution**

On a theoretical level, this research will give the readers an understanding of the five SERVQUAL dimensions (tangibles, reliability, responsiveness empathy and assurance Reliability) and their influence on service quality. These should be customised and integrated to meet the different needs of the customers and the communities in which the CICs services are offered. The study found significant relationship between the five SERVQUAL constructs and the latent variable of service quality. The relationship between the variables may prove useful to future researchers in exploring possible interventions to enhance service quality in CICs particularly in rural areas of the developing countries' were such services are not only being underutilized but a majority of women continue to be left out in the equation of being technologically savvy.

In this study, the extant literature pinpointed to a number of issues. For instance the scholarly work that has been done has focused more on countries that are not only technologically savvy but also have stable economy whereby their government has been able to implement a number of initiative to promote CICs. Therefore, this research will contribute to the existing body of literature on service quality in public sectors which remain in death in developing countries. Moreover, the findings of the study in conjunction with existing scholarly work will highlight the importance participatory engagement with customers and how they should be involved in the service planning and provision. Most importantly, during policy formulation, use of bottom up approach is critical and as such shops owners of CICs and the communities that they server should be involved during policy formulation.

In addition, CICs experts should also come from Government, ministerial levels and NGOs to assist CICs in rural areas to benchmark progress and service quality offered by CICs. This should be an ongoing exercise which will also contribute to Integrated Marketing Communication literature with a focus on the public sector. This can be achieved by implementing different communication channels to reach a wider audience such as radio, leaflets, and posters. Moreover, these should be in indigenous languages so that so that both the literate and illiterate can be aware of the services provided.

Linked with the foregoing suggestions, there is scarcity of published work on the topic under study particularly in the context of African countries especially in Zimbabwe where the concept of CICs is still in the infancy stages cannot be understated. This study was conducted to bridge this research gap in the knowledge that existed. Methodological contribution in the application of the SERVQUAL instrument in the CICs context and its validation with the use of exploratory and Confirmatory Factor Analysis is paramount. Reason being service quality offered to customers is dependent on location, needs of the customers, services and their responsiveness to the services offered.

#### **7.4.2 Practical contribution**

The study will improve knowledge regarding customers' expectations, and this will allow policy makers to effectively act upon the important and demanding task of running public service organizations to avoid implementation deficit. The research study makes analytical effort in order to point out areas that managers and policy makers should emphasise in order to increase the level of service quality in CICs.

Findings from the study provide useful guidelines for CICs in understanding key drivers for its use and sustainability. Providing quality services is one of the crucial elements that needs to be taken care of by management, which makes this topic vital. The results from the study domain will help management and policy makers with reliable data that can be used to monitor and maintain improved service quality in CICs in line with the theory that anchored the study. There should be Memorandum of Understanding (MoU) with CICs experts at national level and district levels on how CICs can be used to promote service delivery and how they should be monitored and evaluated. This will promote dynamic networking, collaboration and identification of pockets of excellence of the service users and service providers.

Findings from the study should boost policy development for superior quality management in the five SERVQUAL dimensions (tangibles, reliability, responsiveness, assurance and empathy). Thus, these dimensions should act as lenses indicating the importance that the CICs should have goals and the objectives that are in line with ICTs policies implemented by the government.

This will promote an open door policy whereby employees could have direct contact with communities that they offer CICs services and also promoting CICs that have an organizational culture is impartial.

Organisations need constant evaluation on how customers perceive their services and they need to implement appropriate corrective action for retaining the existing and attracting new customers. This study will therefore assist the Ministry of Information Communication Technology, Postal and Courier Services (MICTPCS) and policy makers in Zimbabwe by suggesting strategies that can be adopted to promote accountability and transparency in these CICs. For instance the researcher suggests that the CICs should not only focus on service quality for its customers only. These CICs structures should also be centres of excellence that give training programs to individuals and community members who desire to know how to use such services or those who wish open other branches offering CICs. Training programs to support CICs may comprise of different set of teams that are for service providers only, males customers only, females customers only and combinational of both genders (policy makers and the policy implementers). A comparison of outcomes from these different groups can be collated together. This can assist CICs to identify and redress the existing gender gaps in the usage of CICs as well as keep abreast with technological changes.

Moreover, this will also to promote enhanced awareness on the usage of CICs particularly in the study area. Lastly, a monitoring and evaluation framework should be implemented which will be used CICs as a guide showing what is being monitored and evaluated, when, how and why monitoring and evaluation will be carried out. The framework should also show the responsible personnel, their expected roles and responsibilities during the monitoring and evaluation process. In essence, there is need for the government, NGOs and the services providers of the CICs to show commitment and political will through financial and human resources towards monitoring and evaluation process of CICs so that service quality can be achieved.



## 7.5 RECOMMENDATIONS

The following recommendations are proposed and they are based on the results from this study.

### 7.5.1 Training for Community Information Centres employees

From the literature, it was observed that the relationship between the employee and client is considered as highly interactive in nature. Thus, CICs should ensure service excellence by offering training programmes for its employees. The skills acquired by the employees may assure the highest level of satisfaction for CICs services and usage. The training offered should also focus on employee's interpersonal skills and customer care so that they are aware of the need for providing personalised services to their clients. Hence, delivery of promised services will be fulfilled, which in turn will result in greater usage and satisfaction regarding the CICs.

According to Loke, Taiwo, Salim and Downe (2011), tailor made training needs to be implemented to provide staff with vital skills to advance service provision and in the long term to remain competitive in the market. Bahadori, Teymourzadeh, Bagejan, Ravangard, Raadabadi and Hossein's (2018) findings indicate the importance of support given to employees by managers in improving quality. If employees receive support from managers, they will perform their duties more accurately, which in turn will lead to customer satisfaction. Training then should not be confined to lower level employees, but it should also target the management. Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) proposed a cost effective strategy to encourage the front desk employees to listen to citizens actively, communicate relevant information to their managers and offer their suggestions. This could result in improvements on the quality of service

The above findings are in line with Lemmalodesso's (2012) view, which emphasises the need for capacitating and empowering service providers. Adequate training of all staff on how to provide a prompt service to stakeholders is of great importance so as to attract, serve and retain customers.

### **7.5.2 Knowing the client's needs**

Ramseook-Munhurun, Lukea-Bhiwagee and Naidoo (2010:43) allude to the importance of knowledge of the customer's expectations, as it is a vital process in delivering quality service at any level of an operation. Differences that may arise between customer expectations and the organisation's perception of customer expectations of quality are important in the detection and determination of the level of service quality provided. Knowledge of the customer's expectations is a key process in delivering quality service at any level of an operation. A difference that may arise between what the customer expects of quality service is important in the identification and determination of the level of service quality provided. As such, lack of knowledge of such information leads to a lack of devoting resources effectively in the improvement of areas that significantly impact on customer satisfaction of CICs. In order to reduce such gaps, CICs need to make strides in improving such areas.

It is important that CICs invest in service quality by assisting staff to be aware of the requirements in terms of quality aspirations. Management needs to draw up an appropriate strategy on quality needs through market research. The five quality dimensions should be included in staff training to improve service quality in the CICs.

### **7.5.3 Evaluation of quality of services in CICs**

Monitoring and evaluation of services in CICs can provide insights to management on what needs to be improved in the centres. Gaps identified through evaluation will lead to refinement of services provided. Evaluation will also assist management to be able to judge the effectiveness of the CICs and the quality of services provided. It is important that service providers strive to focus on quality services in order to gain utilisation and adoption of services. Use of evaluation models will help assess the quality of service as the CICs in the area of study are still in their infancy. Results from the evaluations will assist the policy makers on what considerations to take into account as the CIC project is rolled out to other districts. Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) proposed developing policies that will analytically describe the appropriate procedures such as, increase response for customer support and adopt an error free policy.

## **7.6 THE IMPLICATIONS FOR MANAGEMENT BASED ON THE FIVE SERVQUAL CONSTRUCTS**

The following section discusses proposals made to management based on the SERVQUAL constructs. Service quality is a crucial element that needs to be taken cognizance of by management in order to retain and attract clients to use organizational services. The discussion on the SERVQUAL constructs thus follows below:

### **7.6.1 Tangibles**

Naidoo and Muntinta (2014:223) indicate that “for the improvement of service quality, staff needs to be aware of what is expected of them with regard to quality aspirations” and thus, the management needs to put in place guidelines to assist in this regard. Another proposal for management is that all the tangibles in centres should constantly be upgraded to keep abreast with technological changes and to cater for a diverse population. New structures can be designed to cater for all the different groups in the communities to enhance the quality of services offered in CICs. Saraei and Armini (2012) indicate that customers expect a lot from CICs. Mtega and Malekani (2009) furthermore state that the quality of services offered in centres has a strong impact on the CICs’ use. To boost CICs performance, the number of information services should be increased, so as to complement each other. A link was observed between the level of satisfaction of information services offered by a CICs and variety and quality of information services. The quality of services offered in centres is also highlighted as an important factor that influences levels of satisfaction amongst centre users (Mtega and Malekani, 2009).

### **7.6.2 Reliability**

The CICs need to carry out market research to find out what the customers’ needs are. According to Naidoo and Muntinta (2014:224), “systems and procedures that standardize service production should be developed to ensure that service is delivered as reliably and consistently as possible”.

Results can be used by management and government policy makers to bring better services to the communities (Ali, 2018). According to Madzima and Nhamu (nd), in the Bililimangwe Project, good customer care was viewed as one of the factors that contributed to its success. Management needs to revisit marketing strategies and should not give unrealistic promises to CIC users. Hirmukhe (2012) states that organisations should take into consideration the option of investing in training and resources so that promised deadlines can actually be adhered to. This can increase the level of reliability as perceived by clients.

### **7.6.3 Responsiveness**

Naidoo and Muntinta (2014) point out the importance of individualizing the service offered to clients. Assisting clients with the challenge of using ICT services can be used as a pull factor to entice new users who might not be using the CICs because of technology illiteracy. Organisations need to implement standard procedures to maximize responsiveness to service situations that may occur regularly. This can be done by developing procedure manuals that can be used in all CICs.

Responsiveness should not be ignored by CICs. This can be addressed by having a webpage that contain regularly asked questions in order to respond to customers' inquiries speedily and precisely. A website that is constantly updated can be maintained on the Ministry of Information Communication Technology, Postal and Courier Services (MICTPCS) portal for easy access by the different stakeholders.

Selection of employees that work in CICs has to be taken into consideration. Ramseook-Munhurun, Lukea-Bhiwagee and Naidoo (2010:43) point out that management needs to ensure that there is an appropriate selection of employees for the attainment of better performance and for the responsiveness and reliability qualities that are regarded by customers as important.

### **7.6.4 Assurance**

The CICs should strive to promote assurance among stakeholders. This can be done by creating trust and confidence among stakeholders.

Contact employees need to have knowledge and skills about their jobs. The dress code, and the surrounding environment should reassure customers to boost their confidence in the use of CICs.

### **7.6.5 Empathy**

Naidoo and Muntinta (2014:224) state that “organizations need to offer individual services to clients”. The CICs should offer services to individual customers to promote usage in the rural communities. As indicated in literature, customers need to feel important, hence offering individualized service cannot be understated. There is also a need to understand the customer differences. The CICs should embark on market segmentation that is grouping customers, sharing similar requirements, expectations and demographic profiles. The employees in the CICs should be empathetic to customers and they need to be trained in this regard.

In the customer relations management approach, the centre employees can be empathetic to the citizens as they are able to view the citizen’s profile and address in their daily registers. This enables them to view the citizens as unique individuals. Twinomurwizi, Zwane and Debusho (2012:103) state that “utilisation of ICT has led to the design of customer relationship management systems, enabling the presentation of service profiles such that the customer is addressed as an individual”. The individual will become known and be valued by the organisation. Loke *et al.* (2011) observe that staff often lack the ability to communicate trust and assurance to clients. They suggest that a CRM strategy should be more focused on being considerate of the client’s way of life factors. They further elaborate that training offered to staff to curb challenges should include “relational elements, allowing them to realise and articulate client needs”. Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013) proposed focusing on the development of human resources, while it seems that employee are constantly courteous with customers.

## **7.7 LIMITATIONS TO THE STUDY**

The study was subject to some limitations, which are mainly methodological and technical in nature. Methodologically, perception scores cannot be the only variable used to explain service quality; as expectations of customers could be based only on the reminiscence of the user and this creates prejudice in the results.

Further, this study was a cross-sectional study, and the researcher is of the opinion that a longitudinal study might give another perspective of the results. Unlike in studies like that of Hurbert (2006), where a longitudinal study was conducted, this study might not give the best results, as it is a cross-sectional study and data were drawn from only three field studies, as some of the rural areas could not be reached after heavy rains have affected the roads.

The research focused on three community centres that were accessible after heavy rains had affected some areas, hence, there were not equal representation across all three centres and as such, the study could be potentially biased to the opinion of the two centres with the almost equal number of respondents. A similar research study could be broadened to include other community centres in the country.

Finally, the use of documents from the Ministry of Information Communication Technology, Postal and Courier Services (MICTPCS) are in some instances out-dated. Documents from the MICTPCS cannot be used to give a picture of a true representation of what is happening in Zimbabwe as some of the documents need updating. Getting entry to the field and getting the required information, especially if registered with a foreign university, can be a cumbersome process in Zimbabwe. Accreditation was granted prior to the entry into the field.

## **7.8 CONCLUSION**

This study has tried to ascertain important insights in the of service quality in a public sector organization. Continuous improvement of service quality is a crucial element of achievement for any service providing organization including CICs. The first stage of improving service quality is to detect the areas that needs improvement by means of

measurement schemes such as the SERVQUAL. This study highlighted how important it is for CICs to carry out surveys and to reflect on the opinions of its customers in identifying areas for service quality improvements. It is, therefore, very significant for CICs to know how customers assess service quality and what needs to be done to determine and improve service quality. Therefore, to surpass customer expectations, it is crucial for CICs to constantly improve the quality of service provided to its customers.

Results indicated significant relationships between the SERVQUAL constructs and service quality. The CICs performed satisfactorily in all dimensions and the magnitude of significance was the noted difference. One dimension of the SERVQUAL required specific attention. The tangibility dimension had lower satisfactory level of significance and it is one dimension that more investments in the form of better equipment infrastructure such as printers is devoted to. This calls for redistribution of resources and strategic efforts more efficiently.

The findings revealed some shortfalls in all the five service quality dimensions. A gap is observed between perception and expectation. Although gaps have been noted, it can be concluded that there is a level of satisfaction among CICs users, but the management of CICs needs to make necessary improvements consistently. Gaps identified will lead to refinement of services provided. It is important that CICs strive to focus on quality services in order to gain utilisation and adoption of services they offer. Positive perceptions of services at CICs cannot only lead to utilisation; these can also lead to the acceptance thereof. The study concludes that CICs need to pay heed to the gaps in order to deliver high quality services. This can be attained by keeping abreast of technology such as by installing modern equipment in the CICs; distributing visually appealing pamphlets; employing more staff for prompt service delivery; and training of employees. Since this study was not all inclusive, it would be useful to replicate it to include all the established CICs in the contexts and research should also include the broader population to assist with the generalization of the findings.

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## APPENDENCES

### Appendix A: Research Ethical Clearance



Faculty of Economic and Management Sciences

#### RESEARCH ETHICS COMMITTEE

Tel: +27 12 420 3395  
E-mail: ronel.rensburg@up.ac.za

30 March 2017

**Strictly confidential**

Dr E de Beer  
Communication Management Division

Dear Doctor de Beer

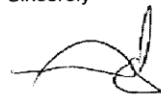
**Project:** Rural community perceptions of telecentres as service delivery communication tools in Zimbabwe  
**Researcher:** M Chigovanyika  
**Student No:** 14240999  
**Supervisor:** Dr E de Beer  
**Co-supervisor:** Prof RS Rensburg  
**Department:** Communication Management

Thank you for the application you submitted to the Committee for Research Ethics, Faculty of Economic and Management Sciences. I have pleasure in informing you that the Committee formally approved the above study on 29 March 2017. The approval is subject to the researcher abiding by the principles and parameters set out in the application and research proposal in the actual execution of the research.

The approval does not imply that the researcher is relieved of any accountability in terms of the Codes of Research Ethics of the University of Pretoria if action is taken beyond the approved proposal.

We wish you success with the project.

Sincerely



**pp PROF RS RENSBURG**  
**CHAIR: COMMITTEE FOR RESEARCH ETHICS**

cc: Prof RS Rensburg  
Student Administration

## Appendix B: Letter of permission from the Ministry of Information & Technology Zimbabwe

**MINISTRY OF  
INFORMATION COMMUNICATION TECHNOLOGY, POSTAL & COURIER SERVICES**

**TELEPHONE:** +263-4-706446  
**FAX:** +263-4-763016  
**E-MAIL:** ministryict@zarnet.ac.zw



**Zimbabwe**

**REF:**

**SECRETARY'S OFFICE  
INFORMATION COMMUNICATION TECHNOLOGY,  
POSTAL & COURIER SERVICES  
PRIVATE BAG CY419, CAUSEWAY  
8<sup>TH</sup> FLOOR, BANK CHAMBERS BUILDING  
76 SAMORAMACHEL AVE  
HARARE**

17 October 2016

The Chairperson  
University of Pretoria  
Faculty of Economic and Management Sciences  
Research Ethics Clearance Committee  
Pretoria  
South Africa

**APPLICATION FOR RESEARCH ETHICS CLEARANCE – M CHIGOVANYIKA: STUDENT  
NUMBER – U1424099**

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This letter serves to confirm that the Ministry of ICT, Postal and Courier Services has granted Ms Martha Chigovanyika (Student Number – u14240999) permission to conduct an academic research in the country. Her research is focusing on Community Information Centres in Zimbabwe and as a result she has been granted permission to gather data from the management of the Community Information Centres as well as users of the services of the Community Information centers around the country.

As the Ministry we strongly feel that findings from her study will assist us to improve the effectiveness of Community Information Centres as service delivery communication tools in Zimbabwe.

**S C Chigwamba  
Acting Secretary for ICT, Postal and Courier Services.**

## Appendix C: Data Collection Instrument (questionnaire).

### Customer perceptions of Community information Centres in Zimbabwe

Dear Sir / Madam,

Thank you for your willingness to complete this survey on *Customer perceptions of Community Information Centres (CICs) in Zimbabwe*.

Community information centres (CICs)/ (CICs) in Zimbabwe have been established as a means to harness the benefits of Information Communication Technologies (ICTs) in raising the community's socio-economic conditions, particularly in rural areas. The purpose of this survey is to determine the quality of service delivery in the CICs.

Please answer each question by either ticking the appropriate box, drawing a circle around an appropriate number in a box or by writing your answer in the shaded space provided.

## CIC-SERVQUAL QUESTIONNAIRE COMMUNITY INFORMATION CENTRES (CICs)

Respondent number	
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### The Survey

The questionnaire below consists of three sections.

1. PART A: The first section poses demographic questions.
2. PART B: The second section asks you to rank **community information centres (CICs) in general** according to **your expectations** i.e. *what you expect all CICs to provide*.
3. PART C: The third section asks you to rank the **CIC you chose for the survey**, according to **your experiences** and **perceptions**.

### PART A: DEMOGRAPHIC INFORMATION

Please answer each question by making a tick in the appropriate box or writing your answer in the shaded space provided

1. Location of the community information centre

Murombedzi	
Rusape	
Muzarabani	

2. Please indicate your gender

Male	
Female	

3. Please indicate your age in years

### PART B: AN ASSESSMENT OF *EXPECTATIONS* REGARDING SERVICES PROVIDED AT CUSTOMER INFORMATION CENTRE'S (CICs) IN GENERAL

#### Expectations

**Important:**

This section of the survey deals with your expectations of **Customer Information Centers (CICs) in general**. Please indicate the extent to which you think CICs **should possess** the features described in the statements below on a scale of 1 to 7 where a 1 indicate strongly disagree and a 7 strongly agree. ..

Please answer each question by drawing a circle around an appropriate number in a box below.

Statement	Strongly disagree	disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly agree
<b>Tangibles</b>							
1. In general, excellent CICs will have modern looking equipment	1	2	3	4	5	6	7
2. The physical facilities at excellent CICs will be visually appealing	1	2	3	4	5	6	7
3. Employees at excellent CICs will be neat in their appearance	1	2	3	4	5	6	7
4. Materials associated with the service (pamphlets or statements) will be visually appealing at an excellent CIC	1	2	3	4	5	6	7
<b>Reliability</b>							
5. An excellent CICs will do something what they promise to do by a certain time,	1	2	3	4	5	6	7
6. When a customer has a problem, excellent CICs will show a sincere interest in solving it	1	2	3	4	5	6	7
7. Excellent CICs will perform the service right the first time	1	2	3	4	5	6	7
8. Excellent CICs will provide the service	1	2	3	4	5	6	7

at the time they promise to do so							
9. Excellent CICs will insist on error free records	1	2	3	4	5	6	7
<b>Responsiveness</b>							
10. Employees of excellent CICs will tell customers exactly when services will be performed	1	2	3	4	5	6	7
11. Employees of excellent CICs will give prompt service to customers	1	2	3	4	5	6	7
12. Employees of excellent CICs will always be willing to help customers	1	2	3	4	5	6	7
13. Employees of excellent CICs will never be too busy to respond to customers' requests	1	2	3	4	5	6	7
<b>Assurance</b>							
14. The behaviour of employees in excellent CICs will instill confidence in customers	1	2	3	4	5	6	7
15. Customers of excellent CICs will feel safe in conducting?? transactions	1	2	3	4	5	6	7
16. Employees of excellent CICs will be consistently	1	2	3	4	5	6	7

courteous with customers							
17. Employees of excellent CICs will have the knowledge to answer customers' questions	1	2	3	4	5	6	7
<b>Empathy</b>							
18. Excellent CICs will give customers individual attention	1	2	3	4	5	6	7
19. Excellent CICs will have operating hours convenient to all their customers	1	2	3	4	5	6	7
20. Excellent CICs will have employees who give customers personal service	1	2	3	4	5	6	7
21. Excellent CICs will have their customers' best interest at heart	1	2	3	4	5	6	7
22. The employees of excellent CICs will understand the specific needs of their customers	1	2	3	4	5	6	7

**PART C: AN ASSESSMENT OF *EXPERIENCES* AND *PERCEPTIONS* OF THE SERVICE PROVIDED AT THE CUSTOMER INFORMATION CENTRE (CICs) THAT YOU VISIT REGULARLY**

<b>Perceptions</b>
<p><b>Important:</b>            The following statements relate to your current <i>experiences</i> about the <i>particular Community Information Centre (CIC) that you visit regularly</i>. Please indicate the extent to which you agree or disagree that this CIC has the features described in the statements below, where a 1 indicate strongly disagree and a 7 strongly agree.</p>

Please answer each question by drawing a circle around an appropriate number in a box below.

<b>Statement</b>	Strongly disagree	disagree	Slightly Disagree	Neutral	Slightly Agree	agree	Strongly agree
<b>Tangibles</b>							
1. The CIC that you visit regularly has modern looking equipment	1	2	3	4	5	6	7
2. The CIC's physical features are visually appealing	1	2	3	4	5	6	7
3. The CIC's reception desk employees are neat in appearance	1	2	3	4	5	6	7
4. Materials associated with the service (such as pamphlets or statements) are visually appealing at the CIC	1	2	3	4	5	6	7
<b>Reliability</b>							
5. When the CIC promises to do something by a certain time, it does so	1	2	3	4	5	6	7
6. When I have a problem, the CIC	1	2	3	4	5	6	7



shows a sincere interest in solving it							
7. The CIC performs the service right the first time	1	2	3	4	5	6	7
8. The CIC provides its service at the time it promises to do so	1	2	3	4	5	6	7
9. The CIC insists on error free records	1	2	3	4	5	6	7
<b>Responsiveness</b>							
10. Employees in the CIC tell me exactly when the services will be performed	1	2	3	4	5	6	7
11. Employees in the CIC give me prompt service	1	2	3	4	5	6	7
12. Employees in the CIC are always willing to help me	1	2	3	4	5	6	7
13. Employees in the CIC are never too busy to respond to my request	1	2	3	4	5	6	7
<b>Assurance</b>							
14. The behaviour of employees in the CIC instils confidence in me	1	2	3	4	5	6	7
15. I feel safe in conducting transactions with the CIC	1	2	3	4	5	6	7
16. Employees in the CIC are consistently courteous with me	1	2	3	4	5	6	7
17. Employees in the CIC have the knowledge to	1	2	3	4	5	6	7

answer my questions							
<b>Empathy</b>							
18. The CIC gives me individual attention	1	2	3	4	5	6	7
19. The CIC has operating hours convenient to all its customers	1	2	3	4	5	6	7
20. The CIC has employees who give me personal attention	1	2	3	4	5	6	7
21. The CIC has my best interests at heart	1	2	3	4	5	6	7
22. The employees of the CIC understand my specific needs	1	2	3	4	5	6	7

**THANK YOU FOR YOUR PARTICIPATION IN THIS SURVEY.**