

## *Original Paper*

# The Role of the Legal Deposit Library in Bridging the Digital Divide: A Case Study of the Msunduzi Library in Pietermaritzburg, South Africa

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### **Abstract**

*In the 21st Century, the pace of globalization and the growth of Information Communication Technology (ICT) facilities, such as computers and the Internet are fuelling human advancement. The development of ICT applications plays a vital role in providing information access. Access to the Internet is not enough, but ICT applications and the intellectual knowledge, expertise and skills to use them to find relevant information and solve problems is what is essential. It is critical that people who have access are in a better position as compared to those who lack access. This gap is known as the “digital divide”. In this digital era of information, people who do not have access to the Internet are at a disadvantage. This paper examines the role of a Legal Deposit Library in managing the Digital Divide in the Pietermaritzburg area. This is informed by the idea that libraries play a significant role in helping to bridge the digital divide by providing free access to the Internet and other ICT tools to users. It is well known that the library is the only place where people can access free information through ICTs without any costs. Both quantitative and qualitative methods were used in the collection of data. Data is therefore, obtained through self-administered questionnaires, interviews, and observation. This triangulation of methods of data collection is designed to increase the validity and reliability of the results. The findings indicated that the Msunduzi library plays a key role in the delivery of digital inclusion activities, community engagement and social inclusion. The results indicated that while the Msunduzi library has made a considerable effort to ensure provincial-wide access to ICT, which currently constitutes an effective instrument for meeting information needs, a*

*considerable number of challenges still exist. The factors impeding easy access are unearthed in this article and therefore, the paper recommends that the public library should engage on more outreach programs in order to include more people of the communities as it is clear that, ICT tools are the requirements for accessing information and participating in the global knowledge system because the ability to access ICT tools has become important to individuals to connect economically, politically, and socially with others in the world.*

**Keywords**

*digital divide, Information and Communication Technologies (ICTs), public library, and access*

**1. Introduction**

The advent of Information and Communication Technologies (ICTs) has led to a global revolution across the world and it continues to change the social sphere and economic milieus of countries making use of these technologies. Mphidi (2016, p. 1) notes that organizations, government departments and ordinary people are using ICT tools to provide access to several information resources and services. It is fascinating to note that the countries have become knowledge societies because of the technological revolution. In this current technological age, people who are unable to have access to ICT tools are at a disadvantage and this led to the digital divide. It must be noted that the digital divide exists in developing and under-developed countries as most people still do not have access to ICT applications because the ICT facilities are not available in their areas and they cannot afford to use them. According to the Organisation for Economic Co-operation and Development (OECD, 2015, p. 5), the term digital divide refers to:

the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access Information and Communication Technologies (ICT) and to their use of the Internet for a wide variety of activities. The digital divide has some specific socio-economic implications that may have both direct and indirect impacts on the lives of people.

The digital divide is because of unequal adoption of ICTs. The digital divide has been a problem since the early days of ICT and as the different aspects of ICT are evolving, the digital divide is taking on different forms and dimensions. Similarly, Fuchs and Horak (2006, p. 101) argues that the digital divide is uneven material access, in which others are unequally reaping benefits from ICT tools which ultimately leads to an information society that is characterised by a class of losers and winners. One of the explanations singled out for this study defined the digital divide as the gaps that exist between those who can benefit and access different ICTs and those who cannot (Singh, 2004, p. 4). Kapondera and Hart (2016) noted that the information gap transpires as a result of the lack of ICT tools, public library, cyber café, electricity and telecommunications (Vaidya & Nath, 2013).

The issues causing the digital divide in rural areas are the inability to use ICT tools and lack of skills. Such a lack of skills in an environment with few public libraries expands the digital divide challenges

(Kapondera & Hart, 2016). The digital divide challenges influencing the rural areas are low levels for application of ICT tools. Most countries are putting strategies in place to bridge the digital divide by encouraging the use and applications of ICTs in public libraries (Osunkunle, 2008). This present study is therefore an attempt to investigate and examine the role of the public library in bridging the digital divide in Pietermaritzburg.

## 2. Background of the Study

Bhim (2010, p. 12) noted that the first public library in Pietermaritzburg was established in 1845 and was known as the “Reading Room”. The Natal Society Library in Pietermaritzburg, was founded in 1850 by a group of residents with the hope of promoting the Colony of Natal by collecting and disseminating accurate information (Liesl, 2009). The Natal Society Library was affiliated to the KwaZulu-Natal Provincial Public Library and Information Service (KZNPPLIS) with the intention of becoming a municipal library. From 1851 the Natal Society Library operated as a subscription library and from 1967, the Pietermaritzburg Municipality signed an agreement with the Natal Society Library regarding whereby the Municipality would provide an annual grant to the Natal Society Library to operate as a free public library for Pietermaritzburg. This led to the Natal Society Library opening its doors to all racial groups from 1975 and being one of the first public libraries in South Africa to do so (Buckley, 1988).

In 1916 the Library was accorded legal deposit status in terms of the Legal Deposit Act, No. 54 of 1997. Therefore, this made the Bessie Head Library one of five legal deposit libraries in South Africa (the only one in the Province of KwaZulu-Natal). Legal Deposit libraries play a unique and very important role as custodians, in perpetuity, of this country’s cultural wealth and information. Having had this status since 1916, the library has amassed a huge collection of South African books, pamphlets, periodicals and newspapers which it is obliged to preserve and make available to present and future generations. The library has an extensive collection of materials and information resources which further academic research, business, government related and vocational endeavours and the work of legislators (Liesl, 2009; Bhim, 2010, p. 14).

On the 1<sup>st</sup> of April 2004 the Natal Society Library was integrated into the Msunduzi Municipality and became the Msunduzi Municipal Library Services. With the aim of providing a comprehensive library service to all residents of the Msunduzi Municipal area. In June 2005/July 2007, the Library was renamed and became the Bessie Head Library in honour of the legendary writer, Bessie Head (Liesl, 2009; Bhim, 2010, p. 14). A Public library can be seen as an essential institution in the growth of ICT and ensures equitable access to information and overcoming the barriers of the digital divide. Stilwell (2006) states that libraries promote social exclusion by helping bridge the gap between those who can afford access to information and those who cannot.

### 3. Statement of the Problem

ICT applications are in the forefront of social change and impact people in a variety of ways which led to a growing number of people becoming regular users of ICT tools to conduct their daily activities and people who lack access to those applications are at an increasing disadvantage (Herselman & Britton, 2002, p. 271). ICT is one of the crucial developmental tools that change agents in rural communities. People within communities matter most when it comes to ICT development, hence positive development is unable to occur in the absence of participation by local people (Mbebe, 2017, p. 1). However, the use of ICT in rural areas is often lacking and as a result does not create an environment where people have meaningful engagement on an individual basis and in combatting community challenges. The social ills such as eradicating poverty, and community and economic inclusion in impoverished areas can benefit a lot from the application of ICT tools.

Townsend et al. (2013) contend that rural areas experience problems in accessing ICT tools and the global world is under a rapid diffusion of connectivity, therefore, the challenge is that the spread is unequal at best (Ani, Uchendu, & Atsye, 2007, p. 356), which leads to digital disparity. To compound the problem, the implications of the digital divide are essential and need to be addressed because these shortcomings reduce the opportunities for effectively using ICT tools (Goggins & Mascaro, 2013). Noted that the effect of the digital divide on those areas increases due to lack of ICT resources and the challenges result in the majority of rural communities having low literacy levels and little or no understanding and knowledge of local issues. The impact of the digital divide is magnifying because of lack of ICT tools in rural Communities for applications by individuals (Mishra, Akman, & Mishra, 2014). It is this background that informed this study; hence, the research sought to investigate the role of the Msunduzi library in bridging the digital divide and uplifting disadvantaged communities. This study, therefore, concentrates on the lack of access, skills to use and the application of ICT. The gaps continue to exist and this is having an impact on rural areas, yet not much has been done to address this challenge (Mbebe, 2017, p. 42).

### 4. The Aim of the Paper

The aim of this paper is to investigate the role of the Msunduzi public library in alleviating the digital divide in Pietermaritzburg, KwaZulu-Natal.

### 5. Review of Related Studies

The preliminary literature is conducted on the basis of the digital divide, the challenges, and causes of the digital divide and the role of public libraries in alleviating the digital divide. The issues that need to be addressed in the empirical component of the investigation on the digital divide and the roles of public libraries.

### *5.1 The Implications of the Digital Divide on the Libraries*

Mbebe (2017, p. 90) carried out a study entitled “analysing the developmental role of ICT in the case of Bakgoma community library in Limpopo”. Amongst the key issues for this study revealed that the library is not being fully utilized as it is regarded as a library for learners only. The challenge that was further revealed is that there is a gap between the educated and uneducated and there is a little use of the library by elderly people, lack of interest from the unemployed youth and poor newspaper supplies were some of the challenges that were highlighted. Seifert (2017, p. 8) also echoed sentiments that the key issues regarding the digital divide do not only revolve around the lack of infrastructure of ICTs but also on the literacy and skills of the person using the technological applications. Having a computer or mobile device with access to the internet does not merely mean that development has taken place. The deployment of infrastructure will only be effective when the person can engage with the technology in a constructive manner.

Mutula (2005) also indicated that the digital divide in African libraries is caused by various obstacles to access to ICTs, but also by low utilisation of existing ICT resources because of the lack of sound information technology exploitation skills. Most libraries in Africa do not have any automation policies. Similarly, Mphidi (2008) citing Trusler (2003) argues that the attributes of the digital divide in South Africa has several causes such as; a high level of inequality, weak ICT infrastructure, particularly in rural areas, a lack of ICT readiness in government and low priority of ICT development in the face of competing demands for public service needs. The absence of appropriate infrastructure for ICT technology had deprived many poor communities. The lack of the application of ICT tools for effective bridging of the digital divide for uplifting rural communities is a factor of concern of this paper.

The definition of the digital divide is the gap that exists between those who have and those who do not have access to ICTs such as, computers, the internet and other related services (Ani, Uchendu, & Atsye, 2007, p. 356). Cullen (2003, p. 247) defines the digital divide as the metaphor used to describe the perceived disadvantage of those who are either unable to make use of ICT in their daily lives and social progress dependent on digitization. Therefore, access to ICT has become a necessity and it is imperative that all are granted such access. The digital divide came into existence once ICT and the Internet came into existence. Kouadio (2010, p. 3) argues that the successful attempt to deal with the digital divide must consider the key issues such as: physical access to ICTs, ICT skills and support, cultural or attitudinal factors and content. The problem of the digital divide starts becoming more relevant when people move from the realm of measures for connectivity to the economic, socio-political and cultural characteristics of the community (Georgopoulou, 2011, p. 103). The digital divide refers to the gap between demographics and regions that have access to modern information and communications technology, and those that don't. It is known that countries around the world are not on the same developmental level and hence disparities in the level of ICT occurs. These problems hang on inequalities between individuals, households and geographical areas within different socio-economic perspectives (Badger, 2013).

Modiba (2016, p. 34) notes that the valid reason for the poor digital divide in South Africa is due to be the apartheid legacy that endorsed isolated improvement that offered mediocre and poor or no access to prospects for the non-white people population. The reality of the digital divide is also attributed to a high level of poverty, lack of telecommunications resources, and expensive the internet connectivity. Even though the digital divide occurs, ladders are being clamped at a macro phase to improve technological midpoints and digital communities in the townships and rural areas. South Africa's voyage to reconcile and reinstate itself from the consequences of apartheid will, however, take epochs. Nonetheless, it is these digital communities that will contribute to therapeutic procedure. The digital divide does not only occur at a macro stage, but has also established itself at micro phases in governments, where individuals are accomplished, well paid, with access to computers and telecommunications resources (Salanje, 2008, p. 241).

Franda (2002, p. 11) noted that the inception of the Internet has contributed and is still contributing to widening the gap between the better-off and worse-off parts of the communities. This is purely because the internet has enabled some nations to create new sources of wealth. With the advancement of technology in contributing to social change and improved development outcomes across Africa, the connectivity on the African continent is at 10.9%. Africa is not changing as fast as the rest of the world, and the gap is widening. Internet World Statistics (2017) states that with 170 million users, internet penetration in Africa is at 18 percent, which is significantly lower than the global average of 30 percent, and only one in 10 households are connected to the net. Africa is progressing towards greater connectivity, prices are falling slightly and internet use is increasing.

Nonetheless, there are still some obstacles to expanding access to mobile internet, such as affordability and investment in network coverage expansion. And while the internet is already common in sub-Saharan urban centres, more than 70% percent of the population live in rural areas. Bornman (2014, p. 7) argues that discourse on the digital divide is normally discovered in developing countries and South Africa is no exception because it is regarded as one of the least computerized regions in the world. This is primarily due to the lack of network infrastructure and basic infrastructure such as electricity in poor communities.

According to existing literature, there are certain aspects to the analysis of digital disparities. Primarily, people refer to the problem of access regarding connectivity and computers. The unequal access to ICTs is viewed as a socio-economic division or contemporary source of inequality. The initial focus of this investigation and discussion is based on the technological infrastructure and the links between physical access or basic usage of ICTs and socio-demographic characteristics of the population such as income, education, ethnicity and geographic location. Another aspects refers to the unequal ways in which ICTs are used, indicating the qualitative dimension of inequality through information technology. According to this approach, access to ICTs is not the sole or even the most important factor, but rather the differentiation in levels of skills, knowledge, usage, and outcome for individuals using new technologies, constitutes a more substantial form of digital inequality (Georgopoulou, 2011, p. 99).

### *5.2 The Importance of Having Access to ICTs*

The development of ICT access in South Africa has changed fundamentally and ICTs have expanded access to information across a myriad of geographical areas. The emergence of ICT in the communities has been hailed as a major step toward a solution to the problem of the underdevelopment of many of them because the use of ICT is “offering an unprecedented opportunity to overcome existing inequalities” in all societies (Selwyn, 2004, p. 342). ICTs can also increase the economic and social wellbeing of poor people, empower individuals and communities, and enhance the effectiveness and efficiency of the public sector. However, in South Africa, there is disparity in the level of accessibility to ICT, between the poor and the rich (Ofua & Emiri, 2011, p. 15). For instance, the essential factor of ICT in bridging the digital divide, is that it promotes economic equality, growth and innovation through increasing education. Sridhar (2009, p. 91) noted that “investment in ICT infrastructure and their derived services provide significant benefits to the economy”.

Bornman (2016, p. 264) states that towards the end of the 20<sup>th</sup> Century, societies globally had to change and be in line with new developments. The changes are the beginning of the information age which led the information society to become more pervasive due to the development of computers and Internet technology (Wong, Law, Fung, & Lee, 2010, p. 38). Therefore, this means that information plays a critical role in the economic, social, political and cultural life within the society. It is strongly connected and allied to ICT applications which assist the societies to create, store and distribute information anywhere around the world (Bornman, 2016, p. 264). It has fundamentally changed the way people live their lives—how they obtain information and interact with others. Information is important in all forms of societies, but the proportion of people involved in producing, distributing and consuming information has reached an unprecedented level (Wong, Law, Fung, & Lee, 2010, p. 38).

Becker et al. (2010) note that free access to computers and the internet in the public libraries evolved from a rare commodity into a core services. Rao (2000) notes that “digital divide or gap is purely a lack of physical access and training that is nevertheless offered in the public libraries all over world.” The gap will in a certain period correct itself, for as long as public libraries across the world provide access to computers and the internet as a way of bridging the digital divide (Robert, 2004, p. 4). However, Oladokun (2010) argues that people will not utilize a technological tools proficiently, even if it is provided to them for free, if they do not know how to utilize it. In support, Kinney (2010) notes that it is useless that people gain free access to computers and the internet if they cannot utilize them profitably.

In making information more easily available, the applications of ICT offers faster, less expensive, more diverse, and more interactive types of communication. As Sanyal (2000) notes “IT offers the opportunity for interaction between the computer and its users, creating conditions necessary for learning, and self-empowerment” (Sanyal, 2000, p. 146). ICT is an important tool to strengthen social networks and participation in low-income communities. Shaw and Shaw (1999) noted that some communities are using the Internet to stimulate online discussions among community members, and

organize numerous neighborhood events. IT also provides the opportunity to bring together groups of users that share common interests but not necessarily physical proximity (Anderson & Melchoir, 1995, p. 35).

### *5.3 The Impact of the Digital Divide on the Community Level*

On every community level, there are people who have the advantage of having access to ICT tools. Then on the other side, there are people who do not have access due to economic or social reasons. The disadvantaged people have less opportunity to engage actively in the information-based economy. In support, Mulonga (2006) argues that the provision of ICT infrastructure is just the beginning and has little impact if the community of interest is not financially capable of accessing the services the initiative provides.

Acacia (2000) is of the view that the value that ICT brings to rural communities and how it can benefit the community members should be emphasised, because without this happening, community members feel they have more pressing needs such as financial sustainability and do not realise that these technologies can assist them in their quest for economic emancipation. The devastating implications of the digital divide are that there is a risk of an increase in social and economic turmoil that could result from the exclusion of the majority of the world's population from the economy. These consequences could harm local and regional stability. Therefore, raising the level of digital inclusion, that is, increasing the number of people who have access to and use the technology tools of the digital age, is of vital importance.

Many rural communities in South Africa are living below the poverty line as with many other communities in other provinces. Such livelihood with poor living standards largely exists with many people depending on government grants to survive (Prieger, 2013). In those communities there is a scarcity of basic ICT assets such as computer and internet connectivity, quality water, electricity, public libraries and rural community libraries which play a major role in community development and alleviate digital disparities (Powell, 2015). As a result, it is not easy to access information at these rural communities for individual and business uses in comparison to urban areas (Oyedemi, 2015). The inability to access and make use of ICT in rural areas in South Africa shows a contributing factor to economic challenges. However, the lack of skills existing in those impoverished areas plays an important role in socio-economic advances in rural areas (Oyedemi, 2015).

Salinas (2003, p. 132) noted that the aspects that contribute to the digital divide, are the access to technological tools (including hard- and software); skills to use the ICT tools; relevant content that makes people become information fluent. Zlotakova and Weide (2015, p. 74) argue that internet connectivity in rural communities is becoming more impossible to obtain. The advancement of technologies does not guarantee that people have skills to use them and become more engaged in the civic arena. However, lack of access to IT will preclude low-income urban communities from new spaces of participation and place potentially powerful community building and communication tools well beyond their reach.

Various studies notably observed that problems and challenges experienced in rural communities are about accessing information that comes from the unavailability of ICT resources, which is mostly associated with the lack of infrastructure in rural areas (Uduku, 2015; Janvry, Sadoulet, & Murgai, 2013, p. 1593). The problem arises when it comes to rural communities where ICT is usually expensive and that poses a challenge when it comes to providing the efficient exchange of information, and it is identified as the fundamental flaw in claims that ICT is a conduit for development (Jerere, 2011, p. 18).

#### *5.4 The Role of the Public Libraries in Defeating the Digital Divide*

The imperative and overwhelming task facing both the global and the development community is finding ways to bridge the digital divide and wire the poor, whose livelihoods could be enhanced through access to technology. It is evident that these very technologies that are causing this colossal rift are perhaps the very tools that can be used to bridge this ever-growing and urgent divide (Herselman & Britton, 2002, p. 271; Jaeger et al. 2012, p. 4). Nafiz and Akter (2011, pp. 68-71), state that the tremendous growth of ICT has opened doors for the public libraries to use technological tools for the betterment of user services. The importance of analyzing the role of libraries in bridging the digital divide is that it will provide policy-makers with information needed for making effective decisions related to ICT in public libraries (Moe, 2004). Mphidi (2016, p. 79) states that IFLA indicated that in order to bridge the digital divide, it is necessary to create libraries and information centers offering an environment that allows free and fair access to information and digital resources. In many communities' libraries are the primary access point to free digital technology.

The public library is an imperative ICT instrument for the promotion of economic and social development in rural communities (Vaidya & Nath, 2013, p. 356). Public libraries across the globe are embracing change and stepping up to meet the shifting needs of their communities. Scott (2011, p. 195) libraries helps ameliorate some of today's social ills, including isolation, a lack of well-being, a lack of access, and the inability to engage. Scott (2011, p. 191) argues that the public library is a democratic equalizer, open to all and providing access to information that helps people improve their lives. Xie and Jaeger (2008, p. 44) states that public libraries have the potential to be an ideal site for providing both Internet access and training for older adults including those who are socially and economically disadvantaged and also provide digital information-literacy skills through workshops and training, thereby, making libraries critical for addressing the digital divide that exists in the communities (Jaeger et al., 2012, p. 13).

The public library fills a critical niche in remedying imbalances in access to ICT because the public libraries function as an intermediary for information in overcoming the digital divide that comes through unequal access to the internet and ICT tools (Vaidya & Nath, 2013, p. 358). Therefore, the public libraries are widely known to be effective intermediaries in addressing the digital divide in South Africa. Over the years, public libraries were using methodologies like face-to-face meetings and organizing public events. Nowadays, the public libraries are increasingly employing technological

driven approaches to improve their access to information and also skilled librarians to teach people to use ICT tools and guide them in finding the information they require.

According to (IFLA, 2001, p. 2), a public library is:

an organization established, supported and funded by the community, either through local, regional or national government or through some other form of community organization. It provides access to knowledge, information and works of the imagination through a range of resources and services and is equally available to all members of the community regardless of race, nationality, age, gender, religion, language, disability, economic and employment status and educational attainment.

The rationale of the public libraries is to provide free or low-cost services to meet the information needs of the public. The public libraries have a central role to play in the delivery of access to relevant information, regardless of whatever format (Xie & Jaeger, 2008, p. 44).

The library is the only point at which people can access information through ICTs without any costs (Khatai, 2013). Important information empowers those that are marginalized and it is the role of public libraries to provide formal and current developmental information. Furthermore, libraries are bound by an ethic code to provide accurate and up-to-date information and knowledge (Raseroka, 1997, p. 491).

Various authors have argued that public libraries can play an important role in bridging the digital divide because the public library provides policy makers with relevant information for efficient decisions in libraries (Soriano, 2007, p. 1). Garner (2016, p. 24) noted that public libraries are the critical institutional defence against broadband access, skills, and participation and also play an important role in helping to strengthen communities altogether. Furthermore, Garner (2016, p. 27) many public libraries are the only source of free Internet access in the communities. The public libraries have the capacity to assist significantly in contributing to the reduction of illiteracy, poverty, and unemployment (Raju & Raju, 2010, p. 10).

“Public libraries, with their commitment to freedom of access to information, and promotion of life-long learning, have an important role to play” (Cullen, 2003, p. 257). Riggins and Dewan (2005, p. 21) argues that public libraries have the potential to assist to close the digital divide gap by providing access to IT, training people on how to use IT tools, and distributing content targeted at and created by these communities. Public libraries are only one way to provide communities with access to technology. Therefore, the public libraries can help to better the livelihood of people and businesses in rural communities. Libraries help to decrease the current low percentages of literacy and increase knowledge and the introduction of libraries offers a solution to the problem of the lack of skills to use ICT (Uduku, 2015).

Raju and Raju (2010, p. 10) noted that the fundamental requirement for reducing the digital divide in communities is to give priority to the development of the infrastructure and provide universal and affordable access to information to individuals in all geographical areas of the community. Therefore, this raises the level of digital-inclusion by increasing the number of people who are accessing and using

the ICT tools in the digital age. Like other developing countries, South Africa is suffering badly from an acute shortage of ICT facilities and skills at different sectors, and organizations. The public libraries are now operating digitally, and their digital services open up a new channel to the universe of knowledge and information connecting cultures across geographical and social boundaries.

According to Khati (2013), the digital divide is part of bigger social divides. If people are not part of the digital world, then they will be shut out of the mainstream of society. The central research problem for this study thus focuses on the question of what role public libraries can play in bridging the digital divide and how they can do this. Hati (2013, p. 24) states that the provision of free access to ICTs impacts on public libraries in positive ways (Servon & Nelson, 2001, p. 280). An essential factor of ICT in bridging the digital divide is that it promotes economic equality, growth, and innovation through increasing education and earning potential.

### *5.5 Challenges of Bridging the Digital Divide*

Information plays an imperative role in the economic, social, political and cultural life of the society. The information society is allied to the advancement of ICT tools, which have become the information highways of the current times and offer new, better and faster ways to create, store and distribute information. Thus, discourses on the information society are also associated with concerns that disparities within societies and in particular between the rural and urban, have deepened, giving rise to debates on the so-called information-haves and information-have-nots and the digital divide (Bornman, 2015, p. 265). Many people in rural areas still live below poverty lines and remain impoverished through a deficiency in basic infrastructure enabling economic growth and development. They are still lagging in terms of ICT access because of illiteracy, lack of computer skills, and lower household incomes (Conradie et al., 2003, p. 199). The major barriers to ICTs in rural regions include cost as well as the low penetration of landline.

Kularskip (p. 359) states that inequalities in Internet access gave rise to the “concern that the new technology might exacerbate inequality rather than ameliorate it”, on what has been called the digital divide between the haves and have-nots. “Internet diffusion in rural areas has been hampered by factors such as poverty, low computer penetration, illiteracy, lack of trained personnel, disinterest, corruption, identity theft, and a failure to understand the benefits of Internet access” (Dholakia et al., 2003, p. 43). Most of the conducted research on the digital divide has focused on inequality of access and a more thorough understanding of digital inequality is required that looks at the Internet in its broader theoretical context and considers how ICT’s impact on existing social inequalities (DiMaggio, Hargittai, Celeste, & Shafer, 2004, p. 358).

Having discussed the development of the concept digital divide and its related problems and dimensions, it is evident that digital divide is the recent reminiscent concept that states the differences in access to and the utilization of information technology that are interrelated with factors of the socio-economic prestige. Therefore, the socio economic factors, including illiteracy, poverty and political factors contribute to the concept of digital divide because illiterate people cannot use

computers and the internet due to the fact that they do not have skills to use them, while the impoverished people cannot afford to buy computers and mobile data for the internet connection. As such they cannot access the internet on their own.

Several studies have subsequently revealed that the digital divide is the direct result of the division of society into demographic characteristics (Singh, 2009; Salinas, 2003; Mutula, 2004; Robert, 2004). Seyed and Alireza (2008) look at the role of librarians and information professionals in bridging the digital divide in the third millennium. The results are that public libraries are treated as one of the main societal resources which can solve the information divide engrained in the digital divide and contribute to the comprehension of the democratic communities (Seyed & Alireza, 2008).

The issues of the digital divide in South Africa are also accredited to ineffectiveness in the usefulness of resources. Mwiyeriwa and Ngwira (2003) indicate that the technological resources needed for maintaining any technological connectivity is mostly deficient in Africa. More issues affecting Africa comprise a short demand of individuals who are able to puzzle content, for whom there is a high international request, and the nonexistence of cheap inducements to technology expertise, counting web content designers, subsequent to the continent effortlessly trailing proficiency to other regions.

The digital divide in African libraries is instigated by numerous impediments to access to technological resources, and by low application of prevailing technological resources. Mutula (2004, p. 30) perceives that “libraries in Africa that had executed ICTs generally experienced under-utilization of the technology on account of the lack of sound information technology exploitation skills as well as restrictions imposed on use in some universities”.

Raseroka (2004) points out “that in general, African institutions did not provide funding for the introduction of technology for the usage in the libraries due to the fact that there were no policies and strategic plans and actions for the introduction and usage of technology that provided access to information”. Raseroka (2004) further noted that “there was no investment in capacity building programmes for staff and patrons, and the usage of information technologies by libraries seemed to have been prompted by information professional’s exposure to international technological developments for information resource sharing and access to the funding”. Therefore, South African libraries’ access to technological resources is hindered by deteriorating resources.

#### *5.6 Actions That Need to Be Taken to Bridge the Digital Divide*

The reality is that the digital divide continues to widen up if it remains unchecked. There are some initiatives in place to bridge the gap. The point of departure starts with the policy formulation where governments recognize the social and economic benefits of the diffusion of ICTs. There must be low-cost technology and there needs to be infrastructure enhancements in rural, low-income and underprivileged areas. Similarly, Russell and Huang’s (2009) study tackles the question of what libraries can do to assist in narrowing the digital divide that creates inadequate access to information. This survey inspects the ongoing problem of digital divide based on the collection of data from numerous nationwide and organizational surveys along with their own studies. The results indicate that

the issues of digital divide, which is particularly affected by numerous demographic dynamics, still exists notwithstanding the speedy acceptance of new technological resources, which is happening amongst the majority of clusters. The survey concentrates on the roles of libraries in nowadays communities by observing the ways libraries can actively utilize and explore upon their work toward balancing access to information for the future benefit of those who continue to be affected by the digital divide.

The Public libraries remain a long-term imperative for the greater spread of ICT access. The benefits of ICT need to be understood by the people so they can greater leverage a technological skillset in life. Such endeavors need to start at a grassroots level where ICT technologies and access must be rolled out in the communities so that they will have a ripple effect in the future. Khati (2013, p. 26) indicates that ICTs in public libraries might play a vital role in narrowing the digital divide. However, if the libraries ICTs are to alleviate the prevailing information poverty and social exclusion in South Africa, it is clear that more than mere physical access will be required.

Equally, the subject of the digital divide has in the recent years been looked at largely from intercontinental and nationwide viewpoints, with the tiny courtesy being paid to the presence of the concept within libraries. Therefore, prevailing studies on the digital divide largely utilize information communication technology metrics without giving much devotion to the entirety of factors that impact on the digital divide. This survey provides a suggestion on how e-governance could be utilized to lessen the digital divide inside libraries in Africa (Mutula, 2005). Even though information and communication technology unlocks access to new library roles in Africa, it also brings the challenges to information professionals who should accept, study to utilize, accomplish and sustain new information technology. The information and library professionals should deal with the elevation of expectations of library patrons and the establishments around the worth and probability of the information and communication technology. Failure to achieve these prospects would lead to amplified uncertainty of the information professionals and disappointment among their patrons.

### *5.7 The Future Developments*

The development of ICT tools fuels the digital divide because to maintain the new technological applications is costly. Therefore, it is known that free access to quality services, ICT tools, such as the computer and the internet in public libraries are necessary for addressing the digital divide and the socioeconomic disparities that are compounded by it. The digital gap can be minimized in the most basic sense by allowing free access to the public libraries. Without the utilization of public libraries, the global digital divide will be harder to tackle because denying access to information resources contributes to poverty, violence, crime and general societal detriment (Brown, 2004, p. 176).

The comprehensive national plan to reduce the digital divide through public libraries should be formulated by the government of KwaZulu-Natal to reduce the digital divide at a provincial level. This plan should ensure special priority and concentration to the development of public libraries within communities and free access at all cost and should be financially supported and have internet and other

communication facilities. Public libraries in communities should work as a panacea for community development. It is through public libraries that activities or initiatives to offer informal education programmes for illiterate aged people and even for the illiterate working people can be created. It is through the public libraries that the ICT training programme for communities could be arranged. People with limited access will be outpaced by those who are ahead in the ability to select and process information (Mason & Hacker, 2003, p. 46). ICT facilitates critical information reaching marginalized communities at a rate and scale never before possible and where appropriate, organizations should be encouraged to integrate technology-driven approaches into their programmes to maximize their impact.

## **6. Research Methodology**

This study is tackled in the post-positivist research approach which advocates methodological pluralism and it is based on the assumption that the method to be applied in a particular study should be selected based on the research question being addressed (Wildemuth, 1993). A case study research design was employed. A case study approach is important since it has the ability to provide an in-depth insight, with high construct validity (Mouton, 2001, p. 150).

### *6.1 Data Collection*

Data were thus obtained through a questionnaire, interviews, observation and email correspondence. This triangulation of methods of data collection was designed to increase the validity and reliability of the results. Data collection for quantitative data was collected through self-administered questionnaires and qualitative data was collected through in-depth interviews. This was primarily done using a questionnaire distributed to the 10 staff members of the library and structured interviews with management staff complemented the data gathered.

### *6.2 Participants*

The population of the study was the staff of the Msunduzi library. A study population is the element of research from which the researcher draws inferences to explain the phenomena or, as noted by Babbie (2013) and Bless and Higson-Smith (2000), is the element about which the researcher wants to determine some characteristics or conclusions. This study applied both quantitative and qualitative methods on investigating how the Msunduzi library can be applied to bridge the digital divide in Pietermaritzburg. Of the 10 questionnaires that were distributed, all were filled and returned. Data analysis is a process that the researcher embarks on with the purposes of searching for themes and patterns within the data (Mouton, 2001, p. 108). It is important to ensure that the interpretation of data is done without errors as this might lead to wrong conclusions.

## **7. Findings and Discussions**

The barriers to using ICT that were encountered in the Msunduzi library includes, lack of skills in using ICTs, and inadequate funding. There are obstacles to ICT use such as limited access time; low bandwidth and insufficient computers; poor condition of ICTs. The findings further revealed: the

respondents indicated that Msunduzi library plays a key role in the delivery of digital inclusion activities, community engagement and social inclusion because Msunduzi libraries have the ICT network infrastructure in place; offers an accessible network of service points and now includes mobile libraries with ICT; have the hardware and software, with specialist equipment for special needs; it is close to their communities in terms of location and awareness of needs; and it offers a lot of support to users, varying from taster sessions, to practical hands on help, to informal tuition to formal teaching leading to qualifications. Provide access, offers ICT literacy programs, Information provision, free access, outreach programs, establishing partnerships with non-governmental sectors. It is implementing digital library services.

Similarly, Khati (2013) conducted a research on the role of public libraries in bridging the digital divide in Cape Town. This research project looked at the role of public libraries in bridging the digital divide which is both a symptom and a cause of social exclusion in Cape Town. Public libraries offer free information services to ordinary citizens by means of a wide range of media, including the internet. The general findings of the study notes that public libraries do assist in narrowing the digital divide by providing free internet access to the public. One of the projects initiated by the public libraries that were surveyed include Masiphumelele library, designated to narrow the digital divide by SmartCape. Masiphumelele did not only have SmartCape, but it also offered free computer literacy courses to its patrons (Khati, 2013).

Drawing from the findings, it is apparent that the Msunduzi library is engaging in projects that help to alleviate the digital divide in the surrounding areas of Pietermaritzburg, for example, out of the 11 libraries Msunduzi has, 8 have got internet access and they are placed strategically in places where there is a need for access. Msunduzi offers Internet training where they educate people on how to create emails and other related services that will help them get empowered. Several attempts have been made to alleviate the digital divide (Warschauer, 2003, p. 47), and from those findings from which the results have been derived one can conclude that it is not enough to provide only the hardware and access without the skills, knowledge, or training to use them. Warschauer made several attempts to close the gap, and articulated that “the key issue is not unequal access to ICT tools but rather the unequal ways that ICTs are used” (Warschauer, 2003, p. 47).

That’s the reason why, Msunduzi library has embarked initiatives that aim to bridge the digital divide in areas where individuals are still poverty stricken, offers free internet and also contact outreach programs whereby they visit deep rural areas using a mobile library bus to give people information and taking resources to them. Mobile Library Trucks promote the use of libraries and the provision of information services in the most deprived wards of the Province. Mobile trucks assist public libraries during outreach and this ensures innovative ways to access information to disadvantaged groups of society. The provision of Mobile libraries in rural areas serves as relief for the rural poor as it gives them an opportunity to access services that were often not available locally and to enjoy some of the benefits that people in urban areas have (Mbembe, 2017, p. 58).

Public libraries play an important role in addressing the concerns of the digital divide. It was acknowledged that not only is it important to provide access, it is also important to provide free access, because the majority of the people who use ICT facilities are people who do not have the technological equipment at home. Noting that they come from the socio-economic groups who cannot afford to own a computer. Therefore, it was felt that it is essential to offer access to ICT for free to the local communities (Mbembe, 2017, p. 58).

For many communities, the public library is the only place that provides access to computers and the Internet. Current initiatives in public libraries include the provision for Internet connectivity. There is an increased demand from users for ICT services which are inadequately met due to limited ICT skills of the staff, library ICT resources and bandwidth; and on the other hand there is a huge need to create an awareness of and the skill in the use of ICTs for access to information amongst communities (Satgoor, 2015, p. 100). Salinas (2003, p. 134) accessing ICT alone is not enough to bridge the digital divide in the community and hence training plays an imperative role in addressing the issue. The majority of people have access to ICT in the library but many have little or no prior knowledge or experience on how to use the information tools to retrieve information that is needed. Thus, training in the use of these tools is important, and must be addressed as basic skills in the use of these tools.

Interviewee on an engagement indicated that there are issues that contribute to the digital divide, such as low bandwidth, investment in information technology, internet access, time limits, the management of funds, maintenance of ICT facilities and the procurement of ICTs for the libraries and skills training (for both users and librarians). The immediate solutions are to address the poor Broadband connection in the library, and ensure a consistent approach that enables access to Web 2.0 technologies, that includes the development of social networks. Strategic documents such as strategic plans, annual performance plans and annual reports showed a focus on addressing the digital divide, for example, establishing and maintaining ICTs in public libraries, training librarians on the use of ICTs, providing infrastructure required for public library services (e.g., Physical buildings and ICTs), and the provision of computers. Currently, we are living in a more connected global world and the digital divide is a disturbing trend that is shaping our generation today.

In the article entitled "Opening Possibilities through the Internet: Accessing Digital Tools for a Better Life in South Africa" the interviewee indicated that most people in the community don't not only lack online access, but they lack also the skills to navigate the digital world. Through that she joined AfLA's International Network of Emerging Library Innovators Sub-Saharan Africa (INELI-SSAf) program and created a service that could offer underprivileged communities with access to digital training. The program, in collaboration with the library's Internet Café staff, offers training in basic computer skills in Microsoft Office, email correspondence, and writing resumes. Library users even learned how to design business cards and fliers. The respondent's program has been so successful that it has captured the interest of local ward councilors, NGOs, and teachers who are willing to support her

initiative. Since its launch, the library has helped train 400 people to easily access information to improve their lives and adapt to the changing world.

## 8. Conclusion

The unequal access to ICT facilities have led to the digital divide not only in South Africa but globally as well. Although Msunduzi library has made encouraging efforts to bridge the gap by initiating a number of projects and programmes for rural and remote locations, a lot more needs to be done to bring people into the information society. All that is required is strong determination among people, good policy-makers and government support from provincial level to bridge the digital divide. Public libraries have a special role in providing information to all in order to reduce the gap between those who have the facilities to access digital information and those who do not.

The role that ICTs plays in alleviating the digital divide can no longer be denied. The literature and the research findings indicate that ICTs are relevant tools that can bridge the digital divide. This article draws on the role of the Msunduzi Library (Pietermaritzburg) in bridging the digital divide. Even though there were challenges but the overall findings state that public library in Pietermaritzburg play a significant role in bridging the digital divide in the area. The researchers observed that the internet connectivity in libraries does not necessarily translate into accessibility and use of ICT for bridging the digital divide. Access, to be meaningful, must be reconceptualised to include not just the presence of the hardware, but actual usability, consisting of physical access and the skills to use that access to serve a desired purpose. If South Africa is to achieve the milestone of alleviating the digital divide it has to ensure that all public libraries have ICT connectivity with high-speed broadband internet. The public library is the only way to access a computer and the internet for many South Africans in low-income households.

Therefore, the South African government seems to be taking the benefit of the internet and other web facilities to offer people with access to electronic information and services. These show that the South African government has initiated proper steps to tackle the digital divide. To ensure that the efforts are improved, the article suggests that government has to offer sufficient training to ordinary people on how to utilize computers and the internet in order to access services. Government should involve the industry in order to develop telecommunication equipment and resources. Government also has to help its inhabitants with access to cheap internet services so that the society is able to utilize more of services.

Disparities will be bridged by successfully adopting ICTs, which can close the gap between the haves and have-nots. Those who are unable to afford ICTs can make use of the public libraries and this will also help to bridge the digital divide because the digital divide is the main hindrance to sustainable development in rural areas. The public library should engage on more outreach programs in order to include more people of the communities. Closing these gaps means rural people will reap the benefits that come with sustainable development. Failure to have access to ICTs in rural areas, means it will

take many years before rural people can escape rural poverty. The public libraries are helping to tackle information inequality demonstrated in the growing information gap and the digital divide. Through their network of services, information on research and innovation is made available to advance sustainable development and the welfare of peoples worldwide. The researcher proposes a further study to conduct a survey on the use of ICT for bridging the digital divide with other legal deposit libraries.

#### Recommendations:

- Therefore, the Msunduzi public library and the provincial government should see the public libraries as knowledge and information centres with computers connected to the internet to in the libraries.
- The library should also train the librarians so that they will be able to impart computer skills to the communities, especially to the users who have indicated that they don't have skills to use computers and internet.
- Public librarians should also initiate computer orientation courses to provide basic skills to those who are computer illiterate in the communities.

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