Information and knowledge society and its impact on poverty alleviation and economic empowerment among informal sector women entrepreneurs in South Africa

By

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@2012
DECLARATION

I, Glenrose Velile Jiyane, wish to declare that this study, “Information and knowledge society and its impact on poverty alleviation and economic empowerment among informal sector women entrepreneurs in South Africa”, except where specifically indicated in the text, is my own original work, in conception and execution, and has not been presented for the award of any degree in any other university. All the sources used in this work have been acknowledged by means of references.

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All the participants - without their support and commitment this study wouldn’t have been possible

My family, especially my husband and children, for their patience, love, understanding and support during the ‘me, myself and I’ time that I needed to complete this study
DEDICATION

I dedicate this work to my family, especially my two beautiful, supportive and loving daughters, Nomagugu Ndandatho Precious & Nandi Ndiletha Pretty-Girl, my only son Notha Phakama Maqhawe, and my soul partner and husband, Vela Mhanjana Dambuza-Mthabathe (“Wena kaMabhala ngozipho abanye bebhala ngempensela!”) for their constant support, understanding, prayers and inspiration. Also to my mother, Sbongile MaDlokovu Gwala, “Ntusi Yenkomol, igalelo lakho libonakele”, and my four siblings and their families for their motivation and thoughtfulness at all times. Finally to my late father, Magembe, “Mhlephuka Kubuye Kuhlangane!” who did not live long enough to witness this success.
ABSTRACT

The use of tools for development has evolved from the industrial revolution in the late 18th and 19th centuries that saw the increased use of machines and developments in the mining industries, to the increased use of information and technology in the 20th century and major breakthroughs that sparked the evolution into the information and knowledge society of the 21st century. The basis of the information and knowledge society revolves around technology’s increased assimilation and diffusion in human society, particularly information and communication technologies and their rapid growth and use in the exchange of information and knowledge. This society offers many opportunities and benefits to people in terms of the facilitation of information creation, distribution, diffusion, access and use for growth and development in various spheres of life.

Information and communication technologies are thus regarded as tools for the advancement and development of communities, and this includes rural, illiterate, marginalized and poor communities and the female entrepreneurs in the informal sector who are the subject of this thesis.

The aim of this study was to examine information and knowledge society and its impact on poverty alleviation and the economic empowerment of informal sector women entrepreneurs in South Africa and develop a model for utilization of information and knowledge in the informal sector. Both qualitative and quantitative approaches were employed for triangulation, although the qualitative approach significantly outweighed the quantitative in this study. The absence of a comprehensive list of informal activities in KwaZulu-Natal led to the decision to use snowball, purposive and haphazard sampling techniques to select the sample for the study.

Focus group discussions, interviews, observation and content analysis were used to collect data from 118 women entrepreneurs from the informal sector, 17 women leaders, and 4 officials from the Hlabisa Local Municipality in KwaZulu-Natal.
By using criteria and indicators of an information and knowledge society to assess whether or not South Africa meets the requirements, it was the conclusion of the study that although South Africa meets some of the criteria, it does not, in many instances, satisfy other criteria, and thus cannot be regarded as an information and knowledge society. The study found that although informal sector women entrepreneurs possessed some information and communication technologies, their characteristics, such as age, level of education, economic status and occupation, deterred them from fully seizing the opportunities and benefits presented by the information and knowledge society in cases where there were such benefits.

The absence of proper infrastructure that supports the availability, access and use of information and communication technologies adversely affects the access and use of these technologies in their businesses. In return, development, global business participation and exposure, connectedness, and speedy access to and use of relevant business information and markets are unattainable. Additionally, the lack of a conducive environment, such as proper regulatory policies and a skilled and knowledgeable human support systems (e.g. women leaders, officials and other systems in the community), unfortunately does not create an enabling platform for leapfrogging and later development of informal sector women entrepreneurs in Hlabisa Local Municipality.

Among its recommendations, the study suggests that South Africa should work toward achieving and meeting the criteria of the information and knowledge society by assessing itself against the criteria and indicators of such a society. Doing so would enable informal sector women entrepreneurs to reap the opportunities presented by the information and knowledge society.
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LIST OF ACRONYMS AND ABBREVIATIONS

IKS - Information and knowledge society
IT- Information technology
ICTs - Information and communication technologies
IS - Informal sector
ISWEs - Informal sector women entrepreneurs
SA - South Africa
KZN - KwaZulu-Natal
STATSSA - Statistics South Africa
UN - United Nations
UNESCO - United Nations Educational, Scientific and Cultural Organization
Unisa - University of South Africa
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CHAPTER ONE: INTRODUCTION AND RESEARCH BACKGROUND

1.1 Introduction
This chapter introduces this study on “The role of the information and knowledge society in poverty alleviation and economic empowerment among informal sector women entrepreneurs in South Africa” by discussing the background and conceptual and contextual settings of the study. The chapter also presents the motivation and statement of the problem, aim and objectives, research questions, and the scope, limitations and significance of the study. The chapter concludes by providing information on how the whole report was organised.

1.2 Research background
The twenty-first century is heralding both exciting and challenging times ahead as we come to terms with the information and knowledge society. While most developed economies are enjoying the numerous benefits of this era, it is posing new and serious challenges to many in the developing world.

The World Summit on the Information Society (WSIS 2003) in Geneva defines the information and knowledge society as a society in which people interact with technology as a fundamental part of life and social organization to exchange information on a global scale. The information and knowledge society has been brought about by the transformation and evolution of previous societies and the use of tools for development (e.g. the Stone Age, bronze age, etc., & the industrial revolution). This society revolves around the use of information and communication technologies (ICTs).

ICTs have been received positively by many countries and communities that regard them as tools for development and advancement. They facilitate the creation, distribution, diffusion, use, integration and manipulation of information at a rapid speed, making it easier than ever to interact and exchange information and knowledge.

However, for many developing countries such as South Africa, there are many barriers to this interaction with technologies, so much so that it is not always possible for these
countries to harness potential benefits such as accelerated growth, empowerment and sustained development brought about by ICTs, regardless of the initiatives of structures such as the New Partnership for Africa’s Development (NEPAD) and African Telecommunication Union (ATU) [International Telecommunication Union 2010].

According to Britz et al. (2006:28), the information and knowledge society is supported by four overlapping pillars, namely usable content, human intellectual capability, information and communication technology, and connectivity, infrastructure and deliverability. These four pillars enable countries and communities to share and exchange information and knowledge in order for them to exploit, locate and use information and knowledge for their growth and empowerment in all spheres of life, from health to politics, education, economy, etc.

Empowerment is defined as a person’s capacity to make effective choices that lead to actions and outcomes (Alsop and Heinsohn 2005:4). It is considered by the World Bank (2000b) as one of the three main pillars of poverty reduction.

According to Alsop and Heinsohn (2005:7), empowerment has degrees that can be measured by assessing whether a person has the opportunity to make a choice, whether a person actually uses the opportunity to make a choice, and whether once the choice is made, it leads to the desired outcome. However, the authors (2005:6) suggest that in order for the degree of empowerment to be measured, there have to be two variables, i.e. the agency and the opportunity. To the authors, agency is an actor’s ability to make meaningful choices; the actor is able to envisage options and make a choice.

Opportunity refers to the formal and informal contexts within which actors operate. Opportunities brought about by the information and knowledge society present possible convenient contexts, among other things, within which communities and individuals, such as female entrepreneurs in the informal sector, can envisage options and choices to help their growth. In this way, they would gain economic empowerment.
Economic empowerment is the process of availing basic economic opportunities for marginalized people. Marginalized people have limited opportunities for self-sufficiency and depend on the government for grants and welfare or on charities for basic help and amenities. While categorizing the ‘marginalized community’ in the introduction of the IFLA Social Responsibility Discussion Group that was held in Amsterdam, Ocholla (1998) distinguishes between five groups, but only the third and fourth groups are discussed here. These groups describe those who are marginalized or disadvantaged because of cultural and social poverty, especially the illiterate, the elderly, women and children, and those who are discriminated against by race, ethnicity, creed and religion. Economic empowerment is crucial because it mobilizes the self-help efforts of the poor rather than providing them with social welfare as we normally observe in developing countries, including South Africa. Economic empowerment lifts the burden from the government and enables people to stand up for themselves rather than rely on the government’s resources, which are not sufficient in many cases.

In many instances, lack of opportunity creates barriers to developing communities and individuals because it prevents them from leveraging the benefits brought about by the information and knowledge society, such as mass information and ICTs to access this information from local, regional and global information and knowledge systems. According to Gillwald et al. (2005:130-153), lack of technology is a barrier that contributes to the digital divide. The digital divide prevents people, especially those in developing communities, from becoming a part of the global information and knowledge society (as discussed in details in chapter 2, see section 2.5.2.2). However, the term has expanded to explain the various differences between people who have access to the internet and those who do not (Shade 2002:5) and also disparities between groups and individuals in one country or even within a family. The American Library Association’s (ALA 2001) Office for Information Technology Policy defines the digital divide as differences due to geography, race, economic status, gender and physical ability in:

- Access to information through the internet and other information technologies and services
• The skills, knowledge and abilities to use information, the internet and other technologies

However, according to Mutula (2003:591), the digital divide is always described in terms of the differences in the number of telephones, internet users or computers per head between rich and poor countries.

Therefore, if developing countries were to focus on progress towards joining the information and knowledge society, dimensions of the digital divide should be eliminated, such as the technological dimension and other barriers and effects as observed by Lor (2003:3) that focus on limited or no access to information. Rao et al. (2000:3) formulated the eight Cs of success in internet economy which provide a classification that is strongly oriented to technology and economic dimensions. These dimensions focus on connectivity, capacity, content, community, finance, the business environment, the legal/regulatory environment, policy framework, and moral or ethical frameworks as highlighted below:

• **Connectivity.** This dimension focuses on the access to personal computers (PCs), telephone lines, internet connections, etc.

• **Content.** The content dimension looks at the number of websites in the country, local relevance of content, languages, etc.

• **Community.** This dimension looks at inclusiveness with respect to sections of the community

• **Capacity.** This dimension deals with the capacity of the workforce, capacity to harness the internet, development of cyber law, etc.

• **Commerce.** This dimension looks at the development of infrastructure for e-commerce
• **Culture.** The cultural dimension focuses on government attitudes to telecommunications, internet awareness of decision makers and bureaucrats, business culture, entrepreneurial culture, etc.

• **Cooperation.** This dimension looks at the cooperation between government, the private sector, academia, civil society, etc., locally, nationally and regionally

• **Capital.** In this dimension, the focus is on investment climates that are hospitable to economically self-sustaining internet initiatives

Additionally, there are modifying dimensions of the digital divide suggested by some scholars (such as Dragulanescu 2002; Singh 2002; and Rao et al. 2000 in Lor 2003:4), and their explanations have been extended to include other aspects and improve understanding. They are:

• **Connectivity.** Not only telecommunications infrastructure and teledensity, but also the availability of state-of-the-art workstations, peripheral equipment and software. A good computer environment, free from excessive heat, dust and humidity. Access to these by the general population, not merely urban elite. Appropriate technology for rural and disadvantaged communities.

• **Capacity.** Sufficiently trained IT professionals to install and maintain hardware, software and networks. Professional information workers who are able to interpret, provide their insights, and motivate and train users. Educational and professional associations of IT.

• **Content.** Content not only from developed countries, but also from the country itself and communities in vernacular languages relevant to national and local issues and concerns.

• **Community.** Clients and potential clients - the client base depends on the literacy rate and level of education. Access to resources for minorities and disadvantaged groups, including rural communities, women, children, the
elderly, persons with disabilities, the unemployed, the rural and the urban poor.

- **Finance.** Capital for investment in infrastructure and implementation.

- **Business environment.** Business culture, adaptability, and entrepreneurial spirit.

- **Legal/regulatory environment.** Legislation and regulatory bodies that oversee telecommunications, the flow of content, e-commerce, availability of foreign currency, import duties and tariff barriers, flow of funds between different tiers of government, budgetary constraints, tender procedures, competition, non-governmental organizations, inter-institutional co-operation, etc.

- **Policy framework.** National information policy or policies. Policies on education, IT, knowledge society, e-government, technology transfer, rural development, culture, language, literacy and libraries. These policies should be articulated with national development plans.

- **Moral and ethical frameworks.** Issues of information sovereignty versus information, media and cultural hegemony of the powerful western industrialized nations. Use of economic power to force principles of market capitalization on small economies. Democratization, tolerance of diversity, inclusiveness and transparency (Lor 2003:4 -7).

Despite the shifts and transformations in communities and advancements in technology - a revolution that has brought about changes in how people do things on a daily basis - people in developing countries and communities still live in poverty and work in the informal sector where they are often oblivious to these developments. The dimensions of the digital divide can therefore drive people to poverty and lead to lack of growth and empowerment.
Poverty can mean a number of things (Studies in Poverty and Inequality Institute, 2007:10). However, one important thread in poverty discourse is the notion of material lack, especially the lack of resources necessary for survival (Studies in Poverty and Inequality Institute 2007:10). Rowntree (1901:86) uses the concept, ‘primary poverty’, to describe the situation of families whose total earnings are insufficient to obtain the minimum necessities for physical efficiency. At the World Summit for Social Development in Copenhagen in 1995, the concept ‘absolute poverty’ was used to describe a condition characterized by the severe deprivation of basic human essentials, including food, safe water, sanitation facilities, health, shelter, education, and information.

However, poverty remains poverty whether it is termed ‘primary’ or ‘absolute’. Either way, it refers to the lack of essentials or life’s necessities. A person is judged as poor when he or she lacks resources that address basic human needs such as hunger, shelter, water and others. According to the Studies in Poverty and Inequality Institute (2007:10), deprivation refers to the effects of poverty on a person’s life and limits what a person can and cannot do in terms of immediate and future actions. In this state, an individual becomes vulnerable and defenseless against the hardships of life and struggles to cope. Such people feel socially excluded because of what they lack when compared to those around them. Between themselves and more affluent communities, there is what can be termed a ‘poverty gap’. According to the Studies in Poverty and Inequality Institute (2007:12), the poverty gap refers to the level of resources required to bring everybody above a designated measure of poverty; in other words it measures how severe the poverty is.

There are many factors that expose people to poverty. Policies and structures can expose people to poverty. Some authors argue that people should pull themselves out of poverty by seeking employment. However, job losses or a labor surplus can make leaving poverty impossible. To others, poverty is simply the result of being left out of the growth and development process (Bernstein et al. 1992). Whatever the causes may be, poverty can be relieved, alleviated and reduced.
‘Poverty relief’ refers to policies and interventions that seek to provide assistance to people who are living in poverty, and it is usually linked to some external shock that pushes people into a more severe state of vulnerability than before (Studies in Poverty and Inequality Institute 2007:14). According to this institute, poverty alleviation aims to reduce the negative impact of poverty on the lives of poor people in a more sustained and permanent way than poverty relief, while poverty reduction refers to strategies and policies that aim to reduce the percentage of people living in poverty or the severity of the impact of poverty on the lives of poor people.

In line with the Millennium Development Goals (MDGs) of 2015, South Africa as a country has committed itself to obliterating poverty. This on its own suggests that the roots of poverty can be removed. Poverty can be alleviated by providing relevant resources such as information, knowledge and skills that are applicable to people’s day-to-day activities in their social, economic and political lives. These resources would empower them with the expertise necessary to economically survive in this information and technological era.

The informal sector is a sector that, despite all the latest exciting technological and information developments, is still marginalized and informal. According to Ikoja-Odongo (2002:41), the informal sector is a sector of unregulated economy that consists of different micro and macro enterprises that operate outside or irrespective of technological advancement, (see chapter 3 for a detailed discussion on informal sector). Many developed countries are embracing the benefits of the information society in their social, economic and political spheres, while others, mainly developing societies, are using this advancement to enjoy power and separate the ‘haves’ from the ‘have nots’, thus essentially destroying their countries. The power mongering forces many people to leave their countries and seek better living standards and business opportunities in other countries, which increases the chances of illegal and unregulated informal business activities.
South Africa is an example of a country that experiences a high influx of foreign nationals from many countries, such as China, Zimbabwe, Sudan, the Republic of Congo (DRC), Nigeria, Mozambique and many others. These foreign nationals enter the country with diverse business backgrounds and experience, but often end up working in the informal sector. Although cross-border and cross-cultural business opportunities are encouraged in South Africa because of the potential of fresh global skills and ideas to support diversity in the business arena, it is true that many often end up operating illegally, and in some cases the premises used do not comply with business regulations, thus ‘upping’ the statistics of the informal sector.

With the unpredictable political landscape in African countries such as Zimbabwe, Somalia, Burundi, the DRC and many others, many African people have sought refuge in South Africa, adding onto the already high population, high unemployment rates, and increased number of businesses operating outside the legal framework. People opt for the informal sector because there is “an ease of entry and no prior business know-how is required” (Ikoja-Odongo 2002). Taxes are also not paid or can be avoided by the businesses and there is no special technology necessary for them to operate. Ultimately, it is often the only option available to people who are new to a country and who need to survive.

1.3 Contextual setting
Statistics South Africa (Stats SA 2011:3) used the cohort-component method to estimate the 2011 mid-year population of South Africa. According to the Stats SA release, the population for 2011 is estimated at 50.59 million. Table 1.1 shows the 2011 population estimates.
Table 1.1 Mid-year population estimates for South Africa by population group and sex, 2011

<table>
<thead>
<tr>
<th>Population group</th>
<th>Male</th>
<th>Percentage of total population</th>
<th>Female</th>
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<td>4 539 790</td>
<td>9,0</td>
</tr>
<tr>
<td>Indian/Asian</td>
<td>626 690</td>
<td>2,6</td>
<td>648 177</td>
<td>2,5</td>
<td>1 274 867</td>
<td>2,5</td>
</tr>
<tr>
<td>White</td>
<td>2 227 526</td>
<td>9,1</td>
<td>2 338 299</td>
<td>9,0</td>
<td>4 565 825</td>
<td>9,0</td>
</tr>
<tr>
<td>Total</td>
<td>24 515 036</td>
<td>100,0</td>
<td>26 071 721</td>
<td>100,0</td>
<td>50 586 757</td>
<td>100,0</td>
</tr>
</tbody>
</table>

Source: Statistics South Africa, mid-year population estimates, South Africa 2011

According to these estimates, Africans are in the majority (40.2 million; 79.5% of the total population) followed by whites (4.5 million; 9.0%) [Statistics South Africa, 2011:4]. Female South Africans outnumber male South Africans at 51% (26.0 million).

Accordingly, mid-year population estimates by province in 2011 demonstrate the shift in population. According to Stats SA (2011:3), for the period of 2006 – 2011, it was estimated that approximately 215 000 people would migrate from the Eastern Cape, while Limpopo was estimated to experience a net out-migration of just over 140 000 people. During the same period, Gauteng and Western Cape were estimated to experience a net inflow of migrants of approximately 367 100 and 95 600 respectively. Table 1.2 shows that with respect to the number of people living in each province, Gauteng is leading (11 328 203 700) and KwaZulu-Natal is following closely (10 819 130).
Table 1. 2 Mid-year population estimates by province, 2011

<table>
<thead>
<tr>
<th>Province</th>
<th>Population estimate</th>
<th>Percentage share of the total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>6 829 958</td>
<td>13,50</td>
</tr>
<tr>
<td>Free State</td>
<td>2 759 644</td>
<td>5,46</td>
</tr>
<tr>
<td>Gauteng</td>
<td>11 328 203</td>
<td>22,39</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>10 819 130</td>
<td>21,39</td>
</tr>
<tr>
<td>Limpopo</td>
<td>5 554 657</td>
<td>10,98</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>3 657 181</td>
<td>7,23</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>1 096 731</td>
<td>2,17</td>
</tr>
<tr>
<td>North West</td>
<td>3 253 390</td>
<td>6,43</td>
</tr>
<tr>
<td>Western Cape</td>
<td>5 287 863</td>
<td>10,45</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50 586 757</strong></td>
<td><strong>100,0</strong></td>
</tr>
</tbody>
</table>

**Source:** Statistics South Africa, mid-year estimates by province, South Africa 2011

The constitution of South Africa equalizes women and men as citizens of the country. In reality, women are often and have always been regarded and considered inferior to men, especially when looking at the duties of women in developing contexts such as household chores, child rearing, and so on - activities women are “stereotypically seen and expected to do” (UNIDO 2003).

According to the United Nations Economic Commission for Africa (UNECA) (2007:12), in education, training and skills development, there is still a significant enrolment gap between girls and boys, and low completion rates and limited access to secondary, tertiary and vocational education in the case of women and girls. In Africa, women have always had to battle cultural bias, stereotypes and superstitions. The latter are practiced in different ways by different ethnic groups, and adversely impact on women’s
development in the socio-cultural sphere of life. For example, in some ethnic groups, women are not allowed to till the soil due to the superstition that the land will not yield crops if they touch the plough, in stark contrast to other ethnic groups where women play major roles in food production (UNIDO 2003). In some communities women are allowed to inherit while in others, widows, their children, land and livestock are all inherited by the brother-in-law. Due to these and other discriminatory beliefs and practices, women find it extremely difficult to break away from traditions and act independently.

Therefore the land and property rights of women and inheritance practices and norms need to be addressed as these are a major impediment to women's development in enterprise (UNECA 2007:12). Likewise, emerging issues in food security caused by rising food prices, climate change, migration, and water and energy shortages are all new trends that affect women in many ways that are different to men (UNECA 2007:12). Generally, women all over the world experience hardships, but women entrepreneurs in the informal sector are double victims as the stereotypes surrounding these activities (jobs that are stereotypically male, women's inferiority, etc.) stagnate their economic growth.

An entrepreneur is an individual who accepts financial risks and undertakes new financial ventures, and could be any person starting a new project or trying a new opportunity (Wise Geek 2003). Hisrich, Michael and Shepherd (2005:1) provide a definition of an entrepreneur from the perspectives of different disciplines, i.e.:

To an economist, it is one who brings resources, labor, materials and other assets into combinations that make their value greater than before, and introduces changes, innovations and new order. To a psychologist such a person is typically driven by certain forces, the need to obtain or attain something, to experiment, to accomplish, or perhaps to escape the authority of others.

To one businessman, s/he appears as a threat, an aggressive competitor, whereas to another businessman the same entrepreneur may be an ally, a source of supply, a customer, or someone who creates wealth for others, as well
as finds better ways to utilize resources, reduce waste and produce jobs others are glad to get.

According to the Small Enterprise Development Agency (2009), an entrepreneur is a person who takes an idea and an opportunity and turns them into a profitable enterprise by harnessing the necessary skills and resources to manage the risks involved.

Thus if an entrepreneur needs to start from nothing and create something, be in control of business actions, and have access to the necessary skills and resources, then an entrepreneur who is a woman in the informal sector faces twice the challenges.

Entrepreneurs are the main actors in the informal sector and make up a substantial percentage of the South African population. However, employment in these enterprises is generally very low and irregular. In South Africa, it has been very difficult to identify who works in the informal sector in order to generate statistics, and the size of the informal sector has been underestimated (Muller 2002:2). There are a number of reasons for this. Those working illegally or those working very few hours a week may provide inaccurate information about their work or may be wrongly coded as unemployed, and those who are involved in casual or temporary work or hold more than one job simultaneously may not be coded correctly (Muller 2002:3).

In 1993, the Resolution on Informal Sector Statistics was adopted at the 15th International Conference of Labor Statisticians (15th ICLS), where it was recommended that informal sector enterprises be identified in terms of one or more of the following criteria (Hussmanns and Mehran 1999:11):

(i) Non-registration of the enterprise in terms of registration under national legislation, e.g. factories or commercial acts, tax or social security laws, and professional groups’ regulatory acts.

(ii) Non-registration of employees, i.e. the absence of an employee or apprenticeship contract that commits the employer to pay relevant taxes and social security contributions on behalf of the employee or which makes the employment relationship subject to standard labor legislation.
(iii) Small size of the enterprise in terms of the number of people employed in the enterprise, preferably those employed on a continuous basis.

In the current post industrial era where there are endless advancements in technology and where businesses that lift the economic sector are run through information and knowledge and relevant skills and technological devices, it is unlikely to see the informal sector, in its current state of poor infrastructure, prospering and being the solution to job losses in the downturn and economic decline worldwide.

1.4 Motivation and statement of the problem
The information and knowledge society of today is characterized by the developments and opportunities that ICTs present. However, in the midst of this advanced developmental stage in mankind’s history, there is still an informal sector which operates without technologies and outside regulatory structures, policies and procedures. Women entrepreneurs in the informal sector conduct the activities of their businesses with little or no regard for technology, which limits their growth. While global business interaction and exchange could increase their visibility, connectivity and advancement, the question is whether or not these women are reaping these benefits.

Substantial research has been conducted on the information and knowledge society (ALA 2011; Holmner 2008; Britz et al. 2006; WSIS 2003; Abid 2002; Castells & Himanen 2002; Webster 2002; Bell 1976, 1974) as well as on the informal sector (Augustin 2009; Amaral & Quintin 2006; Ikoja-Odongo 2002; Bangasser 2000; Chen 2001). Many of the investigations into the information and knowledge society in existing literature address the term’s definitions, origin and development, efforts of progress, and indicators and criteria, among others. For example, an article by Britz et al. (2006) entitled, “Africa as a knowledge society: a reality check”, stood as the basis clearly articulating the initiatives and efforts currently being made to ensure that Africa is included within the information and knowledge society. These authors suggest the fundamental four pillars of a knowledge society by which one can check if any given country has indications of progressing to being a knowledge society.
However, their article does not address the aspects of women entrepreneurs in the informal sector as possible beneficiaries in the information and knowledge society.

Research by Holmner (2008), “A critical analysis of information and knowledge societies with special reference to interaction between local and global knowledge systems”, clearly provides the criteria and indicators of the information and knowledge society and demonstrates how easy it is for developed countries to become information and knowledge societies because they already possess some of the prerequisite criteria, such as efficient and effective ICT infrastructure. In this study, the author highlights the challenges faced by developing countries that are still in the grip of the digital divide while aiming to become information and knowledge societies because they do not comply with most of the criteria. Holmner’s study further lists additional social and educational barriers. Although Holmner’s study indicates that most women, especially those in rural areas and informal sector women entrepreneurs, are sufferers of such social-ills (Jiyane & Onyancha 2010), it does not specifically address any issue on informal sector women entrepreneurs in relation to the information and knowledge society.

On the other hand, Kwake’s (2007) study, “The role of ICTs in harnessing information for women in rural development: case studies of South Africa and Kenya”, addresses women in the rural areas in both these countries. However, the study focuses on women in general, and not necessarily those in the informal sector.

Ikoja-Odongo & Ocholla (2004) conducted a study that focused on identifying the information needs and uses of the informal sector in Uganda, but informal sector women entrepreneurs are not singled-out.

This study therefore fills an important gap in the field of user studies and the use of information for development, which are some of the core subjects in Information Science as a discipline.
1.5 **Aim of the study**

The main aim of the study was to examine information and knowledge society and its impact on poverty alleviation and the economic empowerment of informal sector women entrepreneurs (ISWEs) in South Africa.

1.6 **Specific objectives of the study**

The specific objectives of the study were to:

1. Determine the role of the information and knowledge society in the empowerment of informal sector women entrepreneurs in South Africa
2. Determine women entrepreneurs’ information needs in the informal sector and explain their information behavior
3. Identify and document the types, sources and channels of information used by informal sector women entrepreneurs in the informal sector
4. Explore factors affecting information flow in the informal sector and its exploitation by informal sector women entrepreneurs
5. Determine the extent to which South Africa is an information and knowledge society
6. Develop a model for the effective utilization of the benefits of the information and knowledge society by women entrepreneurs in the informal sector

1.7 **Research questions**

These questions are a refinement of the broader study’s concern, i.e. whether informal sector women entrepreneurs reap the benefits of the information and knowledge society. The questions were also derived from the objectives of the study.

- What role can the information and knowledge society play in empowering women entrepreneurs in the informal sector in South Africa?
- What is the type and scope of the business informal sector women are involved in?
- What are the informal sector women entrepreneurs’ information needs?
- How are their information needs met?
- What sources and channels do these women use to get information?
- What factors affect information flow and its exploitation by women entrepreneurs in the informal sector?
- What impact does information have on the growth and development of women entrepreneurs in the informal sector in South Africa?
- What problems do informal sector women entrepreneurs encounter when accessing information?
- What can be done to ensure that women in the informal sector benefit from the opportunities that the information and knowledge society presents?

1.8 Scope and limitations of the study

According to Mugenda and Mugenda (1999:41), the scope of the study refers to the area, extent or latitude that a study covers, while the limitations of the study address the restrictions that are imposed on the research. These limitations can be internal (i.e., related to the person conducting the study) or external (i.e., imposed by the environment in which the study is being conducted). Kwake (2007:20) observes that such restrictions can also arise from the type of study being conducted.

The study was limited with respect to the following.

1.8.1 Theoretical scope

User studies is a core research area in many schools that teach Library and Information Science, and informal sector women entrepreneurs as information users fall within this category.

1.8.2 Focus

Given that the technology era is upon us, the study focused on the role of the information and knowledge society on poverty alleviation among informal sector women entrepreneurs in South Africa with the aim of articulating the benefits of the information and knowledge society and finding out if the women are enjoying these benefits.
This study limited its scope to cover only those women working in the informal sector in KwaZulu-Natal aged between 15 - 70 years.

1.8.3 Geographical area
Due to increasing unemployment numbers in South Africa, the informal sector has witnessed a significant expansion in numbers as well, thus adding to its scope and diversity. The study only covered the women entrepreneurs working in the informal sector in the province of KwaZulu-Natal, and focused only on one local municipality in the District of UMkhanyakude Municipality.

1.8.4 Methodological scope
Although the study employed mixed methods, it was more qualitative in approach because it sought to gain an understanding of the phenomena, behavior and plight of women entrepreneurs in the informal sector women entrepreneurs.

1.9 Significance of the study
This study will add to the body of knowledge on the role of the information and knowledge society, poverty alleviation, economic empowerment, rural development studies, and the understanding of women entrepreneurs in the informal sector. This would sensitize government policy makers to the needs of informal sector entrepreneurs and how they can provide them with relevant information systems and services.

As mentioned earlier, there are very little known studies in South Africa on women entrepreneurs in the informal sector (e.g. Ikoja-Odongo 2002; Ikoja-Odongo and Ocholla 2004). There is still some debate about the size of the informal sector in the country. With respect to institutions, the study hopes to provide useful research output that can be used widely within tertiary institutions in the country. It also hopes to add to building research and teaching capacities in all institutions that teach user studies, which is one of the core teaching areas in both the University of South Africa, Department of Information Science, and also in the University of Zululand, Department of Library and Information Studies. The study also adds to relevant information materials that can be offered to informal sector women entrepreneurs.
1.10 Dissemination of findings

Libraries are useful and well-resourced institutions for information access and dissemination because they house different information materials in various formats. Libraries also provide space not only for reading and studying, but also for workshops, seminars and meetings. The findings of this study will be disseminated as follows:

- Through a printed form of the thesis stored in the Uzulu collection section of the library in the University of Zululand
- Publication of this thesis online
- Presentation of the findings at conferences, and in seminars and workshops

Some of the findings from the study have already been disseminated through conferences and in peer-reviewed journals as follows:


### 1.11 Definitions of concepts

**Information society**

A society that is organized around knowledge for social control and directing innovation and change (Bell 1974:20)

**Information and knowledge society**

A society in which people interact with technology as a fundamental part of life and social organization to exchange information on a global scale (WSIS 2003)

**Digital divide**

The difference in number of telephone, internet users or computers per head between rich and poor countries (Mutula 2003:591)
Informal sector
This is a sector of economy that employs a handful of workers who earn a low income, utilize rudimentary or subsistence technology and operate largely outside the boundaries of government laws and regulations governing business in general, such as listed standards of quality, minimum pay and safety (International Labour Organization (ILO) 1976).

Information economy

1.12 Organization of the report
Chapter One provides the introduction and conceptual setting; contextual setting; motivation and statement of the problem; aim of the study; objectives of the study; scope and limitations of the study; significance of the study; and the organization of the study.

Chapter Two presents literature on the information society. It provides a definition of the term ‘information and knowledge society’ and the evolution of the concept. The criteria and characteristics of the information and knowledge society are discussed. Advantages and disadvantages of the information and knowledge society are also discussed in this chapter.

Chapter Three is a review of literature related to informal sector entrepreneurs in South Africa. First, the chapter defines the term ‘informal sector’. Then it looks at the characteristics of a sector and the nature and types of businesses in the sector. It also highlights the sources of information available to this sector, and the information flow and problems encountered when accessing information that is necessary for small-scale businesses to flourish. It also looks at the influence of an informal sector on the lives of people.
Chapter Four presents the theoretical framework of the study, which is an outline of the models and theories that were used as a basis for the study.

Chapter Five presents the research design and methodology of the study. A detailed explanation is provided about the design of the study, the area covered in the study, the target population, sampling and sample size, the research methods and research tools, and the procedure used to carry out the study.

Chapter Six presents the data that was collected through interviews and focus group discussions.

Chapter Seven presents a discussion of the research findings presented in the previous chapter. In this chapter, a holistic view of the study is provided, and problems and insights are highlighted.

Chapter Eight summarizes the research, i.e. the synopsis of the findings in relation to the reviewed literature as well as other insights, and provides recommendations and proposals for further research as well as the overall conclusion of the study.

1.13 Summary
This chapter presented a brief conceptual and contextual background of the study and outlined the aim, objectives, research questions, motivation, significance, and scope and limitations of the study. In this chapter, the importance of the study has been articulated, and thus a foundation of the whole thesis has been laid.

The next chapter provides a review of literature related to the information and knowledge society. It defines the information and knowledge society and discusses its evolution, criteria, advantages and disadvantages.

The chapter also assesses South Africa against the criteria to see how far or close it is to achieving information and knowledge society status.
CHAPTER TWO: INFORMATION AND KNOWLEDGE SOCIETY

2.1 Introduction
The term ‘information and knowledge society’ is defined in this chapter, and its criteria and indicators are discussed at length. The chapter also discusses the opportunities and challenges of becoming an information and knowledge society and provides us with a closer look at the effects or impact of the information and knowledge society on various aspects of life. The chapter concludes by indicating whether South Africa meets the criteria and indicators of an information and knowledge society.

2.2 The information and knowledge society
According to Britz et al. (2006:27), in an information and knowledge society, knowledge has become the most important production factor. The authors explain that in this society, there is a culture of knowledge production that is underpinned by a higher level of education with a focus not only on the use of modern ICTs, but also on content.

An information society is a society that is organized around knowledge for social control and directing innovation and change (Bell 1974: 20). In 1988, Martin (1988:42) defined an information society as “a society in which the quality of life, as well as the prospects for social change and economic development, depend increasingly on information and its exploitation”. The author stresses that in such a society, living standards, patterns of work and leisure, the education system and the market place, are all markedly influenced by advances in information and knowledge. According to Abid (2002:1), the importance of information and knowledge lies not only in the principal forces of social transformation, but also in the promise that many of the problems confronting human societies could be significantly alleviated if only the requisite information and expertise were systematically employed and shared.

Information and knowledge also have a central role to play in sustainable development, in particular in contributing to poverty alleviation and income generation, the
empowerment and consolidation of democracy and sustainable health, and the protection of the environment (Khan 2003:20).

Although Dordick and Wang (1993:8) are of the opinion that the information society was already gleaned in the early writings of observers in Japan, who often referred to a ‘new world’ in which material values were to be replaced by more spiritual values, Martin (1995:2) maintains that the concept of the information society emerged in the 1970s and was rapidly adopted in the 80s.

In 1974, Daniel Bell discussed the drop in the manufacturing and agricultural industries and the rise in services with information as the main component in his book, “The coming of post-industrial society”, writing that the post-industrial society was undergoing a transformation and entering the age of the information society (Bell 1974; Webster 1995). Edwin Parker and Mark Porat from Stanford University also confirmed the onset of the information society in 1975 and 1977. This evolution was also confirmed by Toffler (1980), who talks about the ‘third wave’. The author likens the three types of societies to waves, where each wave pushes the older societies and cultures aside. Toffler explains that the first wave is the society after the agrarian revolution that replaced the first hunter-gather cultures, whereas the second wave is the society during the Industrial Revolution, from the late 17th century through to the mid-20th century. According to Toffler, this society was based on mass production, mass distribution, mass consumption, mass education, mass media, mass recreation, and mass entertainment. The third and the last wave, as explained by Toffler (1980), is the post-industrial society which he calls the super-industrial society. Other scholars refer to it as the information age, electronic era, global village, technetronic age, scientific-technological revolution, diversity, knowledge-based production, and the acceleration of change.

Some authors base their definition of the information society on the operational aspect of the concept. For example, Shillinglaw’s (1988:12) definition of the information society is a society in which the majority of the workforce is engaged, not in the production of
manufactured goods, but in the processing of information. Likewise Toffler and Toffler (1995) define it as a society where the new premise is the production and creation of knowledge, unlike the tangible resources of the industrial society. In 1995, the Finland Council of State defined the information society as a society that makes extensive use of information networks and information technology (IT), produces large quantities of information and communication products and services, and has a diversified content industry (McColgan 1996).

In some literature (Martin 1995; Nassimbeni 1998; Webster 2002; Lor and Britz 2007), the term ‘information society’ has attracted some criticism due to its ambiguous use in literature. Nassimbeni (1998:154) points out that very few operational definitions of the concept exist, which makes it very difficult to decide whether a country or community has taken strides towards becoming an information society or not.

According to Lor and Britz (2007:392), many authors use the concept ‘information society’ interchangeably with the newer concept of the knowledge society. The opinions given by Nassimbeni (1998), Lor and Britz (2007) and other authors such as Martin (1995) and Webster (2002) are examples of indications that the information society has evolved overtime.

Despite all these arguments, one has to also look at the definition of the concept as presented at the World Summit on the Information Society (WSIS) in Geneva in 2003 to establish if the concept's definition has evolved overtime. According to WSIS (2003), an information society is the following:

- A society in which people interact with technology as an important part of life and social organization to exchange information on a global scale
- A society influenced by the changes taking place in the ICT sector
- The term refers to the new socio-economic and technological paradigm likely to occur as a result of an all-encompassing process of change that is currently taking place
A society in which advanced technology is used to improve the living and working conditions of all citizens

The ‘information society’ is a term that has been coined to describe a modern population that is conversant with and reliant upon information and communication technology

A society where the creation and exchange of information is the predominant social and economic activity

The acquisition, storage, processing, transmission, distribution and use of information and knowledge (WSIS 2003)

The knowledge society is a more advanced concept than the information society. At the beginning of the 21st century, some scholars (Drucker 1998; Evers 2000; Smith 2002; Servaes et al. 2003; WSIS 2003) were already suggesting that this term is replacing the term ‘information society’, but the way that it is used is ambiguous.

According to Lor and Britz (2007:112), a knowledge society is the following:

- A society that operates within the paradigm of the economy of information
- It values human capital as the primary input for production and innovation
- The knowledge society is well connected via modern ICTs to the dematerialized economy and has access to relevant and usable information
- Highly sophisticated physical infrastructure underpins this economic model and allows the delivery of material objects that are accessed and manipulated in the dematerialized world of modern ICTs

This definition suggests that there is not much of a difference between these two terms. According to Lor and Britz (2007:113), the difference between an information society and a knowledge society is only a ‘shift in emphasis’. Holmner (2008:60) believes that the knowledge society can be regarded as a similar concept to the information society.
However according to the author, even though the knowledge society is more advanced than the traditional view of the information society, the two concepts should not be used in isolation. Rather they should function as a conjoined concept, i.e. the information and knowledge society. Therefore, Holmner’s (2008:62) view of the information and knowledge society is defined as follows:

- A society that is reliant upon a sophisticated physical infrastructure for the improvement of everyday living and working conditions
- A society that values the importance of information as a key to economic wealth and prosperity and where there is an increase in information-related activities as well as an enhancement of human intellectual capability
- The information and knowledge society ensures the freedom of information through the use of ICTs
- In such a society, modern technologies are utilized to achieve the interaction and exchange of information between the people’s local knowledge system (tacit knowledge) and global knowledge (explicit knowledge) to create usable, relevant, contextualized content and knowledge
- An information and knowledge society relies on elaborate physical transportation, consisting of roads, trucks, warehouses, railways, airports, harbors, and similar items
- Sophisticated information and communication infrastructure, consisting of telecommunication cables, computers, servers and hosts and internet service providers, is vital to facilitate the exchange and interaction of data, information and knowledge from the community’s local knowledge systems and global knowledge systems
- Within an information and knowledge society, information is regarded as having economic value and can be utilized to promote human development in areas
such as health, education, social services and commerce. This would lead to an increase in human intellectual capability and can lead to the improvement of daily working and living conditions.

2.3 Criteria of the information and knowledge society
To reiterate, Nassimbeni (1998) notes that very few operational definitions of the concept ‘information and knowledge society’ exist, making it difficult to decide whether or not a country or community has moved forward in its quest to achieve this status. According to Holmner (2008:69), a discussion of the criteria is crucial because if a developing country or community does not meet specific criteria, then this failure becomes a barrier to the country’s or community’s progress towards becoming an information and knowledge society.

With this in mind, authors such as Martin (1995), Webster (2002) and Britz et al. (2006) have suggested certain criteria that have to be met in order for a country or community to be considered an information and knowledge society. According to Holmner (2008:69) the criteria can be applied to countries, and if a country meets the majority of these criteria, it can be deduced that the country has achieved the status of an information and knowledge society. However, if most or all of the criteria are not met by a country, as is often the case with developing countries, it can be concluded that the country is not on the path to becoming an information and knowledge society and can accordingly not benefit from the advantages of being included within this society.

In order to see how befitting the criteria are to an ideal information and knowledge society, the following definition (also in 2.1) has been adopted by Holmner (2008:69) and will be adopted in this thesis as well: a society that is reliant upon a sophisticated physical and ICT infrastructure for the improvement of everyday living and working conditions. This society values the importance of information as the key to economic wealth and prosperity, leading to an increase in information-related activities as well as an enhancement of intellectual capability. Information and knowledge ensures the freedom of information through the use of ICTs.
In such a society, modern ICTs are utilized to achieve the interaction and exchange of information between the communities’ local knowledge systems and global knowledge systems to create usable, relevant and contextualized content and knowledge. This interaction and exchange of information and knowledge will in turn stimulate respect for other people’s beliefs, values and cultures.

From this definition, the following criteria can be deduced (Holmner 2008:70):

- Economic criterion;
- Spatial and technological criteria;
- Political criterion;
- Social criterion;
- Cultural criterion;
- Physical infrastructure criterion; and
- Knowledge criterion.

### 2.3.1 Economic criterion

For a country to be stable economically, it needs a strong and high gross domestic product (GDP) with low inflation in order for its citizens to afford basic amenities and enjoy a better quality of life. According to Martin (1995), information in the information and knowledge society is the key to economic prosperity, and is viewed as a resource, service, commodity, and a source of added value and employment. Britz et al. (2006:27) explain that knowledge is the primary input in economic activities within the information and knowledge society, resulting in a new economy of information. This is an economy where modern ICTs have made it possible for information to be unbundled from its original physical containment, allowing information to travel ‘by itself’ and thus making it possible for more people to access information and to be exposed to more information (Britz et al. 2006:27).
Because information is regarded as having economic value in the information and knowledge society, it can be used to promote human development in areas of health, education, social services and commerce. In this way, it can be used to stabilize the economy and lower the unemployment rate because the majority of the population will use information to their benefit and for upliftment. This would support the aim of the Millennium Development Goal (MDG) of halving poverty by 2015 and the goal of the WSIS of eradicating extreme poverty and hunger. This can only be achieved with an economy that is strong and stable within an information and knowledge society. Therefore, the application of ICTs in the information and knowledge society can be used for information exchange and sharing which can lead to the improvement of daily working and living conditions.

2.3.2 Spatial and technological criteria

The technological criterion is one of the four criteria identified by Britz et al. (2006) as pillars of a knowledge society. Here, ICTs and connectivity are vital. Participation in the information and knowledge society is based on connectivity to modern information and communication technologies (Holmner 2008:73). However, Holmner laments that developing countries and communities do not have adequate technological infrastructure. Nevertheless, physical location is no longer a barrier to access to information because of the use of remote access and networks. Therefore information can be accessed at any time (Goddard 1991) as long as the spatial criterion, described by Webster (2002) as the changing meaning of space, place, time and distance, is present. The presence of remote networks, for example, provides the infrastructure that enables information to be distributed across space and time (Holmner 2008:73).

Sound technological infrastructure is vital for ICTs and connectivity. According to Van Audenhove et al. (1999), technological infrastructure refers to the implementation of (among other things) integrated broadband networks which remove the barriers of time and space. However, these authors notice with disappointment that in many parts of the developing world, these networks are not yet in place. The spatial criterion, which
focuses on the development of different types of networks and their effects on the organization of time and space, is likewise still in progress.

2.3.3 Political criterion

In 2000, the South African (SA) government passed an Act that promotes access to information, called the Promotion to Access to Information Act (PAIA) of 2000 (Government Gazette no 20852 2000:2). This perhaps represents a realization by the government that access to information is important. In an information and knowledge society, the government ensures that citizens are not denied access to information, but rather enjoy timeous access to government information in order to participate meaningfully in debates and government proposals or green papers and assist in upholding the freedom of expression. A number of government activities can also be performed through ICTs and more and relevant government information could be accessed by needy citizens when systems to access information are in place. Kwake (2007) likewise observes the benefits of ICTs as enablers of the better delivery of government public services in areas such as health and education.

The announcement of voting results has improved with the application of technology. This has led to results being immediately released at the completion of the voting exercise. This accomplishment is attributed to ICTs connecting the various voting stations. Likewise ICTs and R&D strategies enable increased public and private participation (Maredi 2012:6). For example; this R&D strategy supports e-governance, modernized government and e-participation in the political arena and provides a mechanism to forecast technology developments in targeted areas, market trends and potentials and also investments (Maredi 2012:6). Such R&D strategies enable citizens to respond to matters in government publications, announcements and call for participation with Bills and other government matters and also participate in their economic business objectives.

Although Webster (1999) criticizes the idea of ICTs ‘saving’ and reviving democracy in the information and knowledge society, and further rejecting the notion that ICTs are a
primary solution simply because they are able to improve the knowledge of people, ICTs cannot be criticized for being sophisticated, technological infrastructural tools that enable access to information and promote the exchange and sharing of information and knowledge. This is so especially, in a democratic environment, where the facilitation and communication and the exchange of information with governments as well is encouraged.

2.3.4 Social criterion

According to Martin (1995), information in the information and knowledge society enhances the quality of life. However, Holmner (2008:79) observes that access to information alone is not enough, and being connected, even with the best ICT infrastructure, does not necessarily mean that people are informed. Subsequently Britz et al. (2006:31-33) indicate that the information should be affordable, available, timely, relevant, readily assimilated, and in a language that the user can understand.

Decision-making and action are a measure of the usability of information, meaning that information has to be both relevant and timely (Holmner 2008:79). Holmner (2008:79) also suggests that the pricing of the internet connection used to access information is a measure of the affordability of information. The author reiterates that information should be viewed as a factor that enhances the quality of life within the information and knowledge society. This can be achieved by developing human intellectual capital and improving health, education, social services and commercial activities through technology and the dissemination of high quality information along information superhighways (Holmner 2008:74). Regarding education, ICT R&D strategies enhance e-education which is supported by mobile and wireless devices (Maredi 2012:6). On the subject of health matters, e-health could be possible with these ICT R&D strategies, where health information will be delivered quicker and easier with the application of ICTs in different aspects of health services.
2.3.5 Cultural criterion

Holmner (2008:80) admits that of all the criteria mentioned already, the criteria that entail changes in cultural values and morals are the most difficult to identify. In Nassimbeni’s (1998:154) definition of the information and knowledge society, he emphasizes that the information and knowledge society serves the cultural enrichment of all citizens through the diversity of content that reflects linguistic and cultural diversity, and this is essentially the cultural criterion.

The cultural treasures, diversity and heritage of a country can be used to increase the international exposure of the country through advertising and marketing, which would in turn increase the tourism to that country (Holmner 2008:81). The use of ICTs could support this because the exchange and sharing of information and knowledge pertaining to a country’s culture, beliefs, norms, values and religions would take place easily.

Singh (2005:680) also notes that technology has an impact on culture in the sense that it creates new means of cultural expression and exchange, and offers opportunities for knowing, learning and disseminating the culture on a global scale.

2.3.6 Physical infrastructure criterion

Proper roads, airlines, railway lines and other related infrastructure are part of physical infrastructure, and their presence promotes mobility and the delivery of people, goods and services from one place to another in a community or country, or even outside the country. According to Britz et al. (2006:27), many policy-makers forget that the information and knowledge society is still underpinned by reliable and highly sophisticated infrastructure. As a result, the infrastructure aspect is overlooked and its importance is underemphasized. [Therefore] accessible airports, roads, rail, harbors as well as modes of transport needed, that can utilize this infrastructure and be used for transportation (Holmner 2008:82) is compromised.

The author opines that although the physical infrastructure criterion does not have a direct impact on the interaction and exchange of information and knowledge, this
criterion is still important because it has a direct bearing on some of the other criteria in the information and knowledge society, and therefore on information and knowledge exchange and sharing. To emphasize the importance of physical infrastructure, Holmner (2008:82) gives the example of how physical infrastructure can influence the economic criterion of the information and knowledge society because the import and export of goods that are reliant upon this infrastructure will have some bearing on the GDP of the country as well as the quality of life in the country. Likewise poor roads and transport would affect the maintenance or fixing of ICTs in different locations, and this would affect the technological criterion.

2.3.7 Knowledge criterion
Access to information is crucial for development. According to Khan (2003:20), access to information highways and to content such as development data and information is still a major problem in many countries. Khan (2003:20) is, however, of the opinion that if all people, including disadvantaged and marginalized groups such as people with disabilities, indigenous people or people living in extreme poverty, and also women and the youth, could access information and equally benefit from ICTs, they would be able to network, share information, create knowledge resources, and develop skills that could help them live and work in the new digital environment.

Evidently there is a crucial relationship between information and development. However, Mncube (2003:6) laments that the failure to recognize this vital role of information within the development arena has negative consequences for development, most notably in developing communities.

It is therefore important for information and knowledge interaction to take place in order for developing countries and communities to: share information to stimulate mutual respect and understanding, access information that can be used as a key to economic wealth and prosperity, increase information related activities, and increase human capabilities (Holmner 2008:83).
2.4 Indicators of the information and knowledge society

To determine whether a country meets the status of an information and knowledge society, the criteria require indicators that should be used for the assessment. If a country does not meet any of the criteria, it cannot be called an information and knowledge society, but if it meets some of the criteria, it can be regarded as in the process of transforming into an information and knowledge society. When a country meets most of the criteria, it is an information and knowledge society.

The following indicators will be closely compared to the criteria as discussed in section 2.2 for easy assessment and drawing conclusions.

2.4.1 Indicators of the economic criterion

The first indicator of the economic criterion is work opportunities that lead to better income opportunities. Work opportunities strengthen the economy of a country. The measure of the work opportunity indicator is the unemployment rate of a country. Through ICTs, people can access the internet and browse jobs that are available in their own country and in other countries. They are also able to share and exchange this information with each other, thus increasing the number of people who become aware of these employment opportunities. Mobile phones and websites are examples of communication devices that can be used to advertise employment opportunities. This contributes towards lowering the unemployment rate in a country.

The second indicator of the economic criterion is the standard of living of the people. This indicator is measured by income, inequality, poverty rate and real income per person. According to Spangenberg (2005), income inequality and distribution is one of the most important indicators of a sustainable information and knowledge society.

The previous indicator ties in to this one as people who are employed or have opportunities for better employment improve their standard of living and are no longer dependent on government grants. This improves the economy of that country.
2.4.2 Indicators of the spatial and technological criteria

The first indicator of the spatial and technological criteria is access to and the use of personal computers. In an information and knowledge society, people possess computers and are able to use them in their homes or at work. This indicator also relates to the economic criterion, where in order for people to afford a computer, for example, they should be working or have a job that will raise them money to buy a computer. It also relates to the social criterion in the sense that children should be in good schools that have infrastructure and computers for them to access and use for their school assignments.

The second indicator of the spatial and technological criteria is closely tied to the first but is more focused on connection. The access and use of a computer is more fruitful when the computers are connected to a network that offers internet access. The internet and computers require good infrastructure and sound technology. Connection to the internet via computers allows people to share and disseminate information much quicker and easier. This indicator therefore looks at the speed and effectiveness of sharing and access to information.

Another important factor is that of telecommunications. There should be strong telecommunications in terms of fixed lines and mobile networks to support penetration. In this way, information and knowledge interaction among people would improve.

2.4.3 Indicators of the political criterion

An important indicator of the political criterion is a high level of democracy. With democracy, people enjoy the right to freedom of expression, intellectual property rights, and the freedom to access information. A country in which people are not afraid to voice their thoughts and express themselves, has achieved a high level of democracy.

In such a democracy, people know that they have the right to access information. This promotes information and knowledge sharing, which improves the way they perceive and even understand things.
2.4.4 Indicators of the social criterion

The first indicator of the social criterion is the health of the citizenry. This indicator looks at the mortality rate of citizens. It is important to assess the life span and mortality rate of citizens because this provides an indication of the state of the country. This indicator also looks at the quality of life. For citizens to have a low mortality rate, there should be a number of medical practitioners who take care of the health of citizenry.

The second indicator of the social criterion is education opportunities. This indicator is measured by looking at literacy levels and the amount of years that education is compulsory in a country. If a country compels children to remain in school for a number of years, more people will receive education, and this will ultimately improve the literacy levels of that country.

A third indicator of the social criterion is the development of modern public services, for example initiatives where government information is available and can be accessed online; health services that are supported by technologies, such as health information that is available online; and initiatives in education such as distance learning.

In fully fledged information and knowledge societies, electronic voting systems allow people to vote online, and other initiatives improve the level of people’s understanding of the government and its systems. In the health system, health information can be shared and disseminated speedily because it is available online, and people have access to such information because they have computers and can access the internet on their own.

Regarding education, ICTs support electronic learning where learning materials are uploaded online or delivered online. This indicator also relates to the spatial and technological criteria because the gap between space and time is narrowed.

The fourth indicator of the social criterion is usable content. This indicator has six sub-indicators which are adopted from Britz et al. (2006), namely that in the information and
knowledge society, information should be available, affordable, timely, relevant, readily assimilated, and in a language the user can understand.

The availability of information is also closely related to the spatial and technological criteria where ICTs support access and the speedy sharing and interaction of information and knowledge.

The affordability of information relates to the economic criterion. It depends on whether people can afford ICTs to access and use the information they need. This in turn requires a look at the economical status of a person, a family or a community, and whether they are employed or not. If not, they cannot afford to purchase computers and stay connected to networks. Thus affordability looks at the pricing of information and the pricing of ICTs that promote access to information.

Delivering relevant information looks at the timeframe and whether information is delivered in a language that is understood by the user. This relates to the spatial and technological criteria in that it is very important for information to be relevant and accessible anywhere, even in remote areas.

2.4.5 Indicators of the cultural criterion
The indicators of the cultural criterion include linguistic diversity, cultural heritage, and the preservation of cultural legacy. According to Nassimbeni (1998), the information and knowledge society supports, serves and enriches culture by accepting linguistic, content and cultural diversity.

The information and knowledge society promotes linguistic diversity where both local and global languages are promoted for the sharing of information and knowledge. People in the information and knowledge society respect each other’s diverse heritage and promote and preserve their cultural legacy and heritage. They also set aside a day or month to celebrate their different cultures because they enjoy freedom of expression and do not have anything to fear. This ties into the political criterion. The government in an information and knowledge society recognizes the role of indigenous people in the
economy of the country, especially through tourism. Therefore, these indicators also relate to the economic criterion.

2.4.6 Indicators of the physical infrastructure criterion
The indicators of the physical infrastructure criterion look at the transport system of the country, the amount of motor vehicles, the availability of railway lines, air transport, and the conditions of the roads across the country. The road supports the flow of transportation of people, goods and services within and around the country, and only strong and sound infrastructure makes this possible. The amount of motor vehicles also means that people can afford to buy them, an indicator of the economic criterion.

The proliferation of railway lines and airports ensures the timely mobility of people, goods and services both within and outside the country, and thus promotes information and knowledge sharing.

This also boosts the economy of the country because it supports tourism. Adequate transport, be it road, railway or air, also makes transport cheaper in the country, which means that virtually everyone can afford to travel.

2.4.7 Indicators of the knowledge criterion
The indicators of the knowledge criterion include information and computer literacy, sophisticated ICT infrastructure, and the creation of local content and local e-content.

The first indicator, information and computer literacy, addresses the issue of the amount of people in the country who are equipped with the skills to search for information and use computers for information access. This requires a certain literacy level. In the information and knowledge society, people are able to surf for information and choose from the vast options available online.

The second indicator of the knowledge criterion, sophisticated infrastructure addresses the issue of the flow of information to everyone everywhere due to the availability of ICTs. Sophisticated infrastructure enables people to share and communicate local and global information. This indicator overlaps with the spatial and technological criteria.
The creation of local content is the third indicator of the knowledge criterion. According to WSIS (2003), people are encouraged to create and share their local content and e-content through ICTs and in their own languages to promote inclusion in the information and knowledge society.

Therefore in the information and knowledge society, information and computer literacy is very crucial to the access, sharing and dissemination of information and knowledge using sophisticated ICTs. In this way local information, heritage and language is shared with people globally.

2.5 Opportunities and challenges of becoming an information and knowledge society

Becoming an information and knowledge society is a journey riddled with obstacles and opportunities. Drawing from the criteria discussed in section 2.2, it is clear that a country can enjoy many benefits, but it may come as a surprise that there are challenges of becoming this society as well. The opportunities and challenges that are discussed are adapted from Holmner’s (2008) list of advantages and disadvantages of becoming an information and knowledge society.

2.5.1 Opportunities of becoming an information and knowledge society

As identified by Holmner (2008:85), the possible benefits of becoming an information and knowledge society include:

- Becoming partners in global digital world trade
- Access to affordable scientific knowledge and other forms of information necessary for development
- Becoming experts of local knowledge via ICTs
- Job creation
- Leapfrogging into new information and communication technologies and gaining the benefits thereof
• Bringing information closer to the resources

• Providing better, more co-ordinated and relevant services in areas such as education, healthcare and similar sectors

2.5.1.1 Becoming partners in global digital world trade
According to the World Trade Organization, developing countries are becoming more important in the global economy and are increasingly looking to trade as a vital tool in their development efforts. Through ICTs developing countries can access trade opportunities in their countries and thus improve their economic situations. In this way, they can become partners in global digital world trade (Holmner 2008:85).

2.5.1.2 Access to affordable scientific knowledge and other forms of information necessary for development
Affordability is a very important and limiting factor in developing countries and communities (Holmner 2008:86). Holmner (2008:86) notes that there have been initiatives from professional societies and publishers designed to supply journals to the developing world and they have largely focused on the provision of electronic information.

Britz et al. (2006:32) list the initiatives and programmes launched to make access to content affordable to African institutions. The authors single out the Health InterNetwork Access to Research Initiative (HIN ARI), Access to Global Online Research in Agriculture (AGORA), and Programme for the Enhancement of Research Information (PERI).

HIN ARI is an initiative of the World Health Organization (WHO) and it provides free or very low-cost online access to major journals in the bio-medical and related social sciences for WHO-approved academic institutions in the developing world (Britz et al. 2008:87).

AGORA is an initiative of the United Nations Food and Agriculture Organization (UNIFAO). It provides free or low-cost access to major scientific journals in agriculture
and related biological, environmental and social sciences to public institutions in developing countries. Its main purpose is to increase the quality and effectiveness of agricultural research, education and training in low-income countries in order to improve food security.

The International Network for the Availability of Scientific Publication (INASP) PERU was created to support capacity building in the research sector in developing and transitional countries by strengthening the production and dissemination of, and access to, information and knowledge through new ICTs.

2.5.1.3 Becoming experts of local knowledge via ICTs

Developing countries and communities, through the use of modern ICTs, can export knowledge of agriculture, local flora and fauna, local history and weather, local languages and dialects, social interaction, conflict resolution, child rearing, old age care, etc., to the global knowledge system (Panyarachun 2001).

Holmner (2008:88) notes that for countries and communities to become exporters of local knowledge, knowledge interaction and exchange needs to take place, and this can be achieved by providing them with access to digital information from the internet and combining this with their local knowledge experiences to create contextualized knowledge.

2.5.1.4 Job creation

In 1980, Toffler (1980) predicted that the low skilled, interchangeable muscle work of the industrial era would be replaced by high skilled, non-changeable ‘brain work’ in the information era, and therefore the level of skills required for work would be different from the skills required for the industrial society. Reding (2005) notes that today, ICTs play a crucial role in growth and job creation within the information and knowledge society. Subsequently, Lor and Britz (2007:119) observe that skilled people are a precondition for progress towards an information and knowledge society. Holmner’s (2008:89) conclusion is that the dynamics of work will change with the support of advanced
technological infrastructure because it will support new wireless and display technologies that will change office equipment and design, and the nature of work itself.

2.5.1.5 Leapfrogging into new information and communication technologies and gaining the benefits thereof
Alex Steffen of World changing defines leapfrogging as the notion that areas with poorly-developed technology or economic bases can rapidly propel themselves forward through the adoption of modern systems without going through intermediary steps (Steffen 2006). According to Wikipedia (2007), leapfrogging is a theory of development where developing countries skip inferior, less efficient, more expensive or more polluting technologies and industries and move directly to more advanced ones.

Holmner (2008:90) explains that the main aim of leapfrogging is to promote greater access to computer and other technologies for those people who would normally have no way of accessing them on their own. According to Holmner (2008), leapfrogging through telecommunications can act as a catalyst that can boost development and improve competitiveness within the global information and knowledge society.

However, the author stresses that technological leapfrogging can only be successful if the country or community has the required application of implied knowledge and skills with respect to the technology, and additionally the development of appropriate human resource skills such as the extensive training of the people who are going to use (and train others to use) the technology (Holmner 2008:90).

2.5.1.6 Bringing information closer to the resource
The information and knowledge society has the advantage of closing the gap between the information and resources by bringing information closer to the resource (Holmner 2008:91). Holmner makes a case of farmers and rural communities in developing countries where there are extension agents, traders, input suppliers and other farmers, who disseminate information and act as an interface between information and the farmers or traders. Holmner (2008) states that by using modern information and communication technologies, information regarding resources for the community can be
made available electronically to all the parties. For example, farmers can place the price of their vegetables on the internet, giving the traders direct access to this information (Holmner 2008:91). All other traders and suppliers who are not farmers could do the same for their produce, products and sales.

Other communication technologies, such as the radio, could be used to air programs that announce products, negotiate prices, and discuss other related matters. In this way information is easily ‘brought’ to the resources, and the problems of space and time are overcome.

2.5.1.7 Providing better and more coordinated and relevant services such as education and healthcare

Relevant services are important because they meet the needs of a particular community, particularly when they have, from the onset, been tailor-made for the community.

According to Britz et al. (2006), education and the investment in human capacity is one of the main success factors in the information and knowledge society because it facilitates development and economic growth. The issue of equipping people with education is also addressed in one of the Millennium Development Goals (MDGs). ICTs have the potential to reach people in far off and remote rural areas. Therefore, a program aimed at teaching communities in these regions could be delivered through ICTs. For example, ICTs could be used to train more teachers in rural areas and instantly deliver teaching materials and resources to them.

Regarding healthcare services, an issue also addressed in the MDGs, health workers can be trained using distance training that is facilitated by ICTs. Urgent health information and services could also be instantly disseminated and delivered to people, and in this way the whole healthcare system would be improved.
2.5.2 Challenges of becoming an information and knowledge society

It is disadvantageous to be part of the global information and knowledge society when there is no e-readiness. Gearing towards fully joining this society and overcoming the disadvantages below must be done by developing countries and communities.

2.5.2.1 Information overload

Access to information through ICTs is imperative in this technological age. Skills are, however, essential to those wishing to interact with ICTs.

The information explosion that resulted from technology has the power to create and disseminate information quicker. This causes what is known as ‘information overload’. If people do not have the skills necessary to access and assess information, they may find it difficult to find what they need due to the amount of information that is out there.

Writing in the 90’s, Machlup 1983 and Lancaster 1987 were of the view that information can assist in decision-making and reduce uncertainty. But more recently, and according to Holmner (2008:94), with the deluge of information available via modern ICTs, it is sometimes very difficult to make the correct choice or decision.

To this effect, Dorner and Gorman (2006) have observed that when placed within a development context, information overload and the inability to access or understand the information one needs for decision-making, escalates the uncertainty of the users, resulting in information anxiety.

Holmner (2008:95) suggests that if users in developing countries and communities were suddenly confronted with large amounts of information, they would suffer information anxiety and be less eager to take part in the interaction process and the exchange of data, information and knowledge, even though this could be used as a key to economic wealth and prosperity, increased information-related activities, and increased human intellectual capabilities.
2.5.2.2 The digital divide

There is great deal written about the phenomenon of the digital divide as a disadvantage of the information and knowledge society (Holmner 2008:98). Straub’s (2003:477) definition of the digital divide is the differential abilities of entire social [or regional] groups to access and utilize electronic forms of knowledge. To Arachchide (2005), the digital divide is the uneven distribution of telecommunications infrastructure between countries and urban and rural areas.

The term ‘digital divide’ was first coined by Larry Irving in the 1990s to describe the existing gap between those who can afford to purchase the hardware and software necessary to participate in the global information network, and low-income families and communities who cannot (Dragulanescu 2002:139; Fienberg 2002). It gained popularity in the mid 90’s after changing slightly to explain the various differences between people who had access to the internet and those who did not (Shade 2002:5). Since then, the scope of the term has expanded, and a great deal is being said and written about it (Holmner 2008:330).

When looking at the term’s growth since its coinage and at various synonmys from various points of view and focus, it should be remembered that there was a debate in the 90’s on the issue of the ‘information rich’ and ‘information poor’ (Holderness 1996; Quinion 2003) and the ‘information have’ and ‘information have-nots’ (Thapisa and Birabwa 1998:53). Larry (2003) observes that while these terms are still in use by many authors, there has been a shift in focus to the use of the term ‘digital divide’. According to Holmner (2008:331), when using the term ‘digital divide’ the focus is more on the countries’ IT infrastructure (availability or lack thereof), such as physical cables, connections, computers and servers, that enable people to gain access to online information.

Molnar (2003:9) indicates that there are various dimensions to the digital divide since the digital divide is much more than a technological divide, and classifies the digital divide into three types as follows.
Table 2.1 Types of digital divide

<table>
<thead>
<tr>
<th>Adaptation stage</th>
<th>The digital divide</th>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early adaptation</td>
<td>Access divide</td>
<td>Early digital divide</td>
<td>Describes the difference between those with and without access</td>
</tr>
<tr>
<td>Take-off</td>
<td>Usage divide</td>
<td>Primary digital divide</td>
<td>Describes the difference between users and non-users</td>
</tr>
<tr>
<td>Saturation</td>
<td>Divide stemming from the quality of use</td>
<td>Secondary digital divide</td>
<td>Describes the difference in quality between users</td>
</tr>
</tbody>
</table>

Source: Molnar 2003

Users with and those without access to technology are differentiated as an early adaptation stage. The take-off stage, according to the table, focuses on the use of technology and indicates that although people have access to technology, some may use it and some may not for different reasons. The last type, the secondary digital divide, describes the quality of use of technology among those who are users, where some use it fully because they have above average skills and are able to ‘play around’ with technology, while others use this technology to a certain extent or prefer not to use it at all, which contributes towards this type of digital divide.

2.6 The effects of the global flow of information on various aspects of society

The information and knowledge society can directly and indirectly affect people’s lives and the areas that relate to their lives, for example through the manufacturing industry, business and finance, social and cultural spheres, education and training, politics and culture, and health and medicine.

2.6.1 Manufacturing industry

Information and knowledge require improved information and communications infrastructure which improves manufacturing because of the quick and efficient transfer and flow of information between operators, suppliers, partners, distributors and...
customers (Chisenga 2000). Manufacturing companies in an information and knowledge society are able to source products and supplies from all around the world (Holmner 2008:103).

2.6.2 Business and finance
Internet technology significantly increases the competitiveness and quality of consumer goods (Singh 2005:681). According to Singh, this technology has worked for India because the way of doing business has changed radically since the introduction of technology and it has become an integral part of the corporate sector for inter-organizational dealings and finding instant business solutions in India. Chisenga (2000) is of the opinion that the greater access to and flow of global information in countries and communities that have become information and knowledge societies has had a great impact on business and finance. According to Van Audenhove et al. (1999), through the use of ICTs, small and medium enterprises can have global reach and can offer worldwide content, services and products at a very low price.

2.6.3 Social and cultural environment
Technology has helped to cut across traditional boundaries (Singh 2005:679). According to the author, the internet and the web are contributing greatly to bridging the gap between cultures among people and countries. They have an impact on culture because they create new ways of cultural expression and exchange and offer opportunities for knowing, learning and disseminating culture on a global basis (Singh 2005:680). Therefore through ICTs resulting from the information and knowledge society, a culture of openness, greater accountability and even democracy is promoted.

2.6.4 Education and training
De Jager and Nassimbeni (2000:193) observe that there is an increasing rate of change in knowledge in the information and knowledge society due to ICT infrastructure that supports the production of information at a faster tempo. UNESCO (2005) concurs, stating that technological developments make it easy for information to be produced at a faster rate, and this means that there is a rise in information and knowledge themes at
institutional level that define research, education and innovation policies (UNESCO 2005:20).

De Jager and Nassimbeni (2000:193) suggest that students who are introduced to the world of work during this period of increased information production should be well trained by institutions of higher learning in order for them to adapt to the changes of the information and knowledge work environment. The authors further observe that at tertiary level, an increasing demand is being experienced to change to more student-centred pedagogies and the preparation of students for life-long learning (De Jager and Nassimbeni 2000:193).

On this note, Singh (2005:680) observes that technology makes education accessible to everyone. The author singles out e-learning and internet-based learning as a fast and interactive way to teach and learn, and cites this as an example of a new approach to content delivery to a cross-boundary class of learners.

According to Friedman (2005), the expectation is that the information and knowledge society will produce more highly skilled people by making primary and high school education compulsory while tertiary education will become more and more critical. Educational issues are also addressed in the MDGs where the Millennium Plan supports universal elementary education (United Nations Development Program UNDP 2003a).

2.6.5 Health and medicine
Nowadays, due to many ailments and serious infections such as HIV, medical information about people and their illnesses is very crucial and thus needs to be handled with caution and confidentiality.

In the information and knowledge society, technology provides health centres and hospitals with the opportunity to meet this crucial need. Patients’ dockets and files with respect to their illnesses are easily filed and quickly retrieved when compared to traditional paper-based methods. Accordingly, medical treatments are conveniently and
speedily tested and approved in modern laboratories which have been improved with advanced technology.

The speedy distribution of health information and services is improved with the use of technologies in the information and knowledge society. According to Kiplangat (1999), by utilizing this technology, problems pertaining to the distribution of health information to rural areas, for example the literacy problem, can be overcome.

2.6.6 Politics and government
Politics and governments are also affected by technology. Mokgobu (2005) observes that technology transforms governments. According to Mokgobu (2005:6), technology plays a significant role in the modernization processes in politics. The use of technological devices such as ICTs in politics and voting has improved. Politicians easily rally and lobby people when it is time to go to the polls. They can easily reach and communicate with their followers. Parties use different radio stations, television stations and other communication platforms to reach possible voters. The announcement of voting results has also improved with technology. Governments have also benefited from technology by easily and quickly providing necessary services to their citizens, as observed by Kwake (2007). According to Kwake, ICTs enable the improved delivery of public services in areas such as health and education.

2.7. South Africa as an information and knowledge society
The criteria and indicators of an information and knowledge society are applied to South Africa to determine where it stands as a society. The section that follows will assess the situation in South Africa by applying these criteria and indicators.

2.7.1 Assessing economic criterion
As already mentioned, a strong economy is determined by the availability of job and employment opportunities. People who earn decent incomes enjoy higher living standards because they can afford to take their children to school, live in a home, and buy household necessities. This in turn improves the gross domestic product (GDP) of a country. Income and living standards relate to the poverty level of people or
communities. When many people in a community are not employed, the overall living standard drops and this often results in poverty. However, when many people earn a decent income, they can, for example, afford better healthcare, which contributes to a stronger workforce that in turn strengthens the economy of the country.

The unemployment rate in South Africa has declined from 25.5% in 2006 to 23.3% in 2011 (see Table 2.2). Globally, South Africa is ranked at 170th place (CIA World Factbook, 2011).

Table 2.2 Decline in the unemployment rate in South Africa between 2003 - 2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Unemployment rate</th>
<th>Rank</th>
<th>Percentage Change</th>
<th>Date of Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>37.00%</td>
<td>18</td>
<td></td>
<td>2001 est.</td>
</tr>
<tr>
<td>2004</td>
<td>31.00%</td>
<td>24</td>
<td>-16.22%</td>
<td>2003 est.</td>
</tr>
<tr>
<td>2006</td>
<td>25.50%</td>
<td>168</td>
<td>1.53%</td>
<td>2005 est.</td>
</tr>
<tr>
<td>2007</td>
<td>25.50%</td>
<td>172</td>
<td>-4.14%</td>
<td>2006 est.</td>
</tr>
<tr>
<td>2008</td>
<td>24.30%</td>
<td>169</td>
<td>-4.71%</td>
<td>2007 est.</td>
</tr>
<tr>
<td>2009</td>
<td>22.90%</td>
<td>170</td>
<td>-5.76%</td>
<td>2008 est.</td>
</tr>
<tr>
<td>2010</td>
<td>24.00%</td>
<td>173</td>
<td>4.80%</td>
<td>2009 est.</td>
</tr>
<tr>
<td>2011</td>
<td>23.30%</td>
<td>170</td>
<td>-2.92%</td>
<td>2010 est.</td>
</tr>
</tbody>
</table>

Source: CIA World Factbook 2011

Although the South African economy is improving, a low standard of living and high rate of poverty still exist, especially in rural areas and among women. South Africa is ranked 23rd with respect to poverty, with 0.45% of the world’s poor (NationMaster 2000). According to Ozoemena from Consultancy Africa Intelligence (CAI) (2010), although there are plans to fight poverty in South Africa in rural areas, there is still a high rate of unemployment and poverty. The author further explains that many existing policies deal
mostly with the formal sector to the detriment of informal, non-remunerative roles that rural women perform. It therefore does not fully meet this criterion.

2.7.2 Assessing spatial and technological criteria
These criteria focus on ICTs and related technology that support access to and the use of computers, the internet and telecommunications.

In 2001, it was estimated that there were approximately 66 personal computers per 1000 people in South Africa, and the number increased to 85 personal computers per 1000 people within 5 years (World Bank 2005). When comparing South Africa to other African countries such as Kenya (14), Tanzania (9), Uganda (10) and Zimbabwe (68) [World Bank, 2005], this is a positive indication given its population of 50.59 million (Stats SA 2011:3).

However, things take a turn for the worse when comparing South Africa to countries such as Switzerland, where 864 per 1000 people had access to personal computers in 2005 (NationaMaster 2005). Based on this comparison, the number of people with access to computers is too low in South Africa for it to be categorized as an information and knowledge society.

Nevertheless, it is acknowledged that the South African government is doing its best to increase the number of people with access to personal computers. For example an initiative focusing on rural areas is in progress to place ICTs, including computers, in centres within rural people’s reach (Snyman and Snyman 2003: 96).

With respect to internet access and use, Internet World Stats (2009) estimates that there were 5,300,000 internet users in South Africa in 2009 with a penetration of 10.8%, an increase from 4,590,000 in 2008 at 10.5%. Although these numbers indicate that many people in South Africa have subsequently been able to access and interact, share and disseminate information and knowledge in education, health, economy and politics in the global information and knowledge society, the figures are still very small, and
internet use is still inadequate, especially in rural areas. Thus it can be concluded that South Africa is not complying in this criterion..

Another indicator is access to broadband services. This provides internet users with high speed internet access, which is extremely important in the information and knowledge society. The Organization for Economic Co-operation and Development (OECD) released its statistics for 2010, which include the number of broadband subscribers per country, broadband subscription by technology, and percentage of fibre connections in total broadband (OECD 2010). There were 294 million fixed broadband subscriptions in June 2010 in the OECD area, which was up from 283 million in December 2009. According to Dataxis News (2009), South Africa, the continent’s largest broadband market, accounts for over 1.9 million broadband users, 1.3 million of these through 3G/HSDPA technology.

Dataxis News (2009) lists Vodacom, Telkom SA, MTN, iBurst and Neotel as South Africa’s broadband providers; Vodacom, the largest South African mobile network operator, has become the country’s top broadband provider, overtaking the incumbent Telkom SA. Vodacom made claims in 2009 that it had broken the 1 million subscriber milestone. These figures include 825 000 prepaid and contract broadband users and another 180 000 machine-to-machine connections. On the other hand, Telkom claimed 548,000 ADSL users in 2009, which is significantly less than Vodacom’s official figures.

Although MTN does not usually report its mobile broadband figures, the cell company was expected to serve 3 300,000 G/HSDPA subscribers by the end of June 2009, while iBurst claimed 77,000 broadband customers, almost four times the 20,000 subscriber base attributable to Neotel (Dataxis News 2009).

Although the broadband service is recognizable in South Africa and the broadband users were, according to World Wide Worx (2006) at 650 000, South Africa’s broadband was still very small when compared to the top ten selected countries in the following table.
Table 2.3 Selected top ten countries in terms of number of broadband subscribers

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>DSL</th>
<th>Cable</th>
<th>Other</th>
<th>Total</th>
<th>Total Subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Denmark</td>
<td>17.40%</td>
<td>9.00%</td>
<td>2.80%</td>
<td>29.30%</td>
<td>1,590,539</td>
</tr>
<tr>
<td>2</td>
<td>Netherlands</td>
<td>17.20%</td>
<td>11.10%</td>
<td>0.50%</td>
<td>28.80%</td>
<td>4,705,829</td>
</tr>
<tr>
<td>3</td>
<td>Iceland</td>
<td>26.50%</td>
<td>0.00%</td>
<td>0.70%</td>
<td>27.30%</td>
<td>80,672</td>
</tr>
<tr>
<td>4</td>
<td>South Korea</td>
<td>13.20%</td>
<td>8.80%</td>
<td>4.50%</td>
<td>26.40%</td>
<td>12,770,911</td>
</tr>
<tr>
<td>5</td>
<td>Switzerland</td>
<td>16.90%</td>
<td>9.00%</td>
<td>0.40%</td>
<td>26.20%</td>
<td>1,945,358</td>
</tr>
<tr>
<td>6</td>
<td>Finland</td>
<td>21.70%</td>
<td>3.10%</td>
<td>0.20%</td>
<td>25.00%</td>
<td>1,309,800</td>
</tr>
<tr>
<td>7</td>
<td>Norway</td>
<td>20.40%</td>
<td>3.80%</td>
<td>0.40%</td>
<td>24.60%</td>
<td>1,137,697</td>
</tr>
<tr>
<td>8</td>
<td>Sweden</td>
<td>10.80%</td>
<td>4.30%</td>
<td>4.00%</td>
<td>22.70%</td>
<td>2,046,222</td>
</tr>
<tr>
<td>9</td>
<td>Canada</td>
<td>14.60%</td>
<td>4.30%</td>
<td>0.10%</td>
<td>19.40%</td>
<td>7,161,872</td>
</tr>
<tr>
<td>10</td>
<td>United Kingdom</td>
<td>14.60%</td>
<td>4.90%</td>
<td>0.00%</td>
<td>19.40%</td>
<td>11,622,929</td>
</tr>
</tbody>
</table>


From this table, South Africa’s figures are nowhere near those of the top ten selected countries, although the number of broadband subscribers is growing. It can therefore be concluded that South Africa does not comply with the broadband indicator.

The level of telecommunication penetration is also very important as an indicator of an information and knowledge society. South Africa has seen a decrease of -1.0% in fixed lines between 2001 from 4,924,500 to 4,729,000 in 2006 (ITU 2006). This decrease is perhaps ironically due to the increase in mobile penetration. Mobile penetration has grown significantly in South Africa over the past few years.

There was a 33.2% increase in the number of mobile subscribers from 10,787,000 in 2001 to 33,960,000 subscribers in 2006, which is equal to 71.6% mobile subscribers per 100 people. This mobile penetration places South Africa in the 24th position in the world with respect to mobile penetration.
Although, not many mobile subscribers are able to use digital services in South Africa because of the cost, South Africa complies with this indicator. Thus overall, South Africa did not comply with a lot of indicators.

2.7.3 Assessing political criterion
For a country to meet this criterion as an information and knowledge society, it has to have a high level of democracy to facilitate and promote the rights of the citizens such as the right to freedom of information, the right to freedom of expression, and intellectual property rights, as indicated in section 2.3.3. These rights, when given to the citizens, increase the level of participation of the government in country matters, which will leads to a consensus of some kind, because with the above rights being enjoyed by citizens, information and knowledge can be shared and disseminated better. Government information and voter information in an information society is more transparent and delivered and announced with ease to people.

In 2001, South Africa effected the Promotion of Access to information Act (PAIA). The aim of this Act is to give South African citizens the information they need to know to exercise and even protect their rights. The Act promotes transparency and supports citizens who need access to government information and records. Overall, South Africa appears to be complying with this criterion, although continuous monitoring of minor incidents is necessary to ensure that there is total access to the government information that citizens require that journalists have freedom of expression and speech, and that intellectual property rights are observed and adhered to.

2.7.4 Assessing social criterion
Human Rights Watch (2011) reveals that there were 53 deaths per 1,000 live births in 2007 compared to 54 in 2001 in South Africa. According to Stats SA (2011:3), mid-year population estimates for 2011 there was a 37.9% infant mortality rate. This is a decline from the 48.2% infant mortality rate in 2009 and 49.3% in 2008. Accordingly, the life expectancy at birth in 2011 stood at 54.9% for males and 59.1% for females (Stats SA 2011:3). This shows that South African health services are improving and people’s
health conditions are becoming better. But this can also be measured in terms of the number of medical practitioners in the country who are able to take care of people’s health and lives.

The NationMaster (2004) estimated that there were 0.77 physicians in South Africa per 1000 people; South Africa was 16th out of 148 countries whose statistics were available in 2004. There are prepaid plans as a percentage of private expenditure on health of 77.7%, and in this regard, South Africa ranked 1st out of 159 countries (NationMaster 2004). However, even with many practicing medicine, South Africa has yet to achieve the social criterion of the information and knowledge society.

2.7.5 Assessing cultural criterion
Linguistic diversity, cultural heritage and preservation of cultural legacy are all indicators of the cultural criterion.

South Africa is inhabited by different cultural groups with different languages and heritage. The South African government is committed to protecting and preserving all the country’s diverse cultures, languages, heritage and beliefs without discrimination because they all contribute to local content, indigenous knowledge, democracy and tourism. The South African government is taking strides to make the information on different cultures, heritage and languages accessible by supporting museums, libraries and centres where this information can be accessed. Heritage sites are preserved and cultural rituals can be performed in the country. For example, recently, in 2011 King Goodwill Ubhejane PhumesiQiwini’s mother was reburied on the site where all the other kings are resting in Umkhumbane.

There are many languages spoken in South Africa, but only eleven are official. According to the CIA World Factbook (2010), although there are many different languages in South Africa, English is generally understood across the country because it is the language of business, politics and media. However, people in rural areas and marginalized communities really struggle with the language and subsequently cannot
benefit from the information society. Thus South Africa complies with all the indicators of the cultural criterion, except perhaps with language.

2.7.6 Assessing physical infrastructure criterion

This criterion refers to well-developed physical infrastructure in terms of railways, roads, airports and harbors which are necessary in an information and knowledge society to improve the communication between people, the movement of goods, services and people, and the dissemination of information and knowledge. Travelling by road is the cheapest mode of transport and is also the most used in rural areas where there are no other means of sophisticated transportation. According to Gwilliam et al. (2008:3), roads provide basic connectivity between primary and secondary cities and key ports and land border crossings.

The current road density in Africa is estimated at 6.84km per 100km, indicating the general inadequacy of road infrastructure. However, in 2009, South Africa had a total of 362,099km of road and was rated 18th globally, a total of 20,872km of railway and rated 14th, and a total of 607 airports and 1 heliport (NationMaster 2010). According to NationMaster (2010), there were 146 motor vehicles per 100 inhabitants as of 28th December 2010, and a total of 8,047,331 motor vehicles in the country.

South Africa has three international airports, namely OR Tambo in Johannesburg, King Shaka in Durban, and Cape Town International. According to the CIA World Factbook (2006), OR Tambo International Airport is the busiest airport on the continent and is regarded as the air transport hub of Southern Africa. It employs 18,000 people. South Africa also has seven national airports and 721 regional airports. In total, there are 731 airports within South Africa. This large number of airports has won the country 10th place in the world (CIA World Factbook 2006).

Railway transport has also remained very important in South Africa. Although it is the slowest kind of transport, it is affordable and reliable and is still being used to transport people and goods, particularly large amounts of heavy goods. According to the CIA
World Factbook (2006) there is a total length of 20,872km of railway in South Africa, placing it at number 14 out of 134 countries.

The physical infrastructure criterion also relates to the tourism industry and thus to the GDP of the country through economy. When a country has adequate and sound roads, railways, airports and harbors, it attracts more tourists which bring money into the country. This also means more people will reach places within and outside the country as fast as possible. This affects the quality of life of the people and inadvertently improves their living standards.

South Africa therefore has a sound, adequate and sophisticated transportation system which is used to transport people and goods within the country and beyond. South Africa is therefore in compliance with the physical infrastructure criterion.

2.7.7 Assessing knowledge criterion

Information sharing and dissemination is fundamental in the information and knowledge society. Nowadays there are ICTs that facilitate this process, which means that the infrastructure should be present as well. Over and above the infrastructure, people should have acceptable levels of literacy and skills to interact with these ICTs in order to access information and knowledge.

Therefore literacy, both information and computer literacy, is very crucial for people to interact, access and use information in the information and knowledge society.

The literacy rate in South Africa, i.e. reading and writing, stood at 86.4% in 2010 (87% male and 85.7% female) [CIA World Factbook, 2010]. South Africa has many projects running that aim to equip people with the skills necessary to function in the information and knowledge society. Various authors have discussed these projects and initiatives, for example Jiyane and Onyancha (2010), Machet and Wessels (2006), and De Jager and Nassimbeni (2007, 2005, 2003, 2002). In these writings, commitment by the South African government, NGOs, institutions of higher learning, libraries and families and communities are discussed. Thus initiatives towards an information literate South Africa
are in place and in progress to meet this indicator of the information and knowledge society.

With respect to local content as an indicator of the knowledge criterion, South Africa is raising awareness of local South African content and there are initiatives to support this. Even in institutions of higher learning such as Unisa, there have been serious recent debates, such as support for the Department of Higher Education Minister, Blade Nzimande’s notion that the mother tongue should be used in teaching so that children may grasp concepts in their mother tongue before they switch to other languages as they progress with their studies. At Unisa, the recent debates (see Unisa electronic news on the topic, “Preparing South Africa’s youth: Maths and Science - is a home language the answer?”, 24 May 2011). These debates stress that local content is better conveyed through a mother tongue. Unisa is also in the process of writing the different languages glossary to improve teaching and learning.

In order for government information materials to be accessible to many citizens, information is translated into many other languages, i.e. eleven official languages in South Africa.

The South African Broadcasting Authority (SABC), in response to the call of promoting local content and indigenous knowledge, is in the process of adding two new channels, that is SABC4 and SABC5 (Gadebe 2005). According to the author, this initiative will cater for Sepedi, Sesotho, Setswana, Afrikaans, IsiZulu and IsiXhosa.

With these initiatives in place, South Africa appears to be only partly complying with the indicators of the knowledge criterion because some of these initiatives are still works-in-progress.

2.8 Conclusion of the assessment
In conclusion, South Africa complies with a few criteria and only partly complies with some. In some instances it does not comply at all with the criteria. In other words, South Africa is still in the process of becoming an information and knowledge society. Meeting
all the criteria of an information and knowledge society would help South Africa improve the conditions of the country’s citizenry, in particular those who are marginalized and disenfranchised in the informal sector. For example, the infrastructure can support the growth of broadband, resulting in lower rates for subscribers. Women in the informal sector can be role players in many activities supported by technology and ICTs to the benefit of their informal businesses. Communication with suppliers and among themselves as business managers would significantly improve. In a fully fledged information and knowledge society, they would be able access other business services locally and internationally, which would lead to economic growth and improved employment and business opportunities (e.g. expanding networks in curio selling to tourists, comparing costs and prices to meet global standards, etc.).

2.9 Summary
This chapter defined the term ‘information and knowledge society’ and discussed the criteria and indicators of such a society. The chapter also discussed the advantages and disadvantages of the information and knowledge society and the effects of the information and knowledge society on various aspects of life. Finally, South Africa was assessed using the indicators against the criteria of an information and knowledge society.

The chapter that follows presents literature on the informal sector by defining the concepts ‘informal sector’ and ‘informal sector women entrepreneurs’ and listing their characteristics. The chapter also discusses the activities that take place in the informal sector in general and that are performed by women in particular, and provides an overall indication of how the activities in the informal sector boost the economy of the country.
CHAPTER THREE: THE INFORMAL SECTOR

3.1 Introduction
The previous chapter presented literature defining and discussing the information and knowledge society, while this chapter presents literature on the informal sector. The chapter first describes the nature of the informal sector by discussing its definitions and characteristics. This is followed by a discussion of reasons for the existence of the sector. The chapter also explains the composition of the informal sector, providing a clear indication of the informal sector’s activities, and discusses the size of the sector, the challenges faced by the sector, and the potential of the informal sector.

3.2 Nature of the informal sector
Unemployment, retrenchment, illiteracy, marginalization, and lately recession and climate change, both globally and in South Africa, forces many people to seek work in the informal sector. Despite the majority of South Africa’s workforce being employed in the informal sector, no single definition exists to describe or define the sector. Although different criteria are used to identify the informal sector, none of them are universally applicable in different empirical situations (Naik 2009:2; Papola 1981). Therefore, varying definitions of the term ‘informal sector’ are used and they depend on the specific requirements of the organization trying to define it (Naik 2009:2).

According to Naik (2009:2), the term ‘informal sector’ was first introduced by Keith Hart while making a presentation on “Informal income opportunities and urban employment” at the Ghana Institute of Development Studies in September 1971 in a conference co-organized by Rita Cruise O’Brien and Richard Jolly. Hart distinguished between formal and informal (both legitimate and illegitimate) income opportunities on the basis of whether the activity entailed wages or self-employment. The term ‘informal sector’ was used in the broader sense in academic literature only after the visit of an ILO employment mission to Kenya, entitled “Employment incomes and equality”, in 1972. The ILO thereafter evolved a conceptual framework and guidelines for the collection of statistics on the informal sector and presented these in the form of a resolution at the
According to ILO (1976), the informal sector refers to the sector of the economy that employs a handful of workers who earn a low income, utilize rudimentary or subsistence technology, and operate largely outside the boundaries of government laws and regulations governing business in general, such as listed standards of quality, minimum pay and safety. More often than not, they do not pay tax. There are many authors (Muller 2002:15; Management of Social Transformation (MOST) in Nkinyangi 1995; Hemmer and Mannel 1989; WIEGO 2001; Ligthelm and van Wyk 2004) who have similar views on the definition of the informal sector.

In trying to develop a framework that would assist with the management of informal trading activities, the Department of Local Economic Development (2004:4) in the Sol Plaatje Municipality, South Africa, proposed the following working definition: “The economic activity undertaken by entrepreneurs who sell legal goods and services within a space deemed to be public property, within the informal sector.” This department does, however, clarify that the definition implies that informal trading management requires a focus on public space management. Thus this specifically excludes any activity that is defined as illegal by any national and/or provincial law.

Globally the informal sector is that which consists of units engaged in the production of goods and services with the primary objective of generating employment and income to the persons concerned (System of National Accounts (SNA) 1993). These units typically operate on a small scale and at a low level of organization, with little or no division between labor and capital as factors of production. The SNA further indicates that labor relations, where they exist, are based mostly on casual employment, kinship, or personal and social relations rather than contractual arrangements with formal guarantees (SNA 1993). This definition clearly does not include the agricultural sector.
According to the (SNA, 1993), the first characteristic of the informal sector is that enterprises are owned by individuals or households and are not constituted as separate legal entities that are independent of their owner.

This relates to the ILO definition of the informal sector in Kenya, which views the informal sector as any family-owned small-scale economic activity in a very competitive market that is very labor intensive, uses skills acquired outside the formal school system, and relies on indigenous resources. It is further characterized by ease of entry and falls under no governmental regulations such as minimum wage or tax laws (ILO 1972). An important characteristic is that the employment size has to be below a specific threshold that is determined by national circumstances (SNA 1993). The informal sector is a sector characterised by an employment threshold of not more than 10 persons, non-adherence to legal and administrative regulations, the employment of family members, no fixed working hours or days, no institutional loans, often no use of mechanical and electrical energy, and the peril-pathetic and semi-permanent character of the activity (Thomas 1992; Sethuraman 1990).

Amaral and Quintin (2006:1541) characterize the informal sector as one in which workers are employed in an untaxed, unregulated sector. Typically, workers tend to be young, less educated, and earn less than their counterparts in the formal sector. Amaral and Quintin (2006:1543) further observe that informal employers tend to rely on self-financing much more than formal employers, and operate at labor ration; they work for an employer that does not comply with government regulations such as labor laws or the tax code.

According to Ligthelm and Van Wyk (2004:10), these businesses are primarily located where high volumes of people and activity are present, such as pedestrian malls, learning institutions, CBDs, taxi ranks and train stations, in other words busy public spaces.
To Charmes (2000:3), the sector is characterized by ease of entry, small scale activity, little capital and equipment, labor-intensive technology, low skills attainment, low level of organization, and limited or no access to formal credit, organized markets, education and training, and services and amenities. Also describing the features of the informal sector, Pratap and Quintin (2006:1) reiterate that it is untaxed and unregulated.

According to Bangasser (2000:10), the characteristics of the informal sector as suggested by the International Labor Organization are as follows:

(a) Ease of entry/ low barriers to entrance
(b) Reliance on indigenous resources or domestic resources
(c) Family ownership of enterprises
(d) Small scale of operation
(e) Labour-intensive and adapted technology
(f) Skills acquired outside the formal school system
(g) Unregulated and competitive markets

3.3 Reasons for the existence and growth of the informal sector
The factors that influence the development of informal sector businesses may differ according to the different economic, political, social and cultural situations of countries. Thus the following reasons may apply to some countries and may not be relevant to others.

3.3.1 Poverty levels
Poverty levels due to unemployment and lack of food and other basic needs force people, especially women, to engage in informal sector trade for their survival (Praveen Dalal, 2005). In our society, whether they belong to the majority or minority group, what is apparent is that there exists a great disparity in the matter of economic standing between a man and a woman (Dalal 2005). According to Dalal (2005)society is male dominated both economically and socially, and women are invariably assigned a dependant role irrespective of the class of society to which they belong. A highly educated woman often is expected to give up all her other avocations in marriage and
devotes herself entirely to the welfare of the family; she shares with her husband her emotions, sentiments, mind and body, and her investment in the marriage is her entire life, a sacramental sacrifice that is far too enormous to be measured in terms of money (Dalal 2005). And yet despite this, women continue to be marginalized.

Ngimwa, Ocholla and Ojiambo (1997) observe that in many developing countries, the majority of women live in rural areas, supporting their households with subsistence farming while raising children and maintaining their property. They are also usually the most exploited and least privileged members of households, overburdened with work and family responsibilities but marginalized with respect to the distribution of resources (1997:46) Therefore women are left poor and minus chances of upward mobility, which increases the size of the informal sector.

3.3.2 Government laws
Government laws are made to regulate a country. However, some laws in many countries do not support free trade and business ownership, thus preventing people from experimentally harnessing their business potential. According to the Department of Trade and Industry (2006:i) it is only now that the National Technical Regulatory Framework (NTRF) is establishing a common South African approach to the country’s technical regulatory responsibilities, and ensures that these South African regulations comply with international requirements and they are responsive to the changing needs of the economy. The end of segregation laws opened doors to artisans, kiosks, shebeens, a variety of small businesses, including questionable practices like abortion and sex work. Abortion is no longer illegal within certain parameters, but sex work is.

3.3.3 Post colonial era, mobility and urbanization
Many countries, particularly African countries, were colonised and tightly controlled with laws that restricted movement for a very long time. For example in South Africa there was Group Areas Act 41 of 1950, which forced physical separation between races (Digital Innovation South Africa. The end of colonization encouraged the mobility of people and goods from country to country. This mobility helped people extend their
businesses to other countries and trade globally. In many instances, informal trading grew almost exponentially. For example in South Africa, the period following 1994 opened doors for trading both locally and internationally. It also encouraged urbanization, which has seen many people move from rural to urban areas in search of employment, and finding none, settling in townships and entering the informal sector.

3.3.4 Unemployment

According to the report by Bizymoms Business Opportunities (2008), the unemployment rate is rising. The report states that most of the new jobs created in the global economy are of a part time nature and not full time as preferred by many governments and their citizens (Bizymoms Business Opportunities (2008)). Unemployment has a negative impact on the economy, as a consequence the gross domestic product of a country is also negatively affected. These harmful effects could include health hazards such as depression for individuals who cannot cope with the demands of life. This could prove costly to governments as it may lead to significant number of citizens being dependent upon government grants. Low morale and poor diets could also cause certain individuals to be prone to many diseases. The increased crime rate among many communities is also linked to high unemployment rates.

High unemployment rate can also lead to migration from rural to urban areas. Qualified, professional people and new young graduates from universities are forced to seek employment in greener pastures. However, those who choose not to migrate, in most cases end up working in the informal sector.

3.3.5 Lack of skills and inadequate formal training

In the past 50 years, the completion of high school education has become more significant, in importance, however, recently, the advancement of technology has transformed the labour market into one that demands highly skilled workers (American for Career and Technical Education (ACTE), Issue Brief 2007:1).
There are very slim opportunities of employment to the job-seekers that do not have necessary job skills. According to ACTE (2007) people who fail to complete school are less likely to be employed. ACTE further reiterates that difficult economic conditions require a workforce of lifelong learners who can quickly gain the knowledge and skills needed to work with new technologies in emerging careers (ACTE 2007:1). This indicates that lack of skills or adequate formal training can lessen the chances of an individual getting employed. Most likely such individuals with less formal training will resort to the informal sector that does not require many formal skills and training.

3.3.6 Economic downturn and downsizing

A recession or economic downturn is a significant decline in economic activity, which may be triggered by, among other things, a country’s decision to reduce inflation by employing contractionary monetary or fiscal policies, or sharp changes in the prices of the inputs used in producing goods and services (Claessens and Kose 2009:52. According to Eaton et al. (2011: 2) global trade fell 30 percent relative to GDP during the Great Recession of 2008-2009. The authors quote a greater decline in trade volume in the U.S. In 2009 in Kenya during recession, there was deflation of principal commodity imports, social stress, Kenya shilling devaluation against the dollar and against sterling pound, capital market crisis (Mwangi 2009:11). In 2008, there was a big global recession and it is speculated that another period of economic downturn is approaching. The last one saw many companies in South Africa retrenching employees who had no alternative but to seek employment as informal traders. The high price of fuel and foods and inflation rates have also had a hand in encouraging informal activities. According to Third World Network report by Chuma (2008:1) South Africa’s Finance Minister, Trevor Manual told Parliament that the country’s export earnings, especially from minerals, would be severely affected by reduced demand and plummeting prizes owing to global recession. Thus retrenched employees resort to informal businesses that boom the sector.
3.3.7 Climate change
The change in weather conditions has had a negative impact on many jobs and businesses, particularly food production and food processing, construction and building, nature conservation, and natural resource management. Some of the employees in these sectors have lost their jobs and turned to the informal sector for work. According to Climate Change Consultant AEA Technology, which has operations in the European Union and the United States, climate change has impacted so much that the firm’s shares fell 5% on the London Stock Exchange on 15 February 2011. This happens after its strategic review statement disclosed 80 job cuts and ‘disappointing’ performance in the European Union (Buono 2011).

3.3.8 Foreign nationals and immigration laws
Wars and political uncertainty force people from many countries to seek asylum in other countries. For example, the United Nations Peacekeeping force (2003/2004) reports on the Cote d’Ivoire wars. According to this report in Cote d’Ivoire the coupe and the subsequent failed elections plunged the nation into civil war. Due to these experiences, people seek protection from other countries. It becomes difficult for these foreign nationals to find employment for legal and security reasons in that country. The laws which allow foreigners to enter countries often also force them to join the informal sector and illegally operate businesses to survive.

3.3.9 International events
Many countries share platforms to participate and compete in international events, such as the Soccer World Cup, the Olympics Games and various other sports, meetings and conferences (e.g. the South Africa 2010 FIFA World Cup, the recent ‘green’ convention, the COP17 held in Durban, South Africa in November-December 2011). Both employed and unemployed citizens of the host country seize the opportunity during these events to open up informal businesses to earn an income. Some businesses take off and grow beyond the event, but for many, it is over as soon as the event is over.
3.3.10 HIV/AIDS
The HIV/AIDS pandemic leaves many people orphaned, widowed and destitute, especially women and children. This increases child labour and the number of women in the informal sector. According to WHO/UNAIDS/UNICEF (2011) report by Avert, 2/3 of all people infected with HIV/AIDS live in Sub-Saharan Africa. The report continues to indicate that the most obvious effect of this crisis has been illness, death and additionally crisis in the households, schools, workplaces and economies.

3.4 Composition of the informal sector and its activities
According to Aluko (2003:195), the informal sector covers a wide spectrum of economic activities including retail, trade, construction, wood and metal work. In Nigeria for example, Ekpo and Umoh (1998) divided the informal sector into productive, service and financial sub-sectors.

The informal productive sub-sector, according to these authors, encompasses all economic activities involving the production of tangible goods such as agricultural production, mining and quarrying (excluding petroleum), small scale manufacturing, building and construction, woodwork, furniture making, garment making, and welding and iron works, among others. The informal service sector includes repairs and maintenance, informal education services, health services, counseling services, and manual labor. Repairs and maintenance services include tailoring, vehicle repairs and maintenance, carpentry and services in various households, and commercial tools. Informal health services, especially in rural areas, include traditional birth attendants, herbalists and other traditional medical practitioners. There are also traditional spiritualists who offer counseling services.

Lastly, Ekpo and Umoh (1998) observed that the informal financial sub-sector activities are mostly underground, unofficial, irregular, informal, shadowy and parallel. The predominant type of informal finance in Nigeria [that they observed], is the ‘Esusu’. There are also informal money lenders who are believed to be highly exploitative, charging high interest rates through which they extract economic surplus provided by
peasant labor, capital, land and also savings and credit associations and credit unions (Ekpo and Umoh 1998).

According to Ligthelm and Van Wyk (2004:10), informal sector activities include spazas, tuck shops, hawkers, street vendors, shebeens, kiosks, takeaways and fast food outlets, to name a few. Bangasser (2000:9) observes that the popular view of informal sector activities is that they are primarily the activities of petty traders, street hawkers, ‘shoeshine boys’ and other groups that are ‘under employed’ on the streets of big towns. Ligthelm and Van Wyk (2004:10) further note that some informal businesses are established on private property, for example the spazas, shebeens and tuck shops in townships. Lalthapersad-Pillay (2004:22) confirms that many people operate in the informal sector as hawkers and vendors, and adds subsistence farmers to the list; all of these groups generate income that is way below the poverty line.

Koekemoer (2005) portrays a situation where South African cities are characterized by extensive informal sector markets concentrated largely at transport interchanges where trains, taxis and/or buses assemble for commuter movement. According to Koekemoer (2005:5), the overwhelming majority of businesses are manned by hawkers and street vendors who operate to survive. These markets will be a permanent phenomenon in our cities as long as high unemployment rates and poverty are prevalent in the country (Koekemoer 2005:5).

According to the Draft Policy: Informal Economy for KwaZulu-Natal (2009:7), the exact numbers of the informal sector businesses are not known. However, estimates of the contribution of the national informal economy range from 8% to 12% of the gross domestic product. The different types of informal sector operations listed below are based on both Informal Economy for KwaZulu-Natal Draft Policy (2009:10) and the Sol Plaatje Municipality (2004:4): Street or kerb-side traders; hairdressing and hair cuts; traditional medicine; restaurants or food outlets; payphones; shoes and shoe
repairs; traditional wear, décor and beadwork; traders in pedestrian malls; taxi drivers; market (flea and craft markets as well as special markets); traders at transport interchanges; photographers; cardboard collectors; traders in public open spaces; mobile traders (roving, caravans, bakkies); beach traders.
Additional to these identified activities many other activities also form part of the business activities of the informal trade:

3.4.1 Repairs and maintenance
In this business, women are not as prominent. In most cases it is men who repair shoes, cars and appliances. Shoes need to be mended, particularly the soles of shoes, and usually a small space with a table is enough for this type of job because old shoes are stacked and left to bond on top of each other or are stored in bags or boxes that the customers supply. Usually a small space with a table is enough for this type of a job. Cars require a much bigger space, one that can at least house more than two cars and that is covered to protect the car parts against bad weather conditions. However in most cases, these traders work in the open, and when bad weather strikes, the business is suspended.

Appliances that often break down include radios, TVs, kettles, fans, heaters, microwaves, stoves, irons, mobile phones and any other faulty electrical equipment. Like shoes, these items are often packed on top of each other by informal traders because of lack of space.

In the case of cars and appliances, the working spaces are usually covered in grease and oil, and the smell and noise can be unbearable.

3.4.2 ‘Clinics’ and ‘medical centers’
In South Africa, many laws were passed when the country gained its democracy in 1994. The Choice on Termination of Pregnancy Act, Act 92 of 1996, is among those passed in the name of democracy, and was passed to legalize the termination of pregnancy. The Act stipulates who can terminate their pregnancy (ACT 92, 1996:2), the
circumstances that warrant the termination of pregnancy (ACT 92, 1996:2), the period within which pregnancy can be terminated, and the places where pregnancy may be terminated (ACT 92 1996:3).

Prior to this, many illegal ‘clinics’ provided the service in private residences or buildings. This trend is continuing, and many people have taken advantage of this Act to start their own businesses. Now fliers and posters advertise this service everywhere. Some people, particularly young people, are ignorant and scared enough to go through the process of pregnancy termination secretly and often unsafely. The other reason could be high medical costs in the private and public hospitals and clinics. It is because of this demand that illegal abortion clinics are blooming all over street corners and in old buildings, flats and some residencies in South Africa. Due to unsafe, sometimes unskilled abortions, many bad after effects and deaths occur. These ‘clinics’ therefore also function as medical centers to those suffering from the after effects of illegal abortions.

Unsafe, unschooled and inexperienced traditional healing is also rampant in South Africa. Many traditional doctors are opening their practices on the street or in other unhealthy places. Their performances and healing contribute to the mysterious deaths of many people who opt for quick assistance from people with inadequate training and knowledge.

3.4.3 Sex industry
This is an old and established industry in many countries, including South Africa. Sex work is a crime in South Africa. It is a well known contributor to the spread of diseases, yet many women are willing to take the risk to support their families through the earnings of this industry. In South Africa, the government is in the process of legalizing the sex trade, something many workers in the industry are looking forward to. According to Augustin (2009), commercial sex is embedded in ordinary daily life, and therefore decriminalization might just be the first step in a positive social and legal direction.
Although decriminalizing this industry has been moved back to the front burner in South Africa (Augustin 2009), new proposals by the Gauteng Premier, Nomvula Mokonyane indicates that a review of the current legislature is underway. In her own words: “We must begin to appreciate that sex work is an industry, here in Gauteng..., the best is to recognize commercial sex work, make sure it has different support systems..., have designated area, register people, let them be subjected to periodic health tests, and also let them be subjected to what me and you are subjected to- tax.”

In South Africa, sex work was regarded as an offence in the Sexual Offences Act, 23 of 1957. All sex work was prohibited, and any activity associated with sex work, such as keeping or participating in the management of a brothel, procuring someone to become a sex worker, soliciting or selling sex, and living off the earnings of a sex worker, was a criminal offence (Act 23 1957). However, the Criminal Law Sexual Offences Amendment Bill of 2003 was passed to amend the law relating to certain sexual offences.

3.4.4 Miscellaneous products
Products in this category include mobile phones, airtime, fruits and vegetables, facecloths, padlocks, cockroach control, etc. Quite a diverse and sometimes bizarre number of items fall in this category

3.4.5 Mobile fast food outlets
Women cook and sell readymade food in mobile ‘kitchens’. Both modern and traditional dishes and menus are on offer in this setting. Food is either prepared at home or transported to the site, which can be an erected tent or caravan. Alternatively the food is cooked at the site with all the accessories, i.e. utensils, plates and pots, which are also washed at the site. Soft drinks and juices compliment the meals. Home-made cookies and fats are also on offer in these mobile kitchens.
3.4.6 Craftsmanship
South Africa is bubbling over with ethnic diversity. The trade in traditional art, artifacts, attire and patterns from different African countries is booming with the sale of traditional mats, wooden toys, animals and furniture, and sometimes dresses, shoes, hats and belts made from animal skins. These are sometimes sewn, crafted or designed on site.

3.4.7 Hair salons
It is popular for African women to style their natural hair and plait their hair with human hair that is sold in many cosmetics shops and outlets. Salons situated in expensive industrial areas such as malls and centers are often less popular than the informal salons surrounding gazebos, trees and buildings for this purpose.

3.4.8 Scavengers and pickers
Informal waste recycling is carried out by poor and marginalized social groups who resort to scavenging or picking through waste for income generation, and some even for everyday survival (Wilson et al. 2005:798). According to Gunsilius et al. (2011:12), informal waste and recycling can be divided into two distinct subsectors: an informal service sector, consisting of individuals and micro-enterprise informal service providers earning fees for the removal of waste, excreta and litter; and an informal valorization sector, consisting of individuals, co-operatives and family enterprises that function as an extractive resource industry. The main activity of this sector is identifying and removing valuable materials from the waste stream and the places where waste accumulates, and valorizing (extracting added value from) it.

3.5 The informal sector South Africa
According to Lathapaersad-Pillay (2004:23), the growth of the informal sector in South Africa can be traced back to the post-apartheid era when the South African labor market witnessed spiraling unemployment due to the restructuring of the public sector and poor economic growth. These events provoked considerable job losses during the period spanning 1994 to 1998, with 284 837 jobs being shed in the formal labor market (143
000 in the public sector alone). During this period unemployment stood at 30% (Lathapaersad-Pillay 2004:23).

According to the Department of Local Economic Development (2004:4), informal street trading has become a feature of our urban environment and symbolizes the changing nature of the city in both spatial and economic terms. In sub-Saharan Africa, the informal sector accounts for up to 60% of the economy. Literature spanning almost a decade (Muller 2002; Portfolio Committee on Finance on Budget 2007; AFRISTAT 2008) keeps stating that the South African Government is in the process of determining the number of informal sector businesses in the country. While this has yet to be done, at the very least, there is no doubt that it is large and growing by the day.

According to Amaral and Quintin (2006:1543), this sector is large in developing nations, often accounting for over one-third of all employment, and the distribution of worker characteristics and earnings varies systematically across sectors.

Chen (2001) observed that the street vendors in east and south east Asia represented a very high proportion (73-99%) of employment in trade and contributed a significant share (50-90%) of the trade to the gross domestic product (GDP).

The author found that street vendors constituted a significant share of total employment in the informal sector and street vending constituted a significant share of total enterprises in the informal sector, with women accounting for more than 50% and up to 90% of informal employment in trade, except in those countries (such as Tunisia and India) where social norms restrict women’s mobility outside the home (Chen 2001:4).

According to Ligthelm (2004:1), the informal sector in South Africa is increasingly being acknowledged by manufacturers and wholesalers as an important delivery channel of goods to consumers. From this, one can deduce that this sector contributes a lot in goods transfer to people in a quick way. This in itself affirms that the economy of a country grows fast as goods are consumed fast. Ligthelm (2004:1) estimated the share
of the informal trade sector to be approximately R38 billion in 2002, which is, according to this author, 10% of retail trade sales in South Africa.

**3.6 Challenges facing the informal sector**

Like any other sector, industry or organization, informal sector is faced with some challenges.

**3.6.1 Lack of information**

Information is a great asset in promoting social progress and a better standard of life (Ikoja-Odongo 2002:1). According to the author, many governments have come to realize that people must have the right to information.

Ikoja-Odongo (2002:4), further indicates that information is now seen as an agent that plays a catalytic role in the development of a human being, in the formation of his identity, and in personal development. In the business context, like in the political, social and other contexts, the need for relevant and up-to-date business information is always of interest to business owners. The author (Ikoja-Odongo 2002:5) reiterates that information is a major resource that businesses require to monitor environmental trends, products, services, markets, regulations or customers; forecast future events; counter competitors’ strategies; and develop new products. Therefore, information is required before venturing into business. It supports making the right decisions which will see the continuity of the business. Critical information that may be necessary in the informal sector includes business registration, the award of contracts, and what is required of a business, for example a business licence. The lack of vital information leads to business failure. The information on what is in the market is also very crucial in order to practice product differentiation and improve competition.

**3.6.2 Lack of ICTs and infrastructure**

Operating in the informal sector is often very slow and time consuming. Poor physical infrastructure and facilities do not support the growth of informal businesses. Connections with suppliers, clients and fellow business operators are very limited, and this does not encourage the growth of a business.
According to Jiyane and Ocholla (2004:8) lack of transport infrastructure in villages makes life difficult for rural women because it prevents them from moving around easily. With no proper infrastructure such as electricity and phones, women are deterred from communicating with others and are subsequently socially isolated from other people and from information (Jiyane and Ocholla 2004:8).

3.6.3 Support structures regulating the sector
The informal sector lacks support from the government and other parties, such as financial organizations and non-governmental organizations (NGOs), because of its operational status. This support may encourage access to many benefits which will grow the businesses because it works within a 'legally binding contract' (Antunes and Cavalcanti 2006: 2). While lacking financial support, informal sector business may be outcast by the product suppliers who may not trust them financially to give them credit and put pressure on them to pay upfront for the delivery of their goods and products. Support can be provided by equipping informal sector traders with the knowledge and skills necessary to draft business plans which can be used to secure funding, and also teaching general business management. This support could be provided to them through different service providers, e.g. the government, NGOs, and financial providers.

Rogerson (2004:765) observes that since 1994, South Africa has confronted the dual challenges of re-integration into the global economy and positioning itself to realize the high expectations of the new democratic order by focusing on the promotion of the country’s SMME economy. The South African government has a policy that addresses small, micro and medium enterprises (SMMEs). According to Rogerson (2004), the South African government introduced the policy in order to attain the objectives of economic growth through competitiveness on the one hand, and employment generation and income distribution on the other. However, the informal sector which works outside the regulatory, legal and tax framework, is very unlikely to be affected by this policy.
Another attempt by the South African government to alleviate poverty was the introduction of Growth Employment and Redistribution (GEAR) in 1996. The main objective of GEAR was to show the government’s commitment to open markets, privatization and a favorable investment climate. The GEAR policy aimed to achieve a sustained annual real GDP growth of 6% or more by the year 2000 while creating 400,000 new jobs each year. However, it did not reach its target.

The province of KwaZulu-Natal only recently tried to put a policy in place that ‘caters’ for informal trading. In the 2009 Draft Policy on Informal Economy for KwaZulu-Natal, it is confirmed that there has been no prior policy that aims to support the informal economy, thus the regulation and development of the informal economy in the province lacks overall co-ordination and is sometimes absent or outdated. Hence in KwaZulu-Natal, the Department of Economic Development has embarked on the development of the policy with the intention to move towards the integrated support and regulation of the informal economy (2009:11).

As outlined in this Draft policy (2009:14), the main responsibilities of governments, according to this policy among others, are to:

- Focus policies and programs on bringing informal workers and economic units into the economic and social mainstream, thereby reducing vulnerability and exclusion. Programs designed to address the informal economy, such as the provision of education, training, and micro-finance, should be designed and implemented with the main objective of bringing workers or economic units into the mainstream.
- Provide a conducive policy and legal environment that: a) Lowers the cost of establishing and operating a business, for example by simplifying registration and licensing procedures, outlining appropriate rules and regulation, and ensuring reasonable and fair taxation; b) Increases the benefits of legal registration which facilitates access to commercial buyers, more favorable credit terms, legal protection, contract enforcement, access to technology, etc. It should be an
environment that helps startup businesses and helps smaller businesses enter the formal economy and create new jobs.

- Provide an enabling framework at national and local levels to support representational rights.

Although the government drafts may be convincing, there are problems on the horizon. Some of the draft policies may not suit the traders. Renting the places and rates could be fixed location and amount by the local government, which may not be negotiated with them. In some instances, some informal businesses may be placed near slums or in open places without proper drainage and electrification systems, places that is not conducive for their businesses, and that might cause dissatisfaction.

With respect to drawbacks, one need only look at the history of the informal sector. It was not taken into consideration that some kind of discrimination existed against informal traders in the past, and as a result is still impacting negatively on the sector even today, because policy-makers have thus far paid little attention to them (Blackman et al. 2006:604). This is what stops informal traders from successfully applying for funding for expansion - formal market for credit, security, labor acceptable standards, etc, because they have been neglected.

According to Blackman et al. (2006:604), the expansion of the informal sector is having a significant impact on the environment, especially leather tanning, ceramics, metalworking, electroplating and mining, because they pollute the environment. According to the authors, small firms performing such activities lack pollution control equipment and often access to basic sanitation services. This is a threat to their health and those around them because the activities are labor intensive and are situated in poor residential areas (Blackman et al. 2006:604).
3.6.4 Personal challenges
Early marriage and pregnancy did no favors for women who remain illiterate because they dropped out of school at an early age and lost out on educational opportunities (Jiyane and Ocholla 2004:4). Lack of marketing and business management skills and a low level of education are personal challenges that lead to poor planning and poor decision-making due to low literacy levels, the poor management of businesses, and irrelevant marketing procedures and practices. Eventually this can lead to the closure of businesses that cannot compete.

3.7 Potential of the informal sector
According to Laltherpasad-Pillay (2004:22), in many developing and developed countries, the informal sector is increasingly becoming a major contributor to the gross domestic product (GDP). Therefore, informal trading is seen as a positive development in the micro business sector because it contributes to the creation of jobs and has the potential to further expand the economic base of the country (Department of Local Economic Development 2004:3).

Another benefit would be its extreme flexibility. The informal sector does not marginalize against the young or old. As long as its participants can work, all is well; there is no age at which one has to retire. The informal sector is also flexible in its approach to time. In the informal sector, business hours can be at any time of the day. A business can start very early in the morning and end very late in the evenings (Jiyane and Ocholla 2004; Jiyane and Mostert 2008). This flexibility suits women who have to raise children and take care of elderly and sick family members before going to work.

The informal sector also supports creativity and innovation. In the informal sector, traders are at liberty to be creative and innovative to enhance and increase exposure to their businesses. Although there is homogeneity in their businesses in most instances (Jiyane and Mostert 2008), they can individually ‘add spice or color’ to what they are trading without asking for permission from anyone, because they are their own bosses.
Potential development is another benefit derived from the informal sector. When a trader is committed, business skills, management skills, and other business management information and knowledge can be easily and quickly learnt, and the potential development of the trader is possible.

3. 8 Summary
This chapter discussed the nature of the informal sector and the reasons that support the existence and growth of the informal sector. It also discussed the composition of the sector and the different types of informal business activities. The challenges facing the informal sector were also discussed in this chapter.

The next chapter, chapter four, presents the theoretical framework that underpins this study.
CHAPTER FOUR: THEORETICAL FRAMEWORK

4.1 Introduction

This chapter presents background information on the theoretical framework, theories and models that were used in the study. According to Anfara and Mertz (2006:xxv11), a theoretical framework is an empirical or quasi-empirical theory of social and/or psychological processes at a variety of levels, for example grand, mid-range and explanatory levels, that can be applied as a ‘lens’ to the understanding of a phenomenon. Neuman (2006:74) defines a theoretical framework as a general theoretical system with assumptions, concepts and specific social theories.

A theory, according to Busha and Harter (1980:13), is a set of assumptions, definitions and propositions that explain a group of observed facts or phenomena in a field or discipline. It is also defined by Kerlinger (1979:64) as a set of interrelated propositions that present a systematic view of a phenomenon by specifying relations among variables with the aim of explaining the phenomenon.

A theory has a significant role to play in research. According to Gorard and Taylor (2004), a theory can be very crucial in transferring findings to new settings and an important end-product of research findings.

Cohen, Manion and Morrison (2007:12) observe that more often than not, the term ‘model’ is used instead of or interchangeably with theory. The term ‘model’ refers to a hypothetical description of a complex entity or process (Miller 2006).

A model is viewed as a representation of reality; it delineates those aspects of the real world the scientists consider to be relevant to the problem investigated, and makes explicit the significant relationships among those aspects (Frankfort-Nachmias and Nachmias 2008:44).

An accurately formulated model can be of great help in achieving clarity and focusing on key issues in the nature of the phenomena (Cohen, Manion and Morrison 2007:13). Models can be used for different purposes. For example, Kedebe (2002:79) observes
that models can be used to simplify phenomena in order to study and understand them, and they can also be used to advance and develop theories (Kedebe 2002:13).

4.2 Use of a theoretical framework in quantitative and qualitative research

In quantitative studies, a theory is used to provide an explanation or prediction about a relationship between variables in a study. It is deductively used at the beginning of the study to test or verify a theory rather than to develop it. In this case, the researcher advanced the theory by collecting data to test it and reflecting on the confirmation or disconfirmation of the theory in the results (Creswell 2003:125).

In qualitative studies, the theories used are much more varied and guide broader explanations than in quantitative research. According to Creswell (2003:121-140), in qualitative research, a theory can be used to provide broad explanations that inform the study. They are also used as a theoretical lens or perspective to guide the study and raise questions that the study would like to address.

Furthermore, a theory can appear at the end of the study that emerges inductively from data collection and analysis (Creswell 2003:140).

This study utilized both qualitative and quantitative approaches, although the qualitative approach was predominant. Theories were not placed at the end of the study because the aim was not to develop a theory, as in a grounded theory approach. The theoretical framework was rather used as an up-front explanation and as a theoretical lens or perspective to guide the study, which is why it was placed at the beginning of the study.

4.3 Theoretical framework that guided the study

This study used the modernization theory as its theoretical framework. It is a theory that regards development as a movement from traditional to modern societies (Park 1998:81). The modernization theory is one of three dominant frameworks of international communication. The other two are the dependency and post dependency theories.
According to Park (1998:81), these three approaches share the modern historiography of uni-linear historical progress (be it development, modernization or liberation) in contrast to the postmodern focus on the multiplicity of historical discourse.

4.3.1 Key elements of the modernization theory
In the modernization theory, there are two terms that have been used interchangeably to refer to a wide variety of social, political, economic and cultural changes, and these are development and modernization (Park 1998:81).

Development and modernization have not been distinguished by Huntington and Nelson (as cited by Park 1998) because they are associated with the movement of societies from relatively poor, rural, agrarian conditions to relatively affluent, urban, industrial conditions, as a process of social, economic, intellectual, political and cultural change. This applies to informal sector women entrepreneurs who run informal businesses in not-so-favorable conditions, which can be termed ‘poor’. However they have the desire to improve to more affluent, better-resourced conditions and to apply newly attained business skills and knowledge and technologies which can lead to economic change and growth, especially in this technological era.

4.3.1.1 Development
Marquis de Condorcet was involved in the origins of the theory with the concept that technological advancements and economical changes can enable changes in moral and cultural values. Condorcet was the first to make the economic-social development connection and to come to the conclusion that there can be continuous progress and improvement in human affairs.

He emphasized that new advancements and improvements would need to keep pace with a constantly changing world, and further encouraged technological processes to help give people further control over their environments, arguing that technological progress would eventually spur social progress. Modernization theories look at the internal factors of a country while assuming that, for assistance, ‘traditional’ countries can develop in the same manner that more developed countries have.
4.3.1.2 Modernization
According to Wikipedia the Free Encyclopedia (2010), the idea of modernization is relatively new, and its basic principles can be derived from the idea of progress that emerged in the 18th century’s Age of Enlightenment - the idea that people themselves could develop and change their society. According to Sorensen (2001), modernization is the transition from the traditional society of the past to modern society as it is epitomized today in the West. Accordingly, Giddens (1991) states that modernization means the appearance of ‘modes’ of social life or organization that emerged in Europe from about the seventeen century onwards and which subsequently became more or less global in their influence. Modernization theories explain the changing ways of communication and media use in traditional and (post)modern societies. It explains the process of modernization within societies.

4.3.2 History, orientation and core assumptions of the modernization theory
The modernization theory attempts to identify the social variables that contribute to social progress and the development of societies, and seeks to explain the process of social evolution (Wikipedia the Free Encyclopedia 2010). Modernization or the development theory presents the idea that by introducing modern methods in “technology, agricultural production for trade, and industrialization dependent on a mobile labor force, the underdeveloped countries will experience a strengthening in their economies” (Bonvillain 2001:191).

The modernization theory has evolved in three waves (Lerner 1958). The first wave appeared in the 1950s and 1960s. This wave explains the diffusion of Western styles of living, technological innovations and individualist types of communication which are highly selective, addressing only particular persons, as the superiority of secular, materialist, Western, individualist culture and of individual motivation and achievement (Lerner; Schramm, as cited by Giddens 1991).
According to McQuail (2000:84), the first wave of the modernization theory produced three variants, namely economic development, literacy and cultural development, and national identity development.

The economic development variant is based on Rogers and Svenning’s (1969) Diffusion of Innovations theory because this variant perceives mass media as a tool to promote the global diffusion of many technical and social innovations that are essential to modernization. In this vein, social progress or the evolution of informal sector women entrepreneurs could be identified and monitored by applying variables that contribute to it, such as mass media, technological tools such as ICTs, and other relevant variables to keep pace with the constantly changing world.

Mass media can teach literacy and other essential skills and techniques in the literacy and cultural development variant. These skills and techniques encourage a ‘state of mind’ favorable to modernity, such as the imagination of an alternative way of life beyond the traditional fare. In the context of informal sector women entrepreneurs, the skills and techniques they attain could widen their insight into the management of their informal businesses in a modern way by employing modern tools and technologies.

The third variant, national identity development looks at mass media as a tool which could support national identities in new nations and support attention to democratic policies.

The second wave of the modernization theory is a part of the critical theory that was popular in the 1970s and 1980s. This wave does not support but rather criticizes the influence of Western modernization (Schiller as cited by Giddens 1991). This second wave concerns the media dependency theory. This theory is of the view that peripheral (developing) countries are assumed to be dependent on mass media in the core (the Western World). This wave is true in the context of informal sector women entrepreneurs. They are developing and adapting through the application of modern technology which has been employed in the western world and proved to be successful, hence they are dependent on the mass media or these new technologies for their
progress as they are living in the 21st century. They need to be innovators if they are to survive in this modern century and realize the importance of economic and market dynamics and thus leapfrog to the application of tools that could economically empower them to do that.

The third wave of the modernization theory, rising in the 1990s, is the theory of late-, high- or post-modernity. This theory tries to be neutral because it does not favour or criticize Western modernization; however, it attempts to unearth the contradictions in the modernization process and to explain the consequences of modernity for individuals in contemporary society (Giddens 1991). In this third wave, Giddens (1991) indicates that the modern society is characterized by time-space distantiatiion and disembedding mechanisms, while traditional society is based on direct interaction between people living close to each other. Giddens further shows that modern societies stretch further and further across space and time because of mass media and interactive media such as money, symbolic means, and English as the Lingua Franca.

Similarly, Meyrowitz and Maguire (1993) talks about the combination of unification and fragmentation in society and in the media. This also relates to the work of Van Dijk (2005) where he explains the rise of the new media, such as computer networks and mobile telephony, as important tools for modern life because they enable scale reduction and scale extension (Van Dijk 2005).

When explaining the theoretical assumption of the modernization theory, Park (1998) indicates that the main focus of this theory has been the internal process of development, that is, the process whereby traditional values are replaced by modern values. This focus rests on the basic assumption that so called ‘backward’ societies can achieve development by substituting modern values for traditional value systems that have served as obstacles to economic and political development (Park 1998:82). When simplifying this perspective, Park (1998:82) indicates that the development of non-Western countries is exogenous in the sense that the adoption of Western values is a necessary precondition for development.
Another important theoretical assumption of the modernization theory is that economic growth would ‘trickle down’ to other sectors of the social system and lead to socio-political modernity in the form of Western-style democracy (Park 1998:82). According to Park, for the effective diffusion of Western values to developing countries, the mass media was understood to be crucially important because of its ability to disseminate modern values on a broad scale. The success of the development program was thought to depend on the ability of traditional societies to mobilize Western ideas by implementing successful mass communication plans (Park 1998:82).

In light of this, Lerner (1958) introduced the communication version of the modernization theory. The author emphasized the role of mass media as the ‘magic multiplier’ of social mobilization, which, according to him, is essential to the developmental process in developing countries. Lerner (1958) hypothesized that increased media exposure as a result of increased industrialization and urbanization would increase individual participation in economic and political life and eventually lead to political democracy. This exposure to the media would make traditional societies less bound by tradition and lead them to aspire to a new and modern way of life (Park 1998:82).

4.3.3 Dependency and post-dependency frameworks
As mentioned in section 4.3.1, the modernization, dependency and post-dependency theories are the three dominant paradigms of international communication.

4.3.3.1 Dependency theory
Radical interpretation of economic growth was important in the development of the dependency theory (Barak as cited by Ojo 2004:143). It borrows from the imperialist school of thought which reinforces the state of backwardness of the Third World by reproducing the structure of economic stagnancy through monopoly over the appropriation of economic surplus. Interpreting this statement, Frank (as cited by Ojo 2004:144) contends that the capitalist system creates backwardness and underdevelopment which is not an original state, but a negative consequence of
capitalist expansion with various forms of dependency of Third World countries on advanced capitalist countries.

The dependency theory predicated on the notion that resources flow from a ‘periphery’ of poor and underdeveloped states to a ‘core’ of wealthy states, enriching the latter at the expense of the former; poor states are impoverished and rich ones are enriched by the way poor states are integrated into the ‘world system’.

The dependency theory outlines a framework for the consideration of external factors as well as internal factors that influence economy (Velenzuela and Velenzuela as cited by Park 1998:83).

4.3.3.2 Post-dependency theory
The post-dependency theory is an extension of the dependency theory (Park 1998:86). Its main aim was to correct the general explanation of perpetuating dependency by providing more empirically convincing explorations of the allegedly autonomous development in some industrial sectors of developing countries (Park 1998:86). This model addresses the economic aspect of development. It also looks at cultural aspects of society because its belief is that transformation in cultural practices results from economic transformation.

In conclusion, both the modernization and dependency theories represent a single super paradigm of development as their assumption is that the development of a society requires modern economic and social organizations to replace traditional structures.

4.3.4 Application of modernization theory in the study
This section tries to examine the key elements of the modernization theory within the context of this study. Firstly, Lerner and Schramm (as cited in Huesca 2003:52) believed that mass media would bring development to developing countries if people in these countries were exposed to the ‘modernized’ world and culture of the West, and in turn learn new lifestyles and behavior.
According to Ojo (2004:140), the modernization theory presumes that the transfer of capital, goods, technologies, industries and Western norms to developing countries would bring about rapid economic productivity and social development in those developing countries, which for a long time were considered to be ancient and primitive. Subsequently, Lerner (1958), in his book “The passing of the traditional society”, argues that through exposure to Western values, people in traditional societies would become civilized and active participants (like people in the modern Western society), and would also develop a psychological pattern which he calls ‘empathy’ (as cited by Ojo 2004:140).

Empathy is defined by Fjes (1976) as that which allows the individual to internalize the process of modernization by not only being able to cope with change, but expecting and demanding it; in other words it is the psychic nexus of all the attitudes and behavior necessary in a modern society (as cited in Melkote and Steeves 2001:115). Melkote and Steeves (2001) further clarify that with the highest empathy, people would be able to move out of their traditional setting and expand their horizons. They would be able to adapt to Western ways of life and culture faster, especially with the continuous spread of ideas of social mobility and changes such as urbanization, literacy and other Western belief systems perpetuated in the mass media (Melkote and Steeves 2001:115).

Accordingly, Lerner believes that these institutional developments, which had already occurred in Western nations, would lead to a take-off toward modernization (as cited in Melkote and Steeves 2001:115).

Based on this, Ojo (2004:140) is of the opinion that modernization is westernization; a nation is developed and modernized when it perfectly resembles industrialized Western countries in economic structures, socio-political institutions, cultural behavior and social attitudes to science and technology.

According to Ojo (2004:141), it is after the United Nations’ (UN) expectations placed on the mass media to be able to incite social and economic development that the need to consider the situation in developing countries was intensified. Through its agency, the
United Nations Educational Scientific and Cultural Organization (UNESCO) initiated a program aimed at building communication facilities in developing countries. After their subsequent meetings with various stakeholders, the resolution was that information media generally has an important role to play in education and in economic and social progress (UNESCO as cited by Ojo 2004:140). Therefore every country, especially African countries, was urged to include communication development plans in their development policy agenda. It is as a result of this view that UNESCO expected each country to have a minimum of 10 copies of newspapers, 5 radio receivers, 2 cinema seats and 2 television receivers for every 100 people (Ojo 2004:141). This minimum requirement aimed to measure national development, and these media types were available, accessed and used in the 1950s, 1960s, 1970s and 1980s. However they had relatively little significant impact on the social and economic well-being of users (Ojo 2004:141).

With the significant advancement in communication technologies over the last two decades (Ojo 2004:144), there has been renewed interest in ICTs as ‘an icon’ for modern development (Heeks 2002:15), a notion driven by corporate ICT vendors such as Microsoft and international organizations such as the World Bank and the International Monetary Fund (IMF) (Ojo 2004:144). In most reports of these institutions, there is a strong belief in the potential of ICTs to instigate social and economic development in developing countries (2004:144).

In this respect, the World Bank clearly states in its report that, “If African countries cannot take advantage of the information revolution and surf this great wave of technological change, they may be crushed by it, in that case, they are likely to be even more marginalized and economically stagnant.”

The relevance of the theory in the study lies in its political implications. It shows that there are different interests that accompany development and growth. The benefits of growth do not spread throughout the economy, as implied by the modernization theory, but most importantly there are conflicting interests in society where it is evident that
there are those in power who use the expansion of poor communities to serve their own agenda and interests. It is also evident in the economic arena, where terms of trade, choices about what to produce, what to sell and where to sell, and the patterns of investments, show the interest of certain groups in society at the expense of others, especially those who are poor.

Although Marker et al. (2002) observe that within populations of poor people, disadvantaged and marginalized sections of society usually face impediments to using ICTs, it has been found that ICT penetration, especially mobile telephony, is increasing (CIA World Factbook 2010).

To reiterate, the modernization theory holds the assumption that economic growth will not only be catered for, but economic growth will ‘trickle down’ to other sectors of the social system and lead to socio-political modernization (Park 1998:82).

This is also supported by Valenzuela and Valenzuela (1978:552, as cited by Park 1998) that “It is already known that in backward areas the modernity-inhibiting characteristics play a dominant role; otherwise the areas would not be backward.”

Giddens (1991) indicates that modern society stretches further and further across space and time using ICTs. This indicates that through ICTs, there is no space, and no time. This view also supports the necessity of well harnessed infrastructure, spatial and technological criteria.

Moles (1999:5) commend the modernization theory in that it provides data for analyzing the specific situations prevailing in developing countries.

4.3.5 Criticisms and strengths of the Modernization Theory
A theory is not a complete entity; every theory has its strengths and weaknesses. The same applies to the modernization theory.
4.3.5.1 Criticism

The modernization theory is criticized for failing to consider the poor as the centerpiece in poverty reduction initiatives (Matunhu 2011:67). Since the modernization theory is adopted from the development of the modern world, the participation and involvement of the individual is ignored. It therefore comes as an imposed strategy to modernize traditional or poor people by implying that adopting a modern way of life improves lives in general.

This is true because the modernization theory paints modernization as a process of change for the better, thus bringing to the fore the transition and drastic transformation that a traditional or a poor person has to undergo in order to ‘fit’ in the modern world, otherwise they will be left in inferiority and underdevelopment.

The modernization theory has an oversimplified view of social change (Coetzee et al. 2007:101). By nature, humans resist change and prefer the status quo as change brings uncertainty, and it is unlikely that the modernization theory can change that.

Again, the modernization theory implies that only externally initiated changes bring about development and progress in a socio-economic situation (Matunhu 2011:67). It does not give any opportunity and space for a reciprocal relationship from within and from without. This implies that only developed, modern societies can bring development and modernity to developing societies, and there is nothing that they could learn from them. In this way, the theory depicts a linear process of socio-economic development.

The modernization theory also portrays the assumption that all countries can follow only a single path of evolutionary development, thus disregarding global-historical development and transnational structures that constrain local and national development (Martinez-Vela 2001:2).
4.3.5.2 Strengths

The strengths of the modernization theory are based on Moles’ (1999:7) observation that international factors are becoming popular. The technological era calls for people to adapt to its waves and thus consider what is befitting now for their progress.

The modernization theory focuses on the social, political and cultural consequences of economic growth and on the conditions that are important for industrialization and economic growth to occur. In this way, it allows the integration of the cultural dimension in development studies and research (Henry-lee n.d.:25).

The growing embrace of the modernization concept by global communities fulfills a wide variety of needs and fills gaps in socio-economic areas (Buttel 2000:60). According to Rice (2001), the modernization theory presents the following opportunities:

- The ability to borrow initial expertise in planning, capital, accumulation, skills and patterns of organization without the costs of invention

- The ability to skip some of the non-essential stages associated with the process [of development and advancement]

Countries in the information era have to consider those factors and criteria that will make them globally accepted as information and knowledge societies so that they may interact, share and disseminate information and knowledge.

4.4 Summary

This chapter discussed the modernization theory of Daniel Lerner. It also presented the dependency and post-dependency theories which both belong to the international communication view. The two key elements of the modernization theory, i.e. development and modernization, were described in detail. The chapter also highlighted the strengths and shortcomings of the theory.

The modernization theory was found to be suitable as a framework for this study because it can be applied in the development and modernization of traditional and
developing communities and individuals with suitable technologies that help them to keep pace with modern and developed communities while they are in the transition stage of movement from traditional to modern ways of doing things.

The next chapter presents the research methodology.
CHAPTER FIVE: RESEARCH METHODOLOGY

5.1 Introduction
Chapter five describes the research methodology that was used in this study by specifically outlining the research design, study area, study population, sampling procedure, data collection procedure and instruments, data analysis, validity and reliability, and research ethics and evaluation. The data was collected from Hlabisa Local Municipality in Mission, Mahunjini, Hlabisa CBD and Mapheleli areas.

5.2 Research methodologies
Neuman explains that when conducting research, a researcher thinks logically, follows rules, and repeats steps in order to find answers to questions (Neuman 2006:2). In the process, a researcher combines theories or ideas with facts in a systematic way while he/she organizes and plans carefully and selects appropriate techniques to address a question (Neuman 2006:2).

Neuman (2006:2) observes that the terms ‘methodology’ and ‘method’ are often used synonymously, but explains that ‘methodology’ is broader and encompasses method. Research methods refer to a range of techniques used in research to gather data that is used as a basis for inferences and interpretation, for explanation and prediction (Cohen, Manion and Morrison 2007:47).

Blaxter, Hughes and Tight (2001:58) explain that research methods involve techniques concerned with different purposes, methods of data collection, statistical techniques for establishing relationships between data and unknown variables, and methods for evaluating the accuracy of the final results. According to Creswell (2003:365), research methodology refers to the set of procedures and methods used to conduct research. It focuses on the research process and the kinds of tools and procedures that are used in a study (Babbie and Moulton 2001:75).
5.3 Research design

In order to successfully carry out a study, research design is essential because it articulates how a study will be implemented. Designing a study, according to Neuman (2006:14), requires making decisions about the type of case or sample to select, how to measure relevant factors, and what research techniques to employ. Creswell (2003: 4) defines research design as the plan of action that links philosophical assumptions to specific methods. Leedy and Ormrod (2005:87) narrate that when formulating the research design, the researcher should consider a viable research problem, the kind of data that an investigation into the problem will require, and a feasible means of collecting and interpreting that data.

5.3.1 Mixed methods

Social science researchers have shown an increasing interest in mixed method research (MMR). MMR is a research design with philosophical assumptions and methods of inquiry which guide the direction of the collection and analysis of data and which combines a mixture of qualitative and quantitative approaches in the research process. As a method, it focuses on collecting, analyzing and mixing both qualitative and quantitative data in a single study or series of studies (Creswell and Clark 2007:5). According to Johnson et al. (2007:112), MMR is recognized as the third major research approach or research paradigm along with qualitative research and quantitative research.

Johnson et al. (2007:118) observe that the use of terms such as ‘triangulated studies’ and Neuman (2006:149) ‘s observation of use of such terms as ‘integrative research’, ‘hybrid research method’, ‘blended research’, ‘multiple methods’ and ‘multi-methods research’ by researchers (Ruberg, Chen and Martin (2006:5), is still more common. However, MMR is a new paradigm that encompasses all these terms. Many studies use this hybrid of both qualitative and quantitative approaches, as according to Neuman (2006:13; 151), while the two approaches differ in significant ways, they both share basic principles of science and can be used to complement each other. Neuman (2006:176) indicates that quantitative and qualitative approaches differ in their strengths
and weaknesses because they specify a different form and sequence of actions when conducting research.

For this study, both qualitative and quantitative approaches were used simultaneously, although the bulk of the study was predominantly more qualitative than quantitative.

It is often exploratory in nature and may use its observations to build theory from the ground up (Leedy and Ormrod 2005:95). The qualitative approach supported the exploratory nature of this study because there was no pre-existing list of statistics for the informal sector that could be used or referred to, and thus the researcher had to find new ways of compiling a list of women entrepreneurs in the sector. According to Neuman (2006:157), in qualitative research, theory can either be causal or non-causal and is often inductive. Research procedures are particular and replication is very rare in qualitative research, and measures are created in an ad hoc manner and are often specific to the individual setting or researcher (Neuman 2006:157). The researcher had to make a few ad hoc decisions as the situation presented itself because of the non-existence of holistic information about the size of the informal sector, and how exactly this group could be sampled. Therefore, an ad hoc manner helped in the creation of standard measures as the process of collecting data was progressing. In this study, the qualitative approach allowed the researcher to refer to data collected by observing the phenomena of women entrepreneurs at work in the informal sector.

On the other hand, in the quantitative approach, theory is largely causal and deductive (Neuman 2006:157) and it seeks to establish, confirm, or validate relationships and to develop generalizations that contribute to theory (Leedy and Ormrod 2005:95). In quantitative research, procedures are standard, replication is frequent, and measures are systematically created before data collection (Neuman 2006:157). In this study, statistical information such as personal information was obtained and recorded by using the quantitative approach, where a pre-existing tool was prepared specifically for this purpose (see Appendix 4).
As already mentioned, mixing methods facilitates triangulation. According to Neuman (2006:149), it is better to look at something from more than one angle, as looking at something from multiple points of view improves accuracy. Jick in Johnston et al. (2007:115) observes that triangulation has the following advantages:

* It allows researchers to be more confident in their results;
* It stimulates the development of creative ways of collecting data;
* It can lead to thicker, richer data;
* It can lead to synthesis or the integration of theories;
* It can uncover contradictions; and
* By virtue of its comprehensiveness, it may serve as the litmus test for competing theories.

There are different kinds of triangulation that a researcher can employ in his or her study. These include triangulation of measures, triangulation of observers, triangulation of theory, and triangulation of method. Triangulation of measures takes place when researchers take multiple measures of the same phenomena with the aim of investigating it from more angles (Neuman 2006:149). In triangulation of observers, more than one researcher gets involved in collecting data. According to Neuman (2006:150), multiple observers add alternative perspectives, backgrounds and social characteristics that reduce the limitations of the research. For this study, the researcher worked with an assistant who fulfilled this purpose.

Triangulation of theory is another type of triangulation where a researcher uses multiple theoretical perspectives in the planning stages of research or when interpreting data (Neuman 2006:150). In the previous chapter, the researcher brought up other theories that support the theory which was used in this study to make comparisons and reveal relationships or related aspects. For example, in section 4.3.2, Roger’s Diffusion of Innovations theory was briefly mentioned to highlight the aspect of economic
development where mass media is regarded highly as a tool to promote the global diffusion of many technical and social innovations that are essential for modernization.

Supporting the use of a combination of methods, Neuman (2006:150) observes that most researchers develop an expertise in one style, but all the styles have complementary strengths. In this study, triangulation was demonstrated in the combination of methods and instruments of collecting data across different times and in different places and contexts.

5.3.1.1 Content analysis

Content analysis is a technique for gathering and analyzing the content of text (Neuman 2006:322). According to Leedy and Ormrod (2005:142), content analyses are performed on human forms of communication such as books, tapes, transcripts of conversation, etc.

Although Payne and Payne (2004:51) assert that content analysis was originally a quantitative way of evaluating written texts, it gradually extended to apply to literature, autobiographies and other documents, with the emphasis shifting to qualitative priorities such as interpretation and subjective meaning.

Neuman (2006:323) observes that there are presently quantitative and qualitative types of content analysis. In qualitative content analysis, researchers examine the larger context of the content’s creation, distribution or reception, while researchers using quantitative content analysis use objective and systematic counting and recording procedures to produce a numerical description of the content.

Content analysis offers many advantages. According to Neuman (2006:323), content analysis lets a researcher unravel the content (i.e. messages, meaning, etc.) in a source of communication and enables him/her to compare content across many texts and analyze the content using quantitative techniques (e.g. charts and tables) if necessary.
In this study, qualitative content analysis was used to analyze documents and text of interest. Quantitative content analysis was also used to develop charts and tables to analyze the information.

5.3.1.2 Survey
The survey method was used in this study. According to Neuman (2006), in a survey, a researcher asks people questions in a questionnaire or interview where answers are recorded. Neuman explains that in survey research, the study uses a sample or smaller group of selected people but generalizes the results onto a larger group. The author further states that surveys can be conducted over the telephone, by mail or in person.

This study interviewed women leaders and municipal officers and discussed issues in focus group discussions with informal sector women. This method of collecting data helped the researcher observe the situation on the ground, and record the attitudes and behaviors of the sampled population.

5.4 The study population
The target population refers to the subjects or entities from which data for the study is drawn. According to Neuman (2006:224), the population is also referred to as a pool; the researcher specifies the unit being sampled, the geographical location, and the temporal boundaries of the population.

The subject of this study was the role of the information and knowledge society in poverty alleviation and economic empowerment among informal sector women entrepreneurs in South Africa. Therefore the target population of this study consisted of women leaders, informal sector women entrepreneurs, and local government officials in the local municipality of Hlabisa in KwaZulu-Natal. Women leaders were important because they were used as a link between the researcher and ISWEs.

They act as ISWEs’ representatives, albeit not officially, in any matters that pertains to informal trading.
To reiterate, ISWEs is short for women who are involved in informal businesses as outlined/discussed in Chapter 3. They were reached via women leaders, as explained in section 5.8.1. The officials in the local municipality were important as they are supposed to be informed about matters in their municipality, such as the businesses taking place in the municipality and ensuring that they relate as part of IDP.

5.5 Geographical scope of the study

KwaZulu-Natal, the geographical scope of this study, is one of nine provinces that make up the country of South Africa. It is surrounded by the Indian Ocean and three other provinces, namely the Eastern Cape, Free State and Mpumalanga. Countries such as Lesotho and Swaziland are also on the border of KwaZulu-Natal. The position of KZN in SA is shown in figure 5.1.
Figure 5.1 Position of KwaZulu-Natal in South Africa

Source: Adapted from Rooms for Africa, 2011.

KwaZulu-Natal (KZN) is the third largest province in South Africa. It is mainly a rural province that covers 92,100 sq km with an approximate population of 10,449,300 (Stats SA 2009). Most of the people live along and close to the coast or in the centre of the province; the extreme west and northeast are lightly populated.
Even though the manufacturing sector is the largest contributor (21%) to the GDP, a subsistence economy prevails in the area, and the economy relies mainly on cattle raising and corn (maize) cultivation supplemented by remitted earnings of people who work elsewhere in South Africa. The most important agricultural area is along the coast where sugarcane is the main crop. According to Stats SA, the average economic annual growth for KwaZulu-Natal for the period 2004 to 2008 was 4.1% compared to 3.65% from 2001 to 2004. KwaZulu-Natal is ranked second as a major contributor to the economy, accounting for 16.7% of South Africa’s GDP (Stats SA 2009).

A total of one hundred and eighteen (118) informal sector women traders, four (4) local municipality officials, and seventeen (17) women leaders were included in the study. They all came from four selected places in the Hlabisa Local Municipality, namely Mission, Mapheleni, Mahunjini and Hlabisa CBD. The women traders were divided into small manageable focus groups of between 6 to 12 participants at a time (Neuman 2006:412).

5.6 Sample size and sample frame

According to Patton (2002:244), there are no rules for a sample size in qualitative studies. The size of the sample differs from researcher to researcher, especially because one researcher’s population’s characteristics may differ from the next. According to Neuman (2006:241), one principle of sample sizes is that the smaller the population, the bigger the sampling ratio has to be for an accurate sample. Furthermore a researcher’s decision about the best sample depends on three variables: (1) The degree of accuracy required, (2) The degree of variability or diversity in the population, and (3) The number of different variables examined simultaneously in data analysis (Neuman, 2006:242). Adams and Schvaneveldt (1991:181) likewise reiterate that the size depends on the purpose of the study, design, data collection, and type of population available for the research problem.

Therefore, the decision regarding sample size depends on the expected reasonable coverage of the phenomenon under study and stakeholder interests. However, Neuman
suggests that ethnographic researchers should start with a relatively small sample (30 or fewer) of subjects who interact with each other on a regular basis in a relatively fixed setting. The ideal sample size for this study could not be determined because there were no figures for the actual population size. However the researcher stopped when realizing that a saturation point had been reached at 118 informal sector women traders.

A sample frame is a list of cases in a population or the best approximation of the population (Neuman 2006:225). Neuman indicates that in a sampling frame, the researcher develops a specific list that closely approximates all the elements in the population. He warns that a good sampling frame is crucial to good sampling. For this study, the sampling frame consisted of a list of informal sector business categories by their nature (i.e. whether they were legal or illegal) and their types (i.e. what is actually for sale or their characteristics, such as where they operate). The idea of a list of informal sector trading activities was obtained from the work of Devey, Skinner and Valodia (2006:10), the Draft Policy on Informal Economy for KwaZulu-Natal (2009), and the Draft Informal Trading Policy and Management Framework (2004) of Sol Plaatje Municipality.

5.7 Sampling

According to Lohr (2009:420), the basic idea in sampling is to indicate the object of the study (who or what will be studied and why). This study employed multistage sampling to provide more manageable and meaningful data.

There are two main methods of sampling, that is probability and non-probability sampling. In probability sampling, the chances of members of the wider population being selected for the sample are known, whereas in non-probability sampling, the chances of members of the wider population being selected for the sample are unknown (Neuman 2006:220).
Since there is no comprehensive list of informal businesses in KwaZulu-Natal, it was not easy to obtain a complete, certain frame for the ISWEs. The fact that they are widely dispersed made it impossible to ascertain their exact numbers.

The lack of statistics on this sector has been echoed by Devey, Skinner and Valodia (2006:13). The authors highlight the fact that the Government’s 1995 White Paper on SMMEs, which was one of the first policy documents of the new government, distinguished between four categories of SMMEs, and while this Paper outlines a concrete proposal for the SMMEs category, it is mute on support strategies for the survivalist category. According to the authors, this omission has continued in policy implementation (2006:13). Thus for this study, it was not feasible to consider the use of probability sampling, leaving non-probability sampling as the only option. The fact that the researcher could not obtain a reliable and complete list of all the ISWEs or an exact size of the informal sector in South Africa and/or in the province informed this decision. The only information available about the ISWEs consisted of estimations that had been made in previous studies, such as Henley, Arabsheibani and Carneiro (2009); Altman (2007).

The sampling procedure that was followed to select the units of the study (ISWEs) is discussed below.

5.7.1 Purposive sampling
According to Adams and Schvaneveldt (1991:181), purposive sampling is a procedure for building a sample based on cases, individuals or communities judged as being appropriate for the study that is underway. Neuman (2006:222) states that purposive sampling may be used to select members of a difficult-to-reach, specialized population, and uses the judgement of an expert to select cases with a specific purpose in mind.

According to Barbour (2008:52), in purposive sampling, the researcher selects interviewees or focus group participants by virtue of characteristics that are thought by the researcher to be likely to have some bearing on their perceptions and experiences. Because of lack of statistics on the population size, purposive sampling was considered
to be the most appropriate sampling method to use to select the province (KwaZulu-Natal) and district and local municipalities for this study within the province.

It was not possible to study the informal sector in all the South African provinces. The researcher opted to focus only on KwaZulu-Natal, even though each province in South Africa has diverse ethnic groups, resources, etc. However, it was concluded that some of the findings in KwaZulu-Natal could be generalized onto other provinces. The choice of KwaZulu-Natal was also informed by its position in the country. Its coastal location attracts visitors to its warm ocean, which in turn opens up opportunities for many businesses.

According to KwaZulu-Natal Top Business (2009) KwaZulu-Natal has ten district councils and two metropolitan municipalities (Durban eThekwini and Umsunduzi). The ten district councils are Ugu (DC 21), uMgungundlovu (DC 22), uThukela (DC 23) uMzinyathi (DC 24), Amajuba (DC 25), Zululand (DC 26), uMkhanyakude (DC 27), uThungulu (DC 28), iLembe (DC 29) and Sisonke (DC 43). There are between three (3) and seven (7) local municipalities under each district municipality - a total of sixty (49) local municipalities in KwaZulu-Natal.

Only the uMkhanyakude District Municipality was included in the study. uMkhanyakude District Municipality is divided into five local municipalities, i.e. Hlabisa, Umhlabuyalingana, Jozini, Big 5 False Bay, and Mtubatuba. There is also a district management area (DMA) which is run by the iSimangaliso Wetland Park Authority. Participants were only sampled from the Hlabisa Local Municipality.

The choice of the uMkhanyakude District Municipality and Hlabisa Local Municipality was mainly informed by the fact that they are in prime locations and have a large density of informal businesses because of the nearby attractions of the St Lucia and Isimangaliso Wetlands. Map 3 shows the position of both the uMkhanyakude District Municipality and Hlabisa Local Municipality.
Figure 5. 2 UMkhanyakude District Municipality and Hlabisa Local Municipality

Source: KZN Top Business
5.7.2 Snowball sampling
This technique was used to sample informal sector women entrepreneurs within the Hlabisa Local Municipality. Snowball sampling, which is also known as chain referral or reputational sampling, is a method for sampling the cases in a network (Neuman 2006:223). Snowball sampling is when identified subjects can refer the researcher to other subjects with similar characteristics (Adams and Schvanveldt 1991:181). According to Neuman, snowball sampling is a multi-stage technique that begins with one or a few people or cases and spreads out on the basis of links to the initial cases (Neuman 2006:223). Neuman explains that snowball sampling is based on the interconnectivity of people or organizations and an analogy to a snowball, which begins small but grows larger as it rolls and picks up snow. Barbour (2008:75) summarizes the above, stating that snowball sampling is a form of research contact-network sampling.

The researcher felt that the main aim was to select unique cases that were particularly informative. However, as Neuman (2006:223) puts it, the crucial feature of snowball sampling is that each unit or person is connected with another through direct or indirect linkages.

The researcher’s starting point was the taxi and bus rank at Hlabisa. This was informed by the literature discussed in Chapter 3, which indicates where the informal sector entrepreneurs normally operate. Other informal sector women entrepreneurs were thereafter reached through the referrals of these women.

The study covered informal sector trade performed by women in only two categories, namely small-scale traders and artisans. Carr and Chen (2002:5) observe that statistics on the contribution of subsectors of the informal economy, that is home-based workers and street vendors, are still weak. This view of the ‘scanty’ data on the informal sector is supported by Muller (2002:3), who states that in South Africa, some informal sector work may not be picked up at all by the National Household Surveys, in particular illegal work and children’s work. Muller (2002) also found that some respondents did not view what they did as work. She identified those who work for a few hours per week, those
involved in illegal activities, and those in low-paying, survivalist outfits, as people who may provide inaccurate information.

As indicated above (see also section 3.4, Chapter 3), not all informal sector enterprises operate within moral and dignified boundaries. For example, sex work, shebeens and abortion ‘clinics’, cannot be openly practiced in society because they degrade dignity and distort character. Some of the businesses have to go through certain formalities in order to be permitted, while others operate during specific hours away from the community (e.g. shebeens). Others, such as sex workers and abortion clinics, are not allowed at all despite South African laws that defend abortion and the upliftment of certain laws on prostitution and sex work. People practising these informal businesses can also be sent to jail when they are found. The researcher chose to focus on women artisans and small scale traders because even though they operate outside the legal framework and in undesignated areas, they present far less legal, ethical and moral dilemmas.

Carr and Chen (2002:4) also point out that artisans and small-scale businesses dominate the informal sector. According to the authors, while men in the informal sector tend to have larger scale operations and to trade in non-perishable items, women traders tend to have small scale operations and to deal with food items (2002:4). For example in Chile, fruit vending, which is mainly practiced by women, expanded by 258 percent from 340,000 tons in 1982 to 1.2 million tons in 1994 (Barrientos et al. 1999). Other examples include the large number of women working with tomatoes from the fields of Mexico, women working in fast food chains in Canada (Bamdt 1999), and the women who left tea factories to join garment factories in Sri Lanka around the mid 80s (Fontana, Joekes and Masika 1998). This goes to show how massive these two subsectors are in the informal sector.

Arguably, many women use their hands better than men, and can thus be found in large numbers in salons, garment and textiles industries, and craft and beadwork organizations. In Asia, an estimated 80% of the women work with garments or in
factories (Carr and Chen 2002:13). The ease of entry (Ikoja-Odongo 2002) into the informal sector could be the general cause of this dominant trend among small scale businesses and artisans in the informal sector, especially in the case of women, since there are no applications and procedures to submit and follow in order for one to operate from under the tree or in an open space. Another reason behind why these subsectors dominate the informal sector, is that it is in people’s nature to be ‘copycats’, i.e. “what is being done by the neighbour can be done by me”, which may explain the redundancy and non-diversity of the products and services that are on offer.

The above reasons explain why the study focused only on these two subsectors of informal trade (small scale and artisans), which can be found virtually everywhere - bus and taxi ranks, under buildings and trees, in tents along the streets, near the roads, outside homes or churches, under half-roofed shelters, etc. The choice of informal sector women entrepreneurs in the small scale and artisan subsectors does not imply that they use ICTs less than their counterparts in other subsectors of the informal sector.

The informal sector businesses that were sampled included sellers of fruit and vegetables and other miscellaneous products such as airtime, padlocks, etc., while the artisans consisted of weavers, sewers, crafters, hairstylists, tailors and dressmakers.

5.7.3 Convenient sampling
A convenient sample is when the researcher gets cases or subjects in any manner that is convenient (Neuman 2006:220) and it was used because there is no comprehensive database documenting ISWEs’ businesses. This made it impossible for the researcher to identify exactly where to find all the ISWEs prior to the study. This sample, with its convenient nature, was therefore appropriate on the field. This technique also helped the researcher conveniently sample the municipal officials.

5.8 Data collection instruments
A research instrument is a tool that is used to collect primary data. Research instruments are used to collect data only after the research design has been clearly
articulated. The data collection methods used to collect data for this study included focus group discussions, interviews with female leaders and municipal officials, a literature review, and the direct and indirect observation of behavior.

Both primary and secondary data was collected during the course of the study. Primary data was collected via focus group discussions, interviews and observations. Secondary data was collected through a literature review and content analysis.

**5.8.1 Focus group discussions**
The focus group discussion is a qualitative research technique where people are informally interviewed in a group setting (Neuman 2006:412). Neuman (2006:412) explains that the researcher gathers together 6 to 12 people in a room with a moderator to discuss a few issues. Most focus groups last about 90 minutes.

The focus group (FG) discussion was considered to be the most appropriate instrument for ISWEs because the FG setting facilitates an in-depth and probing discussion on any given issue. The researcher was able to glean the opinions of many women on the issues discussed. This also saved time and the costs that would have been incurred in conducting face-to-face interviews with many people. Focus groups were chosen because they provide a quick and cost effective way to obtain a large amount of information (Oberg and Easton 1995:119), and they are ideal for exploring people’s experiences, opinions, wishes and concerns (Kitzinger 1995; Kitzinger and Barbour 1999:5). Participants can also relate to one another, which means that they are less inhibited than in a one-to-one interview (Kerslake and Goulding 1996:231).

The present study adopted a more structured focus group approach. Research questions were prepared prior to the discussions (Appendix 1).

The researcher put the women into groups of 6 to 12 and found a conducive place for discussions that were convenient to the participants themselves, that is, their shelters where they carry their trading businesses. An effort was made to ensure that each group member participated fully in the discussion. Field notes were also taken.
Focus groups have some advantages, as speculated by Neuman (2006:412), which were realized in this study. For instance, the natural setting allowed people to express their opinions and ideas freely. Another advantage is that focus groups encourage open expression among members of marginalized social groups, and participants may explain their questions and answers to each other; this was experienced during the discussions. Women were free to express themselves and add on when a friend had started to say something.

Leedy and Ormrod (2005:146) observe that another advantage of focus groups is that the accuracy of the information and the rate at which it is generated is higher in groups than in individual interviews, which was also realized in this study. The total number of ISWEs involved was one hundred and eighteen (118). There were fourteen (14) groups that participated, and each discussion lasted between fifty and seventy (50-70) minutes. Finally, according to Cohen, Marion and Morrison (2007:377) focus groups are useful to triangulate with other data collection techniques such as interviews, questionnaires and observation.

However, there are also limitations to focus groups. For example, Neuman (2006:412) observes that a moderator may unknowingly limit the open and free expression of group members. In this study, the researcher was conscious of this shortcoming and endeavored to create an atmosphere of openness for group members to voice their opinions without fear or prejudice. The atmosphere was positive, accepting and relaxed in all the focus group discussions because prior contact had been facilitated by the women leaders whom the researcher had contacted and met beforehand. These women then introduced the researcher to the groups.

The other shortcoming of FGs is that sometimes the researchers cannot reconcile the differences that arise between individual-only and focus group-context responses. In this respect, the researcher did not encounter any serious differences that could not be reconciled.
There was a time when face-to-face interviews had to be used with ISWEs, but they could not be employed for the entire sessions with ISWEs because of the number of ISWEs who were supposed to have been interviewed. Another reason was that since most of them had limited levels of education, clarifying some concepts and issues was easy with the group discussions and some opinions were easily remembered in a group. The only time interviews were used was when personal/ demographic information from the ISWEs was sought, as shown in Appendix 4. In the structured interview schedule, characteristics such as age, level of education, etc., were covered based on the objectives of the study.

5.8.2 Face-to-face interviews

An interview is a data collection technique delivered in an oral question-and-answer format, which usually employs the same questions in a systematic and structured way with all the participants (Payne and Payne 2004:129). Although it should preferably be done in a face-to-face setting, telephonic interviews are popular nowadays because they save the time and effort associated with travelling and venue arrangements. The interview allows respondents to talk about issues unless directed but discursive manner (Payne and Payne 2004:129). Cohen Manion and Morrison (2007:349) observe that interviews are a flexible tool for data collection that enable multi-sensory channels to be used and participants to discuss their interpretations of the world they live in and to express how they regard situations from their own point of view. This study employed the face-to-face interview in order to take advantage of what Neuman (2006:301) and Cohen, Marion and Morrison (2007:349) cite as the opportunity for the interviewer to observe the surroundings and use nonverbal communication and visual aids to direct the data or information gathering process. Neuman (2006:301) further explains that a well trained interviewer can ask complex questions and use extensive probes to gain further information. In this study, the researcher was able to observe from the interviewee’s non verbal cues if an aspect needed further probing.
Face-to-face interviews were employed with women leaders and officials. The interview schedule was developed and used to collect data from both these groups of participants.

This was a small, manageable group of people who were interviewed at different times. This gave the researcher time to better understand the mood and background of the participants. This was because they were free to provide their opinions without any fear of intimidation by nearby persons. Their opinions and responses were not influenced or picked over by any person, they were just genuine and honest perceptions of the individual. The face-to-face interviews benefited the research in this way.

Overall, a semi-structured interview approach was used in this study. In unstructured interviews, the researcher would have had to use at most an aide mémoire as a brief set of prompts to herself to deal with a certain range of topics (Oxford University Press 2009:314). Structured interviews are based on a set of predetermined questions and highly standardized techniques of recording (Kothari 2004:97). In a semi-structured interview, the researcher has a list of questions and fairly specific topics to be covered, often referred to as an interview guide, that give the interviewee a great deal of leeway in their response. Questions do not exactly follow the interview schedule. In some instances, questions that are not included in the guide are asked as the researcher picks up on things said by interviewee (Oxford University Press 2009:314).

For the purposes of this study, the interview schedules that were developed and employed with women leaders and local government officials contained both structured and semi-structured questions, as indicated in Appendices 2 and 3.

5.8.3 Observation

Observation gave the researcher genuine first-hand experience and explained some issues and opinions that were raised by the ISWEs and in the interviews so that there was a better understanding of why things were as they were, rather than depending only on what the ISWEs were saying. This is something that could not be done through face-to-face interviews or focus group discussions.
The observations were done on site. An observation schedule was developed with a precisely articulated focus. Participation observation was employed in this study. When defining participation observation, Payne and Payne (2004:166) explain that it is data collection over a sustained period of time by watching, listening, and asking questions as people go about their day-to-day activities while the researcher adopts a role from the setting and becomes a partial member of the group in question. According to Cohen, Manion and Morrison (2007:396), participant observation enables the researcher to understand the context of his/her subjects and be open-ended and inductive so that he/she can see things that might be unconsciously missed, and discover things that participants might not freely talk about in interview situations. Notes were taken and observations made about behavior, gestures, attitudes, emotions and events. The schedule outlined the following sections that needed to be observed on the field relating to this study:

* Management systems in the informal businesses;

* Availability of technological devices in the workplace;

* The relationship between the informal sector and the community;

* Communication systems used by the women entrepreneurs in the work environment; and

* Problems in the work places.

There are different roles that a researcher can take when involved in a research setting as an observer. According to Neuman (2006:387), these roles range from a complete observer, to observer-as-participant, participant-as-observer, and finally a complete participant. A complete observer is when a researcher is behind a one-way mirror or taking on an ‘invisible role’, while an observer-as-participant is when a researcher is known from the beginning but has limited contact. A participant-as-observer is when a researcher is overt and is an intimate friend of the participants, and lastly a complete
participant is when a researcher acts like a member and shares the secret information of insiders (Neuman 2006:387).

For the purposes of this study, the researcher adopted different levels of involvement so that she could understand what was going on, but not in a way that she was unable to reflect on the phenomenon. According to Neuman (2006:387), the level of involvement depends on the researcher’s negotiations with members, specifics of the field setting, the researcher’s personal comfort, and the particular role adopted in the field.

Neuman’s view is that a researcher can move from an ‘outsider’ to an ‘insider’ with more time in the field. Because each level has its own advantages and disadvantages, different field researchers advocate different levels of involvement.

According to Cohen, Manion and Morrison (2007:305), participant observation can be structured, semi-structured or unstructured. Structured observation consists of a predetermined set of categories of activities or phenomena that should be studied, where a researcher watches what is happening in a social setting that is highly organized and follows systematic rules for observation and documentation (Neuman 2006:325; Kothari 2004:96). Semi-structured observation has an agenda of issues but gathers data to illuminate these issues in a far less predetermined or systematic manner (Cohen, Manion and Morrison 2007:397). Unstructured observation does not have predetermined ideas of particular aspects that need focus; rather events are observed and recorded as they take place.

For this study, the observer-as-participant role was mostly adopted. Semi-structured observation was also applied (see Appendix 6). The researcher interrogated the presence of any sign of the information and knowledge society in the ISWEs’ workplace. In particular, the researcher was on the lookout for the presence and use of technology in their businesses, such as the availability of phones, the internet, telecentres, libraries, electricity, plugs, and the ownership of mobile phones.
5.8.4 Literature review
The literature review was important as it provided the researcher with background information on the topic at hand. It covered numerous documents that contained related information about the information and knowledge society (see Chapter 2) and informal sector entrepreneurs (see Chapter 3).

The researcher also accessed documented literature relating to the information and knowledge society, the informal sector, poverty alleviation, and economic empowerment. These documents included books, journals, conference papers, government publications such as reports and speeches, grey literature, and other valuable information searched from the internet and different databases.

5.9 Data collection procedures
Gaining access to the study area was highly essential. According to Neuman (2006:387), a gatekeeper is someone with formal or informal authority who controls access to a site. The mayor, councilors and other municipal officials were gatekeepers of the Hlabisa Local Municipality, while Izinduna and Amakhosi as well councilors and women leaders were gatekeepers of the traditional areas, the wards, and the places where informal sector women entrepreneurs were operating. They could easily deny access to the sites if the necessary procedures were not followed.

Therefore telephonic communication and visits were done to request access to the study area and to secure appointments for interviews and discussions with the officials, women leaders, traditional leaders and the women themselves. This was done prior to both the pilot study and the main study.

This study involved one researcher and one research assistant who was a Masters candidate in the Department of Tourism at the University of Zululand.

Data was collected between March 2009 and September 2010.
5.10 Data analysis
The aim of data analysis is to discover patterns in data that point to theoretical understandings of social life (Babbie 2004:376). According to Neuman (2006:460), qualitative data is coded when the researcher organizes the raw data into conceptual categories and creates themes or concepts. The advantage of coding data is that it makes data manageable (Neuman 2006:460).

Because the study was more qualitative than quantitative in nature, the collected data was tabulated under related themes, concepts and subheadings and presented and interpreted by means of descriptions, comparison, interpretations, tables, graphs, frequencies and percentiles using Microsoft Excel.

5.11 Validity and reliability
Reliability refers to dependability or consistency while validity means truthful (Neuman 2006:196). According to Neuman, validity and reliability are necessary to get distinctive results. Neuman (2006:190) states that in order to improve reliability, pilot tests [among others] can be done, where one or more drafts or preliminary versions of a measure are developed and tried before applying the final version.

Validity and reliability are usually complementary concepts, yet reliability is easiest to achieve when the measure is precise and observable (Neuman 2006:197). The validity of the data collection instruments that were used to collect data was measured by deriving all the questions from the study’s objectives, and checking each question to determine its contribution to the objectives (see Appendix 5). Validity was also determined by the supervisors to ensure that the researcher adhered to the topic and to check that what is intended to be measured would be measured. Validity was also measured by generalizing research across persons, settings and times (Stacey 2008). Pilot test was done to test the reliability of the study. A pilot study refers to a mini-version or a full-scale version of a study specifically formulated to pre-test a particular research instrument such as a questionnaire or an interview schedule (Teijlingen and
The pilot study was conducted in 2008 in Umhlatuze Municipality, KwaZulu-Natal.

There were constructive lessons learnt from the pilot study. It was realized that in the guide to the focus group discussions, the section on personal information of the participant had not been included. This was corrected for the main study.

The guide also proved to be a bit long, taking close to 90 minutes. This resulted in some participants leaving in the middle of the discussion to attend to their stalls. It was therefore necessary to redesign this research instrument.

The interview schedule for both officials and women leaders proved to be acceptable.

5.12 Ethical considerations
According to Neuman (2006:129), the researcher has a moral and professional obligation to be ethical, even when the research subjects are unaware of or unconcerned about ethics. To Neuman (2006:129), ethical issues are concerns, dilemmas and conflicts that arise over the proper way to conduct research because ethics define what ‘moral’ research procedure involves.

According to Houser (2007:53), researchers face ethical situations in almost every step of the research process, from selecting participants to reporting findings at the end of a study. In this study, the potential ethical issues concerned the subjects, i.e. ISWEs, especially regarding their economic status. While numerous speeches around poverty and economic development and retrenchment have been made by organizations, government departments and in many forums, the fact remains that poverty is still clearly affecting people, especially women, and rural and non-educated individuals. It is because of this that informal entrepreneurs are cropping up in many homes and open spaces of our cities and townships. These types of businesses are not regarded highly and are given all sorts of ‘bad’ names (Ikoja-Odongo 2002).

Evidently there is a stigma employment in the informal sector with its displays of poverty, marginalization, backwardness, loss of jobs, lack of education, etc. It is the
researcher’s speculation that it may have been uncomfortable to talk openly and freely about issues that pertain to informal sector employment and its challenges without the ISWEs informed consent. Therefore, ethical considerations were seriously applied throughout the process. The researcher obtained informed consent from each participant in order to ensure that they understood their rights as far as participation was concerned. This is why the researcher stated that participation in the interviews and discussions was voluntary, so that if the participants felt that their privacy or confidentiality was disturbed, they could withdraw.

5.13 Summary
This chapter presented a detailed account of the methodological procedures that were followed during the course of this study. The mixed method approach was used in this study; content analysis (literature review), surveys (interview schedule), focus group discussions and observation guides were all used as data collection instruments. Face-to-face interviews were conducted with the municipal officials and women leaders, while focus group discussions were held with informal sector women entrepreneurs. The instruments were tested by conducting a pilot study to ensure their validity and reliability. Following the pilot, the focus group discussion guide was redesigned for suitability.

The next chapter presents and analyzes the data.
CHAPTER SIX: DATA PRESENTATION AND ANALYSIS

6.1 Introduction

This chapter presents and analyses the empirical data obtained through focus group discussions (FGDs) and interviews with ISWEs on their personal information (Appendices 1 & 4 respectively), face-to-face interviews with women leaders and municipal officials (Appendices 2 & 3 respectively), and observations done on site (Appendix 6).

In this chapter, data is categorised according to the objectives and research questions of the study in section 6.2. From section 6.3 to 6.5 data is categorised into themes and presented following themes in each instrument.

Quantitative data, particularly demographic data, was analyzed using Microsoft Excel and presented in graphs and tables.

The purpose of the study was to examine the information and knowledge society and its impact on poverty alleviation and economic empowerment among women entrepreneurs in the informal sector in South Africa. The study was guided by the following specific objectives:

1. To determine the role of the information and knowledge society in the empowerment of informal sector women entrepreneurs in South Africa

2. To determine informal sector women entrepreneurs' information needs and discover how they acquire information

3. To identify and document the types, sources and channels of information used by informal sector women entrepreneurs

4. To explore the factors affecting information flow and its exploitation by informal sector women entrepreneurs

5. To determine the extent to which South Africa is an information and knowledge society
6. To develop a model for the effective utilization of the benefits of the information and the knowledge society by informal sector women entrepreneurs

It is imperative to indicate that only the objectives in bullets 2, 3, 4 and 5 were answered in this chapter. The objective in bullet 1 was realized and answered in Chapters 2 and 3, while the last objective, bullet 6, was addressed in Chapter 8.

The research questions were formulated based on the above objectives. Data was collected from women informal traders at Mission, Mahunjini, Hlabisa CBD and Mapheleni in the Hlabisa Local Municipality. A total of 118 informal sector women entrepreneurs (ISWEs), 17 women leaders and 4 municipality officials participated in this study.

The role of data analysis has been alluded to by several authors. According to Wilkinson (2004:77), data analysis collates data in a meaningful way and enables researchers to interpret or make sense of it. Wolcott (1994) explains that data analysis is the process of identifying essential variables and relationships. It consists of three overlapping sub-processes: data reduction, data display, and conclusions (1994). Data analysis can be regarded as categorizing and interpreting data (Gubrium and Holstein 2001). According to Leedy and Ormrod (2010:296), the data must speak for itself.

This chapter is divided into four sections: i) Data collected through FGDs and interviews with ISWEs; ii) Data collected through face-to-face interviews with women leaders; iii) Data collected through face-to-face interviews with municipal officials; iv) Data collected through observation.

6.2 Responses from interviews and focus group discussions with ISWEs

6.2.1 Characteristics of the participants

Although identifying the characteristics of the participants was not mentioned in the objectives of the study, it was necessary to collect and present this data for the reader to understand the background of the participants. Characteristics of the participants provided a snapshot of their appropriateness and suitability for inclusion. The
characteristics also provided information on the demographic of informal sector women entrepreneurs in Hlabisa.

It was also important to understand the background of the participants because it shed some light on their information needs, information seeking behaviour, the sources and channels they used, and their information skills, access, and utilization. It was hoped that the backgrounds would also expose information regarding problems encountered by participants when accessing information.

The characteristics of the participants includes their age, level of education, economic status, occupation and household, types of informal business activities, and reasons for participation.

6.2.1.1 Age

Table 6.1 Age of the participants

<table>
<thead>
<tr>
<th>Demographic Data</th>
<th>Mission</th>
<th>Mahunjini</th>
<th>Hlabisa CBD</th>
<th>Maphelehi</th>
<th>Total 118</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents interviewed (N)</td>
<td>34</td>
<td>19</td>
<td>39</td>
<td>26</td>
<td>118</td>
</tr>
<tr>
<td>Age 15-29</td>
<td>4 (12%)</td>
<td>2 (11%)</td>
<td>6 (15%)</td>
<td>3 (12%)</td>
<td>15 (13%)</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>11 (32%)</td>
<td>5 (26%)</td>
<td>13 (33%)</td>
<td>5 (19%)</td>
<td>34 (29%)</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>9 (26%)</td>
<td>8 (42%)</td>
<td>11 (28%)</td>
<td>13 (50%)</td>
<td>41 (35%)</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>7 (21%)</td>
<td>4 (21%)</td>
<td>7 (18%)</td>
<td>3 (23%)</td>
<td>21 (18%)</td>
</tr>
<tr>
<td>Age 60+</td>
<td>3 (9%)</td>
<td>0 (0%)</td>
<td>2 (5%)</td>
<td>2 (8%)</td>
<td>7 (5%)</td>
</tr>
<tr>
<td>Total</td>
<td>34 (100%)</td>
<td>19 (100%)</td>
<td>39 (100%)</td>
<td>26 (100%)</td>
<td>118 (100%)</td>
</tr>
</tbody>
</table>
Informal sector trading was practised by participants of all ages and particularly popular with young women in Hlabisa - 12%, 11%, 15% and 12% in Mission, Mahunjini, Hlabisa CBD and Mapheleni respectively. Middle aged informal sector women in Hlabisa were also active informal traders. Both age brackets (30-39 and 40-49) were significantly represented in informal trading - 40-49 by 50% in Mapheleni and 28% in Mahunjini, and 30-39 by 33% in Hlabisa CBD. Older women also participated in informal trading. Their presence was observed in three of the areas, the exception being Mahunjini.

6.2.1.2 Level of education
Question 2 (Appendix 1) asked the participants if they had received formal education. The educational levels were investigated in order to justify the information seeking patterns, sources and channels used by ISWEs. The results show that informal sector women entrepreneurs in Hlabisa had attained different levels of education. However, some did not have any formal education. For example in Mission, Mahunjini, Hlabisa CBD and Mapheleni, 9 (26%), 8 (42%), 3 (8%) and 7 (27%) participants respectively - 23% of the participants from the Hlabisa Local Municipality - had no formal education.

In Mission, Mahunjini, Hlabisa CBD and Mapheleni, a total of 19 (56%), 9 (47%), 23 (59%) and 16 (62%) of the participants had attained primary education consecutively, while 6 (18%), 2 (11%), 12 (31%) and 3 (11%) participants had secondary education. Only 1 (2%) respondent had post-secondary education. The woman with the post-secondary qualification in Hlabisa CBD was asked to indicate her qualifications. She had a certificate in adult basic education.

The level of education of informal sector women entrepreneurs in Hlabisa is shown in Table 6.2.
Table 6. 2 Level of education of ISWEs

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Mission</th>
<th>Mahunjini</th>
<th>Hlabisa CBD</th>
<th>Mapheleni</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal education</td>
<td>9 (26%)</td>
<td>8 (42%)</td>
<td>3 (8%)</td>
<td>7 (27%)</td>
<td>27 (23%)</td>
</tr>
<tr>
<td>Primary education</td>
<td>19 (56%)</td>
<td>9 (47%)</td>
<td>23 (59%)</td>
<td>16 (62%)</td>
<td>67 (57%)</td>
</tr>
<tr>
<td>Secondary education</td>
<td>6 (18%)</td>
<td>2 (11%)</td>
<td>12 (31%)</td>
<td>33 (11%)</td>
<td>23 (19%)</td>
</tr>
<tr>
<td>Post-secondary education</td>
<td>Certificate</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>0 (%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td></td>
<td>Degree</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>34 (100%)</td>
<td>19 (100%)</td>
<td>39 (100%)</td>
<td>26 (100%)</td>
<td>118 (100%)</td>
</tr>
</tbody>
</table>
A total of 67 (57%) of the ISWEs had primary education while 23 (19%) had secondary education. Quite a significant number (27; 23%) had therefore not had any formal education.

**6.2.1.3 Economic status, household data and occupation of the participants**

Economic status refers to information on the principal source of income for the entire household and the household quality and its characteristics. Respondents were asked about land, livestock and the ownership of other assets such as television sets, sophisticated radios, mobile phones, different appliances such as kettles, stoves, microwaves, etc.

Respondents were also asked about the number of people living in the household who were working and could assist the ISWEs with family responsibilities such as food, children’s education, family health, etc., and the extent to which the household relied on the income of the participants. The number of people in the household was crucial in order to establish the level of dependence on the ISWEs informal income by the household members.

Information on the occupation of the participants was also very crucial. Here participants had to state their occupation or the economic activities that they engaged in to earn a living. Responses were grouped according to categories for decoding purposes. The categories included small-scale businesses and artisans.

Table 6.3 shows their responses regarding their activities.
Table 6. Economic status, household data and occupation of the participants

<table>
<thead>
<tr>
<th>Economic status</th>
<th>Mission 34</th>
<th>Mahunjini 19</th>
<th>Hlabisa CBD 39</th>
<th>Mapeleni 26</th>
<th>Totals 118</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole breadwinner</td>
<td>31 (91%)</td>
<td>17 (89%)</td>
<td>31 (79%)</td>
<td>22 (85%)</td>
<td>101 (86%)</td>
</tr>
<tr>
<td>Assisted by 1-2 family members</td>
<td>3 (9%)</td>
<td>2 (11%)</td>
<td>5 (13%)</td>
<td>4 (15%)</td>
<td>14 (12%)</td>
</tr>
<tr>
<td>Assisted by 3+ family members</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>3 (8%)</td>
<td>0 (0%)</td>
<td>3 (2%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34 (100%)</strong></td>
<td><strong>19 (100%)</strong></td>
<td><strong>39 (100%)</strong></td>
<td><strong>26 (100%)</strong></td>
<td><strong>118 (100%)</strong></td>
</tr>
<tr>
<td>Ownership/Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td>27 (79%)</td>
<td>4 (21%)</td>
<td>20 (51%)</td>
<td>19 (73%)</td>
<td>70 (59%)</td>
</tr>
<tr>
<td>Livestock</td>
<td>5 (15%)</td>
<td>7 (37%)</td>
<td>4 (10%)</td>
<td>3 (12%)</td>
<td>19 (16%)</td>
</tr>
<tr>
<td>Radio</td>
<td>31 (91%)</td>
<td>17 (89%)</td>
<td>37 (95%)</td>
<td>20 (77%)</td>
<td>105 (89%)</td>
</tr>
<tr>
<td>Category</td>
<td>Count</td>
<td>Small-scale businesses</td>
<td>Artisans</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>-------</td>
<td>-------------------------</td>
<td>----------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Television</td>
<td>22</td>
<td>15 (79%)</td>
<td>0 (0%)</td>
<td>9 (34%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(65%)</td>
<td>(0%)</td>
<td>(39%)</td>
<td></td>
</tr>
<tr>
<td>Fixed telephone</td>
<td>1</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3%)</td>
<td>(0%)</td>
<td>(0.8%)</td>
<td></td>
</tr>
<tr>
<td>Mobile phone</td>
<td>33</td>
<td>16 (84%)</td>
<td>34 (92%)</td>
<td>107 (91%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(97%)</td>
<td>(87%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer</td>
<td>0</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td></td>
</tr>
<tr>
<td>Car</td>
<td>0</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td></td>
</tr>
<tr>
<td>Tractor/Truck</td>
<td>0</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td></td>
</tr>
<tr>
<td>Bicycle/Motorbike</td>
<td>0</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>9 (0%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0%)</td>
<td>(0%)</td>
<td>(8%)</td>
<td></td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small-scale</td>
<td>22</td>
<td>15 (79%)</td>
<td>36 (92%)</td>
<td>94 (80%)</td>
<td></td>
</tr>
<tr>
<td>businesses</td>
<td></td>
<td>(65%)</td>
<td>(92%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artisans</td>
<td>12</td>
<td>4 (21%)</td>
<td>3 (8%)</td>
<td>5 (19%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(35%)</td>
<td>(8%)</td>
<td>(20%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>34</td>
<td>19 (100%)</td>
<td>39 (100%)</td>
<td>26 (100%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(100%)</td>
<td>(100%)</td>
<td>(100%)</td>
<td></td>
</tr>
</tbody>
</table>
6.2.1. 4 Types of informal business activities

It was important to find out exactly what types of business activities women informal traders in Hlabisa Local Municipality were involved in. Informal trading activities performed by women were divided into two categories: small-scale businesses and artisans. The category of artisans performed activities such as dress-making, i.e. sewing and tailoring traditional gear, dresses, bags, earrings, bangles, open shoes, etc.; crafting traditional utensils such as bowls, calabashes, spoons and forks, mats, basins, and animals such as giraffes, hippos, etc.; weaving baskets, mats and bags; and hairdressing, a popular enterprising choice among women which involves plaiting or ‘planting’ human hair on clients’ heads. It was noticed that the latter was dominated by foreign nationals; however local hairstylists were assisting them and learning to be perfectionists in international styles. Hairstyling was performed in temporary tents and in the verandas of buildings.

It was observed that styling using human hair does not need water, which is why this business prospers when compared to hair relaxing or straightening and hair perms that require a fixed place and a decent supply of water and electricity.

The results show that more women (94; 80%) were engaged in small-scale businesses than working as artisans (24; 20%). Reasons for this could be that it is easy, requires less skills, and does not require the finances and effort necessary to start an artisan trade on a small-scale. For example, the business of selling vegetables could be established by starting a vegetable garden and selling the vegetables. With the profit, bigger products could then be purchased from a retailer. However, artisans need skills and capital to buy equipment and products. For example, hair specialists need to interact with the sellers of various hair products, such as synthetic or human hair, in order to start plaiting hair, and women who tailor and sew need money for fabrics and machines. The same applies to weavers.
6.2.1. 5 Reasons for participation in the informal sector

The participants were asked to provide their reasons for engaging in informal trade. Many (71; 60%) cited family responsibilities, such as taking care of younger siblings and ill parents, caring for the aged in the family, getting married, and starting a family. This confirms the results in Table 1 that generally, women in the informal sector between the ages of 30 and 49 who are still young, active and healthy, are likely to be caregivers.

Limited skills and knowledge to venture into other businesses or formal employment was mentioned by 35 (35%) of the women. Being an orphan or widow was also a significant reason (32; 27%). This follows the trend of all the diseases and social-ills that afflict many poor communities and leave children and adults destitute, effectively forcing them into the informal sector.

The number of those who dropped out of school is also noticeable (16; 14%). School drop-outs leave school because of pregnancy or to start a family, or give up because of more fails than passes, thinking that they will pursue other avenues that end with them working in the informal sector.

Quite a number of the women realised that they had ended up in the informal sector instead of the jobs that they would have aspired to do, such as teaching, nursing or joining the police force, because they were not schooled enough and did not possess the skills necessary to work in the preferred areas.

Sickness was cited by 14 (12%) women as a reason for working in the informal sector. They elaborated that they needed to be near their homes because of their poor health, and the close proximity of their homes made it easier to take medication, take a nap when necessary, and get checked on by their family members from time to time. Table 6.4 summarizes their responses.
Table 6.4 Reasons for participating in informal trading

<table>
<thead>
<tr>
<th>Reason</th>
<th>Place</th>
<th>Mission (34)</th>
<th>Mahunjini (19)</th>
<th>Hlabisa CBD (39)</th>
<th>Mapheleni (26)</th>
<th>Total 118</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early school drop-outs</td>
<td></td>
<td>5 (15%)</td>
<td>2 (11%)</td>
<td>5 (13%)</td>
<td>4 (15%)</td>
<td>16 (14%)</td>
</tr>
<tr>
<td>Orphan/widow</td>
<td></td>
<td>15 (44%)</td>
<td>3 (16%)</td>
<td>8 (21%)</td>
<td>6 (23%)</td>
<td>32 (27%)</td>
</tr>
<tr>
<td>Family responsibility</td>
<td></td>
<td>19 (56%)</td>
<td>13 (68%)</td>
<td>24 (62%)</td>
<td>15 (58%)</td>
<td>71 (60%)</td>
</tr>
<tr>
<td>Supplement old age/grant</td>
<td></td>
<td>3 (9%)</td>
<td>0 (0%)</td>
<td>1 (3%)</td>
<td>0 (0%)</td>
<td>4 (3%)</td>
</tr>
<tr>
<td>Limited skills and knowledge</td>
<td></td>
<td>14 (41%)</td>
<td>6 (32%)</td>
<td>11 (28%)</td>
<td>4 (15%)</td>
<td>35 (30%)</td>
</tr>
<tr>
<td>Sickness</td>
<td></td>
<td>2 (6%)</td>
<td>0 (0%)</td>
<td>4 (10%)</td>
<td>8 (31%)</td>
<td>14 (12%)</td>
</tr>
</tbody>
</table>

6.2.2 Information needs, seeking and modes of information used by ISWEs

An information need is defined, in this context, as a gap in knowledge or the lack of information necessary to perform a task, answer a question, or make a crucial decision in a particular situation. This section’s aim was to establish the information needs that ISWEs experience and to establish how they acquire their information. Their information needs and information seeking patterns, sources and channels were identified using the critical incident technique. The critical incident technique is a qualitative, open-ended
and retrospective method that examines how people or communities seek information. Through this technique, the information systems and services that were used by the participants were identified as well. Observations and focus group discussions (Appendices 6 and 1, questions 5, 6, 7, 8 and 9) were also referred to in this section.

6.2.2.1 Information needs
Question 5 (Appendix 1) asked the participants about the information needs relating to their businesses. They were asked to indicate why they needed information and also to narrate instances where they had needed information. Some women needed information to answer general questions, while others wished to learn about something or to improve their understanding. In some instances the situations were not business or work-related; they mentioned personal problems, health problems, school problems, legal problems, and even entertainment queries. The related instances were then grouped into categories for easier decoding. Table 6.5 shows the categories.

Table 6.5 Categories of participants’ information needs

<table>
<thead>
<tr>
<th>Categories</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>The need for business information (102; 86%)</td>
<td>This included participants who needed information on how to expand their businesses, new business ideas to venture into a different business type, and information on how to manage and grow their businesses.</td>
</tr>
<tr>
<td>The need for Government related information (106; 90%)</td>
<td>This included participants who needed information on rent, government support such as free training opportunities, and secure work environments.</td>
</tr>
<tr>
<td>The need for marketing and exhibition</td>
<td>This included participants who needed information on where they could market their products and put them into exhibitions and all related marketing and exhibition information. This category’s needs</td>
</tr>
</tbody>
</table>
information (76; 64%) were popular among women who were weavers, crafters and tailors.

The need for information on loans and microfinance (118; 100%) This included participants who needed information on loans and other forms of micro-credit to expand their businesses.

The need for information on development (88; 75%) This included the participants who needed to learn new skills, employment opportunities, business management and techniques, profit making, and high income generation.

### 6.2.2.2 Information seeking patterns

This question sought to find out from ISWEs how or from where they obtained the information they need. The aim was to establish the sources of information used by ISWEs. Most of the women indicated their immediate sources such as fellow traders, workmates, relatives and friends. The second most popular source was the radio. Table 9 indicates that radio was owned by 31 (91%) women in Mission, 17 (89%) in Mahunjini, 37 (95%) women in Hlabisa CBD, and 20 (77%) in Mapheleni. The radio is portable, and although sophisticated and advanced radios are available in many shops, most people opt for simple, battery operated radios due to lack of electricity. Traditionally the radio has been used by many people in many households for generations, and it is still popular during this day and age.

### 6.2.2.3 Commonly used information sources

Other sources that were commonly used by the participants include the television, which was cited by some 90 respondents (76%) as sources of information. Mobile phones were also highly popular (102; 86%). All the mobile networks - MTN, Vodacom and Cell C - were supported by ISWEs in Hlabisa. 30 women (88%) used mobile
phones for information in Mission, 16 (84%) in Mahunjini, 35 (90%) in Hlabisa, and 21 (81%) in Mapheleni. Although only one (3%) respondent had a landline in her home, a significant number (84; 71%) used telephones. This is because ticky boxes and Mr Phones are provided by many companies, such as Telkom, Vodacom, MTN and Cell C, and when available, they are cheaper to use than making a call from a mobile phone. One can successfully make a call with 90c instead of installing a landline at home and making calls without considering later bills. Children and other family members also cannot be controlled in terms of how and when they make calls. To the participants, making a call using Mr Phone or a ticky box was fairly affordable.

Mobile phones were owned by a significant number of the participants. However a fairly significant number (11; 9%) of women could use mobile phones even though they did not own them. They did this by borrowing mobile phones from fellow women, friends and relatives. Borrowing was the second means, after ownership, of accessing and using mobile phone services, and it was commonly practiced in all four areas. Like sharing information, sharing handsets was commonly practiced without any profit. Among respondents, there were those who only owned SIM (Subscriber Identity Module) cards which are affordable because they cost only R6.00 in many shops and outlets such as PEP stores, Shoprite, Spar and restaurants, cafés and phone repair shops.

A person with a SIM card simply places it in a friend’s phone in order to make or receive a call or send an SMS, and remove it when done. Thus costs are not borne by the owner of the SIM handset but by the owner of the SIM card. In so doing, the cost of buying mobile phones is eliminated or at the very least minimised.

Another way of accessing and using mobile phones by those who did not own them was by simply buying airtime and loading it into a friend’s phone and thereafter making a call or sending an SMS. In this way, a mobile phone is shared and there are no additional or hidden costs to the owner of the handset. This method of accessing and using mobile
phones helps those who do not have the skills to use this technology; the owner assists them by loading airtime, typing an SMS, or making a call.

The use of mobile phones by ISWEs is, however, steeped with challenges. Poor, weak or non-existing power supplies meant that the women had to travel long distances to places where there was electricity to charge. This travelling increased the cost of using the mobile phone. Alternatively, they charged their phones using car batteries. This alternative was offered by one family that owned a taxi that had fixed a tent nearby for this particular service. Charging like this also has its challenges. There was always a queue of mobile phones waiting to be charged at a cost of R5.00 each.

Internet cafés were not mentioned by any of the women as a source of information access, use or transfer.

Face-to-face communication and social visits were mentioned as sources of information transfer and sharing. These modes of information transfer are still popular and convenient among many informal women traders in Hlabisa Municipality. In Mission, 70% of the women preferred social visits while 79% preferred face-to-face communication in their search for information. In Mahunjini, 100% of the women preferred the use of face-to-face communication, and 90% and 73% of the women preferred this source of information in Hlabisa CBD and Mapheleni respectively. Table 6.6 shows the results.
Table 6.6 Commonly used information sources

<table>
<thead>
<tr>
<th>Place</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Social visits</td>
</tr>
<tr>
<td>Mission (34)</td>
<td>24 (70%)</td>
</tr>
<tr>
<td>Mahunjini (19)</td>
<td>14 (74%)</td>
</tr>
<tr>
<td>Hlabisa CBD (39)</td>
<td>31 (79%)</td>
</tr>
<tr>
<td>Mapheleni (26)</td>
<td>21 (81%)</td>
</tr>
</tbody>
</table>

6.2.3 Information flow and use

Information flow refers to the transfer of information from a variable x to a variable y in a due process (Wikipedia 2007), while information use is the information seeking behaviour that leads to the use of information (Savolainen 2009:38-45). Hlabisa Local Municipality has women’s organizations, non-governmental organizations (NGOs), community leaders and governmental departments at provincial and local levels. There are a few banks such as ABSA, Ithala and Standard Bank. There is one library but no telecentres. The library is situated in town next to the local municipality offices. There are a handful of primary and high schools. The women’s group organizations found in this area include the Sisonke women’s club, Lindokuhle Sewing, Siyafufusa Catering, Siyathuthuka Crafting, and a few others. These organizations provide support for women doing craftwork, beadwork, sewing and cooking. All these institutions represent information flow systems that ensure that some information is transferred from them to the community, especially ISWEs.

The Hlabisa municipality has main roads which are well connected to other big roads that link the municipality to the outside world as well as the National road (N2). However
the feeder roads within the municipality, from villages to town, are not in good shape. They are gravelled, dusty, muddy and slippery, especially during the rainy season.

In section 6.2.3, one (3%) woman indicated that she has a fixed landline and many (102; 86%) relied on mobile phones. There is one Telkom telephone tower that supports telecommunications and landlines situated near the municipality office in town. Telephone towers are necessary to retain telephone or cellular networks.

However, there were no telephone towers in or near the three other villages where focus group discussions with women were held. Additionally, the mobile networks supported by many women through subscription, do not have telephone towers to strengthen them. Thus there was an outcry during the focus group discussions of poor and absent signals in the four areas where discussions took place. The problems with the networks are also as a result of no electricity in some areas of Hlabisa, particularly in the three villages outside the Hlabisa CBD.

There is no community radio in Hlabisa. Community radios focus on the information needs of their listeners in a particular area. The programmes that are aired are mostly directly related to the community and its needs.

There is one internet café in Hlabisa town. However this internet café is approximately 85 km away from the other three areas. Although the internet is not used by ISWEs, there are services that are available which are used by other residents or town visitors who are better skilled. The services provided by this internet café to the residents include emails, internet access, fax, ticker box, scanning, and printing. It opens at 8.00 am and closes at 16.00 pm from Monday to Saturday, but is closed on Sundays and holidays.

From observation and conversations with the people around town, it was garnered that the internet café was sometimes not operational because of problems that required technicians to be called in.
6.2.4 Factors affecting information access, flow and use

Question 10 in Appendix 1 asked the participants to state the factors that they felt limited their access to and use of information that they need. This question sought to establish the factors that impact on the smooth flow of information to ISWEs. The question yielded many different answers which were grouped into categories as indicated below.

6.2.4.1 Education and illiteracy

Twenty seven (23%) participants had not had any formal education at all and 67 (57%) had primary education in Hlabisa Municipality as a whole. When responding to question 10, many (87; 74%), indicated that they did not use or rely on printed information sources because they might not be able to read and understand what is written.

The same question was posed during interviews with municipality officers and women group leaders. They observed that business information in certain formats may not be successfully distributed to ISWEs because of their low levels of literacy. The inability to read text ties in to education, literacy and language. The language of communication used in ICTs, e.g. mobile phones, television, and DVDs, is mainly English. The ISWEs mentioned that in many instances they could not understand some of the instructions or messages they needed to read or follow in order to utilize some of the ICTs.

Time was also cited as a problem by women leaders. They indicated that even with assistance such as training or adult practical sessions, many women were reluctant to leave their stalls or tables/stands unattended for any given amount of time, because they fear losing money while they are away, and do not understand the potential benefits of attending these sessions.

6.2.4.2 Lack of skills

Participants indicated that they lacked the skills necessary to use some of the information sources, especially technological and printed sources, and this delayed and sometimes prevented their access to urgent and up to date information. It was also
noted that they depended on oral, face-to-face and mobile communication for information. Lack of skills, however, forced them to wait for their relatives, friends or children to have time to assist them, especially with technological sources such as mobile phones.

The municipality officers indicated that the office was planning to invite training providers to help ISWEs with business related skills and information. However, a suitable area for the training to take place should be prepared first.

6.2.4.3 Distance and information centres

As mentioned already, there is only one library situated within Hlabisa, the municipality offices are in town, and there is no telecentre that the community could use to access ICTs such as computers for information. Thus the three participating villages outside town have to contend with distance in addition these problems.

Community out-reach programs or extension services, where librarians or telecentre representatives go out to people in order to provide them with the services they need, was not practiced because of lack of resources. Thus when ISWEs wanted to fax, print something or make a call, they had to travel long distances to reach town to use the internet café’s services, although these services were not frequently used. Distance has an impact on cost, time and the motivation to get something done. The availability of ICTs near the ISWEs’ could thus enhance their interest in using ICTs.

6.2.4.4 Language

The participants’ mother tongue was IsiZulu, and this was the language they mainly used to communicate. English was used to a certain extent by a few who could speak and understand it. Problems with understanding another language such as English, which is the language used to explain or interact with most new technology and by many owners and suppliers, is a barrier to the access and use of information that could help women improve their businesses in the informal sector.
6.2.4.5 Roads and transport

Poor road conditions in the rural areas of KwaZulu-Natal, including Hlabisa Local Municipality, are a detriment and hindrance to access to basic amenities by the communities. The most common mode of transport is on foot, although there are taxis and few bakkies that service the area. The informal women traders in Hlabisa CBD and Mission were nearly better off than those in Mahunjini and Mapheleni because they were near town, and the road around them was tarred right through to Hlabisa hospital. However, Mahunjini and Mapheleni women did not benefit from such roads. The participants indicated that the roads within their areas were gravelled and narrow and easily washed away by heavy rainfall. Very few taxis, buses and other means of transport were willing to travel on such roads as they were a threat to their transport and therefore livelihoods. Thus the few taxis and bakkies that traversed the areas were very expensive and did not travel as frequently as the community would want them to. This in turn delayed the delivery of goods and products in the area.

The municipality officer indicated that the Hlabisa municipality, like many others in KwaZulu-Natal and in the district in particular, was in the process of upgrading and improving roads and transportation. Temporary workers in many villages were being employed to construct and expand the roads by hand due to lack of funds and equipment for modern equipment. On the flipside, this equips local residents with skills that they can use for future freelance work and wages to support their families. However, according to ISWEs, these conditions unfortunately do not result in proper roads which could last longer.

6.2.4.6 Time

In order to access and use information, the user must have time set aside to do just that. Lack of time was cited as a problem by the respondents. The respondents started their days very early in the morning, around 6.00 in most cases, and ended their days very late, around 18.00 and even 19.00 for some. Upon returning to their homes, they still had to do house chores, especially those ISWEs who still had young children to take care of. Their days often passed without access to up to date information. They
said that they relied heavily on word of mouth information from their children, family members or relatives, which was sometimes distorted or out dated.

ICTs cut down on the time that is lost when having to walk to work or to suppliers or clients to access information. ISWEs are kept connected and reachable by their clients, suppliers and family and also fellow informal traders. This would be enhanced if ICTs were used for business information exchange and transfer.

6.2.4.7 Support from the municipality

It was observed that the agricultural sector was well equipped with extension services, with farming advisors who assist farmers by disseminating relevant and timeous agricultural information. The radios are also commonly used to air programmes or disseminate urgent information to the farmers, such as the threat of floods or fires. With the ISWEs, there was no similar service. There was no institution or central office, even from the municipality, that could be used to provide this kind of a service to the women.

From observation and interviews with municipality officials, the suggestion is that support for ISWEs is being planned. According to the officials, the office was planning to relocate the women to a place where the necessary infrastructure would be supplied. However, the ISWEs were not in support of this idea saying, “We have been told these stories again and again, but nothing is done!”

One woman said: “Relocating us to another place will not help us because we will be operating away from our clients. We want improved services, infrastructure and better conditions right where we are.”

Municipality officers seemed to realize that the municipality still has a lot to do, and understand that the local government should provide services to improve the conditions in the places where people live and work. However according to them, “Most people, especially in villages, are used to just receiving things from the government or donors..., people need to do things for themselves.”
6.2.4.8 Electricity and poor networks
Hlabisa’s CBD has electricity, but many of the informal businesses that operate around it are not connected to electricity. The women who were cooking food and supplying it to the businessmen in town, especially the taxi operators, were using gas or paraffin stoves for these services. The three other villages that participated in the study did not have electricity at all. While there was one tower near the municipal’s office in the Hlabisa CBD area, it did not help much in the plight of informal sector in the Hlabisa CBD and also the three places of research which are outside town. “Our phones always lose networks”, was one of the many problems voiced by the participants when commenting about the poor networks in the area.

It was observed that a few residents who could afford them used generators to meet their needs in the absence of electricity. All this is evidence that the infrastructure is weak and inadequate and in many instances does not reach the places where most informal businesses are operational. The lack of a well-developed and stable electricity supply and telecommunications infrastructure in Hlabisa Local Municipality also negates the option of running businesses using various ICTs, especially when there is a strong wind or the weather is unstable.

6.2.4.9 Cost
Buying some ICTs, even mobile phones, is expensive to ISWEs. The participants opted for cheaper handsets and accessories because they do not earn much money. However, these handsets generally do not last long and are great loss to many ISWEs. The cost of buying and maintaining mobile phones digs deep into the women’s pockets. Therefore the findings show that the costs associated with the use of specific ICTs is a challenge that prevents women in the informal sector from acquiring the types or versions that would provide them with access to more services.

6.2.4.10 Work conditions
A conducive work environment with enabling resources such as ICTs helps people perform their duties and activities easier and quicker. The ISWEs in Hlabisa Municipality
performed their businesses in different conditions. Weavers, sewers/tailors and crafters worked in roof-covered buildings. Some of these buildings were half-walled or not walled at all. Describing their conditions, they said that while they were protected from direct sunshine in summer, in winter they experienced extreme cold. In rainy seasons, some were exposed to rain which leaks from the sides. They were unable to lock away their equipment, tools and garments because of the nature of the buildings, and had to pack everything away at the end of each working day.

Other participants were in the cooking business, which is a business that is commonly conducted near taxi and bus ranks. They cooked for rank managers and taxi owners and drivers, in particular those working within the Somkhele, Nkodibe and Mpembeni taxi ranks. However, enough food was cooked to provide for the passerby and other informal traders (male and female) who are not in the cooking business. Most of them, especially those who could afford them, used caravans for their catering business. Others used temporal tents. Paraffin and gas stoves were used to cook because electricity is not connected to their caravans or tents. Even those businesses operating from town, where electricity is available in other formal businesses near and around them, they used paraffin or gas. Thus preparation is delayed and slow. Water facilities are generally poor since local residents use boreholes or rivers to meet their water needs. ISWEs said that they carried water in 20 litre bottle containers (izigubhu) or buckets to cook and wash their utensils, because there was no proper pipe system to supply them with water.

Fruits and vegetable hawkers generally display their products on the ground on top of cardboard boxes or on mats along the pavements. Others have learnt to build their own wooden stands on which to put their products. Most of them normally operate in open spaces and under trees. Some use temporal tents made of a few tree poles and torn mielie meal sacks or old materials. Only a few of the respondents had secured their places in the verandas of buildings.
6.2.5 Suggestions for effective information access, flow and use

Question 11 (Appendix 1) asked the ISWEs to suggest how things should be done in order for them to gain access to the business information that they need. Their responses were meant to determine the best way ICTs could be used to transfer business information to the ISWEs. The question also aimed to support the development of a suitable model for information access, use and flow could benefit ISWEs. The themes below show their responses, which are categorised into groups.

6.2.5.1 Cost of ICTs

The cost of ICTs was mentioned as a challenge by many ISWEs. Reduced costs would make ICTs affordable to most of the ISWEs, and this would afford them opportunities to learn to perform advanced and sophisticated activities on ICTs that they owned and maintained.

6.2.5.2 Dissemination of business information and training facilitation

It was indicated in their information needs that ISWEs need information on how they can access finance as this could help them expand their activities. ISWEs start their businesses without or with limited business know-how and finance. They expressed the need to identify financial institutions that would understand them and their needs. According to the women, they did not meet the requirements of many financial providers because they were not registered or because they did not have a financial record that could prove their self-employment and financial balance to the providers, and consequently failed to receive support.

They thus fell into the hands of micro lenders who scoop a high percentage of interest with their loans. This slowed their businesses’ progress and growth.

Training needs were also expressed by the participants. The women were aware that low education bars opportunities for better employment. Due to low literacy and educational levels, they lacked the skills and knowledge necessary to improve their businesses by adopting ICTs.
Training on business management was specifically expressed. Some women showed an interest in the improved use of technology for their businesses, but lacked the necessary skills. Interest in internet use, advanced mobile phone use and computer skills was demonstrated, and equally the training required for their use was expressed.

With respect to ICTs such as computers and the internet, the respondents felt that were expressed, the training provider should be aware of their skills levels and provide appropriate training sessions tailored to suit them, particularly with skills for business-related matters. It was indicated by the ISWEs that a needs analysis should be performed before training is provided. This would determine what they needed to empower themselves and expand their businesses.

The women leaders also indicated that in order to meet their needs regarding training, ISWEs should be given a choice by the providers on which ICTs they required training, so that the training is tailor-made to suit them. According to the women, training should be done where they work in order to make it more convenient.

6.2.5.3 Time

The time factor was also identified by women as an obstacle to engaging in businesses information sessions which could also equip them with skills. The fact that they ran their businesses from early morning until late in the day left them with no time to leave their sites to attend training sessions.

6.2.5.4 Support from the municipality

The participating ISWEs believed that the local municipality could assist them with many things. They mentioned shelter or a better work environment, subsidised product costs, and exhibition support. All these could help them improve their businesses and get exposure to reel in other potential clients. The women who rented caravans indicated that they paid the owner between R300.00 and R700.00 per month. Whereas they could only afford to pay as from R50.00 a week, they did not have any alternative.
The informal sector generally does not have proper sanitation, which does not promote hygiene around their businesses. The Local Municipality could consider providing a temporal sanitation solution to meet this need.

The local municipality was regarded by ISWEs as their closest link to government, and believed to have a lot of resources. Suggestions for the support from this office regarding ICTs included electrical cables and infrastructure in their stalls so that they could charge their mobile phones and stay connected all the time and invest in new radios that do not need a constant supply of new batteries.

6.2.5.5 Strong infrastructure

Many of the participating ISWEs carried their water from home or had to pay other people to provide them with water. Electricity is not installed in many Hlabisa villages. Businesses that can do better with electricity cannot function properly without it, and products cannot last long.

It was also suggested that the municipal office should build a resource centre suitable for both the old and the young, literate and semi-literate people in the community, so that the entire community could have a central but conducive place to meet, receive training, and learn to access the internet and use computers and other ICTs.

The absence of infrastructure such as electricity, water and proper roads leads to poor networks and signals, which interferes with communication.

The ISWEs believed that if they were provided with strong infrastructure in their villages, they could focus on other things that they needed in their businesses. They indicated that they may venture into other businesses that operate with technology rather than focusing on being artisans or small-scale businesses. The examples given by some women were phone shops, which would not only allow women to keep in touch with relatives and friends all the time, but improve their economical standards as women.

Response from both the municipal officers and women leaders regarding a central resource centre were positive. The municipal officers indicated that they were aware of
the need for a centre that would be equipped with the necessary ICTs and space that could meet the needs of local people. However, while they stated that financial resources for proper infrastructure and the site were being discussed for this purpose, they didn’t provide any dates or further details.

The women leaders confirmed that the municipality had promised to relocate informal traders to an identified place with all the infrastructural resources.

6.2.5.6 Proactive women leaders
Women leaders among the ISWEs are not appointed by anyone, but take on the role as a result of a mutual understanding between the women. Their role is to communicate information that is needed to women. Usually these women leaders are better equipped and empowered than others in terms of education, ICT skills, and exposure to and relationships with several people in the municipality office, taxi industry and tourism office. Thus they also act as the ISWEs’ representatives. However, because they are also informal traders, they do not become as proactive as other women expect them to be. According to them, their assistance and role is limited. Yet ISWEs expect their leaders to disseminate information or make them aware of media resources and new technologies or even related meetings and training sessions on ICTs that can be applied in their businesses.

6.3 Data from structured interviews with municipal officials

6.3.1 Introduction
A structured interview schedule (see Appendix 3) with open-ended questions was used with four municipal officials. The researcher explained the aim of the interviews to the participants before the actual interviews, and an agreement was reached between the researcher and the interviewees on the most suitable venue for the interviews to take place. The municipal officers decided to be interviewed in their offices.

The interviews were not audio-taped but manually recorded. The names and contact details of the participants were not recorded in order to ensure and respect their
anonymity. Furthermore, none of them were quoted or identified with any comments. Only their ideas and opinions were recorded by the researcher.

6.3.2 Characteristics of the respondents
The respondents represented managerial positions senior enough to influence decision-making in the local municipal’s office. Three were administrative officials holding various positions in the municipal’s office, while one was a councillor of a municipal ward where some ISWEs were living. These characteristics and positions could influence decisions about ISWEs.

6.3.3 Information about ISWEs from municipal officials
As the representative of the national government at grassroots level, the municipal office is very important in overseeing service delivery to the people, and this includes women in the area who contribute to the upliftment of the economy by engaging in informal trading.

Questions 1 to 6 in Appendix 3 asked the officials about their knowledge of informal trading in their municipality. Municipal officials were also asked to state how many ISWEs were operating or registered in the municipality. This question was asked to find out how much the office knew about the kinds of businesses carried out in the informal sector and whether the municipal office was able to provide the necessary support to these businesses.

Three (75%) officials indicated that they did not know how many ISWEs or how much informal trading is done in the local municipality. However they indicated that they had observed that the sale of fruits and vegetables and second hand clothes is very common, especially on the pavements and at taxi ranks. One (25%) official estimated that there were six hundred ISWEs involved in informal trading within the municipality, but could not indicate the kinds of businesses taking place. Such responses raise doubts as to the municipality’s ability to provide the necessary support to ISWEs.
The officials were further asked to indicate their knowledge of the procedure that had to be followed to allocate stands to ISWEs who would use them to carry out their informal activities, and where rent is paid towards the stands.

All (4; 100%) the officials indicated that they did not allocate any stands to any ISWEs. However, they had observed that the entrepreneurs allocate and erect stands by themselves wherever they thought it was possible to conduct business, which could be on the pavement, near taxi ranks, or under the shade of a tree or building. According to them, they were not aware of the payment of any rent, how much was paid, and how often that rent was paid.

Such responses suggest that the municipal office knows little about informal trading in their municipality. For instance, some ISWEs indicated that they paid rent to the owners of the containers. This was not known by the officials. Understandably, the officials were not in a position to tell what was covered by the rent paid to the owners of containers or caravans. Whether it was within legal boundaries to charge such a rent for a caravan or a container could also not be stated by the officials since they were not involved in any transactions between the two parties.

6.3.4 Services offered to ISWEs by the municipal office

The officials were asked to indicate if ISWEs had come to them with any information request that related to their businesses. The aim of this question was to establish whether, despite their lack of service delivery and support, the officials were aware of the business needs of ISWEs. Two (50%) indicated that they had received requests from ISWEs in matters relating to security in their businesses, new places to work, electricity, water, and shades in the places where ISWEs work.

The officials were further asked to indicate the services they offered to the ISWEs. All 4 (100%) indicated that they did not offer any services specifically tailored for ISWEs. However, they stated that they provided general services to the entire community.
6.3.4.1 Use of technologies in service provision

The officials were asked to indicate the technologies that they used to provide service and support to the ISWEs and the technologies that they had observed being available and used by ISWEs. These questions were asked to find out if there were any special technologies used by or to support ISWEs in their businesses. All 4 (100%) officials could not indicate any technology used to communicate or disseminate information to ISWEs. Although the observation of ISWEs making use of some ICTs such as mobile phones was made, details on this and the availability of other possible technologies such as computers, were not provided.

The officials were further asked to indicate other strategies they used to communicate information to ISWEs. This was asked to establish if there were other ways used by the office to reach the ISWEs. Three (75%) officials indicated that they sometimes visited the entrepreneurs while 1 (25%) indicated that there were no strategies that he was aware of.

However, the ISWEs indicated in their responses that no municipal officials visited them. They did indicate that during campaigning periods, they saw a lot of them, often pleading with the women to vote in order to change their conditions in the informal sector. This shows that mass communication using face-to-face communication was practised by municipal officials, albeit occasionally and for non-business purposes.

6.3.4.2 Opinions on the use of technologies for business by ISWEs

The officials were asked to indicate what technologies could be used by ISWEs in their businesses and why. They were further asked to indicate what could be done in order for the ISWEs to maximize their use of ICTs for business purposes.

Three (75%) officials indicated that mobile phones and the radio could be successfully used to quickly report criminals and for quick announcements.

All 4 (100%) officials indicated that the national government should provide them with resources so that the municipal office was better equipped to deliver services by
providing proper infrastructure to their communities. They further indicated that they could provide what was necessary to the communities if they had enough to budget with. Two (50%) officials suggested that young women should stay in school longer so that they could attain the education and skills necessary to gain better employment. This is in line with the characteristics of ISWEs which indicate that they generally leave school earlier than expected and thus end up with low literacy and skills levels.

It was indicated by 1 (25%) official that women especially had shown an over-dependency on the government, and suggested that they need to learn to do things for themselves.

6.4 Responses from structured interviews with women leaders

6.4.1 Introduction

Personal data was sought from 17 women leaders in the four areas under study in Hlabisa. This was done to determine the level of their experience in working with ISWEs and other stakeholders and their effectiveness in improving ICT access and use in the informal businesses of the ISWEs. Data was also collected to determine the suitability of the women as leaders of ISWEs. As with the municipal officials, the aim of the interview was explained to the women leaders prior to the interview. Agreements about time and place were also reached beforehand.

The women leaders were interviewed in their work places, near their tables, stands and stalls, but a few meters away from other women. Like the municipal workers, the interviews with the women leaders were not audio taped.

6.4.2 Characteristics of the interviewees

The women leaders were working among and with other ISWEs in various informal trading activities. No pre-determined strategy was used to identify women leaders. Among those women who took part in the interviews as women leaders, were either self-volunteered or referred to by the first woman trader encountered in the trading place. Such women were not officially selected, but they represented ISWEs because
they were able to command respect from other women, they were personable and confident, self-styled, and good organizers. Additionally some had higher educational levels than other ISWEs while others owned many items, which suggested a higher living standard than other ISWEs. Some women leaders had been participating in informal trading for a longer period of time than the rest of the women. All these characteristics helped to make them more vocal and active than other ISWEs in terms of communicating with suppliers, clients, local and foreign tourists, and in communicating information to ISWEs.

Four (24%) women leaders were between 30 and 39, while 1 (6%) woman leader was 50+. The majority (12; 70%) of the women leaders were between 40 and 49. No woman leader was between 18 & 29.

With respect to education, 16 (94%) women leaders had primary education and 1 (6%) had attained secondary education. None of them had attained tertiary education.

All 17 (100%) of the respondents were informal traders.

6.4.3 Ownership and usage of technology
Women leaders were asked if they had observed ISWEs with any technologies in their homes or in their workplaces. They were further asked to indicate if they had seen ISWEs using the technologies for business-related purposes.

The majority (17; 100%) of the women leaders had seen ISWEs with mobile phones, in ownership, and in use at work, while only 2 (12%) had seen them using radios at work. No woman leader had noticed ISWEs with a landline telephone or a computer.

Seventeen (100%) women had observed ISWES receiving or making calls with their mobile phones, while three (18%) had seen them sending text messages (SMS).

6.4.4 Information needs and provision
Women leaders were asked to indicate the information sources they themselves used for information to be able to provide for information needs of ISWEs. This question was
asked to establish if there is any relationship between the high ownership and usage of mobile phones with using mobile phones as sources of business information.

All (17; 100%) the women leaders indicated that ISWEs had come to them to ask for information. However, they also said that they used other sources such as friends, which was indicated by 17 (100%) women leaders, and fellow women, indicated by 15 (88%) women leaders.

This confirms the ISWEs’ responses to this question, that sharing information orally with friends and fellow women is still practiced by many ISWEs. Women leaders were further requested to indicate what sort of information ISWEs requested when they came to them. This was asked to establish whether the information need was business related or whether it was a general information request.

Most (15; 88%) women leaders stated having received information requests related to women concerns regarding their businesses, such as “When and where are the exhibitions?”, “What is the municipality saying about the relocation to a better environment?”, “When will the meeting with a councillor be?”, “Are we going to get electricity soon?”, “When is the next delivery date of the suppliers?”, etc. Two (12%) women leaders received general information requests or requests related to other fields from the ISWEs, such as dates for children’s immunization, meetings about land, and death in the community.

Women leaders were further asked to indicate how they supplied the requested information. The aim of this question was to find out whether any ICTs were used by the women leaders to disseminate information to the ISWEs or what other sources the women leaders used to provide information to the ISWEs. Seventeen (100%) women leaders orally communicated the information to ISWEs, while 3 (18) referred them to the municipal office. The women leaders made no reference to the library, telecentres, books, or internet cafes.
6.4.5 Suggestions for information provision using ICTs
The women leaders were asked to indicate what prevented ISWEs from using ICTs to access information. They were further asked to suggest how these problems could be overcome in order to ensure that ISWEs gain access to information that addresses their business concerns or needs and that they use ICTs in their businesses or to obtain business information.

All the women leaders (17; 100%) indicated lack of resources as an obstacle to ISWEs’ use of ICTs for their business information. 14 (82%) women leaders indicated that lack of skills and knowledge forced ISWEs to use friends and relatives and not ICTs when they needed information.

The ISWEs stated that education and skills were barriers to their use of ICTs. Thus the observations by women leaders relate to the responses by ISWEs. Although ISWEs were talking about poor infrastructure as factors that hinder ICT usage, women leaders spoke of lack of resources, which could indicate infrastructure as well. This shows that women leaders are in the vicinity of ISWEs and their observations and experiences about inadequate resources and infrastructure are similar. However, for the sake of this study, infrastructure refers to the physical properties that enhance resources, such as libraries, roads, or anything that can be used for any support or help.

The women leaders’ suggestions were that the municipality should take care of the ISWEs’ needs by supplying them with suitable, relevant and necessary resources (17; 100%). Training that focused on business and ICTs was suggested by 12 (71%) of the women leaders as necessary to ensure that the businesses of the women in the informal sector could improve.

6.5 Data from structured observation
6.5.1 Introduction
Structured observation results were obtained by following an observation guide (Appendix 6). The observation sessions consisted of 30 minute sessions between and
around the focus group discussions with ISWEs and the interviews with women leaders and municipal officials. Observation was done in order to view the situation on the ground - the conditions of the work environment, and the availability of structures that support the information and knowledge society in the four areas that were covered in Hlabisa. The events and structures observed were then categorised according to the issues raised in the research objectives of the study, specifically objectives 1, 2, 3 and 4.

By using a checklist of the practices and structures that the researcher understood to mean or to portray the information and knowledge society, such as availability and access to electricity, extent of telephone service coverage, conditions of roads, the availability of other infrastructure available in the community such as information centres, libraries and tele centres, etc., it was possible to record and assess the availability, accessibility and use of these structures in the community and by ISWEs.

In this section, data is presented in the context of the information and knowledge society on the aspects mentioned above and the general operational processes and conditions in the library that was visited, the municipal office, and ISWEs’ workplaces; roads, transportation and electricity; working days and hours; infrastructure; and the information and communication technologies present and used in Hlabisa Local Municipality. Table 6.7 outlines the observable structures and sources of the information and knowledge society in Hlabisa Local Municipality.

Table 6.7 Results from structured observation

<table>
<thead>
<tr>
<th>Items observed</th>
<th>Detailed notes reflecting availability</th>
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<tbody>
<tr>
<td>1. Access to electricity in the community</td>
<td>Except for Hlabisa CBD, ISWEs from Mission, Mahunjini and Mapheleni did not have electricity access at work</td>
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<tr>
<td>2. Level of telephone service coverage in the community</td>
<td>Fixed telephone lines were very scarce in Hlabisa town and their presence in the other</td>
</tr>
<tr>
<td>157</td>
<td>i.e. mobile phones and fixed telephone lines</td>
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<tr>
<td>3.</td>
<td>Other ICT services available in the community such as internet cafés, telecentres, libraries, public cellular phones (known as Mr Phones)</td>
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<tr>
<td>4.</td>
<td>Conditions of the roads in the community</td>
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<tr>
<td>5.</td>
<td>ICT infrastructure in the community such as mobile towers (Vodacom tower), phone towers (Telkom tower), satellite dishes, etc.</td>
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<tr>
<td>6.</td>
<td>Network availability and all time connectivity in the area</td>
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<tr>
<td><strong>7.</strong> Business days and hours</td>
<td>Every day, seven days a week, ISWEs’ stands, stalls and tables are operational. In some places, such as Hlabisa CBD, weekdays and weekends are business as usual. In others, such as Mapheleni, there are fewer ISWEs over the weekend compared to weekdays. The presence of children in the stands and tables on weekends was observed. What was interesting was that the children were using mobile phones frequently as groups of two or individually, sometimes with their earphones on and in most instances while at their parents or relatives’ stalls or tables. This shows that the young women were using ICTs more than their older relatives. However, this observation of having some kind of ICTs all the time could be used to determine if business information was accessed.</td>
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<tr>
<td><strong>8.</strong> Conditions in the work place, e.g. use of portable radios, availability of electrical plugs, presence of the gathering space</td>
<td>Two portable small radios were found in two different ISWEs’ groups. There were no electricity plugs where they were working. No gathering place was observed. If they want to meet, they come together at one woman’s plot/table</td>
</tr>
<tr>
<td><strong>9.</strong> Frequency of the transport in the area and the prompt product delivery system used</td>
<td>Transport flow is not frequent. Although there are taxis and bakkies, public transport such as buses was not frequently spotted. Some of the</td>
</tr>
<tr>
<td>by ISWEs</td>
<td>buses observed at the rank were proceeding to Nongoma or Mtubatuba. Poor infrastructure impacts on the smooth flow of public transport and thus the delivery of media which could inform women in their businesses</td>
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<tr>
<td><strong>10. Involvement of the municipal office, women leaders and financial institutions</strong></td>
<td>It was observed that women leaders were engaging with other women to an extent because they are also in the business and had to be there all the time. The women leaders were often seen on their mobile phones, taking seemingly endless incoming calls. This could indicate that they are the principal link between the ISWEs and product suppliers, clients, officials, etc. The municipal office is very near the Hlabisa CBD. However during the duration of the observation, no official from the municipal office was seen communicating or interacting with ISWEs. The banks, during the period of data collection, did not engage with ISWEs in any of the areas. Mobile bank stands or tables with ICTs to perform or demonstrate demo transactions, or train ISWEs on the use of mobile phones for business management, or any other related service from the banks, were not spotted during the data collection period.</td>
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</table>
Table 6.7 indicates that Mapheleni, Mahunjini and Mission had no electricity, while Hlabisa CBD had electricity. Thus the informal trading areas where ISWEs conduct their daily businesses were not connected to electricity.

As indicated, not many ICT resources were utilized for business information access and use in their sites besides a few portable radios that used batteries. This is because there are no electricity plugs in their temporal tables and stands.

The scarcity of fixed telephone lines in Hlabisa hampers communication between people in the local municipality and for ISWEs as business owners in particular. Although a few public cellular phones were observed in Hlabisa CBD, Mapheleni, Mahunjini and Mission had none. The use of the containers that house the public cellular phones depends on the availability of electricity to operate. Without electricity, communication via mobile technology becomes impossible because they need to charge.

Libraries are places that allow people to search through various information resources and use these resources for decision-making purposes. The small library found near the municipal’s office in Hlabisa, cannot meet the needs of the entire community in Hlabisa. The limited number of staff as well slows the process of disseminating information to the ISWEs. Women in the informal sector did not to visit the library, and community outreach sessions and ICT training to suit ISWEs business information needs were absent. It was observed that there was a computer on the front desk which was used by a librarian, but not by patrons or library users. The presence of a telecentre could make a difference, but there was no telecentre in Hlabisa to teach ISWEs how to access information using today’s technologies.

The condition of the roads, especially feeder roads that get into many places in Hlabisa, was poor. This is highly frustrating for women who have to travel long distances to access resources.
There were no network towers observed in Hlabisa. This means that connectivity is not guaranteed at all times. Business information access and transfer using ICTs is therefore not always possible. The availability of the Telkom tower, however, promotes connection around the Hlabisa CBD.

6.6 Summary of results
Chapter 6 presented and analyzed data according to the study’s objectives. It also forms the basis for the next chapter, Chapter 7, which interprets and discusses the findings of this study.

6.6.1 Characteristics of ISWEs
The women who participated in this study were between the ages of 15 and 60. They engaged in informal businesses because they had low levels of education and limited business skills and knowledge which prevented access to formal employment. Some of the respondents were single parents, widowed or aged persons who provided for children who had been left parentless because of disease and death.

6.6.2 Information needs of ISWEs
The ISWEs cited different information needs. They expressed personal, legal, educational, health-related and entertainment-related information needs. Business related information needs were also expressed by the ISWEs. These information needs were expressed by those who wished to venture into other types of business or grow their businesses. They expressed the need for information on financial assistance from financial institutions and the government, marketing and exhibition information, information on training, and re-skilling opportunities.

6.6.3 Information seeking patterns, sources and channels used by ISWEs
Oral communication, i.e. social visits and face-to-face communication, was highly preferred by ISWEs in the Hlabisa Municipality. Relatives, friends, workmates and family members were preferred by many ISWEs for information, the main reason being
their proximity and ease of reach. Printed information sources and institutions of information such as libraries were not keenly used by ISWEs in the area.

The radio is still regarded highly by many ISWEs as a reliable source of information, especially battery operated radios. The reason the radio was popular with them was the fact that programs aired in their own language, isiZulu, meaning that they could understand all that was said.

The television was also commonly used by ISWEs in Hlabisa. Some women even used generators to get electricity.

As one would expect, mobile phones have penetrated in Hlabisa. A high number of ISWEs owned mobile phones. Their oral communication was extended further and faster through the use of mobile phones. Although the mobile phones were not advanced, the women were happy to receive and make calls. Few of the respondents could text. Many were able to identify and read messages from friends and even from suppliers or banks, especially when money transfers were made. However, not all the ISWEs in Hlabisa were owners of mobile phones.

Some were just users of mobile phones - they had had mobile phones but for some reason were left with SIM cards only, or had not had mobile phones and bought only SIM cards. They were only using mobile phones through friends and relatives.

An internet cafe was available in town and provided services such as faxing, searches, printing, emails, and the scanning of documents. This facility was not adequately used by the ISWEs. Limited skills and knowledge prevented use of this facility.

6.6.4 Factors affecting information flow

It was found that generally, information was distributed among ISWEs in the Hlabisa municipality. However, there were many factors that interfered with the smooth flow of information. The library was available but the ISWEs reportedly never used it. The library also did not offer library outreach or extension services.
Several banks were present in town that provided banking services to community members, including ISWEs.

Roads and transport services were available. However, the road conditions were very bad and affected the smooth flow of public transport.

Language was a barrier to the access and use of some business information and information sources by ISWEs, especially technological resources in other languages which were not freely used and understood by ISWEs.

Lack of a suitable time from both the ISWEs and informants from different financial and information institutions was a problem and it affected information flow. It was found that ISWEs were not keen to leave their businesses unattended or attended by relatives or friends while they received training.

The office of the local municipality did not visit ISWEs timeously to see and support them in their businesses. Thus it was found that there was limited information about the conditions of informal businesses by the municipality officials, although there were future plans by the municipality to intervene.

Electricity was identified as a problem in the area, especially where informal businesses were operating. The informal businesses closed early because they could not operate until late due to the absence of electricity.

6.6.5 Suggestions to improve the conditions
ISWEs in the Hlabisa Local Municipality suggested what could be done to support their businesses and for their businesses to expand. They mentioned the efficient and timeous dissemination of business information, business training and ICT knowledge and skills acquisition, support from the local municipality, access to funds or loans, adequate resources, well developed infrastructure to support their businesses such as roads, business centres and network signals, and general support from stakeholders and interested parties.
CHAPTER SEVEN: DISCUSSION OF THE FINDINGS

7.1 Introduction
Chapter seven provides an insight into the findings that were presented and interpreted in Chapter 6. The findings that are discussed in this chapter were obtained through focus group discussions with ISWEs, face-to-face interviews with municipal officials and women leaders, interviews with the ISWEs, and observation. The chapter has attempted to collate and compare all the findings obtained through the different instruments and from different participants in line with the objectives of the study and the study’s aim - that of assessing the role of the information and knowledge society in poverty alleviation and the economic empowerment of informal sector women entrepreneurs in South Africa.

7.2 Scope of the discussion
In this section, various issues guided by the research questions of the study are discussed, such as the information needs, types of sources used to access information, commonly used information sources and channels, factors affecting the access to, and the use and flow of information, and recommendations to improve the use and flow of information.

The discussions follow the findings in Chapter six, which were grouped according to the themes of the objectives of the study. As in Chapter 6, the background information and characteristics of the participants are presented and discussed first.

7.3 Characteristics of the participants
The participants’ ages ranged between 15 and 60, with the majority (41; 35%) in the 40 - 49 age group, and a significant number (34; 29%) between the ages of 30 and 39. Most of the participants (67; 57%) had attained primary education, followed by participants who had no formal education (27; 23%). Those with secondary education and tertiary certificates came third (23; 19%) and fourth (1; 1%) respectively.
One hundred and one (86 %) participants were sole breadwinners in their households. Some (14; 12%) were assisted by 1 to 2 other people in the household, and only 3 (2%) were assisted by 3 or more people.

Regarding ownership, 70 (59%) and 19 (16%) participants owned land and livestock respectively. The most common information and communication technologies owned by the respondents were mobile phones (107; 91%) followed by the radio (105; 89%) and television (46; 39%). Only one (0.8%) respondent had a landline and none of the women owned a computer.

The occupation of the respondents was divided between small scale businesses - selling of fruits, vegetables, cooking fast foods (94; 80%) - and artisans - crafting, weaving, sewing, dressmaking, hairdressing (24; 20%). The respondents had different reasons for engaging in informal trading, such as family responsibilities, which was cited by the majority (71; 60%), followed by limited skills/ the inability to do other jobs (35; 30%). Being orphaned (32; 27%) and early school drop outs (16; 4%) were also reasons mentioned by the participants. Those who were receiving old age pensions and different grants stated that these funds were not adequate for them to carry out their responsibilities, and they therefore worked in the informal sector to supplement their incomes (4; 12%).

7.4 ISWEs’ information needs and information seeking behaviour

Information needs assessment is critical in the development of a relevant information service (Du Preez 2008:16; Kaniki 1994:53; Khan and Bawden 2005). Kaniki (2001:188) points out that one of the most difficult yet necessary activities in the provision of community information is the assessment of information needs. Ikoja-Odongo and Ocholla (2004:62) likewise argue that the information system that is developed or adopted must meet the needs of the people that it is to serve. Their argument support Kaniki’s (1994:53) observation that information needs assessment has to be done regularly if established information centres (and those to be developed) are to continue to be relevant in any given community.
The findings of this study indicate that the ISWEs experienced a variety of information needs, such as the need for business information, information related to loans, financial support, business management, marketing, education, security and entertainment, as shown in Table 6.5 under section 6.2.2.1.

The need for information related to business was mentioned by the majority of the participants. For instance, all the respondents (118; 100%) required information on loans, and 106 (90%) required information on government support towards rent, training opportunities, and a conducive workplace. Women also needed information that was not related to business, with topics spanning personal problems, health, legal issues and security, and entertainment queries.

7.5 The types, sources and channels of information used by ISWEs

It was very crucial to determine the types of information sources and channels used by ISWEs for their information because there should be a relationship between them and the types and channels of information. When put together, they should make a system. ISWEs in this case are regarded as a social system, and the channels, sources, equipment and processes that they use are regarded as a technical system. There should be a relationship between the two because their interaction creates the conditions for successful or unsuccessful system performance (Walker et al. 2007:5).

7.5.1 Relatives and friends

The findings indicate that the participants mostly relied on interpersonal, informal and oral means of communication as their main information sources, as indicated in Table 11 in Chapter six. This could be caused by low literacy and skills levels, inappropriateness, and the high costs of other types of sources of information such as computers and the internet.

Friends, relatives and family members were highly preferred by ISWEs for information. Reasons for this could be that they communicate in the same language, which is an advantage in terms of understanding what is said as well as easy interaction. The proximity syndrome is also showcased here, as indicated in many studies (Ntalaka and
Baruga 2010: 5; Ikoja-Odongo and Ocholla 2004; Kaniki 1994:13; Case, 2002:8). These studies point out that despite the presence of a wide range of sources, people use most of these sources only on rare occasions, and gather and apply information from informal sources such as friends and family throughout their lives. With this in mind, it is not surprising that in the presence of sophisticated ICTs, ISWEs in Hlabisa Local Municipality preferred oral sources of information for their business information needs.

7.5.2 Radio
The second largest used source of information was the radio. The radio was preferred because it is an affordable ICT to own and maintain. These findings are concurrent with literature. For instance, Oyedemi and Lesame (2005:91) found that in areas without electricity, people used the radio to satisfy their communication needs. Likewise Ikoja-Odongo and Ocholla (2004) found that radio broadcasts were the most popular source of information in Uganda. Maepa (2000) also points out that in South Africa, the radio is relied upon more in the rural areas.

The main advantage of the radio is that in most instances, it provides information in the local language of the listeners. This observation was noted by Maepa (2000) when indicating that the language aspect has implications on the language formats of the information provided by ICTs.

All four of the areas from which the ISWEs were sampled could access and listen to available community radio stations, the Zululand community Radio, which is aired at 97.0 Frequency Modulation and the Maputaland Community Radio station found in at 107.6 Frequency Modulation. These two community radio stations have become important sources of information on health, politics, and business matters. Community radio is relevant even to people who are illiterate because of how affordable it is when compared to other ICTs. It is also audio-based, with programs that are relevant to people in the community. It allows local people to air their own local content and what concerns them. Both Zululand and Maputaland Community Radio stations could be the most relevant ICTs to provide vital business information to ISWEs in Hlabisa.
The modernization theory, as discussed in section 4.3, regards development as a movement from traditional to modern societies. Availability of both Zululand and Maputaland Community Radio stations in the area could support ISWEs in their development by affording them an opportunity to receive information broadcast by technology in that way moving from traditional ways of relying on relatives and friends, which is oral for information to using this ICT. Through radio, information could be accessed and disseminated at all times as long as the owner has access to a radio and utilize it. Additionally ISWEs at Hlabisa Local Municipality have an advantage of location since they are near the border of South Africa and Mozambique. This allows them an opportunity of international communication as indicated in the framework of modernization theory (see section 4.3 in chapter 4). People from the other side of the border can participate in radio programmes and discuss matters relating to them and their neighbours. In that way creating an opportunity to share valuable information that can contribute to their development and that of their communities.

7.5.3 Television
Television, like the radio, is generally regarded as an old type of ICT. However, it is still not fully and completely accessible in rural areas, as indicated in Table 11 of Chapter six. Television ownership and use is still lower than radio ownership and use in Hlabisa. The table also shows that none of the ISWEs in the Hlabisa CBD owned a television. Instead quite a significant number of them owned land where they spent time tilling the soil to produce food.

The findings indicate that even the ISWEs, who owned televisions in their homes, did not have regular access to its programs. The time they spent in their businesses in the stalls, tables and tents, and weak or the absence of network posed some challenges.

Television could be another category of ICTs supporting the development of ISWEs at Hlabisa Local Municipality, especially if a community television channel is established. Such an initiative could have local programmes that are relevant in terms of content and language. Moreover it could provoke their interest of ownership and usage. Although
there is a connotation that television is for entertainment, ISWEs of Hlabisa Local Municipality could develop strategies that will enable people watch programmes relating to what they do and their lifestyle generally. If South Africa met the infrastructure criterion, there would be many local televisions, and many towers which support local networks and maximize clear viewing in all areas of the country. Unfortunately South Africa relies on few National televisions which are centralized and caters for the entire nation. Although there are few programmes, such as news, which alternate the days in language delivery, especially SABC 1, 2 and eTV, this is about the only thing, the language that they understand and which could arouse their interest. The wider use of television by ISWEs at Hlabisa Local Municipality could contribute to their development and empowerment as indicated in the modernization theory’s elements in section 4.3.1.

7.5.4 Telephone services

As indicated in Table 8, not many ISWEs owned telephones or landlines in their homes. The fixed line telephone industry has had to contend with a lot of competition in terms of other convenient service providers from mobile cellular phone networks such as MTN, Vodacom and Cell C. The findings indicate that there were a few containers from different mobile companies installed in the area other than Telkom call boxes. These are widely known as Mr Phones or ticky boxes. Seemingly, they are improving the services of the telephone business since they open until late and there are people in the containers managing them, unlike the Telkom public phones which stand alone and are at risk of being vandalized. This could be because it would be difficult and even very expensive for the government to deploy or install a nationwide infrastructure for fixed line phones, especially in rural areas like Hlabisa where households and villages are often far from each other. This supports the observation that the telephone fixed line coverage was very low and always out of order or broken in Hlabisa.

7.5.5 Mobile phones

The use of the fixed landline telephone by people in South Africa has dropped dramatically, with mobile phones radically outpacing its development and use. The
penetration and use of mobile cellular phones has grown in Africa tremendously. As indicated in literature (Rao 2011; Wakari and Ocholla 2010; Ardonivo 2007), in 2008 there were more than 246 million mobile phone subscribers in Africa. In areas where internet services are not available and the web is non-existent, mobile phones have succeeded due to their accessibility and affordability (Rao 2011:14). Rao (2011) further observes that informal traders in rural communities now use mobile phones to communicate and connect with the world and to improve their businesses, even in the absence of electricity. However, it is disheartening to find that ISWEs in Hlabisa are not taking advantage of internet services, even though South Africa alone had 5.3 million internet users and over 3 million people on Facebook at the end of 2010 (Rao 2011:34). These findings concur with Wakari and Ocholla’s (2010) observation that mobile phones are the most popular ICTs, and the Mobile Africa Report by Rao (2011:5) on “Regional hubs of excellence and innovation”, which reports that the four biggest mobile phone markets in Africa are Nigeria, South Africa, Kenya and Ghana.

The popularity of mobile phones among ISWEs at Hlabisa Local Municipality is indicated in section 6.2.2.3, where ownership and access and use even without ownership is practiced among them. Hence mobile phones were recorded as one of the commonly used information sources by ISWEs at Hlabisa Local Municipality, as indicated in table 6.6. This form of ICT could be used by government and other stakeholders who wish to facilitate development to ISWEs at Hlabisa Local Municipality. Reasons for this, as stated in the development theory, section 4.3.2, which is one of the elements of modernization theory, that by introducing modern methods in trade, among others, dependent on a mobile labour force, the underdeveloped countries could experience a strengthening in their economies. High percentage of mobile phone ownership and use in South Africa and in this particular case by ISWEs at Hlabisa in particular, is an indication of the extent of the readiness and willingness of ISWEs to develop and modernize. In this way, their existence could be relevant in the information and knowledge society.
7.6. Factors affecting information flow and its exploitation by ISWEs

The findings on this study’s objective are presented in section 6.5 of the previous chapter (6). This objective sought to establish the barriers to the use of ICTs for information flow and exploitation by ISWEs in Hlabisa.

7.6.1 Education and literacy

The level of education and literacy has an impact on the ability of ISWEs to utilize technology. Literate people are able to utilize and explore more functions and services of technology. With the findings on the low levels of education among ISWEs in Hlabisa, an ICT-driven, habit-conducting business cannot be practiced fully by these women, because to them using ICTs is a challenge. Therefore, the full benefits that accompany ICT use in businesses are not reaped by ISWEs in the Hlabisa Local Municipality. Computer literacy programs that accompany adult education could be the only way to increase awareness and enhance technology use in their businesses.

Empowering communities with information literacy and the skills necessary for the mastery of new media, the internet and multimedia, is essential for growth. This is equally essential for ISWEs at Hlabisa Local Municipality. Since the modernization theory holds the assumption that economic growth will not only be achieve through the use of ICTs, but it will ‘trickle down’ to other sections of the social systems and lead to socio-political modernization. When ISWEs at Hlabisa Local Municipality have ties with international ISWEs counterparts, they could be motivated to improve their educational levels and other literacies such as financial and information literacies; an initiative which could empower individuals positively. In that way cross-border and international business friendship could be initiated and business agreements could be reached. Furthermore alleviating poverty and placing them in the business limelight.

7.6.2 Skills

The need to be trained in order to use ICTs was mentioned by ISWEs. This indicates that they realized that they lacked the skills that could help them apply ICTs in their businesses. Therefore, workshops and other training on ICTs can play a role in the
women’s way of conducting business. The modernization theory is of the view that western skills can be learnt and applied by developing countries. Therefore, in theory it is possible for ISWEs to adopt the business skills practiced by modernized countries to better their own skills. In this regard, the modernization theory emphasizes what was discussed in section 2.5.1.5 regarding leapfrogging into new ICTs and gaining benefits thereof. ISWEs at Hlabisa Local Municipality could take advantage of applying ICTs in their informal trading and gaining skills as while they continue participating in their businesses.

7.6.3 Access to information centres (libraries, tele centres, etc.)

According to the modernization theory, the availability of multi-media community centres or tele centres ensures community connectivity, local capacity building, content development and communication (Harris 2004:38). Unfortunately, there is no tele centre in Hlabisa. Therefore ISWEs cannot benefit from all the services offered by this kind of centre in the Hlabisa Local Municipality. ICT skills acquired through computer training at the tele centre could give ISWEs valuable skills that would enable them to access new job opportunities or overcome their fear of technology and computers. Either way they would benefit from basic computer literacy sessions or training and find ways to use this to improve their financial capital.

Although there was a library available that could benefit the ISWEs in Hlabisa CBD for instance, the findings show that the women were not keen to use this facility. In Chapter six, relatives and friends, radio, television and phones, especially mobile phones, were the preferred sources and channels of information. No mention of information centres or the library was made.

Another factor could be education and literacy levels, as shown in Chapter 6. A low level of education limits a person and prevents them from pursuing opportunities that could help them venture into ICTs for business.

Distance as well could impact negatively on ISWEs wishing to access the library. The findings in Chapter six indicate that the ISWEs of Mission, Mahunjini and Maphele...
lived in remote areas that were very far from the library. As indicated in sections 6.5.3 and 6.5.5, distance and the transport system are related factors that could discourage access to the information available in information centres.

Communities can have shared access to information by using existing community institutions such as post offices, libraries and telecentres, or new institutions can be built to meet the community’s information needs. In Kaniki’s (1994:53) view, it is important for the information centres to be relevant to a community in order to meet their needs.

7.6.4 Language
The language used with new technologies such as computers acts as a barrier to information among ISWEs who are mostly semi-literate. Poor grasp of the English language was mentioned by ISWEs in the Hlabisa Local Municipality as a reason behind why they were not able to use the internet or willing to attend computer training sessions that could be offered by independent service providers or the library, especially in the case of those ISWEs who were in Hlabisa CBD which is near the library. The observation they made was that some Automatic Teller Machines (ATMs) and mobile cellular phones have made the effort to localize and translate the languages used in their processes or transactions.

The findings thus indicate that language is a factor that significantly affects information flow and use.

7.6.5 Conditions of the roads and transportation system
Communications and transportation infrastructure is very essential for the socio-economic development of a people because it provides links between people, centres of production and markets, especially in the economic sector. Poverty is in this way reduced, because a flowing transport system will reduce the transport tariffs of the commuters and their luggage. In most instances, public transport is used and relied upon by poor people because it is affordable.
As the findings indicate, the feeder roads within most of the rural areas in Hlabisa, especially in Hlabisa CBD, Mahunjini, Mission and Mapheleni, were either very poor or non-existent, making it very difficult for residents to move around and for business owners to transport their products to their tables, stalls or tents. Walking, head-loading and wheel-burrow transport are pretty standard in Hlabisa Local Municipality to overcome the lack of transport.

ISWEs require a reliable and cost-effective transport system to transport their goods and services. Without an efficient road infrastructure and transport system, ISWEs are not able to reach their stalls on time, and thus their sales suffer. Information providers cannot convey messages to them, for example to ask them to bring their work and products for exhibitions outside their localities in order to take part in regional exhibitions. ISWEs find such tasks to be difficult when the transport is not reliable and does not reach deep into rural and remote areas in the Hlabisa Local Municipality.

7.6.6 Time
Under normal circumstances, women in the informal sector have a lot of responsibilities in their homes and their communities, and this erases the time for other things like training sessions to facilitate their personal growth and development, and working to expand their business horizons in the case of entrepreneurs. The modernization theory recognizes that ICTs are useful in bridging distance and providing their users with more time, but in many instances, the time spent by the women at work does not spare them any time to use ICTs to access business related information.

7.6.7 Support from the local municipal office
Informal sector businesses need a lot of support from the government, NGOs and other stakeholders that may be interested in their advancement and growth. The fact that their businesses are mostly performed without legal documentation, skills and knowledge, is a huge barrier to their exposure and access to finances, information, skills and training support and assistance from relevant organizations and sections.
The findings in Chapter six revealed that women in the informal sector receive little support from the municipality. The local government is supposed to be the government's ear at grassroots level, listening to the people and understanding their concerns so that development can take place. Its other important role is as the government's hands; according to the ISWEs, the local municipality is the office of the government that should ensure that they receive services such as water, electricity, sanitation, roads, and other infrastructure such as proper shelter for their businesses and subsidies to purchase amenities for their businesses. However, such support and assistance was reportedly lacking.

The findings indicate that the municipal office had no clear strategy or plans to assist informal trading in Hlabisa. Lack of resources and funding from the national government were reportedly the main culprits. Either way, the infrastructure that could support the installation of ICTs and IT-related centres was not in place to support the growth of informal trading and empowerment of ISWEs in particular.

7.6.8 Electrical supply and network infrastructure

ICTs cannot run without electricity; electricity is an absolute requirement for computers to run, charging mobile phones, for community radio stations and television, and as a source of power for information centres such as libraries and telecentres. Without an adequate electrical supply, it becomes virtually impossible to meaningfully utilize ICTs for growth and sustainability and also to run ICT projects that could improve the socio-economic levels of people.

In most rural areas in South Africa, electricity and power failures are frequent occurrences, but much worse off are the areas with no electricity at all, where daily living is an arduous task. These communities pay a different price in terms of the costs that accompany alternative power supplies such as generators, gas and motor batteries.
One tower available in Hlabisa CBD was not enough for the coverage of all other areas in the Hlabisa Local Municipality, including Mahunjini, Mapheleni and Mission. Hence there were always network problems.

In all four of the areas visited for data collection within the Hlabisa Local Municipality, access to electricity by ISWEs was poor, if it was available at all.

7.6.9 Access to telephone and mobile services
Efficient telecommunications structure has a positive impact on the growth and potential for generating revenue and the desire to reduce the digital divide (Ardovino 2007:2).

In addition to the basic benefits of calling and receiving calls, which are easily performed by many ISWEs who have access to mobile phones, there are many other benefits that could be performed via this ICT, such as money and airtime transfer, payment of bills and fines, and general banking transactions which can save ISWEs the time and money spent travelling and queuing to meet with suppliers, clients and other ISWEs for information and/or product purchase and delivery.

There are many countries that have set an example by showing the benefits of using the mobile phone as an ICT that can improve the quality of life. For example in Tampa in the USA, the community uses the Parkmobile system, which is an innovative, multi-space, parking pay station service.

This system instantly updates the CALE WebOffice database with real-time payment information to allow CALE’s customers the ability to see all the parking payments at once, regardless of the payment option the customers choose (Nethery 2011:1). In Estonia in Eastern Europe, mobile phones are also used to manage the parking system and improve communication between home and school (Mobile-Government, 2010 and Beyond). In Bangladesh, the government sends text messages to warn people of natural disasters, including floods and cyclones.

Some of the greatest success stories have been the use of mobile phones for financial transactions. In Kenya, project M-PESA is a mobile-based money transfer service that
also allows customers to send remittances home across the country and to make payments (Rannu, Saksing and Mahlaköiv 2010:7). Similarly, in South Africa, MPESA service is used in many banks and also several banks are utilizing the benefits of mobile phones. For example, First National Bank uses e-Wallet, a cell phone service that oversees the transfer of money to a recipient via a mobile phone, and the recipient gets an SMS to let them know that they may go and withdraw money without having an account with the bank or a card to use in an ATM. Airtime can also be bought with this e-Wallet service. Standard bank has StandardMobi and ABSA bank has AbsaMobi services which can be performed using mobile phones. These services would be extremely beneficial to the ISWEs.

The use of mobile phones in the delivery of business information to businesses and informal traders, such as ISWEs, saves the time, costs and effort associated with travelling and disseminating information in a traditional face-to-face way. Access to ICTs can assist in marketing information that pertains to business (for example sending a text to say that something is just in or to advertise discounts), and becomes easier when all the clients and stakeholders (customers, suppliers and other ISWEs) have access to such technology.

Factors that affect the use of ICTs that relate to affordability, costs, infrastructure, time, education and literacy, age and support, affect the smooth transfer and use of information by ISWEs and understandably affect their growth and business development. These women completely miss out on the benefits of the information and knowledge society.

As indicated in the modernization theory, developing countries can adopt the styles of the modernized countries to improve on their situations by improving the way they do things. However, sustained service delivery, in this case through access to telephone and mobile services, is essential for the continuous flow of information that is relevant to the community, so that the community and individuals may rise up and manipulate the
services and structures that propel them forwards towards their development and growth.

Although South Africa has an established transport system with many airports and well maintained national roads when compared to other African countries, it does not fare well when compared to developed countries. This is because these features do not benefit most of its citizens, such as the residents in townships and villages and those who work in the informal sector. With their characteristics, only a few citizens can afford to speedily fly to another country for a business workshop, for example. As mentioned before in Chapter 2, South Africa is only partly complying with this criterion.

### 7.7 Municipal officials and women leaders

In order for the government to improve service delivery to its people, proper and well researched statistics should be provided. The local municipality in Hlabisa could not tell the number of informal traders in its municipality or the kinds of activities performed. This in itself shows that there could not be any proper delivery of services and provision of support where necessary. This is in line with the comments of the ISWEs on the support that they received from the municipal office.

Regulations on paying rent cannot be an individual’s decision. An owner of a caravan or a container should be in line with regulatory standards when charging rent. The municipality should be aware of this in order to prevent other people from taking advantage of poor communities, especially women in the informal sector. The lack of involvement of the local municipal office in the affairs of the ISWEs is an obstacle to the growth of their businesses due to lack of support.

Normally, rent is paid for services such as water, electricity, refuse, security and other proper amenities. The ISWEs operate their informal businesses with little or none of these. This means that the rent they pay does not help them improve their working conditions. It is also true that those ISWEs who cannot afford rent, have to persevere through conditions of extreme weather on a daily basis.
The officials’ responses showed that the service and infrastructure provision plans were generally for the whole community, and not specifically for the ISWEs. This is understandable because the municipal office represents the government. However, there should be separate structures within the municipality that specifically address the needs of informal traders.

Education and the provision of skills that were suggested by officials were in line with the suggestions of all the other parties who took part in this study. The ISWEs themselves longed for another opportunity for education. But with their responsibilities and age, they felt that skills and training would be the second best thing that could empower them.

From the data, it was found that the women leaders were also informal traders who were working in the informal sector. In some way this means that they are suitable to be leaders of ISWEs because they potentially understand them more than others who may come from outside. In another way this means that as far as literacy and skills are concerned, women leaders, just like ISWEs, were unlikely to have more skills and knowledge in the use of ICTs for business information. Their ideas, information and skills are probably slightly better or just as good as those of ISWEs, and thus they may not be as proactive, knowledgeable and innovative as one would expect from a leader. However, what they lacked in skills they made up in experience, success, networks and the vocalization that it takes to say something on behalf of others.

The majority of the women leaders were in the middle age bracket. This shows that the majority of the ISWEs, whose numbers were found to be high among the ISWEs in the study areas, who participated in the study, are represented fairly well.

Regarding mobile phones, the women leaders’ responses were in line with the ISWEs’ comments on technology ownership and use, specifically that mobile phones are a highly popular and used technology among ISWEs. The radio was also indicated as a popular traditional ICT.
Women leaders stated that they had seen many ISWEs using mobile phones at their places of work. However they did not seem to know whether the mobile phones were used for business purposes or not. Nevertheless, the women leaders confirmed the ISWEs assertions that they possessed and used mobile phones.

The findings from the women leaders are on par with the responses of the ISWEs about their information seeking patterns. These findings showed that even women leaders preferred providing and receiving information through oral communication. Reference was also made to sources that were known to them, such as the municipal office, rather than telecentres which were not available or libraries and books that they did not use.

The concerns about better working conditions were well known by the women leaders. Many ISWEs had approached them about the possibility of improving their working conditions and upgrading to any structure that was better.

Lack of skills and resources were mentioned by both the ISWEs and the women leaders as factors that prevent the access and use of ICTs for business related purposes. This shows that there is a need for the provision of skills to ISWEs coupled with suitable resources so that training could be provided based on the skills that are available, and the skills that the women lack.

The suggestions of women leaders and those of ISWEs regarding what could be done to ensure that ISWEs incorporate ICTs in their businesses are very closely related. The municipality was identified as an important role player in providing necessary resources and information as well as support to women in the informal sector. Like the ISWEs, women leaders felt that training and re-skilling in business and ICT usage for business would make a difference in the lives of the ISWEs, and were therefore a necessity.

**7.8 Summary**

Chapter Seven presented a discussion of the research findings that were established in chapter six and presented the implications of these findings on this study. The chapter
also attempted to indicate how the current research findings concur or even differ from previous studies that resembled this one.

The discussions of the research findings in this chapter covered the findings of three out of five specific study objectives as indicated in 6.1. The first objective was covered in the literature chapters, Chapters two and three, while the 5th objective will be covered in the next and final chapter, Chapter eight. Therefore, these specific objectives were not part of the discussions in this chapter.

Chapter Seven has shown that technology and information and communication technologies in Hlabisa Local Municipality have a low level of utilization from the side of the informal sector women entrepreneurs found in this area. There are a number of factors that affect the access and use of ICTs for business information related purposes. These factors in turn affect informal sector development as a whole and empowerment in the areas that were visited and presumably other areas that are as remote and rural as the four areas in Hlabisa.

Information needs assessment was seen to be very critical in the development and support of informal sector women entrepreneurs for the delivery of relevant and tailor-made information services that would benefit them and their businesses. It was highlighted that the local municipality office, which is the representative of the national government in the area, does not have a ready and clear map for providing support to the ISWEs in the near future. The ISWEs in Hlabisa are not benefitting from the absence of information centres, such as telecentres, and a library that could play a significant role in providing a conducive environment for the ISWEs to reap the benefits that accompany technology and information, but isn’t.

In this chapter, the implications of ICTs were shown to extend to the improvement and sustained development of informal sector businesses; better earnings and savings in time and transport; interaction and connectivity; training and skills; and literacy and knowledge sharing.
The next chapter provides the summary, conclusion and recommendations of the study. It also proposes a new model for the effective utilization of the information and knowledge society by informal sector women entrepreneurs.
CHAPTER EIGHT: SUMMARY, CONCLUSIONS, RECOMMENDATIONS

8.1 Introduction
This chapter summarizes the important outcomes of the study and presents conclusions and recommendations on how the information and knowledge society can benefit informal sector women entrepreneurs and empower them economically and assist in poverty alleviation.

The study set out to examine information and knowledge society and its impact on poverty alleviation and the economic empowerment of women entrepreneurs in the informal sector in South Africa.

The following objectives were formulated in order to achieve the above aim:

1) To determine the role of the information and knowledge society in the empowerment of informal sector women entrepreneurs in South Africa

2) To determine women entrepreneurs’ information needs in the informal sector and explain how they acquire information

3) To identify and document the types, sources and channels of information used by female entrepreneurs in the informal sector

4) To explore the factors affecting the information flow in the informal sector and its exploitation by women entrepreneurs

5) To determine the extent to which SA is an information and knowledge society

6) To develop a model for the effective utilization of the benefits of the information and knowledge society by female entrepreneurs in the informal sector

8.2 Summary of the findings
The chapter is summarized according to the respective research objectives.
8.2.1 The role of the information and knowledge society in the empowerment of informal sector women

The information age boasts that information technologies are the drivers of transformation in information access, use and dissemination. Advances in ICTs demand that the socio-economic sector restructures for growth and advancement. Interconnectivity, accelerated information access, and the use and flow of information enable communities to leapfrog forward and harness new opportunities for their development. Therefore, knowledge and skills’ sharing are of paramount importance. ICTs make it easier to surmount borders and partner with global business communities because space and time factors are no longer an issue. Information can be brought directly into the hands of the people who need it. Improved and relevant services in other sectors are prominent, such as in the health, political and educational sectors.

8.2.2 Informal sector women entrepreneurs’ information needs and information seeking behaviour

The findings indicated that ISWEs experience business information needs. Overall, the majority of the participants demonstrated a strong need for business-related information, citing information on the expansion of their businesses, the management of business, new business ideas, business training opportunities, secure business environments, government business support (e.g. subsidizing renting), and information on credit facilities.

However, this information need was not adequately addressed by any information provider in the area.

With respect to information seeking patterns, oral, face-to-face communication and visits were the main modes of seeking information.

8.2.3 Types, sources and channels of information used by women entrepreneurs in the informal sector

The findings indicate that there were various information providers in the research area, such as schools,
churches, traditional systems such as Amakhosi and Izinduna, banks, local government offices and other government departments, and one library. With relevant systems in place, these information providers could improve the level of information access and use and the smooth flow of information to ISWEs. Information providers in close proximity were used by the participants.

Internet cafés and telecentres are normally centrally positioned and equipped with various ICTs such as computers, fax machines, telephones, etc., to support information exchange. These could help the community in general and ISWEs in particular with skills training and the use of these ICTs to improve their informal activities. However there were no telecentres that the participants could use to access these services, and the only library in Hlabisa did not offer them either.

The radio was the second most popular information source (105; 89%), followed by the television. The radios they used were battery-operated because of the limited supply of electricity and lack of proper electrified working areas with plugs that would allow the ISWEs to bring radios that operate with electricity to their places of work during the day. The radio is cheap and broadcasts local content in the local language of the community, which explains its popularity. The nature of the radio (oral communication) also allowed it to be shared with women who didn’t own radios.

However, the most commonly used ICT was mobile phones (107; 91%). These ICTs were either owned or borrowed and were mainly used for social communication. They also cut costs and the time that would have been spent travelling to relatives, friends and even business partners.

8.2.4 Factors affecting information flow and exploitation by informal sector women entrepreneurs

Although the findings indicate that ICTs such as mobile phones were owned by the majority of the ISWEs and commonly used by these women to communicate, older women’s access to and use of this information source was significantly low.
The findings also indicate that even though education and literacy levels were generally low among ISWEs in the study areas, it was a bit higher among in the younger and middle-aged group of ISWEs. Low education and literacy levels do not encourage ISWEs to be active users and exploiters of ICTs for information purposes. Only younger ISWEs with better levels of education and literacy were found to be frequent and keen users of the ICTs.

The majority of the participants generally lacked the ability to use technological devices such as mobile phones or computers for business purposes. For instance, even though SMS is considered to be one of the cheapest services of mobile phones, it was not used often by the participants due to lack of skills and the literacy required to use them.

As mentioned previously, there were no tele centres in any of the areas that were covered in Hlabisa. Their absence fails the ISWEs and poor and disadvantaged communities in terms of providing ICT services such as typing, photocopying, designing of business cards, and internet and telephone access. The observation that information centres such as tele centres can act as local hubs and provide services and connections to other important institutions such as schools, government offices, hospitals, NGOs, is also not applicable.

There was one library available in one study area (Hlabisa CBD) next to the city. This library was next to the Local Municipality office. However its services were not benefiting ISWEs who did not see its importance or use.

The study’s findings indicate that many participants struggled with the language used in ICTs. Many ICTs are still using the English language in all their transactions or in communication. The majority of ISWEs shy away from such ICTs.

The road and transport system plays an important role in information flow. Three out of the areas covered in the study area had roads that were in a pathetic state. This made it difficult for ISWEs to transport themselves and their products to their places of work or to markets and exhibition places when there were such events. Many people, including
ISWEs, used wheelbarrows or travelled on foot when moving their goods from one area to another. From observation, although the municipality had a few better roads connecting Hlabisa to outside places and other municipalities, it had a very bad feeder road system to connect places within it, and thus the movement, transport and delivery of goods, were severely hampered. The flow and use of information either orally by local people or through printed media or sophisticated ICTs was also curtailed by bad roads.

ISWEs spent most of their time selling their wares at their work stations, but they also had house chores to perform before they left or when they arrived back home. This left them with no time to learn about how to use any new ICTs or listen to or watch business-related programs about different ICTs that could boost their businesses.

There was little support from the local municipality office that could benefit ISWEs. The interviewed officials did not know how big the informal trading sector in the municipality was and what recent and workable plans were there to support them. Plans to relocate all the informal traders to a better trading place, which had been there for a long time, could not materialize because of limited resources (according to the municipal office).

The majority of the ISWEs did not have access to electricity in their homes and at their trading places. Generally, a very low percentage of people had access to electricity in the areas. The absence of electricity is a virtually insurmountable barrier to the use of ICTs for information.

As mentioned previously, many participants owned or had access to mobile phones. The beneficial impact of these ICTs and their ability to help with emergencies was acknowledged by the participants. However, the ISWEs complained about the quality of services. The findings indicated that in certain locations, the network was patchy or totally unavailable.

Furthermore, television and radio signals were reportedly generally weak or unavailable. In this instance, the community radio and its programs could not be transmitted to report important local news and updates.
The costs that accompany buying and maintaining ICTs such as radios, mobile phones and the television, for example, are transferred to customers. This makes these ICTs and their services unaffordable to the majority of ISWEs.

The ISWEs operated their businesses in very bad conditions. Their trading places were open, on the ground, on pavements or in tents, under trees or buildings, and a few were in old containers. None of these areas had electrical infrastructure that could facilitate the use of ICTs. These conditions did not inspire pride in their places of work and impacted negatively on their sales and profits.

Generally, ICT use in rural areas is still faced with a lot of barriers, ranging from low levels of education and literacy, to affordability, language and lack of basic infrastructure such as electricity. Low literacy and education, for example, do not equip a person with the necessary skills and competencies to manipulate and take advantage of better self expression, and thus information cannot be properly utilised and transferred. This is exacerbated when it is embedded in new technologies that require a sound education and literacy standing.

Language was found to be a barrier to the effective use and application of ICTs. Most ICTs in most instances used English as their primary language of communication to reach the wide variety of users of their products and goods. The ISWEs were poor English speakers and said that they struggled with the language of these products and services.

**8.3 Conclusion**

The study has shown the indicators of the information and knowledge society that need to be addressed to empower informal sector women entrepreneurs in South Africa. The information and knowledge society offers opportunities for improved infrastructure and telecommunications and increased and fully equipped and resourced information centres such as tele centres and libraries that support easy and speedy access to and the smooth flow of information and knowledge. This access, use and flow of information and knowledge facilitates informed decision making, improved productivity in business,
and improved service delivery between clients and suppliers, and opportunities for global participation and recognition. Business processes are easy to follow because ICTs facilitate the storage and retrieval of information and documents, thus making business activities more transparent.

Even though there are many challenges in the access and use of ICTs in the informal sector, ISWEs are seemingly keen to try a wide variety of sources, including sophisticated technologies, if they had access and knew how. This has been demonstrated in their possession and use of mobile phones in particular. With the right support, ICTs really could benefit women entrepreneurs in the informal sector and help them leapfrog into the information and knowledge society.

8.4 A new proposed ISWEs-ICT4D model

In order to fulfil the last objective as stated in Chapter 1, which was to develop a model for the effective utilization of the information and knowledge society by women entrepreneurs in the informal sector, this section presents a new proposed ISWEs ICT for development model (ISWEs-ICT4D). This model is based on the empirical findings of the study and ideas from other models which are presented in Chapter 4. All the models discussed in Chapter 4 are valuable and are considered significant in explaining the relationship between ICTs and the empowerment of women in the informal sector.

To this effect, the proposed ISWEs-ICT4D model suggested for this study and presented in Fig 8.1 is a result of the ideas of the modernization theory discussed in Chapter 4.

The information and knowledge society that is associated with developed communities is closely tied to modernity. Well-developed infrastructure supports ICTs, meaning that ISWEs need places where they can interact with information. The information and knowledge society presents opportunities for an enabling environment where there is a proper system for information flow. Government departments, NGOs, traditional leaders, community leaders and financial institutions should all make it easier for
informal sector women to share and access information and infrastructure should be improved to allow them to move goods and themselves easily and speedily. This would promote connectivity with product suppliers and clients, and increase savings over time for improved business management and performance.
Fig 8.1: ISWEs-ICT4D model:  Source: Own

Informal sector women entrepreneurs
(Needs: business information, knowledge & skills, business expansion, markets)

Connectivity

Business Information

knowledge & skills
access, use sharing, mobility

Enabling environment
(Decision-makers, Government departments, women community leaders, traditional leadership, municipality, financial institutions, NGOs, proper roads, telecommunication networks for, information accesses, use, flow, mobility of goods mobility of people)

Business expansion/growth
Global ties
Relevant skills, knowledge
8.5 Recommendations

The recommendations provided in this section are addressing study findings as outlined in section 8.2.1-8.2.4.

8.5.1 The information and knowledge society in the empowerment of informal sector women entrepreneurs

ICTs are the enablers’ basis of the information and knowledge society contributing to an environment for improved information access, use and dissemination by informal sector women entrepreneurs. In that way their socio-economic environment is transformed. This study has pointed out that infrastructure and relevant ICTs are in place to accelerate information access and use and flow in general. This infrastructure can support connectivity of informal sector women entrepreneurs to their counterparts in other places of the world, therefore allowing information to be shared among themselves. Skills and knowledge to harness such opportunities of ICTs manipulation for development, empowerment and growth are also vital. It is recommended that informal sector women entrepreneurs should be equipped with such skills that will help them to survive in the current information and knowledge economy.

8.5.2 Informal sector women entrepreneurs’ information needs and information seeking behaviour

In order for informal sector women entrepreneurs to expand their businesses, their business information needs should be catered for. The local government, women leaders, traditional leaders and telecentres will ensure that their information needs, particularly business information needs are catered for. Continuous visits, training and the provision of knowledge and skills regarding their business, centrally in the telecentres and other ICTs supporting services such as libraries and internet cafes will empower them with business management knowledge and skills that are conducive for a business environment. Therefore it is recommended that all the possible stakeholders, who have constant contact with the informal sector women entrepreneurs and those who can arrange for other stakeholders to support these women should always be available and be equipped with information business and skills. Telecentres
should be in place and a library should be more proactive for these ISWEs to utilize for their information needs and as centres for business skills and knowledge acquirement.

8.5.3 Types, sources and channels of information used by women entrepreneurs in the informal sector

Chapter 6 indicates that various information providers such as schools, churches, traditional leadership, banks, local government offices and the library exist in Hlabisa local municipality. These information services should be used to disseminate information to the informal sector women entrepreneurs and also to provide them with skills and knowledge on various aspects of managing businesses, particularly the informal sector that they are engaged in. Although the study revealed that informal sector women entrepreneurs in Hlabisa, prefer to consult people in their vicinity first such as friends and relatives, they should be encouraged to have a good working environment with all the information services in their localities mentioned above.

8.5.4 Factors affecting information flow and exploitation by informal sector women entrepreneurs

The findings reveal that there are factors which affect information flow and exploitation of this information by the informal sector women entrepreneurs. Factors such as inadequate formal education and literacy levels deter them in manipulating ICTs for information. However radio was identified as a means that could contribute positively to development in the area. It is recommended that radios which are highly used by the informal sector women entrepreneurs in Hlabisa, should broadcast programmes that are relevant. These programmes should be in the local language, which is isiZulu. Experts can be invited to participate in these programmes. It is also recommended that the government and broadcasting authority consider to fully supporting community radios which could encourage informal sector women entrepreneurs.

The use of television could also help. The need for community television is also vital. Although SA as country that is still developing and one that may not have enough resources to support community television for all its communities, the establishment of
community television stations could awaken the interest from local viewers. Like radio, it could broadcast programmes in the local language and further demonstrate where necessary, for instance banking procedures, communication and marketing skills and other aspects which could make informal sector women entrepreneurs feel the relevance and need to watch television for other reasons other than entertainment.

The road and transport system in Hlabisa was not of good standards at the time of this study. Infrastructure such as proper road networks is important for the business of informal sector women entrepreneurs. The study therefore recommends that the roads in this area be given attention. This will enable the flow of goods and products.

The provision of electricity was found to be problematic in Hlabisa at the time of this study. Weak electric infrastructure results in weak electricity which then disturbs the use of devices such as mobile phones, which were found to be possessed by a good number of the informal sector women entrepreneurs in Hlabisa Local Municipality, and use of other devices such as radio, television, library and some few telephone and cellular containers. Therefore, it is recommended that towers are installed by the government. Both electricity and telephone/cellular towers could improve patchy receptivity and network, weak connectivity.

**8.6 Recommendations for further research**

This study examined information and knowledge society and its impact on the economic empowerment of informal sector women entrepreneurs in South Africa. The study recommends the following areas for further research.

**8.6.1 Statistics and policy that cover informal trading**

No information regarding the scope of the informal sector could be found, which is one of the reasons behind why the government fails to support women entrepreneurs. It would be interesting to generate statistics and therefore the working policy around informal sector entrepreneurship in South Africa.
8.6.2 Scope
The study was narrowed down to one province and one local municipality. The high unemployment rates worldwide make it interesting to find out if other provinces in South Africa are experiencing an increase in informal sector businesses as a solution to unemployment. It would also be interesting to investigate male informal sector entrepreneurs in order to establish how different their conditions and challenges are from those of informal sector women entrepreneurs.
REFERENCES


Koekemoer, E. 2005. *Informal Markets in Tshwane; Entrepreneurial incubator or survivalist Reservoir?*. Pretoria: UNISA


Nethery, J. 2011. CALE Parking System USA partners with Parkmobile to offer Pay by Phone services and integrated enforcement and reporting systems. Press Release EDT, 10 January.


Portfolio Committee on Finance and Budget, 2007


APPENDICES

Appendix 1: Interview schedule with the focus groups

- Good morning. Thank you for taking the time to meet with us. We will honour your time by ensuring that we wrap up in the next 60 minutes.

- Does any of you mind if we tape record this for our records? Since we are student researchers who want to assess the role of the information society on poverty alleviation and economic empowerment among informal sector women entrepreneurs (ISWEs) in South Africa, we will not share the tapes with anyone else except our study supervisors.

- Our evaluation is formative and qualitative, which means our primary point is to gather information that will help ISWEs to reap the benefits of the information society for their development. This is why the information we are collecting is by design descriptive rather than numeric, and also why we are more concerned with your words and views.

- All information given here is confidential. For example, we will not disclose who actually participated in this focus group. We hope this encourages you to speak freely.

- Our evaluation will result in a written report by the end of 2010. This report will be submitted to the University of Zululand for examination purposes in order for me to pass or fail my studies. However, its findings will be shared with decision-makers in the government, communities and among institutions of learning, in order for them to make informed decisions on poverty alleviation and economic empowerment of the community, especially ISWEs.

- Any questions before we start?
• We intend to break our questions into several thematic groups. These are:

(a) Role of the information society in empowering ISWEs.

(b) ISWEs information needs and how information is acquired.

(c) Types, sources and channels of information used by ISWEs.

(d) Factors affecting information flow and its exploitation by ISWEs.

**Role of the information society in empowering ISWEs**

1. Have you heard about the information society, where technology make things easier to do and faster? For example where there is a lot of information for all our needs, such as information for our business, getting into contact with friends and relatives wherever they are much faster and easier, communicating with businesses outside the country and business partners who have never been met, etc.?

2. How do you think, as ISWEs, that you could also benefit from such a society?
ISWEs information needs and how information is acquired

3. Describe the types of businesses you are involved in:

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

Probe: fruits & vegetables, fast cooked food, hairdressers, traditional gear, other

4. What informed your decision to embark on that particular business?

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Probe: finances, inheritance, passion, etc.

5. Regarding your business, what information needs do you normal have?

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Probe: partnership, finance and funding support, work conditions, products, potential clients/consumers, transport, other

6. How do you get the information to satisfy your needs?

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Probe: making calls, visiting friends/neighbour/relatives, read recorded information (magazines, books, etc), other

Types, sources and channels of information used by ISWEs

7. What do you use/whom do you contact/ where do you go if you need information/ to know anything about your business?

Probe: friends, relatives, neighbours, bosses, financial institutions (which ones) information centres (which ones), media (which ones), other

8. Are there any particular reasons to use such sources or channels for the information you need?

Probe: reliability, proximity, other

9. If you cannot find the information you need, what do you do?
Factors affecting information flow and its exploitation by ISWEs

10 What would you regard as factors that prevent you from getting information you need for your business?

Probe: illiteracy, lack of time, absence of advisors, absence of information centres, other

11 What do you think should be done in order for you to get timeous and relevant information for your business?

Probe: visits (by whom, and why), trainings (on what, by whom), infrastructure (which one, why will it improve your situation), other
Appendix 2: Interview protocol for women leaders

<table>
<thead>
<tr>
<th>Name of respondent (Optional)</th>
<th>Date of interview</th>
</tr>
</thead>
</table>

Section a: Personal information

1. Age
   1 = [ ] 18-29
   2 = [ ] 30-39
   3 = [ ] 40-49
   4 = [ ] 50+

2. Level of Education
   1 = [ ] primary education
   2 = [ ] secondary
   3 = [ ] tertiary

3. What is your occupation?

Section B: Views about informal sector women entrepreneurs (ISWEs)

1. In your observation, do ISWEs have any of the following technologies in their businesses?
2. In your observation, do ISWEs use the above-mentioned technologies for business purposes?

1= [ ] yes
2= [ ] no

3. If yes, in your observation, what do they use them for?

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........................................................................................................................................
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4. If no, what do they use or do if they want information for their businesses?

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........................................................................................................................................
5. As a women’s leader, do women ever come to you to request information related to their businesses?

1= [ ] yes

2= [ ] no

6. If yes, what information requests do you normally receive from them?

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.................................................................................................................................
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.................................................................................................................................
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7. How do you provide them with that information?

1= [ ] orally

2= [ ] refer them to telecentres

3= [ ] refer them to the library

4= [ ] refer them to the tax office

5= [ ] refer them to the Internet café

6= [ ] refer them to books

7= [ ] refer that to radio programmes

8. If no, in your opinion, what hinders their access to business information?

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9. In your opinion, and from your experience, what can be done to ensure that ISWEs get information that suits their business needs?

Thank you.
Appendix 3: Interview protocol for local government officials

Name of the Official (optional)........................................................................................................

Location........................................................................................................................................

Date of the interview........................................................................................................................

1. How many informal sector women entrepreneurs (ISWEs) are registered in this office?
   ..................................................................................................................................................
   ........

2. What kind of businesses do they do?
   ..................................................................................................................................................
   ........

3. How are the stands allocated to ISWEs and by whom?
   ..................................................................................................................................................
   ..................................................................................................................................................

4. Do they pay rent for their stands?
   
   1= [ ] yes
   
   2= [ ] no
5. If yes, how often do they pay rent?
   1= [ ] daily
   2= [ ] weekly
   3= [ ] monthly
   4= [ ] annually

6. How much do they pay per stand per given time?
   ................................................................. .................................................................
   ........

7. What services are covered by the rent fee?
   1= [ ] water
   2= [ ] electricity
   3= [ ] refuse
   4= [ ] security/policing
   5= [ ] shades
   6= [ ] other

8. If your answer to no 4 is no, who pays for rent?
   ................................................................. .................................................................
   ........
9. Do ISWEs come to your office for any service/information request?

   1= [ ] yes
   2= [ ] no

10. If yes, what kind of service or information do they normally request from your office?

    ....................................................................................................................
    ....................................................................................................................
    ....................................................................................................................
    ....................................................................................................................
    ........................................................

11. What services does your office currently offer these women?

   1= [ ] business training
   2= [ ] Internet access
   3= [ ] fax
   4= [ ] other

12. If your answer to 9 is no, how do you think their business or information needs are met?

    ....................................................................................................................
    ....................................................................................................................

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13. In your observation, do they use any of the following technologies for their businesses?

1= [ ] radio

2= [ ] mobile phones

3= [ ] landline public phones

4= [ ] computers

5= [ ] fax

14. In your observation, what kind of information do they communicate with the above-mentioned technologies?


15. In your knowledge, is there a community radio in this area?

1= [ ] yes

2= [ ] no
16. If yes, what business programmes are aired that can assist these women in their businesses?

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17. If no, how can the availability of a community radio assist in ISWEs’ businesses?

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18. What strategies does your office use to ensure that these women have access to information relevant to their business needs?

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19. Does your office have reports on problems related to ISWEs’ work?

1= [ ] yes

2= [ ] no
20. If yes, what problems do they normally report?

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--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
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21. In your experience, do you think these problems could be solved with the use of ICTs?

1= [ ] yes

2= [ ] no

22. In your opinion, how can the problems or challenges of ISWEs be solved?

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--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
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23. In your opinion, what can be done by this office to ensure that technologies of today are used by ISWEs for their socio-economic empowerment and development?

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--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
Thank you
Appendix 4: Demographic information of ISWEs

Name of place-area .................................................................

Date ......................................................................................

1. Age

15-29 [ ]

30-39 [ ]

40-49 [ ]

50-59 [ ]

60+ [ ]

2. Level of education

No formal education [ ]

Primary education: Lower primary (gr 1-5) [ ]

Higher primary (gr 4-7) [ ]

Secondary education: Lower secondary (gr 8-10) [ ]

Higher secondary (gr 11-12 [ ]

Post secondary: Certificate [ ]

Diploma [ ]

Degree [ ]
3. **Breadwinner**

   Sole breadwinner [ ]

   Assisted by 1 [ ]

   Assisted by 2+ [ ]

4. **Number of people at home**

   Between 1-3 [ ]

   Between 4-6 [ ]

   Between 7-10 [ ]

   11+ [ ]

5. **Ownership**

   Land [ ]

   Livestock [ ]

   House [ ]

   Other................................................................................................. .......................

   ..................

6. **Other assets, including ICTs**

   Car [ ]

   Truck/ tractor [ ]

   Bicycle/ motorbike [ ]

   Taxi [ ]

   Radio hi-fi [ ]
Portable radio [ ]
TV [ ]
DSTV [ ]
Land line [ ]
Mobile phone [ ]
Computer [ ]
Calculator [ ]

7. Occupation of ISWEs

Small scale businesses [ ]

: Fast food [ ]
Fruits & vegetables [ ]
Muti leaves & herbs [ ]
Spaza [ ]
Airtime vouchers [ ]
Kids’ toys [ ]

Other..................................................................................................................................................
............

Artisans [ ]

Dressmaking [ ]
Traditional gear [ ]

Crafters [ ]

Other............................................................................................................................

.............

Thank you
Appendix 5: Outline of the study objectives in relation to the methodology

<table>
<thead>
<tr>
<th>Aim</th>
<th>Objectives</th>
<th>Research Questions and Chapters</th>
<th>Target Population</th>
<th>Research Method</th>
<th>Research Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>The aim of the study is to establish the role that the information society and knowledge society play in poverty alleviation and the economic empowerment of informal sector women entrepreneurs in South Africa.</td>
<td>7. Assess the role played by the information society in the empowerment of the informal sector women entrepreneurs in South Africa.</td>
<td>• What role can be played by information society and knowledge society in empowering the informal sector women entrepreneurs in South Africa? (Ch 2, 3, 6 &amp; 7)</td>
<td>Literature</td>
<td>Content Analysis</td>
<td>Interview/Focus Group and Literature Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Explore the characteristics of the information society and how they can bring development and advancement.</td>
<td>Literature</td>
<td>Content analysis</td>
<td>Observation and Literature Review</td>
</tr>
<tr>
<td></td>
<td>9. Identify the informal sector women entrepreneurs and determine their business characteristics.</td>
<td>• Who are the ISWEs and what is the type and scope of business they are involved in? (Ch 3, 6 &amp; 7)</td>
<td>Literature</td>
<td>Content analysis</td>
<td>Interview/Focus Group and Observation</td>
</tr>
<tr>
<td></td>
<td>10. Determine informal sector women entrepreneurs’</td>
<td>• What are the informal sector women</td>
<td>ISWEs and Literature</td>
<td>Content analysis</td>
<td>Interview/Focus group, Observation and</td>
</tr>
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<tr>
<td>11.</td>
<td>Identify and document types, sources and channels of information used by informal sector women entrepreneurs.</td>
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<td></td>
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<tr>
<td>12.</td>
<td>Explore factors affecting the information flow and its exploitation by informal sector women entrepreneurs.</td>
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<tr>
<td>13.</td>
<td>Develop a model for effective utilization of the information society by informal sector women entrepreneurs.</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

**Entrepreneurs' information needs, and how are they met? (Ch3, 6 & 7)**

- What sources and channels do informal sector women entrepreneurs use to get information? (Ch 3, 6 & 7)

- What problems and factors affect the information flow and its exploitation by the informal sector women entrepreneurs? (Ch 2, 3, 6, & 7)

- What can be done in order that informal sector women entrepreneurs reap the benefits of the Information Society? (2, 3, 6, 7 & 8)

**ISWEs and literature review**

**Content analysis**

**Interview /Focus group, Observation and literature review**

**ISWEs**

**Content analysis**

**Interview/Focus Group, observation and Literature review**

**ISWEs**

**Content analysis**

**Interview/Focus Group, observation and Literature review**

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## Appendix 6: Observation guide

Name of the community: .................................................................

Date of observation: .................................................................

<table>
<thead>
<tr>
<th>Items to be observed</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Access to electricity in the community</td>
<td></td>
</tr>
<tr>
<td>2. Level of telephone service coverage in the community, i.e. mobile phones, fixed line telephones</td>
<td></td>
</tr>
<tr>
<td>3. Other ICT services available in the community such as internet cafés, telecentres, libraries, phone-shops (Mr Phones)</td>
<td></td>
</tr>
<tr>
<td>4. Conditions of the roads in the community</td>
<td></td>
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<td>5. ICT infrastructure in the community such as mobile phone towers, telephone lines, satellite dishes, etc.</td>
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<tr>
<td>6. Network availability in the area</td>
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<td>7. Observe business days/ hours</td>
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<td>8. Observe conditions in the work environment, e.g. the use of portable radios, the availability of electricity plugs, the presence of a gathering space</td>
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<td>9. Observe the frequency of the transport in the area and the product delivery system in use</td>
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<tr>
<td>10. Observe the involvement of the tax-payers office, women leaders</td>
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