

Use of Information and Communication Technologies by Women Hawkers and Vendors in South Africa

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Abstract

South Africa's informal sector is growing, but the majority of the entrepreneurs in this sector earn low incomes. It is widely acknowledged that the use of information and communication technologies (ICTs) by informal sector workers can help them improve their productivity and incomes. The aim of the study, therefore, was to determine the role of ICT in business communications among rural women entrepreneurs in South Africa. Forty-two women were sampled from two local municipalities, using purposive sampling, and information was gathered through observation and interviews. The study found that the majority of women possessed mobile phones, and other ICT used included landlines, radio and television. Computer technology, however, was absent, although the sampled women displayed a keen interest in its use. All of the surveyed women

used radio and TV to listen to and watch business-related programmes, and almost all of them used cell and land phones to make and receive calls to and from business partners, retail stores, product suppliers and distributors. However, none used ICT to search for business-related information. It is recommended that Adult Basic Education and Training (ABET) classes to improve literacy rates be introduced, while skills training in a variety of ICT, including computers and access to tools for digital communication, be made more accessible to these women near their work environments.

Keywords

Information and communications technology, informal sector, women, hawkers and vendors, South Africa.

Introduction

Many countries, both developed and developing, are investing in information and communication technologies (ICTs) for improving their life styles and business practices. The South African government has placed a strong emphasis on ICT sector development through the implementation of a national ICT strategy, which proactively addresses ICT penetration, particularly for disadvantaged segments of the society (Zawada et al., 2007). Also, the South African ICT sector development framework aims to promoting the development of the ICT sector in South Africa, thereby complementing and supporting the broader socio-economic goals of the government of South Africa. There are other specific initiatives by the South African government to promote ICTs sector development, especially for disadvantaged communities. The 1995 Green Paper and the 1996

White Paper on Telecommunications Policy form the basis of the 1996 Telecommunications Act. Also, Info.com 2025, a programme which addresses issues of policy infrastructure, human capacity and local content within ICT industries, seeks to empower people in the way they work, live, play and make South Africa globally competitive (Kwake and Ocholla, 2007).

Minishi-Majanja (2003) asserts that ICTs have impacted the economic, scientific, academic, cultural and other aspects of life. In line with the Millennium Development Goals, ICTs can be used to empower individuals and thus are valuable tools that may be used for poverty alleviation by people in the business environment, particularly the informal sector. Mostert and Ntetha (2008) state that ICTs are applied to access, analyse, evaluate, integrate, present and communicate information. When utilised in these ways, ICTs could transform the business environment and increase productivity and incomes. Some services are more conveniently and speedily performed by ICTs. It is in this regard that Fors and Moreno (2002) assert that ICTs enable larger amounts of information to circulate and be stored at a much higher speed and a much lower cost. Casparry and O'Connor (2003) see ICTs as potentially able to promote economic growth and possible access to resources and services by poor people.

New technologies come with their challenges, however, people in remote and rural areas are poor mainly because they lack access to opportunities, knowledge and the means of environmental exploration, communication and interaction to lift them out of their condition. Their poverty keeps them marginalised in their communities. Marginalised communities or groups, as defined by Ocholla (2006), are the economically disadvantaged populations of developing countries, including: rural people who are often geographically isolated as a result of lack of transport and communication systems; those marginalised or disadvantaged by cultural and social poverty, such as illiterate, the elderly, women and children; those who are discriminated against by race, ethnicity, creed and religion; and the physically disabled. ICTs could be the pivotal factor for promoting the participation and empowerment of poor and marginalised groups, as they can be used as means for communication and information sharing

by such groups to access resources and services (Zawada et al., 2007).

ICTs play a vital role in communications. In many countries, including South Africa, there is great improvement in telecommunications, through different mobile cellular networks and computers, along with increased utilisation of Internet for e-mail, e-commerce, e-searching and video-conferencing. This has greatly improved the processes of information and knowledge sharing and dissemination. ICTs also enable networks among people who share the same interests and views. Networking with peer business owners is vital at all times because it promotes easy information dissemination, exchange and communication (Zawada et al, 2007). Connecting individuals through ICTs therefore becomes imperative in the informal sector because it will not only boost their business productivity, but also connect them to both local and global communities who could be business partners and share with them business information. ICTs also confer social benefits associated with long distance contact with family members working abroad or in the city (Casparry and O'Connor, 2003).

Informal sector entrepreneurs must rely heavily on information in order to run and expand their businesses successfully in competitive environments. A study conducted among Mozambican women concerning the use of ICTs found out that computer-based ICTs are currently not deemed useful for daily survival needs, especially among rural informal traders, neither are they aware of its possibilities. Mobile phones, however, have been adopted and the ever expanding mobile network benefits women entrepreneurs in terms of the mobility it allows them, and also because their key contacts, clients and suppliers are all in possession of a mobile phone, thus overcoming all barriers in communication (Neondo, 2009). The usefulness of mobile phones for economic empowerment, especially among those residing in rural areas, has also been demonstrated by the success of the Grameen phones in Bangladesh (Thas et al., 2007). This mobile phone network provides women with communicative access to business information and opportunities concerning financial matters, agricultural prices, etc.

Studies among women in the Asia-Pacific region indicate however that the availability and accessibility

of ICTs do not necessarily guarantee empowerment of women. It was found that irrelevant content, lack of control over the physical ICT instrument, and what information can be accessed by the women, are huge challenges of the successful access to, and utilisation of, information (Thas et al., 2007). In a study by Jiyane and Mostert (2008) among informal sector women in the uMhlatuze Municipality in Northern KwaZulu Natal, South Africa, a need to access information concerning such business issues as access to funding, marketing of businesses and products, lowest prices for products, and business management was expressed. The women mostly preferred verbal communication, though demonstrations, seminars and TV programmes were also considered acceptable means of obtaining business information. Interestingly, the women made no mention of computer related ICTs, landline phones or mobile phones as tools for acquiring or disseminating business information (Jiyane and Mostert, 2008).

Research Problems and Objectives

In South Africa the informal sector provides employment for a substantial percentage of the South African population. Davey et al. (2006) estimated the sector to comprise 2.4 million people of whom 42.1% are females. It may be assumed that the current economic meltdown has significantly increased these numbers. According to Nkinyangi (1995), the informal sector is made up of small-scale units producing a very wide variety of goods and services. These units are owned and operated by largely independent, self-employed producers who employ family labour or a few hired workers and apprentices. Operating on very little or no capital and with low levels of technology and skills' utilisation, these micro and small scale enterprises are to be found in great numbers in all the main economic sectors, including natural resource extraction, farming, produce processing, cottage industries, and services (trading, hawking, etc.). Many of these informal sector businesses, particularly the micro-scale types, are dominated by women.

Several initiatives, particularly focusing on women, have been collaboratively started by the South African government and non-government organisations (NGOs) to promote access to and use of ICT-mediated information. For instance, the South

African Non-Governmental Organisation Network (SANGONET), the Commission on Gender Equality (CGE) and Women's Net are collaborating to provide a regional electronic information and communications network in South Africa (Kwake and Ocholla, 2007). The network seeks to empower women by providing services that meet women's information needs in a user-friendly manner, making ICTs accessible to women, and training women in the use of electronic media. According to Marcelle (2002), women can be empowered through the enhancement of skills, knowledge and access to ICTs, which then improves access to information and promotes the informal sector through the sharing thereof.

Despite these and other initiatives and projects, questions remain as to the impact they are having on women generally, and women operators of micro-scale businesses in particular. Although ICTs are seen as valuable tools to enhance business information sharing and dissemination among SMEs, studies of these enterprises often ignore those in the micro-scale category probably because of their micro scale or informality. In any event, studies that specifically explore the use of ICT for business purposes by informal sector hawkers and vendors in rural communities are rare. The aim of the study, therefore, was to explore the current role of ICTs for the access and transfer of business information and knowledge among women hawkers and vendors in the rural Umkhanyakude District Municipality, KwaZulu-Natal Province, South Africa. The objectives were to:

- (i) establish whether the ICTs are used by the hawkers and vendors in the Municipality for business related activities;
- (ii) determine which types of ICTs are used and for what specific purposes;
- (iii) determine the skills level of the female hawkers and vendors in utilising the ICTs; and
- (iv) establish whether or not the ICTs have changed the way women hawkers and vendors conduct their businesses.

Methodology

The study was conducted in the Hlabisa and Mtubatuba Local Municipalities, which form part of the Umkhanyakude District Municipality, and are located on the North East Coast of the KwaZulu-

Natal Province, South Africa. The main sources of income of people in the area are agriculture, such as sugarcane farming and cattle, and tourism. The First World Heritage site in South Africa, the Greater St Lucia Wetlands Park World Heritage site, falls within the municipality's borders. A number of game reserves, wildlife sanctuaries and game farms also fall within this area. Although it is a very rural area with poor economic and transportation infrastructure, a number of projects have been instituted to enhance business opportunities and economic growth within the area, such as the curios centre at the entrance to the Greater St Lucia wetlands park situated at St. Lucia, the Dukuduku forest nursery project on indigenous plants and artwork, and the Mtuba Art project which offers opportunities to both local entrepreneurs and businesses to sell their art work. (Hlabisa Local Municipality, 2007). In addition to these formal sector businesses, the municipality is witnessing growth in the informal service sectors, among which are vendors and hawkers of fruits, vegetables, traditional hats, attires, dishes, utensils, bags, traditional fashion accessories (earings, necklaces, bangels, rings, etc.). As the principal town in the Municipality Mtubatuba is the most developed town in this municipality, though neighbouring towns are also showing positive signs of progress. Internet cafes are available within the town, as well as branded email services provided by Forafrika Internet services. All the major mobile phone networks, i.e MTN, Vodacom and CellC, are fully operational throughout the area, while landlines are commonly available within the towns and in some of the more densely populated deep rural areas. The infrastructure for both radio and television reception is well developed, and these ICT devices are commonly found throughout the region.

These two municipalities were chosen as they are the most economically active areas, while the other three municipalities in the Umkhanyakude District Municipality are mainly game parks or nature reserves, and are therefore, more sparsely populated with a few villages. The focus was on female hawkers and vendors between the age bracket of 20 - 60+ years, as these are normally the groups that engage in economic activities. To identify participants, non-probability purposive sampling was used. The first group of hawkers and vendors were easy to

identify, as they are plying their trade next to the national highway, commonly known as the N2, to Mtubatuba. The second group located in the Hlabisa municipality was tracked down through referrals from this first group. According to Neuman (2006), this sampling method fits research where the number of potential respondents is not known, and only cases fitting the criteria can be reached. Twenty (20) individuals from the Hlabisa local municipality and twenty two (22) from the Mtubatuba local municipality were chosen as respondents.

Focus group meetings was identified initially as the ideal method for collecting data because of its value in facilitating the sharing of ideas and perceptions and to create a thick description of the whole phenomenon (Krueger, 1994). However, it proved impossible to get prospective vendors and hawkers who were willing to leave their businesses unattended to participate in such focus group meetings at an appropriate centrally situated place. Therefore, the data was collected through observation and individual interviews with the sampled vendors and hawkers. A total of 42 respondents took part in the interview, 20 from Hlabisa municipality and 22 from Mtubatuba municipality. The survey was undertaken in June 2008.

Results

Demographic Attributes of Respondents

The highest number of respondents (22; 52%) was from the age bracket 40-59 years. This may be because this group is made up of still potentially strong women who, apart from being homemakers, also needed to work to provide for their families. In addition, a significant number (12; 29%) of the women were 60 or more years old. These are grandparents who also desired to earn incomes in order to survive, keep themselves busy, or provide for the needs of their grandchildren who had lost their parents due to broken families or HIV/AIDS. The majority of the respondents 36 (86%) had had only primary education, while the remaining six (14%) had had secondary education. The low basic education of the women would, of course, limit their capabilities to learn to use computer-based ICTs.

ICTs Ownership

All 42 (100%) respondents owned some kind of ICT. The mobile cellular phones were owned by almost all of them 40 (95%), while only 2 (5%) owned landline phones in their homes. All 42 women (100%) owned radios, and 39 (92%) had TVs in their homes. None owned a computer for Internet access. However, they knew or had heard about computers.

All the respondents also indicated that they lacked the requisite knowledge and skills to use phones to perform advanced operations such as telephone banking or Internet access. Similarly, all the women could operate radio and TV sets, and landlines and talk-boxes provided by Telkom. However, only a very few could perform more advanced operations such as listening or watching CDs and DVDs, and

Table 1: Basic and Advanced Use of ICTs among the Respondents

ICTs	Basic Uses	Advanced Uses
Mobile/cellular phones	42 (100%) [e.g. voice call]	0 (0%) [e.g. SMS, MMS, video call, Facebook, email, Internet, download, take pictures, music, banking]
Landlines/talk boxes	42 (100%) [e.g. receive/make calls]	6 (14%) [e.g. leave voice messages]
Television sets	42 (100%) [e.g. watch programmes]	6 (14%) [e.g. play games, watch DVD, tune in specialised programmes, e.g. e-tvbusiness programmes from 6-8 am]
Radio sets	42 (100%) [e.g. listen to any programmes, music]	16 (38%) [e.g. tune in for specific and specialised business programmes, e.g. 9-12 Ukhozi FM]
Fax machines	2 (5%) [e.g. fax/ receive faxed documents]	0 (0%)
Computers	0 (0%) [e.g. typing, basic information searching]	0 (0%) [e.g. emails, webcam/Skype, download software, advanced information searching]

Skills and Knowledge to use ICTs

The respondents were asked whether they had the necessary skills to do basic and sophisticated operations with the ICTs. Table 1 summarises the results.

All the women indicated conversance with using mobile cellular phones for basic interactions like calling and receiving calls, and SMS. From the researchers’ observation however, it was clear that in many cases and particularly with the old women amongst them, a child or another family member makes the calls on behalf of the vendor or hawker.

indicated that these activities were the turf of the children and youths at home. None of the women had any knowledge in using computers, while only two (5 %) knew how to use fax machines.

ICTs Skills Training Required

The women expressed a great need for further training on how to use the various ICTs more effectively to gain access to business related information. All of them wanted to learn how to operate the computer and to access its associated information and services such as the Internet and e-

mail. This was interesting as none of the respondents had a computer, although they could use one at an Internet café in Mtubatuba. They also expressed need to be able to operate a fax machine, as well as the knowledge to operate CD/DVDs to obtain information. The expressed need for skills in operating fax machines and CD/DVDs may reflect their lack of understanding of what these ICTs can or cannot do for their businesses. What is, however, clear is that there is a need for improvement of their skills in all the traditional ICTs, and that the entrepreneurs are willing to engage in further training should the opportunity be extended to them. Despite their apparent low educational levels they seem well-informed enough to realise that computer-based information and services could be beneficial to them.

Purposes of using ICTs

ICTs have the potential to provide access to, and allow dissemination of a huge amount of business information to anyone in possession thereof. In terms of using ICTs to receive business-related information, or to contact individuals who might assist, it seems as if the majority of commonly owned ICTs are used extensively to gain access to required information. Table 2 shows major ICT use purposes among the women.

Table 2: Purpose of using ICTs

Purpose	Frequency
Make/receive calls to and from friends/relatives	42 (100%)
Listen and watch business-related programmes	42 (100%)
Make/receive calls to and from business partners, retail stores, product suppliers and distributors	37 (88%)
Search for business-related information	0 (0%)

Usefulness and Benefits of using ICTs

The women indicated that ICTs gave them the opportunity to easily reach people they want to contact without having to leave their places of work or homes. Not having to leave their businesses

unattended provides them with the possibility of increasing their trade, increases their income per day, and enables them to manage their time better. ICTs cut down on time lost when having to walk to another vendor or their suppliers when in need of information or supplies. It also afforded them contact with their friends and relatives, keeping abreast with family-related news and information. Contact with family and friends kept them informed about the date of product delivery, if problems with transport were experienced, or if new stock and products have arrived. A major benefit to them was the fact that they were always connected and reachable, which enhanced their possibilities of exchanging business information and stay in contact with their clients and suppliers. However, only very few of the women indicated that ICTs sometimes provided them with business information from suppliers and retailers.

The researchers demonstrated the usefulness of the mobile phone to gain business information through the Internet during informal discussions with the respondents. The women exhibited a very keen interest in obtaining the skill to enable them to do the same, as they indicated that they could see the benefit thereof. Lively discussions, and the fact that many of the nearby women came to observe the demonstration, attested to this.

Problems Encountered when using ICTs

Lack of a well-developed and stable electricity supply and telecommunications infrastructure in this rural area provides the women vendors and hawkers with numerous problems concerning the use of ICTs. All (42) women indicated that they had a problem with either network connection or electricity, especially when there is a strong wind or the weather is unstable. The language of communication used in the ICTs, e.g. mobile phone, television, DVD, was mentioned as a major challenge by 39 (93%) of them. They mentioned that they could not understand some of the messages or instructions they need to follow in order to maximally utilise their ICTs. The costs associated with the use of specific ICTs is another challenge that hindered them from acquiring the types and versions that would provide them access to many more uses of the ICTs.

Suggestions for Improving the use of ICTs in businesses

The respondents were asked how they thought the use of ICTs for their business purposes could be improved. They suggested that costs of the ICTs should be reduced so that they become affordable to most of the informal sector entrepreneurs, problems with mobile phone network connections need to be addressed and the need for training workshops on how to use the ICTs for their businesses.

Discussion

There is a growing number of entrepreneurs who use ICTs for communication and information dissemination. However, very few seem to use them for business purposes. This has also proven to be the case with the surveyed hawkers and vendors of Hlabisa and Mtubatuba local municipalities, among whom only the mobile phone seems to be of any use in communication with suppliers and retailers. However, the other possible business uses of mobile phones, such as telephone banking and Internet search for business information, are rare. In the absence of landline phones, mobile phones have become the most commonly owned, accessible, and utilised ICT tool. The major advantage of the mobile phone to these informal sector women entrepreneurs is that it enables them to spend less time away from their stalls or workplace, thereby reducing the chances of missing out on pass by customers. Should the entrepreneurs be skilled in all the other business functions that the mobile phone offers, such as telephone banking and access to business information on the Internet, they might spend even less time away from their workplaces. Nevertheless, other than being a communication tool, mobile phones, especially the very high-tech versions, offer enormous capabilities to entrepreneurs as they could gain direct access to market prices, survey trends in markets, do most of their banking transactions using the phone, thereby saving time and the effort of having to stand in long queues. However, given their poor economic conditions, and by their own admission, these entrepreneurs probably cannot afford the sophisticated mobile phones. Moreover, it is doubtful if these micro-scale entrepreneurs could afford to use mobile phones to regularly receive and disseminate business information. Most of them earn

minimal incomes and, with South Africa's mobile costs ranking among the highest in the world (Mail and Guardian 2009), regular use of mobile phones for business purposes would probably not be economically viable opportunity for these entrepreneurs.

The fact that computers are not playing a role is not really a surprise. With the rising unemployment, and more and more family members joining the ranks of the unemployed, it is often up to a lone female entrepreneur to keep the family fed and clothed. Daily survival needs thus surpass the need for a computer and the Internet, or even access to it through an Internet café. Though the respondents did indicate that they would like to have training in the use of computer-related technologies, it is doubtful that they have any idea what a computer could do to assist them in their businesses, since computers are not commonly found in rural schools, and therefore these entrepreneurs might have had very little, if any, exposure to computers. It is, however, positive to observe that there is awareness among them that a tool exists that might be of some assistance and that they are willing to learn new skills in order to improve their chances for success in their business or personal lives.

The dominant language of communication used by most ICTs is reported by the entrepreneurs as a serious challenge. With the exception of radios, wherein there are programmes in local languages, all the other commonly owned and used ICTs use local languages either very minimally (e.g. South African Broadcasting Corporations (SABC) 1 TV broadcasts), or not at all (e.g. mobile phones and DVDs). Given the low educational level of the women, their grasp of the most commonly used language on the ICTs, i.e. English, would be very poor. Therefore, the informative and communicative potentials of such tools for them would be also low. The same problem would also be experienced should computer-based ICTs become affordable and accessible to this specific group. Though the South African government has a policy of acknowledging all eleven languages spoken in the country and propagates the use of all these languages on an equal level, the reality remains that English is the major language of communication in the country. English is also the dominant language used on ICTs.

It is clear that most of the entrepreneurs do not possess the necessary skills or knowledge to use various ICTs optimally. However, as Jiyane and Mostert (2008) concluded, the required skills training would have to take place at the entrepreneurs' workplaces or in their homes, since they usually do not want to leave their workplaces for prolonged periods. Skills training and knowledge of the benefits of using ICTs to gain business knowledge is essential among these women in order for them to benefit from it. Ideally, this should be given to as many entrepreneurs as possible, and government and non-governmental organisations (NGOs) should be innovative in the methods they use to achieve this. Repackaged information in the form of posters and displayed prominently near the entrepreneurs stalls, or distributing free DVDs in local languages, could be utilised to provide the necessary skills. DVDs could become a powerful instruction medium as it can be watched at home whenever the opportunity arises. The fact that the younger relatives of the entrepreneurs could assist with the operation of this medium in homes makes DVDs a very useful tool for skills training and knowledge dissemination.

Conclusion and Recommendations

The study established that ICTs are not playing a major role in the acquiring of business information among the women entrepreneurs. Other than contacting suppliers and relatives through mobile phones concerning supplies, only minimal use of the other ICTs is made to gain more knowledge about business-related matters. This could be ascribed to many factors, such as the focus of the vendors and hawkers on local and pass by customers, high costs of using ICTs, instability of electrical and communications networks, and inadequate support and empowerment of such businesses by government. The findings and conclusions of the study inform the following recommendations:

(1) Innovative skills training methods should be introduced, through which women entrepreneurs can be trained at times and locations convenient to them. The use of multimedia presentations including DVDs in local languages to demonstrate various skills in the use of ICTs for business purposes would be appropriate.

- (2) ABET (Adult Basic Education and Training) classes should be made available to the women at convenient times so that they can improve their ability to read, write and comprehend messages and information delivered through ICTs.
- (3) Government sponsored Internet cafes should be made available and accessible, closer to the workplaces of the women entrepreneurs, and that training on request be given to the women.
- (4) Government and NGOs should give this group focussed attention, as in these times of worldwide economic crises it is the informal sector that provides the best opportunities for income generation among poor households. The more skills and knowledge the group have, the less they would need to depend on the government for their survival.

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