

ICTS FOR EMPOWERING WOMEN IN SMES IN THE CAPE METROPOLITAN AREA, WESTERN CAPE

by

ESTERY RUHODE

Thesis submitted in fulfilment of the requirements for the

Master of Technology: Business Information Systems

in the Faculty of Business

at the

CAPE PENINSULA UNIVERSITY OF TECHNOLOGY

Supervisor: C Uys (Ms)

Co-Supervisor: Dr A Koch

Cape Town Campus

December 2011

DECLARATION

I, Estery Ruhode, declare that the contents of this	thesis represent my own unaided work, and
that the thesis has not previously been submitted	ed for academic examination towards any
qualification. Furthermore, it represents my own opi	inions and not necessarily those of the Cape
Peninsula University of Technology.	
	_
Signed	Date

ABSTRACT

Women, being important stakeholders of the community, are lagging behind in terms of economic empowerment. Their opportunity to participate actively in business in the past was hindered by various discriminatory policies that were in place. ICTs have the forte to empower and increase the knowledge base of the women in SMEs through information dissemination. The argument is that women in South Africa and indeed in many other developing countries have not embraced technology in their everyday businesses as much as their male counterparts. This study therefore explores how women in SMEs in the Cape Metropolitan, Western Cape are utilising ICTs to empower themselves to overcome the economic discrimination they have suffered in the past.

In order to collect relevant data and obtain deep insights about the utilisation of ICTs by women in SMEs, a qualitative research method was applied enabling respondents to articulate their experiences concerning the use of ICTs in their businesses. Women of all races were selected using the snowball sampling method and were interviewed. The population involved women in SMEs from the five suburbs of Claremont, Rondebosch, Gardens, Pinelands and Mowbray.

The findings of the study are that women in SMEs in the Cape Metropole are utilising various ICTs to empower themselves in their businesses. They are exchanging business documentation with other business resulting in marketing of their entities. Women in SMEs are taking advantage of the fast growing social and business networking technologies such Facebook, LinkedIn, Flickr, Twitter, Skype and blogs to promote marketing of their various products and services, gaining mileage in publicity and also managing their expenditures.

ICTs enable women to work anytime, anywhere affording them the opportunity to take care of their families which they could not do while they were employed in the corporate world. Some of the women in SMEs reported that they can now independently negotiate business deals due to increase in their self-esteem and also have access to available information in their areas of expertise.

Key words: Information Communication and Technologies (ICT), women, empowerment, SMEs

ACKNOWLEDGEMENTS

I would like to show gratitude to GOD, my Creator for giving me strength, health and life to soldier on through my studies.

I wish to thank:

- My family, Ephias, Prince and Prudence for their patience, love, understanding and being there for me through my studies.
- Mrs C Uys, my Supervisor for her guidance and support.
- Dr A Koch, my co-Supervisor for her support and assistance.
- Mrs A Bytheway for being my Language Editor.
- My friends, Ndaizivei for going an extra mile, Iris, Tendai and Chenge for their encouragement.
- ❖ To all the women who took part in this research despite their busy schedules. They afforded me the opportunity to interview them. Thank you all from the bottom of my heart.
- ❖ All the staff from Research Information Support Centre for helping me with data searching.
- My connect group for their prayers and support.
- All the Office Management and Technology Lecturers for their support.

I acknowledge the financial assistance from Cape Peninsula University of Technology. Opinions expressed in this thesis and the conclusions arrived at, are those of the author, and are not necessarily to be attributed to the Cape Peninsula University of Technology.

RESEARCH ACHIEVEMENTS

Estery Ruhode, Corrie Uys & Aneen Koch. Utilisation of ICT by Women in SMEs to benefit their businesses' growth. Submitted to Journal of Community Informatics. Article under review.

GLOSSARY

Abbreviations and Acronyms

CDEACF Le Centre de documentation sur l'education des adultes et la

condition féminine

CEOs Chief Executive Officers

CFOs Chief Finance Officers

DTI Department of Trade and Industry

EC European Commission

GDP Gross Domestic Product

GEM Global Entrepreneurship Monitor

GRACE Gender Research in Africa into ICTs for Empowerment

IDRC International Development Research Centre

ITU International Telecommunications Union

LFS Labour Force Survey

MIDWIT Multinational Development for Women in Technology

OECD Organisation for Economic Cooperation and Development

SEDA Small Enterprise Development Agency

SMEs Small Medium Enterprises

SPGTF Stability Pact Gender Task Force

UK United Kingdom

UN United Nations

UNDP United Nations Development Programme

UNECE United Nations Economic Commission for Europe

UNESCO United Nations Educational, Scientific and Cultural

Organisations

USA United States of America

USITC United States International Trade Commission

VPs Vice Presidents

WINIT Women in IT

Definition of terms

ICTs - are "set of goods, applications and services used to produce, distribute, process and transform information. They include the outputs of industries as diverse as telecommunications, televisions and radio broadcasting, computer hardware and software, computer services and electronic media (Marcelle 2000:8).

Contents

ABSTRACT	II
ACKNOWLEDGEMENTS	
RESEARCH ACHIEVEMENTS	٠١
GLOSSARY	v
LIST OF FIGURES	XII
LIST OF TABLES	XIV
CHAPTER 1	1
INTRODUCTION AND BACKGROUND	1
1.1 INTRODUCTION	1
1.2 BACKGROUND TO THE RESEARCH PROBLEM	2
1.3 STATEMENT OF RESEARCH PROBLEM	
1.4 RESEARCH QUESTION	4
1.4.1 Sub-questions	2
1.4.2 OBJECTIVES	
1.5 RESEARCH DESIGN AND METHODOLOGY	
1.6 ONTOLOGICAL AND EPISTEMOLOGICAL STANCE	
1.6.1 EPISTEMOLOGICAL STANCE	5
1.7 THE FINDINGS OF THE RESEARCH STUDY	5
1.8 DELINEATION OF THE RESEARCH	5
1.9 CONTRIBUTION OF THE RESEARCH	6
1.10 LIMITATION OF THE STUDY	6
1.11 SUMMARY OF CHAPTERS	6
CHAPTER 2	8
WOMEN IN SMES AND ICTS	8
2.1 Introduction	8
2.2 WHAT ARE ICTS?	
2.2.1 ICT ADOPTION BY SMES	
2.2.2 ICT UTILISATION BENEFITS EXPECTED BY SMES	
2.2.3 ICT UTILISATION CHALLENGES ENCOUNTERED BY SMES	
2.3 WOMEN AND ICTS	
2.3.1 ICT UTILISATION BY WOMEN IN THE CORPORATE SECTOR	
2.3.3 RENEFITS OF ICTS LITHUSATION BY WOMEN IN SMES	16

2.3.3.1 ECONOMIC EMPOWERMENT	16
2.3.3.2 Access to Information	16
2.3.3.3 Stereotype	17
2.3.3.4 LOBBYING OF WOMEN'S ISSUES	17
2.3.4 CHALLENGES FACED BY WOMEN IN SMES IN UTILISING ICTS	17
2.3.4.1 LACK OF THE NECESSARY IT SKILLS-BASE	17
2.3.4.2 POOR INFRASTRUCTURE AND CONNECTIVITY	18
2.3.4.3 LIMITED ACCESS TO ICTS	18
2.3.4.4 HIGH SETUP COST	18
2.4 WHAT IS EMPOWERMENT?	19
2.4.1 EXAMPLES OF SUCCESSFUL USE OF ICTS BY WOMEN FOR EMPOWERMENT	19
2.5 WHAT ARE SMES?	23
2.5.1 IMPORTANCE OF SMES	25
2.6 WOMEN IN SMES	26
2.6.1 BENEFITS DERIVED BY WOMEN IN SMES	
2.6.1.1 FLEXIBILITY	27
2.6.1.2 AUTONOMY	28
2.6.1.3 OCCUPATIONAL SEGREGATION	28
2.6.2 CHALLENGES FACED BY WOMEN IN SMES	28
2.6.2.1 LACK OF FUNDING	29
2.6.2.2 FAMILY RESPONSIBILITY	29
2.6.2.3 NETWORKING	30
2.6.2.4 TECHNOLOGY, EDUCATION AND TRAINING	30
2.6.2.5 HIV/AIDS	31
2.6.3 FACTORS THAT SUPPORT THE RUNNING OF SMES BY WOMEN	31
2.6.3.1 Policy coordination	32
2.6.3.2 Finances and Premises	32
2.6.3.3 Business Support, Network and Promotion	33
2.6.3.4 Training and mentoring	33
2.7 SUMMARY	33
CHAPTER 3	35
RESEARCH DESIGN AND METHODOLOGY	35
3.1 Introduction	35
3.2 TARGET POPULATION	35
3.2.2 RESEARCH PROBLEM	37
3.3 Research Design	37
3.3.1 QUANTITATIVE RESEARCH	38
3.3.2 Qualitative Research	38
3.4 DATA COLLECTION TECHNIQUES	39
3.4.1 INTERVIEWS TECHNIQUE	30

3.	4.2 Structured Interviews	39
3.	4.3 Unstructured Interviews	40
3.	4.4 Semi-structured Interviews	40
3.	5.5 Interview Process	41
3.6.	SAMPLING TECHNIQUES	41
3.	.6.1 Purposive Sampling	41
3.	.6.2 Snowball Sampling	41
3.	.7 Data Analysis	42
3.	.7.1 Step one: Corpus of raw data	42
3.	.7.2 Step two: Data analysis	43
3.	.7.3 Step three: Creation of themes	43
3.	7.4 STEP FOUR: TEXT OF DATA DISCUSSION	43
СНА	PTER 4	44
DAT	A PRESENTATION	44
4.1	INTRODUCTION	44
4.	2.1 Sub-Questions	44
4.3	SECTION A: PERSONAL AND BUSINESS DETAILS	44
4.	3.1 Personal Details	45
4.	3.2 Business Details	46
TABI	LE 4.1: METHODS OF COMMUNICATION ON BUSINESS MATTERS	47
4.	4.1 Exchanging information with other businesses	49
4.	4.2 FREEDOM TO NETWORK WITH OTHER BUSINESSES	49
	4.3 Advertising and promoting the business using ICTs	
	4.4 Use of decision making systems in the business	
4.	4.5 BENEFITS FROM TELEVISION AND RADIO PROGRAMMES	51
	4.6 Internet banking to conduct business related transactions	
	4.7 Use of ICTs to increase customer base	
	4.8 Use of CDs and DVDs in the business	
	4.9 OPPORTUNITY FOR THE PARTICIPANTS TO REPRESENT THEMSELVES IN THE BUSINESS ENVIRONMENT	
4.	4.10 Using email in the business	53
	CHALLENGES FACED AND BENEFITS DERIVED FROM THE USE OF ICTS BY WOME	
	RIOUS BUSINESSES	
4.	.5.1 BENEFITS OF USING THE ICTS	
	4.5.1.1 Instant confirmation of orders	
	4.5.1.2 Ability to work anywhere and anytime	
	4.5.1.3 Effective communication with stakeholders	
	4.5.1.4 Postage costs and use of paper	
	4.5.1.6 Availability of information	
	4.5.1.6 Availability of information 4.5.1.7 Scheduling of appointments	
	4.5.1.7 Scheduling of appointments	
	1.0.1.0 1.0.4.Cittip CO3C3	

4.5.1.9 Making business decisions using ICTs	56
4.5.1.10 Striking a balance between work and family	57
4.5.1.11 Improvement of self-esteem	58
4.5.1.12 ICTs easily accessible in terms of cost	59
4.5.2 CHALLENGES FACED WHEN USING ICTS BY WOMEN IN VARIOUS BUSINESSES	59
4.5.2.1 CHALLENGES	59
4.5.2.1.1 Malfunction of the networks	59
4.5.2.1.2 Wrong email address	59
4.5.2.1.3 Computer literate	
4.5.2.1.4 Breakdown of the equipment	
4.5.2.1.5 The limited use of ICTs	
4.5.2.1.6 Software upgrading	61
4.6 SUMMARY	61
CHAPTER 5	62
INTERPRETATION OF FINDINGS	62
5.1 INTRODUCTION	62
5.2 PERSONAL AND BUSINESS DETAILS	62
5.3 UTILISING ICTS TO BENEFIT BUSINESS GROWTH	63
5.3.1 EXCHANGING INFORMATION WITH OTHER BUSINESSES	63
5.3.2 FREEDOM TO NETWORK WITH OTHER BUSINESSES	64
5.3.3 ADVERTISING AND PROMOTING THE BUSINESS USING ICTS	
5.3.4 Use of ICTs to increase customer base	
5.3.5 Internet banking to conduct business related transactions	
5.3.6 MAKING USE OF CDS AND DVDS IN THE BUSINESS	
5.3.7 Use of decision making systems	
5.3.8 ADOPTION OF ICTs	
5.3.9 IMPROVED SELF-ESTEEM	70
5.4 BENEFITS DERIVED AND CHALLENGES MET BY WOMEN IN SMES FROM USING ICTS	72
5.4.1 Benefits	72
5.4.1.1 Ability to work anywhere and anytime	72
5.4.1.2 Manage expenditures	74
5.4.1.3 Access to available information	74
5.4.1.4 Autonomy	
5.4.1.5 Striking a balance between work and family	76
5.4.1.6 Accessibility of ICTs	78
5.4.2 CHALLENGES	79
5.4.2.1 COMPUTER LITERACY AND TRAINING	79
5.4.2.2 Internet connectivity problems	
5.4.2.3 Breakdown and upgrading of equipment	80
5.4.2.4 LIMITED USE OF ICTS BY EXTERNAL ENTITIES	80

5.5 SUMMARY	
CHAPTER 6	82
SUMMARY AND CONCLUSIONS	82
6.1 Introduction	82
6.2 SUMMARY	82
6.3 CONCLUSION	84
6.4 Further research	84
BIBLIOGRAPHY	86
INTERVIEW SCHEDULE	96

List of Figures

Figure 2.1:	Factors affecting ICT adoption by SMEs	10
Figure 2.2:	Framework for supporting women in entrepreneurship activity	32
Figure 3.1:	Cape Metropolitan map	36
Figure 3.2:	From data to writing	42
Figure 4.1:	Using DVDs and CDs in the business	52
Figure 4.2:	Use of ICTs to improve self-esteem	58
Figure 5.1:	Print screen: Momtreprenuer	65
Figure 5.2:	Print screen: Celebration	66
Figure 5.3:	Print screen: Mom Diary	68
Figure 5.4:	Print screen: Wooden Elements	73
Figure 5.5:	Print screen: Momtreprenuer	76
Figure 5.6:	Print screen: Microsoft Office 2007	78

List of Tables

Table 2.1:	National Small Business Act's definition of SMEs	24
Table 2.2:	Examples of SMEs owned by women in South	27
Table 3.1:	Research questions and sub-questions	37
Table 4.1:	Methods of communication on business matters	47
Table 4.2:	Number of years that women have been using ICTs	48

CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1 Introduction

The human environment has been altered as ICTs take the driver's seat. From cleaning to eating ICTs have transformed how individuals conduct their lives. ICTs have altered the mode of communication, living and working of the global village.

The world wide community is being driven by the use of ICTs which aid the quick transfer and exchange of information. Today, ICTs are allowing enhanced access to information for all users. Information is easily accessible to the populace. This populace includes people of all ages and gender, the educated and the uneducated.

This study focuses on the use of ICTs by one previously disadvantaged group, which is women. This group of people has been disadvantaged due to political and societal barriers throughout the globe including in South Africa.

There is a general belief that the use of ICTs in business, gives women, in SMEs, the leverage of being independent and flexible. Most women are establishing their business domains from their homes. This allows them to work and spend quality time with their families. It is an observed phenomenon that women now have a quest to be affluent business people who can work and independently manage their homes.

South Africa can be seen as one of the most advanced democracies on the African continent. Seventeen years into democracy, the nation exhibits a steady rise in the participation of women in mainstream economic activities. The emerging information society offers a number of opportunities for women to establish their own businesses without depending on their male counterparts, as traditionally was the case.

The focus of this study is the utilisation of ICTs by women in their businesses within the Cape Metropolitan area. The findings are based on both literature and interviews with women in SMEs.

1.2 Background to the research problem

Women have always played second fiddle in economic development, due to the patriarchal society that favoured men over women, (Rosser, 2000:62; Mijumbi Epodoi, 2003:42). The business environment has not been level enough to allow women to take part and empower themselves. Dlodlo (2009:168) reports that women are important stakeholders in society when it comes to economic development and denying them the opportunity is detrimental to any country such as South Africa. The absence of women in the business world contributes to the country's failure to participate in the global arena, and will lead to communities failing to sustain themselves, Maier and Nair-Reichert (2007:44).

Tran-Nguyen and Zampetti (2004:18) suggest that "small and medium enterprises are the centrepieces of many economic development initiatives and women in SMEs constitute more than 40% of the economic population worldwide". Maier and Nair-Reichert (2007:44) and Viju (2010) state that "ICTs could be an effective tool for women in SMEs to develop business" as they are able to establish themselves in their various types of business, be it jewellery making, web design or selling crafts.

By fully utilising ICTs the women in SMEs can contribute to the economic growth of their Province, improve their communities and at the same time afford comfortable lives for their families. This will lead to improved families which are the engines of the communities, thereby leading to a better nation which is economically empowered (Morgan, 2008:2).

According to James, Roodt, Primo and Evans (2006:3), "ICTs have emerged as a major driver of employment in the developed world. They are increasingly seen as an important pillar for economic growth in South Africa. Growth and prosperity in the South African economy has however, not been realised to its full potential. This has been due to a lack of meaningful participation by women in the national economy and particularly in ICTs". Parmentier and Huyer (2008:15) say that the absence of women's participation is a contributing factor to the under development of the country, since women constitute half of the population. Further analysis of this important factor can help to explain unemployment, rampant poverty and high levels of crime in many communities.

Morgan (2008:2) says that, "women can become economic agents: because of their actions they are capable of changing the faces of their communities. In order to have an effective and sound economy, there is a need to match these women's businesses with the relevant ICTs for their

businesses". Mijumbi Epodoi (2003:41) reports that ICTs have the power to rectify the inequalities created by society, as they are able to equip disadvantaged groups, such as women. ICTs can provide women with platforms to air their views on important issues such as health and politics and provide opportunities for them to run their own businesses, Gurumurthy (2006:613).

James et al. (2006:3) states that "in South Africa women of all races were barred from achieving their full economic potential due to both legislative and non-legislative discrimination". Women were not appreciated as important stakeholders of the society. Their capabilities and meaningful contributions as workers and employers, whose businesses would help shape the country's economy, were not realised. The household was the only place where women could get recognition, outside that whatever they possessed was not valued (Al-Lamky, 2007:49). Only men were seen as capable members of the community who could make decisions and run the economy. These attitudes were very restrictive, and prevented women from using their talents, because it was a man's world. Today gender inequality in some organizations still prevails in South Africa (Business Women Association South Africa, 2009).

According to Marthur-Helm (2005:56) women are still lagging behind in economic empowerment because of being a disadvantaged gender group. The economic environment is tailor made to suit men who have been enjoying the economic benefits while women were being left out by society. Maier and Nair-Reichert (2007:43) advise that poverty eradication and the empowerment of historically disadvantaged groups can be addressed using ICTs as the key solution. Huyer and Siskona (2003:5) have deduced that ICTs could be tools for women's active participation in improving their situations. Simple access to information and improved communication may end the isolation of women in SMEs. ICTs have the power to turn around the lives of women, if they have access to them.

This research investigates the use of ICTs as a tool of empowerment for women in SMEs in the Cape Metropolitan area of the Western Cape. The aim of the research is to find out how women utilise and embrace ICTs in their establishments. The research looks at the benefits that ICTs bring to their business in terms of growth and profitability. An assessment of the challenges faced whilst using ICTs is also included in the research.

1.3 Statement of research problem

The problem this research will investigate is as follows:

Women in SMEs in the Cape Metropolitan are not necessarily utilising ICTs to empower themselves to overcome the economic discrimination they have suffered in the past.

1.4 Research question

How are women in SMEs in the Cape Metropolitan utilising ICTs as a tool of empowerment to end their economic discrimination?

1.4.1 Sub-questions

- What are the challenges faced and benefits derived from ICTs by women in SMEs?
- Are women in SMEs utilising ICTs to benefit their business growth?

1.4.2 Objectives

- To establish the benefits and challenges of using ICTs.
- To determine to what extent women in SMEs are utilising ICTs in their businesses.

1.5 Research design and methodology

This study made use of a qualitative research design because it enabled the depiction of indepth information as the respondents were able to narrate their experiences of how they were using ICTs as a tool of empowerment in their businesses. This qualitative study looked at how women in SMEs described their use of ICTs. Snowball sampling was used to locate and select respondents. Semi-structured interviews were conducted face to face, recorded, transcribed and tabulated to enable analysis of the data.

1.6 Ontological and epistemological stance

According to Blaikie (2000:8) ontology is the study of the interactions of society with its surroundings including its day to day activities. Nel and Com (2007:63) state that ontology helps the researcher to get hold of knowledge.

The research seeks to explore how women in SMEs in the Cape Metropolitan area are utilising ICTs to enhance their business growth, and to highlight all the potentials of the ICTs that can be adopted and be useful in running women's businesses today. The elements of the research study are defined as follows:-

ICTs are implements with the purpose of dispensing, gathering and exchanging information from one individual to another, from a group of people to another group of people, using different types of computers and computer networks (United Nations, 2005).

SMEs are firms that have between 1 and 49 employees and a balance sheet of less than R5 million per annum, Government Gazette of the Republic of South Africa (2003).

1.6.1 Epistemological stance

Steup (2005) defines epistemology as "the research of knowledge and justified belief. As the research of knowledge, epistemology is concerned with the following questions: What are the necessary and sufficient conditions of knowledge? What are its sources? What is its structure, and what are its limits". This study will make use of an anti-positivist approach where the writer will not distance herself from the phenomena she will be researching.

The epistemology of this research project is to investigate the use of ICTs, as a tool of empowerment, by women in SMEs. The sources used for this research are ICTs and women. The interviews will be conducted to capture in-depth knowledge about the use of ICTs by women and how they are embracing ICTs in their various businesses.

1.7 The findings of the research study

Women in SMEs in the Cape Metropolitan area are utilising different types of ICTs ranging from social and business networking sites such as Facebook, Flickr, LinkedIn and emails among others to market their businesses and exchange information for business purposes.

This has resulted in an enlargement of their customer base, and flexible schedules, enabling women to strike a balance between their families and their work. ICTs are indeed assisting women to end their economic discrimination, by increasing their knowledge base and growing their businesses.

1.8 Delineation of the research

The research focused on women in SMEs in the urban areas of the Cape Metropole. The research area covered the suburbs of Claremont, Rondebosch, Pinelands, Gardens and Mowbray.

- This research investigated women in SMEs who have a variety of means to access ICTs, as most of them are able to utilise different types of ICTs.
- The focus of the data collection was on different types of businesses established by women from their homes and communities and how they were embracing ICTs in their businesses.
- The contribution of ICTs to women's business in terms of business growth and benefits was also important because of the problem statement.

1.9 Contribution of the research

This research will contribute to the academic body of knowledge by providing literature on how women were utilising social and business networks to establish their own businesses.

1.10 Limitation of the study

A limitation to the study is that only respondents from the suburbs of Claremont, Rondebosch, Pinelands, Gardens and Mowbray were included in the study.

1.11 Summary of chapters

Below is an overview of the research project highlighting the themes of the chapters.

- Chapter two (Literature Review): Literature was used to discuss the definition, benefits
 and challenges of using ICTs, and comprised of a discussion of the challenges faced by
 women in SMEs and how individuals can adopt ICTs in their businesses.
- Chapter three (Research Methodology): This chapter focuses on the methodology
 used to investigate the research problem. A qualitative approach was selected and
 interviews were used to gather data.
- Chapter four (Data presentation and Discussion): This chapter presented the empirical results of the research detailing all the information emanating from the respondents.
- Chapter five (Findings and Analysis): The findings were analysed and compared with the literature. The goal was to highlight the new findings against the results that were available in the literature review.

• Chapter six (Conclusion and Recommendations): This was the closing chapter which focussed on the conclusion and recommendations. The research highlighted the use of social networks as a marketing tool by women as one line of future research.

The next chapter discusses the literature relating to the research topic of this study.

CHAPTER 2

WOMEN IN SMES AND ICTS

2.1 Introduction

Women in SMEs are making inroads in the economy as they take advantage of the ICTs which permit them to work anywhere and anytime. ICTs have a potential to improve efficiency and effectiveness in the operations of SMEs, thereby substantially adding value and competitiveness to businesses. Current literature on ICT utilisation by women in SMEs is very limited, therefore most literature is sourced from the significant body of work that exists on ICTs utilisation by SMEs in general.

This chapter is organised as follows: firstly, definitions of ICTs in the literature, the benefits and factors affecting ICT uptake by SMEs. The next section focuses on the utilisation of ICTs by women in the corporate sector and SMEs including the reasons why women are inhibited from using ICTs, benefits and challenges are discussed. The definition of SMEs in the context of this study is presented as well as an assessment of their importance to the South African economy; women and the challenges they face in establishing their SMEs, are discussed together with factors that support the running of SMEs.

2.2 What are ICTs?

Selwyn (2002:1-20) states that Information and Communication Technology (ICT) is a term including a wide range of technological applications; digital broadcast technologies; telecommunications technologies as well as electronic information resources. ICT therefore, encompasses a range of technologies, information and resources. The rationale of ICTs is to distribute information amongst individuals for a specific purpose (United Nations, 2005). Sarmento (2009:196) states that ICTs are "...principally about information and communication, above all about the uses that people give to the technologies which are available at a certain moment and within certain institutional, economic, social contexts".

ICTs transport information from one point to another, meeting the needs of the populace who use them. ICTs reorganise, rearrange and streamline all the ways business is conducted, as the global economies are controlled by them (United Nations Conference on Trade and Development, 2003). The use of ICTs makes it easy to communicate, and to do business

where-ever you are, as long as there is infrastructure which permits you to do so. In this regard, ICTs are pieces of apparatus that are transforming the way people exchange information, socialise, learn and do business (Rahim, 2008:11). Furthermore, Mostert and Ntetha (2008:23) are of the opinion that if ICTs are exploited in analysing, accessing and evaluating information, they are capable of improving the way business communication is done, thereby enriching the way the business is conducted. These attributes make it necessary for SMEs need to adopt ICTs in their operations as ICTs can enhance the running of the business. The adoption of ICTs by SMEs is discussed under the next heading.

2.2.1 ICT adoption by SMEs

A study by the Organisation for Economic Cooperation and Development (OECD,2004) which represents the economies of the European Union, the United States of America, Canada, Australia, Korea, and Japan found that ICT adoption can enhance communication and the management of resources. This is in line with the postulation of Alam, Khatibi, Ahmad and Ishmail (2007:125) that ICT adoption increases the performance of SMEs as they are hailed as devices that improve business competitiveness. Alam et al. (2007:125) are supported by Alberto and Fernado (2007:352) in suggesting that ICTs are essential to the SMEs because they bring competitiveness to the SMEs thereby enabling them to compete against big businesses. Apulu and Latham (2009:64) report that "in developed countries ICTs have been used to change the way businesses are conducted in order to have a strategic advantage in their various operations". Developed countries have benefited from ICT adoption as SMEs in their economies have managed to avoid the effects of recession by exporting to various markets.

However, many developing countries have failed to utilize ICTs as expected due, to organisational and environmental factors which are coupled to a lack of technical skills (Kapurubandara and Lawson, 2008:3). Yet a report from the International Telecommunications Union (ITU, 2005; Rahim, 2008:12) describes ICTs as potentially powerful and cost-effective with significant power allowing developing countries to leap frog several stages of the development process after adopting them in their economies.

The model in Figure 2.1 is employed in this research because it describes the characteristics associated with the owner manager of an SMEs, which relates to the sample in this study, which is women in SMEs.

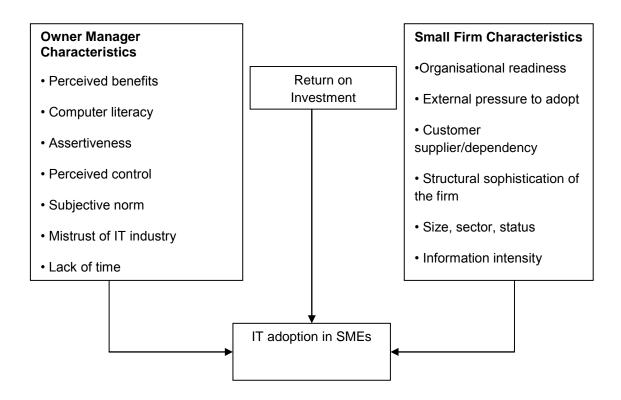


Figure 2.1: Factors affecting ICT adoption by SMEs. (Source: Van Akkeren and Cavaye, 1999, p1081 cited in Manueli et al., 2007).

Factors affecting ICT adoption by SMEs are divided into two categories, which are the owner manager characteristics and the small firm characteristics. The listed characteristics determine the pace of ICT adoption by the owners of SMEs.

Owner manager characteristics: Zappala and Gray (2006: 264) assert that the ICT knowledge level of the owner will decide whether to adopt ICTs into the business or not. SME owners may be unenthusiastic about adopting ICTs if they are not sure about the professed benefits ICTs can offer to their businesses. Mistrust of the IT industry by SME owners inhibits the adoption of ICT in their business as these owners may want to establish a relationship first with them. The procedures involved can be time consuming (Manueli, Latu and Koh, 2007). The owners of SMEs might not embrace the idea of adopting ICTs early in their enterprises, as they may need time to appreciate how they may benefit out of the whole process. Beckinsale and Ram (2006: 847) report that the perceived benefits of ICT adoption include the focus on improving operational and business efficiency, and the need to reach out to new markets.

Small Firm Characteristics: Factors such as external pressure from customers, suppliers, competitors, business structure, and size are the characteristics that can influence the technological needs and capacity for ICT adoption (Zappala and Gray, 2006:264). In the same vein, Manueli et al. (2007) are of the opinion that SMEs that deal with a lot of information on a daily basis are likely to adopt ICTs, in order to augment their businesses in terms of good customer service, to reduce paper work and to be ahead of their competition. The readiness of an organisation determines how quickly the adoption of ICT takes place. ICTs can strategically position SMEs enabling them to serve their niche markets. The utilization of ICTs by SMEs brings forth various benefits enabling them to compete in global economic environments.

2.2.2 ICT utilisation benefits expected by SMEs

Rapid sustainable economic and social development can be achieved by developing countries if they structure their economies based on ICTs (UNDP, 2004). Martin and Wright (2005:163) state that ICTs are imperative to small business because of the prospective business opportunities they bring to the industry. In this twenty first century ICTs are managing their users thereby giving them flexibility and convenience. Instead of standing in a queue doing a transaction in the banking hall or running other errands, ICTs permit users to do these activities in the comfort of their homes or areas of business. ICTs take over some of the workload thereby allowing business owners some improved flexibility to run the business.

SMEs are perceived as the vital drivers of economic and societal augmentation globally (Thas, Ramilo and Cino, 2007). Most of the established industries began as SMEs and expanded to recognised firms. In developing countries SMEs provide employment (Ndiwalana and Tusubira, 2006:1; Kotelnikov, 2007:3). Small businesses keep communities thriving as there is exchange of goods and services. With the presence of ICTs these businesses are put on the map, which allows users and end users to get to know them better. SMEs with ICTs are able to foster an economic change that is needed to eradicate poverty and unemployment (Ndiwalana and Tusubira, 2006:1; Kotelnikov, 2007:3).

SMEs need to associate themselves with ICTs in order to facilitate their survival, as they are the drivers of the economy. As far back as 2001, the study by Sein and Ahmad (2001) found that ICTs can change the way business is done as it may be used directly as inputs within the production process. An example of this would be the village phones owned by rural women, which are being used to provide payphone services to neighbouring rural communities in Bangladesh. According to the opinion of Ndiwalana and Tusubira (2006:1) ICTs can be used to

make more efficient the way business is done on a daily basis in the SMEs as they are capable of picking up errors. ICTs enhance the reduction of assembly costs, help the organisation to compete with its rivals, thereby increasing the sales of the outputs (Nguyen, Sherif and Newby, 2007: 102; Corso, Martini, Pellegrini and Paolucci, 2003; Premkumar, 2003: 91).

Research by Modimogale and Kroeze (2011:1-12) shows that SMEs that employ ICTs according to the critical success factors below, have a better chance of becoming commercially successful than those who do not. Taylor and Murphy (2004:280-289) state that the critical success factors are as follows:

- "owner motivation, experience and management skills;
- expertise in managing growth;
- access to resources (money, technology and people);
- innovation, a competitive advantage and flexibility;
- close contact with customers;
- a focus on profits rather than sales and
- Strong demand and operating in a growth market".

A clear focus and fitness for purpose is required if the utilisation of ICTs by SMEs is to achieve the critical success factors listed above. An intelligible ICT strategy which will govern the adoption and utilisation of ICTs in the SME should be formulated. The right skills should also be acquired to productively use the ICTs. Despite the benefits to be accrued by SMEs, there are challenges to be faced in adopting ICTs. These challenges range from socio-economic to technological.

2.2.3 ICT utilisation challenges encountered by SMEs

SMEs encounter challenges in the process of adopting ICTs. Ngwenyama and Morawczynski (2007) state that the barriers to ICT adoption are both socio-economic and technological, meaning that there are internal and external factors faced by SMEs.

Ritchie and Brindley (2005: 205-217) group the challenges as follows:

• **Strategic:** This level addresses issues that impact on the direction of business strategy, capital investments and networks in relation to ICT. SMEs should formulate their own ICT strategic objectives.

- **Technological:** This level deals with issues relating to the complexity of technology and professional support for the technology in relation to the production of goods and services. This level should underpin the above level of strategy by implementing an ICT strategic plan in order to build a good ICT architecture.
- Organisational and behavioural: This level deals with issues that relate to the personality such as capacity and risk perceptions. These also emphasize the strategic level but the focus is on supporting the business process.

Despite these challenges, most businesses are able to distribute information to and share information with each other, courtesy of ICTs processing the data, and transmitting it from one recipient to another, with women included. Women in SMEs need to partner with ICTs in order to accomplish their quest to be recognised as important economic stakeholders of society. The issues of women in business and their utilisation of ICTs are examined next.

2.3 Women and ICTs

UNESCO (2003), reports that "women represent the main economic force in most developing countries. As economies become more information-driven the issues of women's access to and use of ICTs is growing in importance for both developed and developing economies". ICTs are able to transform women from being general workers to employers managing businesses from their home as well as in the outside world.

2.3.1 ICT utilisation by women in the corporate sector

International trends have seen the female labour force participation rising in all sectors of the economy (Gillard, Howcroft, Mitev and Richardson, 2008:262-279). The percentage of female employees (at all levels) in private companies varies greatly from one country to another. The corporate world is witnessing rapid growth in women occupying middle to higher positions. Ibarra and Zahidi (2010), report that in Norway, the percentage of women among the boards of directors is above 40%. This trend is evident in the ICT sector where there is a significant growth in the number of women entering the field of science and technology which was, in the past, predominantly a male domain. One of the major empirical studies on the exploration of professional women's experiences in the ICT industry was carried out in England in 2006. The project was called Women in IT (WINIT). Of the 111 women respondents in the survey, 47 indicated that they were IT professionals working in non-IT sectors and 34 women indicated that

they were IT professionals working in the IT sector (Griffiths and Moore, 2006). The WINIT survey also shows that 45% of the sample had their highest qualification in Computer Science, 6% in Engineering and Technology, 6% in Mathematical Sciences while the remainder had qualifications in non-IT fields. Such statistics indicate that women are now taking technical jobs in the corporate world very seriously.

Commenting on the current status of women leaders in the USA, Mistry (2010) reports that "Women have proven themselves to be capable leaders in every field. Indeed, more and more women are emerging as Chief Finance Officers (CFOs) and Vice Presidents (VPs) of small to large multinational corporations". While engineering and science have been traditionally dominated by men, women are steadily penetrating this domain all over the world. Women in California have initiated programs which empower and prepare women for the corporate world. The Mathematics and Science Conventions were started in the mid 90s for girls from the age of 12. Girls are exposed to the myriad of choices of careers in mathematics and science and are encouraged to consider these options at an early age. Another initiative is the Science Summer Camps: Tech Trek are camps for girls at prestigious institutions such as Stanford University. The curriculum offered is a rigorous study of mathematics and science. As a result of such initiatives, the USA has many women executives who are technology experts (Mistry, 2010).

According to Perrons (2004), changes in the global division of labour that came into existence in the 1970s have been facilitated by continued improvements in ICTs and have contributed to the feminization of employment. By 2006, in India women comprised 19% of the IT workforce and 37% of employees in ITES (IT Enabled Services), while in Brazil, women made up 20% of the software industry.

Many governments in Africa have adopted a rigorous gender equity approach in many of their policies and implementation strategies. Buskens and Webb (2009:183) state that twenty-five African nations have well-publicized ICT plans where gender policies are adequately covered to promote the role of women in ICTs at corporate levels. These countries include Benin, Nigeria, Burkina Faso, Cameroon, Chad and Egypt. However, much still needs to be done in many of the technology sectors, and particularly in the ICT sector. The demographics at top and middle managerial levels particularly in the ICT sector show large discrepancies between men and women in Africa. However, significant advances are being realized in many African countries to empower women to rise to the top of the corporate ladder. A lot of studies into use of ICTs by women in Africa have been undertaken by the Gender Research in Africa into ICTs for Empowerment (GRACE) Network, a 12-country research and capacity building project

supported by the International Development Research Centre (IDRC), Buskens and Webb (2009:183). Many professional career women in ICTs in Africa who have ventured into the fast growing ICT sector, either as owners, CEOs or technical persons, working in various organizations and companies across Africa, participate in various surveys by GRACE.

The situation in SADC is very encouraging for women as the entire economic bloc has a more educated citizenry than their counterparts in central and eastern Africa. While there is no reliable data for the ICT workforce in different countries within the SADC region, literature reports an increasing number of women executives in countries like Zimbabwe and South Africa, (Zikhali, 2009).

According to the Labour Force Surveys (LFS), the ICT labour force in 2005 in South Africa was dominated by men, (Statistics South Africa, 2005). ICT core work relates to technical engineering and scientific work in ICT, like computer programming and networking security. More than 81.4% of those doing core ICT work were men and only 18.6% were women. The legacy of women staying away from things technical, both in career choice and in everyday use, still prevails in South Africa. James et al. (2006:3) report that women are more concentrated in jobs related to the ICT end user component, which is the administrative support function. Of this workforce, women are 74.4% and 25.6% are men. Numerous efforts are being undertaken through various government departments (education, communications, trade and industry, communications, science and technology) to improve the status of women in the workplace by first empowering them through focused interventions like training, and increasing women intake levels in tertiary educational institutions. Many women have taken it upon themselves to establish their own ventures while utilising ICTs, (James et al., 2006:3).

2.3.2 ICT utilisation by women in SMEs

Women in SMEs are strategically positioned as important stakeholders of society because of the impact they have through their various businesses. Huyer and Sikoska (2003:6) state that ICTs are women's kit to lock and unlock all the avenues of their economic and social freedom. ICTs have the power to supply information concerning their well being, how to take care of their families and how to run their businesses, enabling them to be bread winners in their households.

The use of ICTs helps the women in SMEs to explore information required for the running of their businesses. By utilising ICTs women in SMEs are able to compete on a global market showcasing their products and services. They are able to exchange information with other

business, Viju (2010). This explains Pitroda's (2002:9-15) report that, "ICTs have been called the most potent democratizing tool that can put unequal human beings on an equal footing".

By following Pitroda's observation above, women in SMEs who traditionally had been marginalised and far removed from mainstream economic activities can stand to benefit through the use of ICTs in their businesses. ICTs are capable of levelling the playing field of communication so that all users enjoy the same benefits of access to information. Terry and Gomez (2010:2) are of the opinion that ICTs not only benefit women who make use of them, but also their communities.

2.3.3 Benefits of ICTs Utilisation by women in SMEs

There are various benefits that are derived from ICTs that are available to women who use the technology. Some are listed as follows:-

2.3.3.1 Economic Empowerment

According to Al-Ashtal (2010:2) ICTs help in giving women in SMEs access to existing and novel markets as they participate in the economy. Use of social networks allows them to get feedback thereby helping them to improve their products and services for their clients. Terry and Gomez (2010:6) suggest that access to ICTs encourages women's empowerment through knowledge. ICTs provide women in SMEs with information that they are able to use to develop their businesses. They can use all the knowledge that they acquire to empower themselves whilst excelling in their quest to be recognised as important stakeholders of the community.

Sandys (2005) reiterates that the focus on women's empowerment must be on their capability to be decision makers on matters that affect them, and their right to utilize the wealth of the country to change their circumstances. ICTs could be the essential facets for supporting the involvement and empowerment of disadvantaged communities. This is in line with Stromquist (2003:45) who describes empowerment as attaining knowledge which results in an increase in self-esteem.

2.3.3.2 Access to Information

Mbarika, Payton, Kvasny and Amadi (2007:12) suggest that any lack of provision of ICTs to women in SMEs, impacts on a country's ability to compete in a universal arena, thereby affecting its human resource output. In her study Al-Ashtal (2010:1) states that access to and utilisation of information develop the sense of worth in an individual. ICTs supply information to women enhancing their capacity to make well-informed assessments concerning their businesses and families, but they are still faced with challenges in utilising ICTs to their full extent. They can be

utilised as a means of communication and information acquisition by such communities, in order to access services (Zawada, Wallmach, Ngcobo and Mabule, 2007). In a study conducted by Huyer and Sikoska (2003:6) it is noted that ICTs enable women in SMEs to change or strengthen their situations giving them an opportunity to communicate well.

2.3.3.3 Stereotype

ICTs are giving women in SMEs the opportunity to be recognized as effective and efficient economic participants. ICTs permit women to conduct business online without being judged according to their gender, as the focus is on the business transaction only, (Martin and Wright, 2005:170). As reiterated by Viju (2010) ICTs empower disadvantaged societies by availing them with information, access and enables them to conduct their businesses without having to ask for permission.

2.3.3.4 Lobbying of women's issues

Martinez and Reilly (2002) say that ICTs grant women in SMEs and their associations the opportunity to bring forward issues that concern them. These issues range from how women are represented in parliament, provincial and local government policies, women's economic participation and funding of their businesses. Gurumurthy (2006:613) writes that ICTs bring to light women entrepreneurial ambitions and the experiences that they have been through, in order to be recognised as stakeholders in society. They continue to fight the societal perception of them being good in the home only. Women in SMEs are always faced with challenges whether or not they utilise ICTs.

2.3.4 Challenges faced by women in SMEs in utilising ICTs

There are many challenges associated with the utilization of ICTs in SMEs in general, but the following categories apply to women in the context of a developing country like South Africa.

2.3.4.1 Lack of the necessary IT skills-base

According to Mutula and Van Brakel (2007:402-417), pervasive use of ICT in the economy depends on well-trained human resources for developing relevant applications, and for supporting and maintaining systems. Concerning women, Vodanovich, Urquhart and Shakir (2010: 4) are more specific by stating that "women make up nearly two-thirds of the world's illiterate, and one out of every two women in developing countries is illiterate. Women in SMEs are more likely than men to lack basic literacy and computer skills. This lack can prevent women from taking advantage of the opportunities afforded by ICTs".

To acquire ICT skills women in SMEs need to attend training sessions which can be expensive depending on the service provider. Vodanovich et al. (2010:5) mention that by acquiring ICT skills women can be equipped to serve their communities as they are empowered with information.

2.3.4.2 Poor infrastructure and connectivity

Unreliable power supplies and underdeveloped communication systems present significant obstacles for achieving internet connectivity (Elnaggar, 2008:208-293; Islam and Hasan, 2009:537-553; Olatokun, 2008:53-69). It is difficult to work when the network is slow or down most of the time. It is important for women to have reliable service providers who provide them with a reliable network so that they are able to work anytime. (Ngwenyama and Morawczynski (2007) categorise this challenge under geographical factors. They assert that ICT adoption in South Africa is constrained by poor infrastructure and lack of connectivity. This notion is supported by Best and Maier (2007:137:155) and Elnaggar (2008:208-293) who note that lack of personnel and training deprive communities and women in SMEs of ICTs availability.

2.3.4.3 Limited access to ICTs

Access to ICTs is crucial if they are to be used as a means for women's empowerment (Jain, 2004:3). In order to utilise ICTs women in SMEs need to have access to funds in order to be able acquire them. Various ICTs should be available so that women are able to make an informed choice about which ICTs they may want to use. As far back as 2004 in his study, Jain (2004:3) reports that women in SMEs have been conventionally excluded from using ICTs. Controlled access of ICTs is one of the challenges faced by many ICTs users as it deprives them of information availability.

2.3.4.4 High setup cost

Small organisations like SMEs do not usually have the budget for ICTs because they normally demand high set up costs. There are different types of costs associated with ICTs: product/solution development, connectivity, hardware, software, maintaining workforce and hidden costs such as annual license fees and upgrade fees (Modimogale and Kroeze, 2011:1-12). Though challenges are present they are overshadowed by the benefits that are derived from the use of ICTs. ICTs can be agents of change as they provide information empowerment to their communities (UNDP, 2004).

2.4 What is Empowerment?

Strandberg (2002:1); Luttrell, Quiroz, Scrutton and Bird (2009:2-25) define empowerment as "a progression that helps people gain control over their own lives and increases the capacity of people to act on issues that they themselves define as important". According to the United Nations (2009) women's empowerment is about "the right to have and determine choices, access to opportunities and resources. The rights of women to control their own life within and outside their home, influence the direction of social change to create a more equitable social and economic order nationally and internationally". Varghese (2011:37-53) states that women empowerment is one of the vital Millennium Development Goals of the United Nations.

As stated by the UN (2009) women's empowerment entails the right to create a more equal social and economic order nationally. In order to achieve this, women in SMEs should utilize ICTs to empower themselves. ICTs present a variety of podiums for women to showcase their ventures whilst giving them control over their lives. Empowerment enhances the ability to decide for oneself and being part of the decision making process on issues that shape one's life. ICTs empower women to voice their concerns on issues of governance, health, and education as noted by Huyer and Sikoska (2003:6).

2.4.1 Examples of successful use of ICTs by women for empowerment

In many parts of the world, women are championing initiatives to empower themselves. In the United States of America, a bipartisan federal government council called National Women's Business Council, was created to bring forward and solve issues concerning women's businesses. This council has created an online agency called W-Biz Insight which tackles all business concerns of women in SMEs. Women who are establishing their businesses are able to get all the relevant and important information to enable the successful running of their businesses (Center for Women's Business Research, 2010).

The European Union Social Fund established a project called the JIVE (Joint Interventions) Partners. The aim of this project was to break down occupational segregation through equality training of women. This project has been administered throughout the European Union member states identifying the barriers faced by women when studying and using ICTs. This project will enable governments to implement measures and policies that support women as they venture into the information technology and science fields (Herman and Ellen, 2005).

As far back as in 1998, a long term internet project Le Centre de documentation sur l'education des adultes et la condition féminine (CDEACF) was established in Quebec, Canada. The purpose of the centre was to train women to use ICTs to empower themselves. Apart from conducting training, the centre published articles and flyers to motivate and help women to understand how the Internet could change their lives. Many women activists, feminist scholars and students have benefited from this project, as they participate in group discussions, workshops and dialogues (Womenaction, 2011).

The Agenda de las Mujeres (Women's Agenda) is a portal launched by women's movements in Latin America covering countries such as Argentina, Chile and Costa Rica. Its purpose is to produce relevant Spanish content on the internet which deals with women's issues. These issues range from gender equality, statistics and reports relating to women's status and the advancement of their rights. This group wants to empower women with information relating to their own lives so that they will be able to make informed decisions (United Nations, 2005).

The Women Mayors' Link in South Eastern Europe is an initiative to build women's capacity in decision making structures especially in government using ICTs. This initiative is a product of the Stability Pact Gender Task Force (SP GTF) in the region. The network which communicates through emails has been established to strengthen women mayors' leadership skills for cooperation between women mayors and local communities (Gurumurthy, 2006:612). The aim of the project is to continue grooming more women leaders that will represent women in influential positions such as parliament and many other decision making bodies of the country. This will pave the way for more women to take part in leadership programmes in countries such as Greece, Romania, Bulgaria, Albania, Hungary, Kosovo, Moldova, Montenegro and Yugoslavia.

A UNESCO project called "Networking rural women and knowledge" was established in Nabanna, India, exploring innovative uses of databases, intranet portals and web-based partnerships in the local language. The aim of the project was to put the emphasis on building women's local information networks by providing simple facilities and training at the four ICT centres in Baduria, Taragunia, Arbelia and Punda (Jain, 2004:7). After having access to information and communication these women gained respect from the community, and as a result of the ICT skills they acquired they became more creative courtesy of learning programs like Paintbrush in Windows XP. As a result, young women from these centres became more marketable in terms of seeking employment. The atmosphere created in the centres was

conducive to the discussion of women's issues that they were shy to talk about in the public or in the presence of men (Jain, 2004:7).

In Malaysia an organisation called Mothers4mothers uses ICTs to help build cyber communities and networking opportunities for homeworkers, homemakers and teleworkers. One of the projects, eHomemakers provides resources on how to get started on work-at-home projects and advises on how to become a successful "homepreneur". Homebased Xchange allows women to post their products and services online. There is also a grief online support group and a breastfeeding support group, so that all the women are able to get help when in need (Green, 2004).

Microsoft Unlimited Potential Grant was used to start a project named "The Phoenix Project Taiwan" in 2005 where women were taught information technology skills on how to send emails, using digital cameras and how to post information on the internet. These skills facilitated doing business online for these women and enabled communication with their children. By 2007 the government noticed the impact of the project and provided funding. Asus donated 500 easy to use low cost notebooks towards project Phoenix in 2008. More than 50 000 women have so far passed through the project (Melhem and Tandon, 2009:73).

Buiten, Monareng, Sparrow and Brijmohan (2007), report that women of Songtaaba Association in Burkina Faso, is a group which manufactures shea butter skin care products. They use ICTs such as cell phones, computers and global position systems to sell their product and increase their profits. ICTs are enabling these women to market and sell their products. Their website has contributed to an increase in sales as an increased number of customers are now able to view and order their products online.

In an effort to empower women, international agencies in Uganda such as the International Telecommunications Union (ITU), International Development Research Centre (IDRC), United Nations Development Programme (UNDP), UNESCO and the World Bank in conjunction with government, initiated a venture named "Rural women in Africa: ideas for earning money". The initiative encouraged women to make use of telecentres and access ICTs and benefit themselves and their communities. Entrepreneurial information was repackaged on CDs in simple, ready to use formats preferably in local languages. Through the programme women have been able to access ICTs and obtain information on markets, prices and credit services (Gurumurthy 2006:612; Mijumbi 2002:5). Just like their Indian counterparts, women in SMEs in Uganda have taken control of their lives thereby improving their communities.

In 2008 Gender Research in Africa into ICTs for Empowerment (GRACE) carried out research to look at the impact of cell phones on women owned micro-enterprises in Kenya in the city of Nairobi. The study wanted to explore the ways women in Africa use ICTs to empower themselves. The study established that cell phones have increased confidence in women's economic activities. Women use cell phones to establish close contact with customers enabling them to venture into new markets. These women are able to communicate with their suppliers when they want to order raw materials for their products (Munyua and Mureithi, 2008:1).

The Rodwel foundation in Zimbabwe was formed and registered as a women cooperative owned by a group of ten women who put their money together and bought computers. The aim of the cooperative was to train women in the use of computers. They went further and bought a modem so that they were able to use the Internet to communicate and to know what is happening in their environment and the world at large. The Foundation now has six employees, which includes an Internet trainer, a technician and an instructor, and other members are teaching IT on a part time basis (Baharul Islam, 2009:8).

In 2008 the Meridian International Centre, the Maxum Business Incubator at the Hub in Pretoria and Multinational Development for Women in Technology (MDWIT) conducted a project called "Empowering Women in SMEs in South Africa". A group of twelve women comprising aspiring and current entrepreneurs from the ICT sector were given the opportunity of starting as well as growing their businesses. They participated in a three-week customised training and information sharing program in Washington, DC and Baltimore. They returned to South Africa where they were monitored and mentored for a period of twenty four months. Each participant promised to plough back their knowledge by mentoring one woman (Meridian International Centre, 2010).

Another development of note is that of the MTN Foundation which created MTN ICT Entrepreneurship pilot centres in KwaZulu-Natal, the Eastern Cape, Limpopo and Mpumalanga 2010. This investment is expected to benefit about five hundred women who will participate in these projects. These centres facilitate access and skills development in the use of computer hardware, software, telecommunication devices and internet applications to improve businesses owned by women entrepreneurs. The idea behind this is to provide women and their communities with the tools for business empowerment (MTN SA Foundation, 2010). ICTs have the capacity to accelerate empowerment of women in their communities and alleviate poverty and unemployment. Rahim (2008:11) points out that ICTs are the apparatus that is transforming the way people exchange information, socialise, learn and do business, thereby giving a new

sense of direction to how people live in the twenty first century. Women are using ICTs in their SMEs in order to reach many more customers. The next section will discuss SMEs and their relevance to the economy.

2.5 What are SMEs?

The literature reports that different countries have different definitions of an SME (OECD, 2004; Taylor and Murphy, 2004:280-289). Generally, SMEs are defined by size, capital base or method of production (Abor and Quartey, 2010:218-228). In the United States of America, according to the SBA's Office of Advocacy (SBA Advocacy, 2009) SMEs are defined as enterprises with fewer than 500 employees. The European Commission (EC) defines SMEs largely in terms of the number of employees as follows:

- firms with 0 to 9 employees micro enterprises;
- 10 to 99 employees small enterprises;
- 100 to 499 employees medium enterprises (Storey, 1994).

In Nigeria, Apulu and Latham (2009:64-80) report that the National Association of Small and Medium Scale Enterprises define SMEs as following:

- Small scale enterprise a business with fewer than 50 employees and an annual turnover of 100 million Naira.
- Medium scale enterprise a business with fewer than 100 employees and an annual turnover of 500 million Naira.

According to Abor and Quartey (2010:218-228), the most widely used framework in South Africa to define SMEs is the National Small Business Act 102 of 1996. This framework defines SMEs according to five categories ranging from the number of employees per enterprise size to the annual turnover. The following are definitions for the various enterprise categories:

- Survivalist enterprise: The income generated is less than the minimum income standard or the poverty line. This category is considered pre-entrepreneurial, and includes hawkers, vendors and subsistence farmers
- Micro enterprise: The turnover is less than the VAT registration limit (that is, R150 000 per year). These enterprises usually lack formality in terms of registration. They include,

for example, *spaza* shops, minibus taxis and household industries. They employ no more than 5 people

- Very small enterprise: These are enterprises employing fewer than 10 paid employees, except mining, electricity, manufacturing and construction sectors, in which the figure is 20 employees. These enterprises operate in the formal market and have access to technology
- Small enterprise: The upper limit is 50 employees. Small enterprises are generally more established than very small enterprises and exhibit more complex business practices
- Medium enterprise: The maximum number of employees is 100, or 200 for the mining, electricity, manufacturing and construction sectors. These enterprises are often characterised by the decentralisation of power to an additional management layer.

Table 2.1 shows the National Small Business Act's definitions of the different categories of business in South Africa:

Table 2.1: National Small Business Act's definition of SMEs

Enterprise Size	Number of Employees	Annual Turnover (in South African rand)	Gross Assets, Excluding Fixed Property
Medium	200, depending on	Less than R4 million to R50 million, depending upon industry	Less than R2 million to R18 million, depending on industry
Small	Fewer than 50	Less than R2 million to R25 million, depending on industry	Less than R2 million to R4.5 million depending on industry
Very Small		Less than R200 000 to R500 000, depending on industry	Less than R150 000 to R500000, depending on Industry
Micro	Fewer than 5	Less than R150 000	Less than R100 000

Source: Falkena, Abedian, Blottnitz, Coovadia, Davel, Madungandaba, Masilela, and Rees (2001).

SMEs facilitate the diversification of (the) economic activity as they are flexible and can react to market demands (Ongori, 2009:79-85). SMEs are fundamental to both developing and developed economies because they revitalise the economies during recession.

2.5.1 Importance of SMEs

SMEs exist in every country globally. According to Fan (2003), SMEs are important to any economy for the following reasons:

- SMEs are the engines of growth: The SME sector is the largest provider of employment in most countries, especially of new jobs and they are a major source of technological innovation and new products
- SMEs are essential for a competitive and efficient market: A large number of SMEs create competitive market pressure. Easy entry and exit of SMEs make economies more flexible and more competitive
- SMEs are critical for poverty reduction: SMEs tend to employ poor and low-income workers.

Hammer, Jabara, Bloodgood, and Grossman (2010) reports that "SMEs make significant contributions to the U.S. economy in terms of employment, job creation, entrepreneurship, and economic activity, as measured by gross domestic product (GDP)". As far back as 2001, Baldwin, Lymer and Johnson (2001:103-120) in his study reports that SMEs in the European Union have created employment for a wide range of the population. In Latin America SMEs have contributed 36% of all jobs and 63% of industrial jobs (Luka'cs, 2005:1-3). Notably some of the best performing economies are in the Asian region, where the Taiwan and Hong Kong economies are supported by SMEs (OCED, 2001a).

Apart from employment SMEs have generated goods for exports from these countries to different markets across the globe. The shipping and transportation of exports boosts the foreign currency reserves needed for development. SMEs contribute towards the gross domestic product (GDP) of these developed countries. Abor and Quartey (2010:218-228) state that "in the developed industrial economies, it is the SME sector rather than the multinational that is the largest employer of workers".

SMEs in developing countries such as South Africa, India and the Middle East play a vital role in the growth of their economies. Mukongolo (2010:2288-2295) reports that SMEs transform the agricultural led economies of developing countries into industrial economies. These industrial economies will furnish the processing of goods for export markets which will create jobs and revenue for the governments which can be used to support their citizens.

To underscore the importance of SMEs, the department of trade and industry in South Africa (DTI, 2003) established a body in 2004 which is specifically mandated to implement government's small business strategy; design and implement a standard and common national delivery network for small enterprise development and integrate government-funded small enterprise support agencies across all tiers of government (SEDA, 2004). The body, which is called the Small Enterprise Development Agency (SEDA), has a mission to develop, support and promote small enterprises throughout the country, ensursing their growth and sustainability in co-ordination and partnership with various role players, including global partners, who make international best practices available to local entrepreneurs (DTI, 2003).

The economic importance of SMEs to the South African economy can be observed in three dimensions: through employment creation, contribution to the GDP and contribution to investment. The SME economic sector increases the average productivity of labour in the country by employing the average unemployed low-skilled labour force which is actively seeking employment (Bacon & Hoque, 2005:1976-1999; Locke, 2004). As far back as 2002, (Berry, von Blottnitz, Cassim, Kesper, Rajaratnam and van Seventer, 2002) discovered that the South African economy had benefited from SMEs over the years as on average they account for about 91% of the formal business entities, contributing between 52% and 57% of GDP and providing about 61% of employment. According to the department of trade and industry most women in SMEs contribute positively to the economy, with most employing between five and ten people (DTI, 2005). Women in SMEs play a pivotal role in the economy as they help to alleviate poverty within their communities.

2.6 Women in SMEs

Women in SMEs are creating organisations that serve their constituents by focussing on the service sector, the fastest growing sector of the economy. As recently as 2002, women owned fewer than a third of the independent owned businesses in the United States of America generating \$1.15 trillion in sales. In the United Kingdom women account for 26% of business ownership (Winn, 2005:381; Jalbert, 2000:28).

The UNECE (2004:10) reports that women in SMEs in the Asian region are not performing like their counterparts in other parts of the world because of markets that are trading slowly. Winn is supported by Sadi and Al-ghazali (2010:1) who indicate that women around the world are changing their communities as they contribute to the gross domestic product (GDP) of their national economies. In South Africa women in SMEs are contributing to the national economy

as they concentrate on business areas such as crafts, hawking, personal services and the retail sector (DTI, 2005).

Table 2.2 presents some of the ventures created by women in SMEs, highlighting that their presence in the economy of the country is crucial. Some of these women participated in the interviews used in this study.

Table 2.2 Examples of SMEs owned by women in South Africa

Name	Type of business	Place	Relevant literature
Sibongile Sambo	Aviation services	Johannesburg	World Bank Group Gender Develop, 2006
Norma Ratcliffe	Wine making	Edmonton	Women in entrepreneurship Grow Global, 2010
Linda Robyn	Ceramic making	Cape Town	Allie (2003)
Aurelia Makhuphula	Candle making	Cape Town	Allie (2003)
Helga Steyn	Marketing	Cape Town	Business Women's Association South Africa, 2010
Jeanne Groenewald	Rearing Chickens	Cape Town	Business Women's Association South Africa, 2010
Thandeka Mahlatjie	Digital printing	Free State	Business Women's Association South Africa, 2010
Tebogo Kgobokoe	Training dancers	Johannesburg	Business Women's Association South Africa, 2010
Tania Diekmann	Online business	Cape Town	SA Kids On The Go, 2011
Claire Minnan	Web designing	Cape Town	Momtrepreneurs, 2010.

2.6.1 Benefits derived by women in SMEs

Winn (2005:382) states that many women face the dilemma of finding a balance between their careers and their families, and because of that, they end up establishing their own businesses. Carter, Anderson and Shaw (2001) reports that scholars in Europe cite women's desire to gain control over their working lives as the motivating factor for establishing their own businesses. The department of trade and industry (DTI, 2005) mentions that there are very few studies of women in SMEs in Africa because of the limitation of contextual African methodologies. Most of the literature that is used in the study by Carter is from the United States of America and United Kingdom. That literature looks at women in SMEs from the mid-1970s in the USA and the mid 1980s in the UK (Carter et al., 2001).

By establishing their own ventures, women in SMEs are able to dictate which products they want to produce, or services they want to provide to their own customers at their own scheduled times. The following are some of the benefits derived by women in SMEs.

2.6.1.1 Flexibility

According to Winn (2005: 382) SMEs offer women the ability to strike a balance between running a business and taking care of the family. They are able to take time off and take care of

personal commitments. This is different from a corporate world setup where employees cannot step out of the office to attend to their personal errands without taking a day off. Nagarajan and Potter (2000), state that, "entrepreneurial endeavours have been seen by women in SMEs to offer flexibility in time which helps them to balance work and family responsibilities". This notion is supported by Sanyang and Huang (2008:885) who report that women need to spend time with their families than a corporate job would allow. SMEs offer women flexibility thereby allowing them to be autonomous.

2.6.1.2 Autonomy

Orhan and Scott (2001:232-243); Winn (2004:143-153); Kitching, Mishra and Shu (2005:2), and Erogul and McCrohan (2008:178) say that many women want to gain control over their own working lives and become their own bosses. This can only be achieved if they establish their own businesses. In line with the findings by the above authors, (Sanyang and Huang, 2008:885) report that women are able to make their own decisions without being influenced by outsiders. This is not like the situation in the workplace where their bosses have to put a stamp of approval on a decision before it can be implemented. By venturing on their own, women in SMEs make their own decisions concerning their businesses and families, they are able to escape occupational segregation in the corporate world.

2.6.1.3 Occupational Segregation

Occupational segregation, denying women progression in the corporate world has pushed many women into establishing their own businesses (Sanyang and Huang, 2008:885).

Winn (2005:381) indicates that the business environment is still controlled by men, thereby leaving women with little room to manoeuvre as economic participants. Nagarajan and Potter (2000) expand on Winn's (2005:381) viewpoint by stating that women institute their own ventures to "escape the glass ceiling". Even though women in SMEs enjoy many benefits, there are challenges that are associated with establishing their own ventures which they need to overcome.

2.6.2 Challenges faced by women in SMEs

Women in SMEs be it in Africa, USA, Europe, Asia, or Latin America brace themselves to face the many barriers that stand in their way, in order to be recognised as business stakeholders in society. The Centre for Women's Business Research in the United States doing research in many countries finds that women are faced with the same challenges where ever in the world they are, when establishing their businesses, UNECE (2004:2). The business arena still belongs to men, Winn (2005:381). This study will highlight some of the barriers that women deal with in their quest to become recognised business owners such as the following:-

2.6.2.1 Lack of funding

In order for a business to grow it needs funding or capital, money must be ploughed into the business to cover start-up costs. According to Cassar (2004:261) failure to get funding will prevent the SMEs from establishing. Brush, Carter, Gatewood and Hart (2004) believes that failure by women to get funding hampers all their efforts to be successful business owners. UNECE (2004:2) report that women in the United States of America and the United Kingdom cannot access funding because they are not considered to be committed business people by male banking personnel.

Jalbert (2000:26) is of the opinion that women in SMEs tend to seek small personal loans which have high handling costs. The credit institutions have the reputation of serving big clients who have collateral and are able to pay back when the money is due. Passion and knowledge about their business, is not enough to convince the money lenders to fund women's ventures. Dejene (2007) expands on Jalbert's (2000:26) view point by stating that most women do not have assets due to the societal setup in many African societies, where men are the sole owners of the family assets. Dolan (2002) cited in USAID (2005), claims that failure to access funding hampers the operation of the projects the SME owners want to pursue in terms of size and location.

2.6.2.2 Family responsibility

On top of the desire to run their own businesses women in SMEs are faced with the task of taking care of family (Winn, 2005:381). It is traditionally the mother's duty to nurture the children and support the spouse. The challenge of balancing these duties cannot be over emphasised as women battle against all the odds to establish businesses they are passionate about in a society which is yet to appreciate them.

This notion is supported by (Winn, 2005:381; Viju, 2010; Sadi and Al-Ghazali, 2010:2) who assert that in developing countries traditional practices still restrict women to their maternal roles and other family bound tasks, which results in them doing the lion's share of the home chores. As reported by Viju (2010) as well as Makombe (2007:55), women in the Middle East countries, like their counterparts all over the world, are engaged in household activities, which consume most of their time, leaving them with little time to focus on their businesses.

2.6.2.3 Networking

Both Winn (2005:381) and Sadi and Al-Ghazali (2010:2) mention that, due to their situation, women in SMEs do not have as much time to network with some of the important business and trade associates as their male counterparts do. Usually most of the networking is done in the evenings, which for women is the time to prepare supper and put their children to bed. This hampers their marketing efforts, as these events provide opportunities to network and platforms to showcase their businesses.

Women in SMEs are excluded from mainstream networks for many reasons; the cost of participating in events is often beyond what most small businesses can afford, and the culture of established networks can be intimidating and uninviting to women (Gibb, 2003). Olawale and Garwe, (2010:731) report that SMEs need to be located near important business contacts, such as suppliers and clients, to enhance their marketing opportunities and to reduce the cost of transporting raw materials. Most women's businesses do not enjoy the opportunities that are highlighted by Olawale and Garwe (2010:731) as most of their businesses are situated in their homes, and consequently, they have to work hard to lure business opportunities into their own environments.

2.6.2.4 Technology, Education and Training

Jalbert (2000:28) describes technology, education and training as barriers that prevent women in SMEs from accomplishing their role as bread winners for their families. Lack of training in how to run the business has a big impact on the prospective business owners as they struggle to manage the business and remain profitable. The President of the World Bank was cited by Jalbert (2000:29) as saying that education has the power to change communities especially if it can be focussed on women who are agents of change. Any transformation of women's lives has a large impact on their communities.

Sadi and Al-Ghazali (2010:2) who are supported by the DTI (2005) recommend that skill based training, management skills and technology should be made available to women in SMEs because most of them lack these. According to the opinion of (O'Neill and Viljoen, 2001:37-44) the training for women in SMEs should be prepared exclusively to meet their business needs and mentoring should continue to be administered even after training.

2.6.2.5 HIV/AIDS

HIV/AIDS have an impact on the livelihoods of women in SMEs, especially in South Africa (DTI: 2005). If a family member is sick it will be the woman's responsibility to take care of them, whether or not they have a business to run, especially in an African setup. If women are affected by this disease it means that their businesses suffer as there will be no one running their ventures in their absence. Despite all these challenges, women in SMEs continue to triumph in establishing their ventures. A conducive business environment is necessary for women's business to operate. In that environment there are conditions or factors that support the running of SMEs by women, as highlighted by Figure 2.2.

2.6.3 Factors that support the running of SMEs by women

Global Entrepreneurship Monitor (GEM) is a global report produced yearly by a consortium of scholars from leading universities such as Babson College and the London Business School. The aim of GEM is to study the behaviour of individuals, which include women in SMEs, when they start and grow a business.

Over 60 countries, including developed and developing have taken part in this major survey since its inception in 1999. In 2006 GEM developed a model that describes an enabling environment for the entrepreneurship activity of women. The model maps out the various key variables that provide an environment that is conducive to total entrepreneurship activity by females (GEM, 2006).

This model is employed in this research because the factors that are discussed relate to the needs of women in SMEs. If these factors are addressed by key policy makers the business environment will create many economic participants which include women in SMEs. A report by the DTI (2005) reiterates the need for government support for women's SMEs.

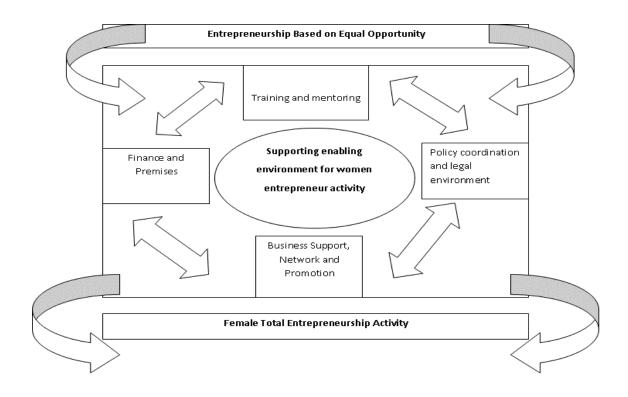


Figure 2.2: Framework for supporting women in entrepreneurship activity.

(Source: The Global Entrepreneurship Monitor (GEM) 2006 Report on Women and Entrepreneurship)

2.6.3.1 Policy coordination

Sannikova (2007:5) states that if governments incorporate gender issues within their policies, the chances are that they will be addressed because the gender issues become part of the government's agenda and policies. It is important for governments to create environments that enable women in SMEs to operate, beginning with legislations that pave the way for implementation of women's economic empowerment.

2.6.3.2 Finances and Premises

Marlow and Patton, (2005:719) mention that "many SME owners face the challenge of gaining access to an appropriate level of finance". A lot of evidence indicates that women experience additional disadvantages associated with their gender, Carter (2000); Marlow and Patton (2005:719). Research conducted by Carter (2000) as far back as 2000 indicates that women

find it more difficult to acquire funds for starting their businesses than their male counterparts, because they are not connected, as many men are, to formal and informal networks.

2.6.3.3 Business Support, Network and promotion

The best way to provide business support to women in SMEs is through centralised centres supported by government agencies. Women in SMEs will be able to access information about their various businesses through these centres e.g. tele-centres in Uganda, Mijumbi (2002:5).

Sannikova (2007:6) postulates that "women's business association and other non-governmental organisations should provide information and contacts, customised training in marketing, management skills as well as information on how to start up and grow a business".

2.6.3.4 Training and mentoring

Sannikova (2007:6) points out that when starting a business there is need for training and mentoring in order to give the SMEs owners the vigour that is needed in the early stages of establishing a business. Most women in SMEs lack training and mentoring because they fail to pay for the courses and workshops available, as a result of lack of funds. Women in SMEs can be equal economic participants, if the factors that support women's entrepreneurship are addressed. Gurumurthy (2004) states that ICTs have the capacity to open previously closed doors for women, giving them the opportunity to participate in some of the male dominant businesses. ICTs facilitate the enriching of women's participation in their businesses, communities and their families, if they exploit them. Women in SMEs will benefit from utilising ICTs as they enable access to knowledge and available information. ICTs are capable of changing the situation of women in SMEs and other disadvantaged groups of the society.

2.7 Summary

This chapter reviewed the SMEs and their relevance to the economy of South Africa. Also discussed in this chapter was the utilisation of ICTs by SMEs as well as the challenges and benefits that are associated with these essential tools. The topic continuously evaluated the use of ICTs by women in both SMEs and the corporate sector, drawing attention to the benefits and challenges that are brought by ICTs to women businesses.

The challenges faced by women in SMEs in their endeavours to be equal economic participants, and conditions that are conducive for women's businesses to operate in, were brought into view. Various projects focusing on the use of ICTs to empower women that have been implemented

in different global communities were highlighted, together with a discussion on empowerment. The next chapter will discuss the research methods that will be used to carry out this study.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The aim of this chapter is to highlight the methodology used in this research. Details about the location of the research project are given, the sampling and data collection methods used are explained.

3.2 Target Population

The population of the research study was composed of women in SMEs using ICTs in their various entities. The locations of the data collection were the suburbs of Claremont, Rondebosch, Pinelands, Gardens and Mowbray, in Cape Town, South Africa. The participants had left their day jobs to establish their own businesses from their homes so that they could work whilst taking care of their families. The participants' careers included accountants, teachers, graphic designers, administrators, web designers and lecturers, just to mention a few.

The participants have established different types of businesses: these include childhood development, website design, handmade jewelry, hand crafted premium children's wooden furniture, a skills training and consulting business, a security business, marketing and distribution of agricultural products for soil enrichment, selling handmade hand bags, hats and wall posters, teaching science, mathematics and graphic design. Some of the women have started employing staff while the rest were still working on their own.

3.2.1 Research Location

The research was undertaken in the Cape Metropolitan area of the Western Cape. The focus was on women in SMEs from the urban communities who were able to access and use different types of ICTs in their businesses. The research location covered the suburbs of Claremont, Rondebosch, Pinelands, Gardens and Mowbray. Most of the participants were conducting their businesses from their homes whilst a few were working from rented offices. Below is the map of

the Metropolitan Cape area where the research took SOUTH ROBBEN ISLAND (WORLD HERITAGE SITE) WESTERN CAPE TABLE VIEW ATLANTIC OCEAN N7 TABLE BAY MILNERTON N1 VÊA WATERFRONT CENTURY CITY GREEN POINT BELLVILLE N1 MOVILLE POINT 600DW00D RUILS RIVER SEA POINTO CENTRAL BANTRY BAY N7 CAPETOWN N2 CAMPS BAY TABLE NEWLANDS BAK OV €N KENILWORTH BISHOPSCOURT OWYNBERG LLAND UD NO @ ΝZ PLUMSTEAD KHAYELITSHA CONSTANTIA TOKAL FOREST MOAOD! 00 OR DHO €K SILVERMINE MUIZENBERG OKALK BAY FISH HOEK KOMMETJIE SIMONS TOWN 🗸 🤍 SCARB ORO UGHO FALSE BAY OLIFANTSBAAL ATLANTIC OCEAN SMITSWINKEL BAY VENUS POOL ноек уап воввејаап РСАТВООМ ВАУ CAPE POINT CAPE OF GOOD HOPE

place.

Figure 3.1 Cape Metropolitan

Source: Maps of the Western Cape

3.2.2 Research problem

The research seeks to investigate how women in SMEs in the Cape Metropolitan Area are utilising ICTs to empower themselves to overcome the economic discrimination they have suffered in the past. As reported in the literature reviewed in Chapter Two, in the past due to political and societal barriers, women in South Africa did not have the opportunity to participate fully in the economy like their male counterparts. This research study elucidates how ICTs have enriched women's opportunities to participate in the economy as important stakeholders. The benefits and challenges that women face whilst using these ICTs will be discussed. In order to address the research problem, this study used a qualitative research approach. The table 3.1 illustrates the research question and sub-questions, the objectives and data the gathering techniques used.

Table 3.1 Research questions

Research Question	How are women in SMEs in the Cape Metropolitan utilising ICTs as a tool of empowerment to end their economic discrimination?		
Research Sub-question	Research Method(s)	Objectives	
What are the challenges faced and benefits derived from ICTs by women in SMEs?	Semi-structured interviews	To establish the benefits and challenges of using ICTs.	
Are women in SMEs utilising ICTs to increase their business growth?	Semi-structured interviews	To determine to what extent women in SMEs are utilising ICTs in their businesses.	

3.3 Research Design

The research design is a structure that brings all the elements of the research study together. This will be an amalgamation of the data collection and analysis methods. Welman, Kruger and Mitchell (2005:8-9) state that "research methods and procedures do not rely on personal feelings or opinions. Research methods should be systematic, purposeful and acquired through valid and reliable procedures".

A descriptive study is employed for this research study to enable an analysis of how women are using ICTs as tools of empowerment in their various businesses. Gray (2009:35-36) states that "the purpose of a descriptive study is to present a picture of an occurrence as it happens".

There are two categories of research methodologies that are used in research. These are quantitative and qualitative methods which will be discussed below:-

3.3.1 Quantitative Research

Babbie and Mouton (2009:49) note that quantitative research is about "quantification of constructs, measuring the properties of phenomena and assigning numbers to the perceived qualities of things". This notion is supported by Welman et al. (2005:2) who explains that "quantitative research's purpose is to evaluate objective data consisting of numbers where the researchers use a process of analysis that is based on complex structured methods to conform or disprove hypotheses".

The quantitative research method, also known as the positivist approach entails a detached approach where the researcher is not involved with the research process. Unlike qualitative method which focuses on understanding the phenomenon, the quantitative research method focuses on examining the phenomena so as to quantify the outcome, Gray (2009:165). Respondents in the quantitative approach are not free to convey what they want as they are controlled by the data collection methods.

This approach was not selected for this research because the researcher wanted a more involving approach, where the participants would be able to comprehensively narrate how they were utilising ICTs in their businesses in order to empower themselves.

3.3.2 Qualitative Research

Qualitative research, also known as anti-positivist or interpretive approach, is a "process that is conducted in the natural setting of social actors focussing on the process rather than the outcome, the actor's point of view is emphasised. The primary aim is the in-depth descriptions and understanding of the actions and events with the focus being on understanding social action in terms of its specific context", Babbie and Mouton (2009:270).

A qualitative research method was selected for this research study because it allowed the participants to go into detail about their knowledge and their experiences. Unlike the quantitative method where the participants are controlled, participants within the qualitative method are free to articulate their views concerning the topic under discussion. Face to face contact with the subjects helped the researcher to obtain a full perspective (Hennink, Hutter and Bailey, 2011:16) about how these participants were using ICTs to empower themselves.

This research method was appropriate as it requires the presence of the researcher to capture the phenomenon as it happens. This process necessitated the recording of the interview proceedings for data collection. While quantitative research methods need a large sample from which to collect data, qualitative methods focus on a small sample, but concentrate profoundly on the happenings of the sample. The participants managed to go into detail concerning their indepth knowledge about utilisation and adoption of ICTs in their businesses.

3.4 Data Collection Techniques

3.4.1 Interviews Technique

Kvale and Brinkmann (2009:1) report that qualitative interviews "attempt to understand the world from the participants' point of view, to unfold the meaning of their experiences, to uncover their lived world prior to scientific explanations". An interview is a procedure whereby the interviewer and the interviewee exchange opinions on a certain theme or topic. The conversation is usually done within a pre-specified timeline while the proceedings are being recorded. This usually takes place at a secluded place to avoid disturbances and interruptions. There are three different types of interview techniques: structured, semi-structured and unstructured interviews. These will be discussed below in order to select one that is appropriate for this research study

3.4.2 Structured Interviews

Wellman et al. (2005:165) note that structured interviews are a collection of questions from a "previously compiled questionnaire" which is used by the interviewer to interview a respondent on a face to face basis whilst recording the proceedings of the conversation. The interviewer in a structured interview is obliged to ask the list of questions prepared for the occasion. If the respondent deviates from the subject concerned, the researcher will guide them back to the main issue of the discussion.

Using structured interviews for this research study was not appropriate as it restricted the interviewees from giving an in-depth narration of how they were making use of ICTs to empower themselves. The research questions for the interview were generated from the literature review and the research problem, instead of using a previously compiled questionnaire as outlined by Wellman et al. (2005:165).

3.4.3 Unstructured Interviews

According to Wellman et al. (2005:166) unstructured interviews also referred to as in-depth interviews, are used to dig deep inside the subject of discussion as they allow the participants to share their experiences. There are no set questions for the occasion but the interviewer must have some idea of what the interview is searching for. The idea is to let the respondent express themselves without controlling them. Unstructured interviews have relatively few prepared questions. The researcher listens and learns from the participant, and where unplanned and unanticipated questions may be used in order to elicit clarification, (Richards and Morse, 2006:111).

This unstructured interview technique was not a suitable data gathering tool in this research study because conducting an interview without an interview guide would not be appropriate, as it would not yield the required results. The interviewer needed to be in control of the process to make sure that all the relevant questions pertaining to the research problem were addressed. It was also important to have an interview guide in order to keep within the time limit of each interview session. The participants operated on planned schedules, which the researcher did not want to disturb.

3.4.4 Semi-structured Interviews

Semi-structured interviews are non-standardised interviews used in qualitative analysis. The interviewer has a list of issues and questions to be covered, but may not deal with all of them in each interview (Gray, 2006:373, Kvale and Brinkmann, 2009:124). All the history and experiences of the interviewees will be recorded using a tape recorder. In semi-structured interviews the interviewer aims to ask in-depth questions to encourage the interviewee to explain their phenomenology in considerable detail.

A questionnaire can be designed to use as an interview guide, to make sure that all the relevant matters are covered. Semi-structured interviews enable participants to talk in detail about their own experiences. The interviewer has the opportunity to ask in depth questions on matters that she feels the participants should discuss further. The semi-structured interview allows the participants to talk at length about their own particular experiences in the field of the interview.

This interview approach was relevant for extracting the appropriate data needed to address the research problem of the study. Thus semi-structured interviews were ideal and appropriate for this study.

3.5.5 Interview Process

The researcher did a preliminary interview to explore the viability of the questions and to check whether the questions would provide answers appropriate to the research questions. After looking at the results from the first interview, the researcher went ahead and conducted the rest of the interviews. Interviewees were called in order to setup appointments. The researcher introduced herself, and explained the purpose of the research study as stated on the letter accompanying the questionnaire.

As mentioned by Kvale and Brinkmann (2009:128), "a good contact is established by attentive listening, with interviewer showing interest, understanding and respect for what the subject said". The interviews took between 15 and 30 minutes. A digital recorder was used to record all the proceedings. All the interviews were done in English. After each interview the researcher inquired about other participants in the interviewees' business circles.

3.6. Sampling Techniques

Bless, Smith and Kagee (2006:106) describe sampling as a process of grouping individuals, objects and documents for the purpose of gathering information for a particular project. The aim of sampling is to make sure that the target population is represented in the process (Mouton, 2006:110). Below are two forms of qualitative sampling that were considered for this research study.

3.6.1 Purposive Sampling

According to Babbie and Mouton (2009:166), Babbie (2010:193), purposive sampling which is also known as judgmental sampling, is a type of qualitative sampling where the researcher selects the sample according to his or her understanding of the sample. The researcher takes into consideration the properties of the sample and what she or he wants to acquire from that sample. Purposive sampling was used in the initial stages of the study but later snowball sampling was used as purposive sampling did not yield the required number of participants that was essential for the project.

3.6.2 Snowball Sampling

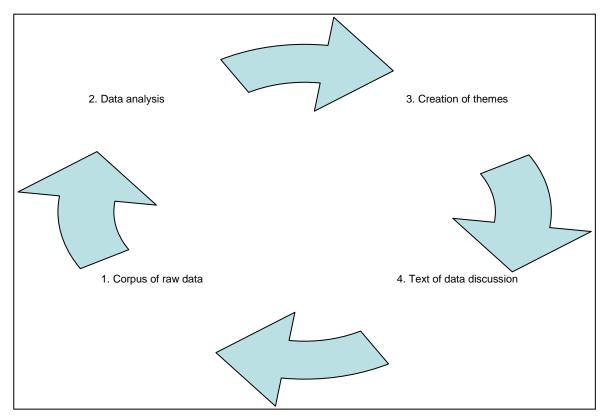
Snowball sampling is a method of qualitative sampling where a few individuals from the relevant population act as informants and identify other members in the same population for inclusion in the sample. This kind of sampling is used when the target population is difficult to find (Welman et al., 2005:69; Babbie and Mouton, 2009:167).

A snowball sampling approach was selected as the appropriate method for this research study because after finding a few individuals to participate in the interviews, the researcher could then utilise those participants as informants. The researcher was able to make contact with new participants through the business networks of participants who were interviewed early in the project. Snowball sampling facilitated the identification of different types of businesses, that the participants were involved in, as business owners, and how these participants were utilising ICTs in their businesses.

3.7 Data Analysis

Data analysis is process of assessing what the participants' views were, after an interview, on the use of ICTs as a tool of empowerment by women in SMEs in the Cape Metropolitan area. Holliday's data analysis process was adopted by this research study.

Figure 3.2 From data to writing: Source: Holliday (2007:90)



3.7.1 Step one: Corpus of raw data

The tape recordings were transcribed into a tabular format detailing each question with results from each respondent. This was done to arrange the data into subject areas corresponding to

sections of the questionnaire, so that the researcher could compile the findings from the interviews.

3.7.2 Step two: Data analysis

The researcher read through the entire interview transcripts twice in order to understand the raw data. The data was then colour coded to enable the researcher to identify the relevant topics.

3.7.3 Step three: Creation of themes

The topics derived from the data analysis in step two where then used to create themes. These themes were used to clarify the objectives of the research and extract meaning from the data. The roles of themes were to explain the phenomena experienced by the participants (Holliday, 2007:90).

3.7.4 Step four: Text of data discussion

Finally these themes became headings which enabled the argument of the research to unfold. Extracts from the interviews were presented as evidence to answer the questions posed by the research. The relevant themes were chosen and used as the foundation of chapter four (Holliday, 2007:90).

3.8 Summary

This chapter discussed the methodology that was used for this research study. A qualitative research method was employed. Interviews facilitated the gathering of data and snowball sampling facilitated the selection of the participants. The ensuing chapter will present the data analysis.

CHAPTER 4

DATA PRESENTATION

4.1 Introduction

This chapter presents the results gathered from the interviews that were conducted with women in SMEs in the Cape Metropolitan. Twenty five participants were drawn from the suburbs of Claremont, Rondebosch, Pinelands, Gardens and Mowbray. A semi-structured interview schedule was used. The participants articulated their experiences of how they utilised ICTs in their businesses. A digital voice recorder was used to capture the conversations as they happened. Each recorded interview was transcribed immediately after the interview in order to safeguard the information.

4.2 Research Question

The main research question is as follows:

How are women in SMEs in the Cape Metropolitan utilising ICTs as a tool of empowerment to end their economic discrimination?

4.2.1 Sub-Questions

- What are the benefits and challenges derived from ICTs by women in SMEs?
- How are women utilising ICTs to benefit their business growth?

The interview schedule was designed from sub-questions 1 and 2. The aim was to gather information from the participants on how ICTs were empowering them to end their economic discrimination. The interview schedule was divided into three sections:

- Section A: Personal Details
- Section B: Benefits and challenges derived from ICTs.
- Section C: Utilising ICTs to benefit business growth.

4.3 Section A: Personal and Business Details

This section contains details such as the type of business, number of employees, turnover, the reasons why the women started their own businesses, their working capacities, obstacles faced

and how they have overcome them, (Interview Schedule). The aim of the personal details section was to establish a background or a general profiling of the participants in the various businesses that they have established.

4.3.1 Personal Details

This research did not set out to factor in any effects which the previously deep rooted racial tensions of the apartheid era had on women's entrepreneurship. Women of all races are included in the research sample. It is evident that with the new dispensation of economic empowerment in South Africa, race should no longer play a part in the success or failure of any business.

The participants had a wide range of qualifications. Their careers included navy officers, graphic designers, web designers, lecturers, teachers, accountants, programmers, hair dressers, a clinical psychologist and some were helping to run family businesses. Most of their lives had been spent working in the corporate world and at some point they decided to start their own business enterprises. Being their own managers enabled them to plan how to share their time between work and family matters, which they would not have been able to do, had they remained in their previous corporate jobs. Many women gave up their jobs in the corporate world, despite the high positions that they had achieved, as one participant explained below,

"After giving birth to my son, I decided to leave the corporate world I have been working for some years, and settle at home whilst taking care of my family".

The interviewees are now involved in various businesses which include childhood development, web designing, crafting handmade jewellery, security, publishing mom diary, writing children's stories, crafting children's wooden furniture, network marketing, distribution of agricultural products for soil enrichment, teaching mathematics and science in primary schools and crèches. Some of these business owners have created employment opportunities in order to alleviate poverty within their communities, which is a notable societal benefit. They have employed a few individuals on a permanent or casual basis. The following reasons were given by some of the participants as to what motivated them to establish these ventures. For one woman it was her passion for books that led her into writing children's story books after working with books for a long time. Certain industry requirements were changing in response to technological developments, this situation rendered the skills of some participants obsolete, thus they needed to reinvent themselves elsewhere. For example some programming languages where no longer being used and the participant could not cope with the rate at which the new languages where

coming into the industry. Three quarters of the participants said they needed flexible working schedules, because they wanted to take care of their families. In order to achieve this they decided to work from home. Most women did not want to miss their children's developmental milestones, like the first step or the first day at school.

4.3.2 Business Details

The participants have come across a number of challenges in establishing their various businesses. Funding or cash flow was the most common hindrance all women faced. Failure to get funding did not deter them from their plans. When they started running their business some acquired new skills like leadership and delegation of duties. Some of the businesses have a turnover of over a million rands a year. Such businesses are important to the economy for their contribution towards the Gross Domestic Product (GDP) and employment creation. Some of the participants cited slow business growth as a major challenge. Finding clients was not easy as many companies were not at liberty to award tenders to service providers that did not have a proven track records.

"Getting my business name "out there" with good references is difficult when I only have 2 or 3 projects as referrals. People tend to trust more with many more testimonials".

Despite all these challenges they persevered and worked hard to attract customers to their businesses. One participant turned her business into a trust in order to attract donors and some are looking for investors to invest in their businesses. Another participant said that in order to overcome any obstacle,

"Keep working there is nothing else you can do". "Went to all and every course in business I could afford. Joined Chamber of Commerce and went to lunches, training programs, meetings for small business, and joined forums. I spent many hours on computer learning programs – (later became a trainer for Quick Books (without formal training myself) and another program for Cash loans businesses".

As the above participant confirmed, many women decided to go for basic training for people starting their own businesses. Some decided to teach themselves so that they would be able to run their businesses with determination, courage and confidence. To overcome the challenge of training costs, most of the women resorted to downloading training videos and manuals from the internet. This study looked at how women are using ICTs to overcome their economic discrimination and empower themselves, so that they could be recognised as important

stakeholders by their communities. The different types of ICTs the participants are using and whether or not they are compatible with their business profiles, is discussed in the next section.

4.4 Utilising ICTs to benefit business growth

In order for a business to function efficiently and effectively, communication is mediated by different technologies. It was found that these women in SMEs used a variety of communication methods which are listed in table 4.1. Twenty five women were interviewed.

Table 4.1: Methods of communication on business matters

Method of communication	Number of Participants
Internet	25
Cell phone	23
Landline	10
Computer	23
Fax machine	1
• Video	1
DVDs and CDs	19
Digital camera	2
Face to face	3
Scanner	2
Software	24
Radio shows and newsletters	2
Newspapers and catalogues	2

Table 4.1 illustrates the methods of communication employed by the participants in the research sample. The purpose of the question was to investigate the various methods the participants are using to communicate in their businesses, (Interview Schedule).

The participants are using different forms of ICTs including, among others, the internet, email, social networks like Facebook. The most used form of communication is email. Many women prefer using emails because they offer tracking and editing facilities that they can use to make corrections. Emails retain a record of communication to which they can refer.

Table 4.1 shows that women in SMEs are versatile and they are not restricted to any one product. To participate in the global village, they have adapted and learnt to use ICTs in their businesses. The number of participants against each type of communication shows that there is evidence that women have embraced ICTs in their various businesses.

Table 4.2 Number of years that women have been using ICTs

Number of years using ICTs	0 – 5	5 - 10	10 – 15	15 and above
Participants	4	7	6	8

Table 4.2 illustrates the number of years women in SMEs have been using ICTs. Most of the participants have more than five years experience. This means that they are capable of selecting and adopting ICTs that are suitable for their business needs, as one participant said,

"I have used the telephone since I could communicate, cell phone since 1994, fax since 1994, emails 1998, online banking since 1997, computer cad, computerised bookkeeping and record keeping since 1994, Skype since 2006, Websites since 1998. MS office since 1994".

Many of the participants had been using these ICTs in the corporate world, where they had been working. Some of the women still prefer face to face communication as it gives them an advantage, because they are able to convince their potential customers about their products or

services. Some are still using print media such as newspapers and newsletters, as most of their customers still prefer using them. So it is important to use different platforms in order to reach all the prospective clients.

4.4.1 Exchanging information with other businesses

"Yes. I use blogs and social networking sites to share news about my newly completed projects. I share industry news with fellow designers, bloggers and photographers that I find in my (RSS) feeds. I often share links to websites of interest to my clients that may pertain to their particular business".

ICTs enable women in SMEs to exchange information pertaining to projects that they are currently working on and to look for advice on topical issues. The ability to exchange information, brought by ICTs, helps the running of their businesses as information is readily available.

"Product information, confirmation of appointments, invoices, orders, payments made, bills, banking, proof of payments, contracts, tax and tax docs, accounting info sent to accountant via e-mail, reports, quotations, statement of accounts sent and received, photographs for products".

As the participant above stated, ICTs help businesses to exchange a wide range of information, be it with the suppliers, SARS or other service providers. These women are also able to exchange information about running their families, health issues and beauty tips.

4.4.2 Freedom to network with other businesses

"Yes, it allows you to be in many different places at once. It gives you access to many other people, peers, businesses at a click of a button. Usually the people you find at the other end of these sites are just as friendly and willing to talk and help as you are".

ICTs empower women in SMEs to communicate on different platforms. They are able to chat on Facebook, Skype and Google, discussing different issues pertaining to their businesses. Saying, "at the click of a button", implies that there are individuals willing to engage in business with them. The participants are able to hold training and consultation workshops to showcase their businesses to the world through the use of ICTs. Some of the women are now able to network with the Chamber of Commerce for business information and workshops.

4.4.3 Advertising and promoting the business using ICTs

"At the moment I promote my products through my website, my blog, email signature, social networking sites and via word of mouth".

The participants are using ICTs various modes to advertise their businesses. For example websites, blogs, Facebook pages, Google, emails, radio, Twitter, Flickr and LinkedIn. These ICTs have opened the doors for these women's businesses to be seen and appreciated in the business community. Women are also using pamphlets, catalogues, children's magazines such as Child Magazine Cape Town's Best Guide for Parents, trade magazines, posters and notices.

"Usually I make appointments and present on a one-on-one basis or groups using Power- point presentations. For Agric(culture) products I also went to Agricultural Trade shows. Spent a lot of time phoning potential clients and sending them specialised product information via e-mail and referring them to the website. Farmers prefer one-on-one presentations".

To increase their market share, some businesses have set up shops at some retail outlets to reach a wider market. Some of the women are still using word of mouth to entice potential and existing clients to consider their products or services. Participants in the catering business participate in the weekend markets, including those at Rondebosch, Harfield Carnival and the Old Biscuit Mill, to display their products. Some of the businesses are selling their products online.

4.4.4 Use of decision making systems in the business

"Spreadsheets are used for example a summary of classes held, an attendance register, student lists, any payments received or outstanding, progress report cards and our financial projections for each term".

Decision making systems play an important role in the businesses owned by participants. They use them to calculate mark-ups, product costing, budgeting, turnover predications and tracking orders from suppliers. Spreadsheets are also used to keep track of staff progress on assigned projects for those businesses in web design.

Besides calculations, women use spreadsheets for other purposes; one uses them to manage her asset register, another, who teaches science in primary schools and crèches, uses them to keep her attendance registers. The use of password protection facilities on documents reduces the risk of unauthorised access to information in their businesses.

4.4.5 Benefits from television and radio programmes

"Besides keeping me informed on current events and economical status, it is primarily effective with agric business on new concepts and new product type. This has been assisted by radio and TV programs on ecology of soil and going green programs, including programs advertising other business in same field".

Many businesses run by participants have benefited from radio and television programmes in the form of interviews and programmes aired on the use of ICTs. Amongst the participants, some have had the opportunity to talk about their businesses on air. Some businesses have benefited from advertisements that are broadcast on the radio and television as confirmed by this participant,

"There have been radio and television programmes which have highlighted the weakness of mathematics in the country so when parents read or see this, they therefore enquire into our programme as they want to help their children early before any perceived problems escalate".

4.4.6 Internet banking to conduct business related transactions

"Currently my only supplier is my bandwidth and the occasional piece of software that goes off on a debit order or is paid via c/c and PayPal, respectively. I use internet banking personally for everything, so as the need arises. I will use internet banking for my business".

Three quarters of the participants make use of internet banking because of the convenience it brings to their businesses. These women are able to execute transactions from the comfort of their homes and workplaces, avoiding the long queues in banking halls. This reduces the risk of handling cash at their businesses, as all the payments are confirmed on their cellphones or through the emails, as one participant highlighted,

"We requested the parents to use internet banking because we don't want to handle money at the school because it is risky. All the confirmation of internet banking will be sent through to our email".

4.4.7 Use of ICTs to increase customer base

"It is working yes. Very frequently I have new enquiries coming in, via the internet and email based on word of mouth referrals as well as online referrals and online advertising (via website, blog, social networking sites etc)".

The inclusion of relevant ICTs in the SMEs has helped widen the participants' customer base. These ICTs have made it possible for the businesses to reach clients and business partners in other geographical areas, including other continents.

"Keeping contact with friends through e-mails also results in many business leads or contacts from friends. Website – definitely. Twitter has also introduced me to a few potential clients".

Using DVDs and CDs in the business 20 15 10 Yes No

4.4.8 Use of CDs and DVDs in the business

Figure 4.1 DVDs and CDs

"Yes, at the start of each lesson we have a numbers song which all children learn and sing. This is on a CD. We normally use the DVD to show parents recordings of our lessons. This is during orientation so parents can see what happens in the hour that their children are with us".

Most women in SMEs are using DVDs and CDs in their ventures. According to Figure 4.1 very few women are not using them. DVDs and CDs are being used to record or store training material by the participants in teaching businesses. Information on these storage media include products or presentations of services offered by businesses to potential and regular customers. They are also used for backup of confidential and other important information used for running the business.

To reduce the physical storage space needed by these DVDs and CDs, some of the participants have started using flash drives that can store more data and are portable. DVDs and CDs are very reliable as many women use them for storing information.

4.4.9 Opportunity for the participants to represent themselves in the business environment

"Yes, because I have an online profile it allows me to be judged by my work, my projects, my testimonials and thereby qualify my abilities first, before they see a young blonde woman standing in front of them".

ICTs provide women in SMEs with podiums to showcase their businesses without being judged by their gender, as suggested by the above participant. With the use of ICTs women's work is judged on its presentation and content without prejudice, as explained by the participant below,

"I believe women have to be better at what they do to survive in a male dominated environment. Being competent to use the ICT systems makes all operations run smoothly. Without ICTs women would have to overcome the normal barriers into business.

The participants are able to come up with business plans which were difficult in the past. The availability of ICTs makes it easy for them as they can now utilise some search engines like Google to research the required information to penetrate the male dominated business environment.

4.4.10 Using email in the business

Email has been recognized to be cost efficient by women in SMEs. They use email to receive and send bills, statements, quotations and many other business documents that need the attention of any individual. Sent emails remain as a reference for future use if anything goes wrong, the writer can refer back and make use of any sent email. All important communication to stakeholders can be addressed using email, as stated by the participant below,

"Most of my communication to my editors, publishers and employees is done through email. "We use email to communicate between me and the management team, sending quotations to prospective customers and receiving information as well from outside the organisation".

4.5 Challenges faced and benefits derived from the use of ICTs by women in their various businesses.

4.5.1 Benefits of using the ICTs

The aim of this section is to explore the benefits that can be derived from using ICTs by women in SMEs, and to find out if it is possible to see these benefits being achieved in the businesses

owned by the participants? Some of the benefits mentioned by the participants during the interviews are listed below:-

4.5.1.1 Instant confirmation of orders

"I am now managing to get my orders whenever I need them. I can go to my computer, send an email to my suppliers and they can instantly confirm the availability of stock in their warehouse. From there I will do electronic transfer of funds to them so that they can send me my order".

Orders are confirmed after sending an email to the supplier enabling the participants to get their stock on time. The fast response reduces and or eliminates out of stock scenarios in the business. Women are appreciative of the ICTs' capability to help them get prompt feedback and quick order processing.

4.5.1.2 Ability to work anywhere and anytime

"I am able to communicate anytime, anywhere giving me access to information when I need it.

ICTs permit flexible working schedules for women in SMEs to work from anywhere and anytime. Women can use their laptops anywhere in the house as mentioned by the participant below,

"I can basically work from the kitchen table while I prepare food, from here in the design room or while I am sewing, wherever I want".

4.5.1.3 Effective communication with stakeholders

ICTs have facilitated effective communication for women in SMEs as they are able to correspond, chat on Facebook and blog with their customers and other stakeholders. Business communication through the use of ICTs flows effectively and efficiently as long as the communications network both at home and with the service provider is working. Uninterrupted communications aid in attaining and sealing deals on time. Effective communication is good for the business as the participants will not miss any function or instruction from the stakeholders concerning their business as stated by one participant.

"Difficult to imagine without ICTs, Cell phone saved time, money and enables effective communication with stakeholders".

4.5.1.4 Postage costs and use of paper

"E-mailing invoices etc has saved time and postage costs and allows for easy follow-up. Online systems save filing and paper while allowing easy access to information".

This sentiment is echoed by many of the participants. ICTs help the business to cut costs on postage through the use of emails. Emails offer reference in cases of missing information, for example if mail is undelivered, the writer can resend the previous email to that particular person. All the sent emails which do not warrant paper work and big filling cabinets, can be kept in folders. Any reduction in operational costs means that the business is making savings.

4.5.1.5 ICTs speed up work

"The use of ICTs speeds up our work and makes it less cumbersome to send mail for example, if I have a message to send through, I can send an email to many recipients at once"

Instead of sending many letters to clients, ICTs enables the women to send one email to a group of recipients in a single operation. This saves time which the sender will be able to use to concentrate on other pressing issues concerning the business. ICTs help the women to be multi-taskers.

4.5.1.6 Availability of information

The availability of information makes it easy to conduct businesses anywhere and anytime for women in SMEs. ICTs enable the participants to know what their competitors are doing as they can go online and search for available reports on their competitors. Information availability helps to enlighten these women about their business environment.

"My customers can contact me at all times. I respond extremely quickly to all messages and I am aware of all that is happening within my area of expertise".

Information availability provides the participants with confidence to handle their businesses. As the above participant explains, she is able to respond promptly to her clients because she is well informed to make the right decision quickly.

4.5.1.7 Scheduling of appointments

"We are able to schedule artists that are registered with our agency. Booking them at different functions and emailing their programmes. Online and cellphone calendars reminds us of any appointment well before time".

ICTs assist women in SMEs to maintain their appointments. They use calendars on their mobile phones, online calendars in their emails whether it be Yahoo, Gmail or Hotmail. The availability of these systems makes it easy to keep to schedules, knowing that the meeting with a client is well prepared for, a workshop on leadership is not missed and the family commitment is taken care of. As one participant said,

"The business has benefited a lot without these platforms we wouldn't be in business".

4.5.1.8 Travelling costs

"We have a business in Namibia so we communicate with ICTs thereby saving us money to travel up and down".

"Yes we have a branch in Johannesburg instead of travelling, it saves time, money and information travels faster and efficiently. I am able to know what is happening there even if I am not there. I also participate in decision making even if I am out of the country".

Time and money is saved as some participants reported that instead of travelling for meetings they use Skype or video conferencing. No matter where these women are they can conduct their business as long as they have ICTs at hand.

4.5.1.9 Making business decisions using ICTs

"Yes, with proper business practices in place: I have my accounts system set up for easy quotation, billing and payments reconciliation, which I email to my client at every step of the project. That way my client and I always understand where we are in the relationship. I can automatically add my terms and conditions to all my quotes. I can update my client of the progress via email. And on completion of a project I can get feedback via a web form which I can use to improve areas highlighted".

ICTs aid women to make business decisions as the above participant mentioned. The use of ICTs in business alleviates costs and difficulties encountered with manual activities. Calculations are made easily by capturing the figures and the ICTs will do all the processing. It is easy for the participants to make business decisions using ICTs because all the information is available, and can be easily converted into usable formats such as reports.

"Using spreadsheets to analyse revenue and costs assists in whether the business decision is worthwhile".

The ability to book customers for certain periods of time, the decision to participate in certain events and scheduling programmes for a required period of time, is facilitated by ICT systems. Some of the participants have business ventures in several locations which makes it difficult for them to be everywhere all the time, but with ICTs they are able to monitor and delegate, as one woman said,

"I can delegate my employees to put some items on sale from our shops in Namibia, all the items, prices and instructions will be on email".

4.5.1.10 Striking a balance between work and family

Balancing work and family is the main issue that women deal with everyday. These women in SMEs have proved that although it is difficult to maintain a balance between work and family, ICTs have enabled them to schedule their workload.

"All my work is done during the morning or early afternoon when my children are not home".

"My clients do send me information via email which I check late at night after putting my children to bed. Any other messages if urgent in matter are smsed to me then I make the decision to act today or wait till tomorrow. This therefore helps me to achieve and maintain a work life balance as I am always in touch with what is happening without being physically present on site".

The availability of ICTs within their homes that they also use as offices, gives these women the flexibility to work whilst taking care of their families. They can schedule and determine their workloads to accommodate their families unlike the situation in the previous corporate jobs where they could not do so.

"Definitely if I want to stop and take the kids to sports, I can do that. I can choose my hours of doing business".

4.5.1.11 Improvement of self-esteem

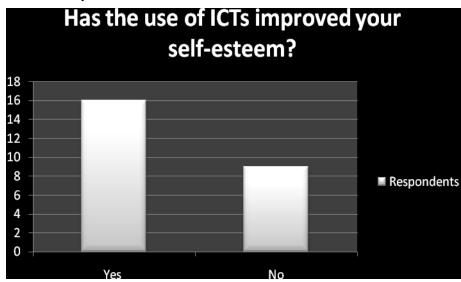


Figure 4.2 Self Esteem

"Yes, when I was last in the corporate world (1994) I had a secretary who did everything for me, it is empowering to be able to manage my own business primarily independently".

The use of ICTs by women in various businesses has improved their self-esteem, as some are now able to negotiate business deals on their own. They are now running their own businesses autonomously, doing all the work without depending on anyone.

"I suppose it has. I feel competent to be able to get a job done and to be able to communicate effectively through most current communication systems. Being older (52) I don't feel that I'm a techno dinosaur".

"When I do a presentation it looks professional, it makes people respect me, and I will not be a Mickey Mouse".

ICTs permit women to command respect especially in male dominated fields, as the above participant explained. They are able to prepare business documents and confidently deal with new clients. They could not do so prior to using ICTs. ICTs have played a big role in improving women's lives as some of them could not imagine running their businesses without using ICTs.

Some did not consider that ICTs had improved their self-esteem, as they felt that their self-esteem was independent of the use of ICTs. They indicated that they had been exposed to ICTs prior to starting their business ventures. Figure 4.2 summarises the opinion of all women on the issue of self-esteem being improved by ICTs.

4.5.1.12 ICTs easily accessible in terms of cost

"In my case, yes, definitely. Email, Internet, Skype communication costs are very low. The more I use these, the less I have to make expensive calls or travel to client sites, saving on transport costs too".

Many of the participants share the above opinion. They appreciate the reduced costs of business communications. They choose ICTs that are affordable and relevant to their business. There are many service providers for ICTs users to choose from. The choice made by the user depends on the terms and conditions of the service providers.

4.5.2 Challenges faced when using ICTs by women in various businesses.

There are several challenges that are associated with using ICTs. Women in SMEs are no strangers to these challenges. Despite the challenges, the participants prefer to concentrate on the benefits ICTs bring to their businesses. The following are some of the challenges:-

4.5.2.1 Challenges

4.5.2.1.1 Malfunction of the networks

"If the internet is slow at times it takes me forever to prepare for my lessons as I will be researching most of the information. At times its difficult to communicate through emails with schools if their servers are down".

The unavailability of communications network from the service providers due to their equipment failure or human error is the most challenging issue relating to the use of ICTs by women in SMEs. When the communications network is down there is virtually no communication between these women and their stakeholders. The women have to reschedule their days and work offline or go to costly internet cafes. By so doing they increase their operational costs because sometimes they have to hire a baby sitter, which can be costly.

4.5.2.1.2 Wrong email address

"Sometimes I mistakenly give people a wrong email address and they take long to contact me".

Sometimes if the participants give out a wrong email address, their clients will fail to reach them. This also delays business transactions and will prompt the use of phones thereby increasing operational costs to the business. Failure to communicate in business can lead to lost business opportunities.

4.5.2.1.3 Computer literate

"I was not computer literate. Everything I know I have taught myself. It took me the whole day to teach myself how to create my own blog".

Many of the participants confirm that computer literacy is a challenge. They spend a lot of their working hours learning how to use some of the ICTs in order to be part of the business community. They cannot afford to ignore ICTs, but like the above participant explained, it took time, which is meant for business, to learn or teach themselves how to use these ICTs. They resorted to self tutoring because of the high costs of training involved. This can be a setback to business because their attention is diverted to learning instead of running the business.

4.5.2.1.4 Breakdown of the equipment

"Yes, I have experienced numerous issues. Two big ones in my line of work have been a crashed Mac that had to go in for repairs for over a week. I had to find an alternative computer to use, which on its own is an issue, but all my contacts, work in progress, invoices etc were on the broken Mac".

ICTs sometimes can inconvenience the way a business is run if they breakdown unexpectedly. As the above participant stated she had to carry on her business for a week without her laptop which contained all her vital information. Although these women might have backups, it is not easy to lose any of the equipment that you use, as you rely on it on a daily basis. Technical problems of ICTs, such as viruses attacking information, are other challenges that these women face.

4.5.2.1.5 The limited use of ICTs

"The limited use of the ICTs by some clients e.g. some municipalities in Namibia do not have emails, then it becomes difficult to communicate with them".

Some of the clients that the participants have, such as government and municipalities, do not utilize emails. This situation presents major challenges to the exchange and sharing of information with such organisations. These organisations rely on old methods of communication,

such as the postal service. Instead of sending an email the participants have to drive and meet face to face with the person responsible for that transaction. This travelling around takes valuable time away from other aspects of running the business, which means the schedules may not go as planned.

4.5.2.1.6 Software upgrading

"Continuous upgrading of ICTs always causes both financial budget management and training challenges".

While using ICTs in their businesses the participants have to deal with software upgrading which is costly to the business. The world has become a global village and technology changes are done regularly. Software upgrading is a challenge and it can increase costs to the business. The new updates have to be paid for even if all the functions that come with the new release are not required.

4.6 Summary

The findings of this study show that women in SMEs are utilising ICTs to end their economic discrimination. Their dedication to their businesses reveals how important it is for them to be recognised as equal economic partners in their communities. Women in SMEs are embracing a whole range of ICTs in their businesses.

The analysis of the data and literature will be addressed in the following chapter.

CHAPTER 5

INTERPRETATION OF FINDINGS

5.1 Introduction

This chapter focuses on the research question and the objectives of the study. The following themes from the research interview schedule have been selected, in order to explore and discuss the findings, as the study seeks to answer the main research question namely:

How are women in SMEs in the Cape Metropolitan utilising ICTs as a tool of empowerment to end their economic discrimination?

- **Personal and business details:** Women in SMEs presented their profiles, their businesses' profiles, and how they have managed to establish their own ventures.
- **Utilising ICTs to benefit business growth:** Participants gave an overview of how they were adopting ICTs in their businesses, the types of ICTs they were using to increase their business growth.
- Benefits derived and challenges faced by women using ICTs in SMEs: Interviewees
 described the benefits they have derived and the challenges they have faced using ICTs.

5.2 Personal and business details

Women in SMEs have created various businesses that each have an annual turnover in the region of R1 million. They have employees from fewer than five to more than 200. This agrees with the South African National Small Business Act's definition of SMEs. Micro enterprises employ fewer than five people and have a turnover of less than R150 000. Very small enterprises employ fewer than 10 people with a turnover of between R200 000 and R500 000. Small and medium enterprises employ between 50 and 200 people and the turnover is between R2 million and R50 million (Falkena et al., 2001).

The participants had been employed as web designers, graphic designers, accountants, scientists, clinical psychologist, navy officer, programmers, teachers and lecturers before they decided to start their own businesses. Some of the participants stated that they wanted to spend more time with their families, so they needed some flexibility in their working environment. This could only be achieved by establishing their own ventures.

5.3 Utilising ICTs to benefit business growth

The sub-question: "How are women in SMEs utilising ICTs to benefit their business growth?" was analysed in conjunction with its objective. This was done with the aim of exploring how women are utilising ICTs in their businesses. This research established that women in SMEs in the Cape Metropolitan were indeed using ICTs as supported by the following information that was derived from all the interviews:-

5.3.1 Exchanging information with other businesses

Zawada et al. (2007) found that, "ICTs facilitate the exchange of information if the people have the same goals. Networking with peer business owners is vital at all times because it promotes information dissemination, exchange and communication". This correlated with the findings of the study, where the majority of the participants stated that ICTs permit them to exchange information with other businesses. This information ranges from bills, invoices, proofs of payments, notices about workshops, quotations, statements of accounts, business contacts, product information, tax documents and reports. Exchange of various documentation enhances the visibility and marketing of SMEs businesses run by women. These businesses are able to acquire new clients.

ICTs also enable women in SMEs to share news and complete project reports through blogs, as mentioned by one participant. This helps the participants to get feedback and other ideas on improving their services and products from peer businesspersons and other stakeholders. This result agrees with a study conducted by the United Nations Conference on Trade and Development, (2003) that ICTs are capable of transporting information from one point to another thus meeting the needs of the populace.

In a study by Gurumurthy (2006:612) under the auspices of the Stability Pact Gender Task Force (SPGTF), a programme was initiated to empower women in the developing countries Romania, Bulgaria, Albania, Hungary, Kosovo, Moldova, Montenegro and Yugoslavia. Women exchange information using only email to help the development of women to enable them to become leaders in the parliament and local governing bodies. This study has found that today women in SMEs easily exchange a great deal of information. This has been made possible by the utilisation of ICTs ranging from email, blogs, Skype, Twitter, Facebook and LinkedIn. The participants have been empowered economically and socially through the use of ICTs.

A study by Martinez and Reilly (2002) found that ICTs aid the sharing of information which promotes economic empowerment. Women network through these ICTs to publicise their

business interests. This is evidenced from the data collected by the researcher. Some participants said that they share links to websites of interest with their customers and business colleagues. These websites may include information about exhibitions taking place, suppliers of raw materials and business contacts of those personnel in corporate organisations, which they may need if they are looking for business deals.

5.3.2 Freedom to network with other businesses

This study has established that ICTs provide women in SMEs with freedom to network with other businesses. They log on to the Internet to communicate with other people on different relevant websites e.g. momtrepreneur is a website where women in SMEs discuss their businesses, say how they have managed to establish their ventures and share words of encouragement to women in up and coming businesses. These people that they communicate with are either looking for products and services that they provide or are looking for other business people to partner with. It is evident from the findings of this study that women in SMEs are utilising ICTs to grow their businesses. They get information on how to manage their businesses better than before. They get constructive criticism and the latest ideas from bodies, such as the Chamber of Commerce, that help them to run their businesses.

ICTs augment the freedom to network for women in SMEs. Some participants said that they are informed well in advance, if schools are having fund-raising events where they can showcase their products and services. Event fixtures advertised through ICTs help the participants in planning whether they should participate in certain events or go and support their business counterparts. For example those in the catering sectors know when and where to register to take part in upcoming events such as the J&B Met. Participants who specialise in the kids events get details on functions such as the Baba Indaba expo. Improved networking amongst women in SMEs through the use of ICTs allows them to plan properly for specific events from which their businesses will benefit, for example the Look and Feel Good Expo for the participants who specialise in jewellery and events management sectors, as shown in Figure 5.1.

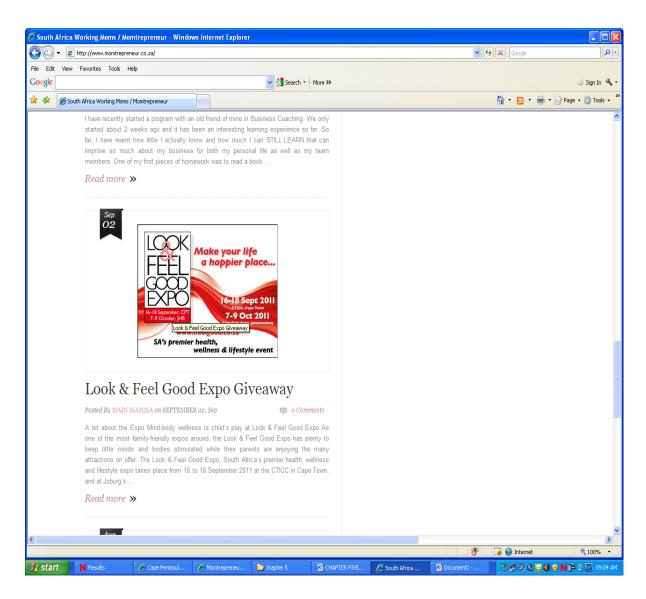


Figure 5.1 Print screen: Momtrepreneur (http://www.momtrepreneur.co.za)

5.3.3 Advertising and promoting the business using ICTs

The data from this study revealed that some of the participants were using their websites to build their market base and advertise the products and services that they offer. They use blogs and social networks like Twitter and Facebook to market their products. Some participants mentioned that product launches and promotions are also made possible through the use of ICTs, for example a participant who specialises in writing children's stories uses email, a Facebook page and a cellphone to announce the launch of her books.

Women in SMEs are using social and business networking sites such as Flickr and LinkedIn to exchange business profiles. To reach other customers that may not have access to ICTs, some

participants' businesses are still using pamphlets, newsletters, catalogues, kids' magazines, flyers, posters and trade magazines to advertise and promote their services and products.

This research has established that since the advent of some components of ICTs such as Facebook, Flickr, LinkedIn and Twitter, it has become possible for women in SMEs to have many podiums from which to advertise their businesses in order to reach wider markets. The use of social networks has given women economic empowerment. On these platforms some of the participants receive much needed feedback that helps them improve their products and services for example, Figure 5.2.

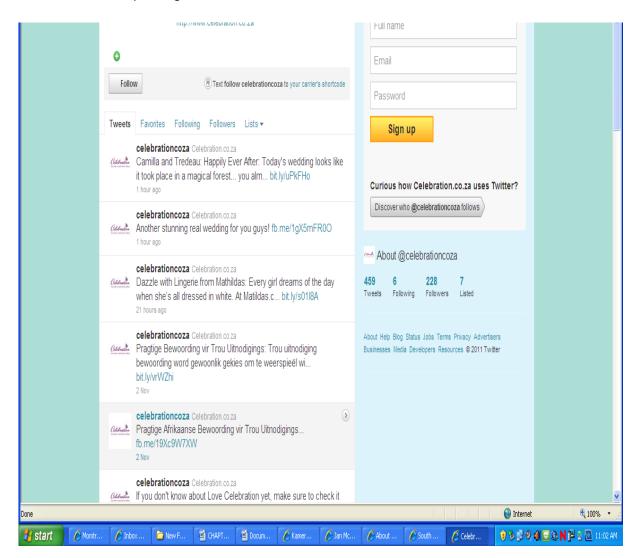


Figure 5.2 Print screen: Celebration (http://www.celebration.co.za/)

Very few participants have used radio or television to promote their products. Some participants use radio and television to get updates on current affairs in the country. Other participants said

that they got their inspiration through television programmes. For example, catering business ventures were inspired by the Food Network Channel on the Discovery Satellite Television. Participants, who deal with mathematics and science, had their businesses promoted by the television and radio programmes. These programmes highlight the problems that learners are facing in some schools in the country. An example of a Television program that has promoted such a business is Shift on SABC.

The participants indicated that they have not used radio and television to market their businesses because of the high rates that are charged by the companies. Women in SMEs stated that they would prefer to use Facebook, Twitter and email as access to them is reasonably priced. Notably, a popular method of advertising used by women in SMEs in this survey was by word-of-mouth. One of the participants who ran a day care centre has benefited from this mode of marketing. Satisfied parents whose children attend her centre have referred other parents there too. Some of the participants were using trade shows, school open days and markets to exhibit their products and services. The findings revealed that some of the participants are promoting their products through the retailers that have online shopping facilities.

5.3.4 Use of ICTs to increase customer base

The results from the interviews showed that businesses owned by the participants have increased their customer base through the use of ICTs. There were customers who were able to access their websites to get detailed information about their products and services. Women in SMEs blog with prospective customers. Facebook and other social networks have made it possible for products to be viewed by new clients. This correlates with Terry and Gomez (2010:7) who report that ICTs enable women to access new markets.

ICTs have enabled prospective customers to either view or know about products as illustrated by the figure 5.3.



Figure 5.3 Print screen Mom Diary (http://www.momdiary.co.za/)

In Burkina Faso, a study by Buiten et al. (2007) finds that women who manufacture shear butter skin care products have managed to boost the visibility of their products through the use of ICTs. Promotional and sales fairs advertised on the website have constituted 70% of their sales. This has led to increased sales and profits. This evidence demonstrates that ICTs can facilitate the running of the business by showcasing it to potential and prospective customers as is being highlighted by the participants of this research.

Buiten et al. (2007) is supported by Maier and Nair-Reichert (2008: 50) who report that ICTs help women to reach markets that are far from home. ICTs help women sell their goods, providing improved access to regional, national and global markets, as has happened in Morocco, Egypt, Lebanon, Tunisia and Jordan. In these countries women in SMEs are making use of e-commerce websites to sell their products abroad. The study by Buiten et al. (2007) and Maier and Nair-Reichert (2008:50) agreed with the finding of this research where women in SMEs are using websites to attract new and old clients to their products.

Some of the participants mentioned that their clientele base has increased courtesy of emails and by collecting email addresses for mass circulation of appropriate information to interest groups.

5.3.5 Internet banking to conduct business related transactions

Most of the participants interviewed reported that they were making use of Internet banking. It provides them with flexibility as they no longer visit a banking facility to conduct business transactions. ICTs facilitated the withdrawals and payments of funds, as confirmation of each transaction is directed to the participant's emails or cell phones.

Women in SMEs indicated that they were able to budget and manage their overdraft facilities as they make use of Internet banking. They know how much is in their company bank accounts as they get instant information on their banking transactions wherever they are.

Conducting business related transactions through Internet banking is one of the ways women in SMEs were utilising ICTs to avoid the risk of handling cash at their businesses. One participant said that they have urged parents to make use of internet banking to avoid handling cash at the crèche.

The data revealed that Internet banking gives women in SMEs flexibility, as one participant said "you cannot visit a bank at 3 am in the morning but you can process a transaction in the comfort of your home". Some of the participants used Internet banking to book flights, to purchase items such as books, to pay their accounts and others indicated that they were using Internet banking to pay their employees.

5.3.6 Making use of CDs and DVDs in the business

As far back as 2002, in a study conducted by Mijumbi (2002:5) in Uganda, it was noted that women used CDs to empower themselves as they make use of tele-centres to get entrepreneurial information on compact disks (CDs) about markets prices and credit services. This relates to the findings of this research where a number of the participants stated that they utilised CDs in combination with DVDs for the following:

- Storage of their confidential information and backup purposes
- Product marketing and design presentations
- Training purposes

- Transferring information from one point to another
- To sell their services and products to customers
- To record programmes for school kids to watch

The participants were making use of online filing which allows them to work without huge filing cabinets, and to reduce the use of paper. They were using CDs, DVDs and flash drives which do not occupy as much space as filing cabinets.

5.3.7 Use of decision making systems

Financial accountability is made easy by the use of spreadsheets and accounting software for small businesses. Some of the participants whose businesses are starting out use spreadsheets to do their basic accounting functions. Some of the spreadsheets and accounting software have graphs that can be used as decision making tools. Before they process any of the transactions, the spreadsheets enabled women in SMEs to do all the workings of the figures involved. One participant said, "Spreadsheets are used for a summary of classes held, an attendance register, student lists, any payments received or outstanding, progress report cards and our financial projections for each term", and another said "I use spreadsheets for project tracking, invoicing, payments, time keeping".

5.3.8 Adoption of ICTs

Zappala and Gray (2006) in their study found out that the level of knowledge that the SMEs owner has regarding ICTs will be a factor in the decision to adopt or not to adopt ICTs in the business. This correlates with this research's findings where it was noted that the level of knowledge of the participants indeed has influenced the adoption of ICTs in their business. These women have been utilising ICTs ranging from 2 years to more than 15 years. It is evident from the findings that women are utilising ICTs to end their economical inequity as they make use of all the various ICTs components available to them.

5.3.9 Improved self-esteem

The research has found that the self-esteem of most of women in SMEs has increased because of utilising ICTs. They can confidently negotiate business deals on their own. Some of the participants said that they now can give professional presentations about their products, as mentioned by some of the participants, "when I do a presentation it looks professional, it makes people respect me, and I will not be a Mickey Mouse". "I have an online profile it allows me to

be judged by my work, my projects, my testimonials and thereby qualify my abilities first, before they see a young blonde woman standing in front of them".

Most of the participants are able to manage their own businesses independently through the use of ICTs. One of the participants said that at the age of 52 she feels that she is not a "techno dinosaur" as she is able to use different types of ICTs. Most of the participants appreciated the utilisation of ICTs in their business, as they felt that without them they would be unable to operate their businesses efficiently and effectively. For example electronic mail enables women in SMEs to reach many recipients using a single mail shot, an advertisement featuring a product on their Facebook page is viewed by many prospective customers. Some of the women in SMEs mentioned that they were using Microsoft Powerpoint and Publisher to generate their business cards and brochures. These participants have gained new skills that produce professional results and this leads to improved self-esteem.

Women in SMEs felt that their confidence had improved because of the inclusion of ICTs in their business operations. This result is supported by the study conducted nearly a decade ago by Jain (2004:7) in India. In this study a group of women undertook training on how to use ICTs. This resulted in boosting the women's confidence that led them to gaining recognition in their communities. Al-Ashtal (2010:1) reiterates the importance of information availability to women as it enhances self-esteem in an individual.

The literature suggests that wherever women use computers and have access to the internet for their own purposes, they often report increased self-esteem, which is thought to come from the confidence gained after mastering new skills and unfamiliar technology (Huyer, 2005; Sengupta et al., 2007:335; Long, 2005; Hafkin, 2002:14). In the same literature it is also noted that after the use of ICTs in all projects done by these women, their self esteem was remarkably improved. The literature findings agree with the empirical findings of this research where some of the participants have noticed a positive change in their self-esteem.

ICTs gave women in SMEs the opportunity to represent themselves as business people. Some participants said that they have managed to break through the male dominated business environment. For example some of the participants are building websites, another participant is running a security company, another one is distributing agricultural products for soil enrichment, and another is teaching mathematics and science in schools.

ICTs help participants to be informed of what is happening in their area of expertise and what their competitors are doing, when they utilise search engines such as Google. ICT systems enable the business operations to run smoothly, since information is readily available, thus enabling women in SMEs to confidently make informed decisions.

5.4 Benefits derived and challenges met by women in SMEs from using ICTs

This section will discuss the benefits and challenges as the study seeks to explore the subquestion: what are the benefits and challenges of using ICTs? The objective of the question is to establish the benefits women in SMEs derive and the challenges they encounter from using ICTs in their businesses.

5.4.1 Benefits

5.4.1.1 Ability to work anywhere and anytime

Women in SMEs who took part in this study were in agreement with the flexibility ICTs bring to the users. ICTs allow the participants to work anywhere and anytime. They said that it was up to the individual to regulate themselves as they are capable of setting their own work schedules or timetables.

The availability of communications networks in many areas, for example free Wi-Fi zones in cafes or shopping malls, enhances the use of ICTs, giving women the opportunity to conduct business wherever they are. Working anywhere and anytime is one proof of the flexibility that ICTs have brought in to women's lives.

Data revealed that women in SMEs were capable of scheduling their working time at home in order to cater for their families. ICTs enable women to work anywhere and one participant said that she can work from "the kitchen table". Most participants said that the use of ICTs enhance their businesses because their contact details are easily accessible on their blogs or websites where customers can access them, for example Figure 5.4.

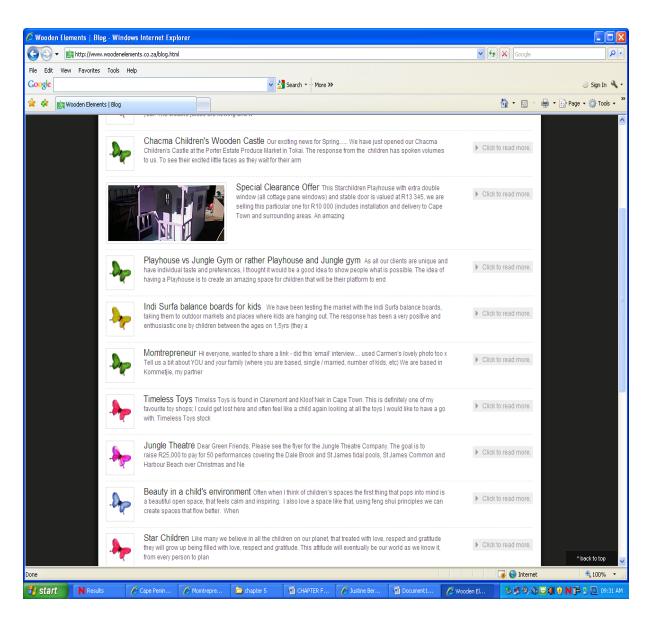


Figure 5.4 Print screen: Wooden Elements (http://www.woodenelements.co.za/blog.html)

Ability to work from anywhere was highlighted as the most important advantage ICTs bring to women's businesses. The use of ICTs allows them to have flexible working hours to cater for customers in different time zones. For example the participant who runs an Online Travel agency has customers from all over the world logging onto her website at anytime to make holiday bookings.

One participant said that she can stop working during the day and take her children to participate in sport events, meaning that ICTs permit her to be there for her family anytime without any hassles.

5.4.1.2 Manage expenditures

It was evident from the data of this study that ICTs permit women in SMEs to manage expenditures. Instead of posting mail and driving around to deliver quotations, women make use of emails and faxes. They save on travelling costs to attend meetings, through the use of video conferencing, and can communicate with their clients or partners abroad or in other towns, by using basic facilities such as Skype. They also use Google chat (Gtalk) and social networks such as Twitter and Facebook to chat and exchange business information.

The versatility of ICTs has become an advantage to the participants as they are capable of performing all their business tasks whilst they are at home with their families, incurring little or no cost at all. This is different from the situation when there were no ICTs as they would have needed to travel to attend meetings and thus be away from their families.

The ability of ICTs to cut down costs in business is evidenced from the study by Munyua and Mureithi (2008:19); Jain (2004:3) where women in SMEs were using their cell phones to call their suppliers instead of going there to order their raw materials. They realised a significant reduction in transport and production budgets. The findings of Munyua and Mureithi (2008:19) and Jain (2004:3) agree with the findings of this study, that women in SMEs were able to keep the running costs of their businesses low.

5.4.1.3 Access to available information

The findings of this research reflect that access to information is crucial in the women's businesses because as one participant said, they "get to know what is happening in their areas of expertise". ICTs permit information to be available anytime for users to make informed decisions about their tasks or projects. Availability of information to women in SMEs broadens their knowledge base, for example the use of website browsers to search for information about their businesses, products and services. Some participants noted that it was easy to make a business decision based on the information that you have managed to research.

Access to information enhances the way the business operates, one participant highlighted that her "company did subscribe to an online organisation that helps them deal with labour related issues". They opted to subscribe to this online organisation, instead of hiring a human resources consultant, because for them it is less expensive to pay the subscription than to hire a consultant.

ICTs provide easy access to information that empowers women in SMEs to make timely informed decisions. Examples of timely informed decisions are:

- Participants who publish diaries and books, they need to know the due dates to submit their work to the publishers so that the launch of such new material will go as planned.
- All participants have to submit company returns to SARS on time.
- Those involved in teaching mathematics and science need to have reports on time so as to prepare their students' reports on time.
- Those who build websites need to ensure that the projects are ready according to the agreed terms and conditions of the projects.

Access to information through all communication systems such as radio, television, newspapers, and internet helps in broadening their knowledge base. Widely read business people come up with new ideas that help grow their businesses. ICTs allow women in SMEs to get prompt feedback whenever they are communicating with their stakeholders.

5.4.1.4 Autonomy

As mentioned in the literature review, authors such as Erogul and McCrohan (2008:178); Orhan and Scott (2001:232); Winn (2004:143) and Kitching et al. (2005) found out that many women seek independence. They leave their jobs to start their own businesses and thereby gain control over their working lives. This agrees with the findings of this research which revealed that most of the women felt that they had reached a decision point in their careers. In order to make use of their qualification and experience, it was necessary for them to venture on their own. The interviews showed that ICTs have helped women to schedule their flexible working hours as most of them are working from home.

Women in SMEs revealed that they wanted to take charge of these business ventures. They did not want to ask for permission to attend to a sick child or to stop working to take their children to sporting activities. Some participants were surrounded by books and their passion to write was ignited. They capitalised on the availability of information provided by ICTs and started writing books and publishing mom diaries. One of the participants said that she wanted to have her own Day Care but did not have information on how to run it. ICTs helped her to gather information about managing and running a centre. When an opportunity arose to take over a Day Care centre she was well equipped to write a proposal to get funding for her business plan and manage it thereafter. Women in SMEs have managed to establish their own ventures while utilising ICTs to enhance their economic independence. Instead of working for other entities, they have become managers of their own businesses where they make decisions that determine

the growth of their businesses. The participants are able to document the rules and regulations on how to conduct business in their own establishments with the aid of ICTs. ICTs have given women autonomy to manage their businesses enhancing their economic participation.

In a study conducted by Martin and Wright (2005:170) it was found that ICTs enable women to conduct business without being prejudged by their gender. It is evident from the analysis of the data that women feel that ICTs help them to break those barriers of entry into business environments that they could not penetrate before. Women in SMEs are utilising ICTs such as Twitter to present themselves as important stakeholders of society and equal competitors to their male counterparts in business as illustrated in Figure 5.5.

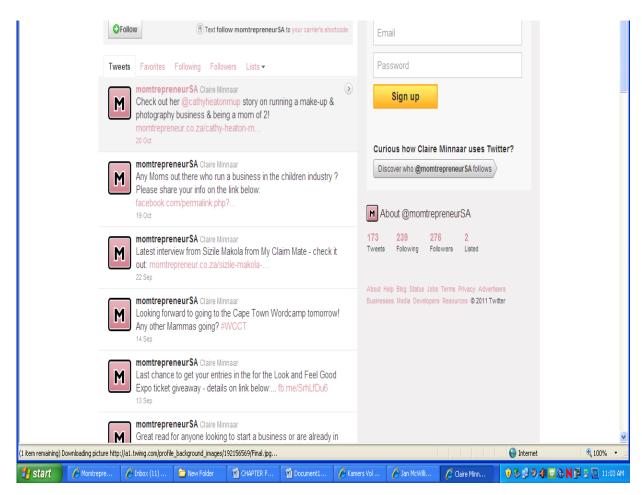


Figure 5.5 Print screen: Momtrepreneur (http://www.momtrepreneur.co.za/mommy-blogging/)

5.4.1.5 Striking a balance between work and family

It is evident from the data collected that most of the women in SMEs were working from home because ICTs are giving them the flexibility to do so. The participants needed flexible schedules that are not as strict as their former employment, so that they can have more quality time with their families. They decided to leave their jobs so that they could prioritise nurturing their families.

Utilising ICTs has given women in SMEs control over their careers and managing their families. They can plan how they want to achieve this without the complications of the rigid time management that is demanded in the corporate world. As they work from home using ICTs they can send emails and get quicker responses to their business communications than by using physical mail. They will end up with more time to spend with their families. This is in line with what was mentioned by Winn (2005:382) that business ownership offers women the ability to juggle their time between running a business and taking care of the family.

The findings from the data revealed that the participants, now that they are utilising ICTs to run their businesses, are capable of managing their time between work and family. Some of the participants said that they work when their children are at school, some use their maids to help them out, some said that they work from morning until three in the afternoon and then stop and focus on their families.

The interviews revealed that women in SMEs balance their time between work and family as they are assisted by ICTs to schedule their tasks. Electronic organisers on their cellphones and emails are important components of ICTs, which enabled some of the participants to track their tasks to completion. This guarantees that important emails are not missed, intended recipients of emails are not omitted and all the other important issues on the "to do list" are accomplished on time, as they make use of Microsoft Office OneNote 2007 as illustrated by Figure 5.6.

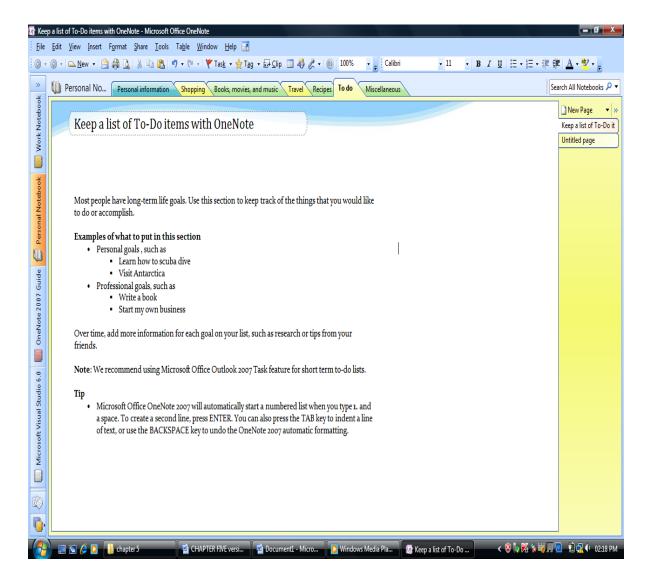


Figure 5.6 Print screen: Microsoft Office 2007 (http://www.microsoft.com/en-us/default.aspx)

5.4.1.6 Accessibility of ICTs

This study has found that women in SMEs perceive ICTs as accessible in terms of cost. They have highlighted that there are a lot of ICTs available on the market such as hardware, software and communications networks to use in their businesses. There are only two service providers with large communications network coverage. They choose the ones that are relevant to their business and are reasonably priced. Their choice is determined by quality of product or service and the cost of utilising the selected ICTs.

5.4.2 Challenges

5.4.2.1 Computer literacy and training

Training is one of the crucial activities in running a business. The participants' training budgets could not meet the prohibitive costs charged by some of the training centres and therefore most of the women failed to attend important workshops. Data revealed that some women have resorted to teaching themselves or learning on their own even if it takes a full day to learn a single thing. Jalbert (2000:28) and Sadi and Al-Ghazali (2010:2) also found that the women's ability to run successful businesses is hampered by lack of training. The findings of this study confirm that women are still facing the training challenge, meaning that this situation has not improved.

Women in SMEs face different challenges when using ICTs. Vodanovich et al. (2010:4) report that in countries such as the United Arab Emirates "women lack computer skills so ICT training is of the utmost importance if women are to use the technology of their choice. Gaining the required skills will empower women to use ICTs in many ways such as contributing to community development". This opinion is shared by many participants who reiterated that they do not have the necessary computer skills required to fully utilise their ICTs.

The participants said that it is easy to spend more time teaching themselves how to create blogs and websites. Because it is expensive for women in SMEs to outsource these training activities, they have opted to teach themselves. The process of self tutoring does consume time meant for running the businesses.

5.4.2.2 Internet connectivity problems

Women in SMEs highlighted that when their home network or Service Provider network is down it becomes difficult to operate their daily business schedules.

Data revealed that the participants have experienced the malfunction of the internet network from their respective service providers, which prompted them to look for alternatives. Some of the businesses have to stay connected because they are heavily dependent on internet connectivity. It then becomes expensive for the participants when they end up using local internet cafes that charge exorbitant fees. Thus unreliable connectivity can impact heavily on their business running costs.

The interviews revealed that some of the service providers are either expensive or their service can be very inconsistent. In their study Elnaggar (2008:209); Islam and Hasan (2009:537);

Olatokun (2008:53) found that irregular power supplies and underdeveloped communication systems present significant obstacles for achieving internet connectivity in some communities. This correlates with the findings of this research where women in SMEs are still facing Internet connectivity problems.

5.4.2.3 Breakdown and upgrading of equipment

Even though women in SMEs appreciate having ICTs in their businesses, ICT equipment sometimes breaks down in the middle of a meeting or during the weekend when all workshops are closed. It is hard to salvage all the information on the laptop or desktop machine after a virus attack. One participant could not make use of her laptop after it had crashed. A majority of the participants have suffered from the breakdown of equipment, and have learned to make use of CDs and DVDs for back up purposes.

Another challenge of using ICTs that was highlighted by women in SMEs is the upgrade of hardware equipment and software. Some software upgrades are expensive as the suppliers require these buyers to buy the whole package, and not only the modules that they use. Software upgrades may fail to run on existing equipment and this may force the owners to either buy new equipment or remain on older versions that make it difficult for them to exchange information with their counterparts on the latest versions of the software, especially those participants who specialise in graphic and web design.

5.4.2.4 Limited use of ICTs by external entities

Some of the women interviewed in this study mentioned that the limited use of ICTs by their external entities hampered the operations of their businesses. Some participants stated that there are some governments departments and local municipalities that are still operating manually and do not make use of emails.

Some of the participants mentioned that they spent precious time travelling to the offices of their external entities in order for a transaction to be processed. Because of beauracracy the transaction can take longer than expected. Such delays affect the business in terms of income and costs. The longer a transaction takes to process the more it affects the profitability of the business and other opportunities that depend on that transaction can be missed.

5.5 Summary

From the findings of this study, it is evident that women in SMEs in the Cape Metropolitan have embraced ICTs in their businesses. They are taking advantage of ICTs to empower themselves

even though there are still some barriers in their way. It seems now that women are utilising ICTs to push for more economic participation as they are running their businesses.

The recommendations and conclusions will be presented in the next chapter.

CHAPTER 6

SUMMARY AND CONCLUSIONS

6.1 Introduction

The world is slowly becoming a global village because of ICTs disseminating information to the world population. Women in SMEs are part of this global village but they have been lagging behind in the business world. Their importance to society cannot be understated as their efforts will contribute to the development of the country. In South Africa's recent past women were not given the opportunity to represent themselves as business people because of legislative and non legislative discrimination. This has robbed them of the opportunity to participate in the economy as equals with their male counterparts.

Failure by women to partake in the economy results in poverty and anarchy in many communities. These communities can benefit if women are given a chance to contribute to the local economy. ICTs are opening up various avenues and previously closed doors, allowing women in SMEs to take part in the business environment.

This study was about the use of ICTs as a tool of empowerment by women in SMEs in the Cape Metropolitan area. The aim of this study was to explore if women in SMEs were utilising ICTs to empower themselves to overcome the economic discrimination they have suffered in the past. This was to determine to what extent women were utilising ICTs in their business establishment in order to declare their presence as important stakeholders of society. The benefits derived and challenges faced by women in SMEs when they are utilising ICTs in their quest for empowerment through their businesses, were also investigated.

6.2 Summary

The chapters of the study are summarised as follows:-

The literature review of the study was carried out in chapter two, where the significance of SMEs to the South African economy was outlined, the benefits derived from utilising ICTs by SMEs and the challenges faced by SMEs. The importance of women in SMEs with the challenges they face when establishing their own ventures, as well as the benefits they derive when they are utilising ICTs were identified. A look at the utilisation of ICTs in the corporate environment with regard to women and the successful utilisation of ICTs by women for empowerment around the globe closed the discussion.

Chapter three discussed the methodology of the study. A qualitative research approach was applied in this study because this approach gives the participants the freedom to articulate their experiences concerning the use of ICTs in their businesses. Semi-structured interviews were used as a data collection method, because of their capacity to enable the researcher to probe more deeply into responses from the participants. The target population was comprised of women of all races from the suburbs of Claremont, Pinelands, Mowbray, Gardens and Rondebosch. A snowball sampling method was selected for this study as the first few participants introduced the researcher to the other participants.

In Chapter four data was presented according to the layout of the interview schedule which was as follows, Section A presented the personal and business details of the participants and their businesses. Section B tackled the benefits derived and challenges faced by women in their quest to empower themselves using ICTs. Section C discussed how women in SMEs were utilising ICTs to benefit their business growth while eliminating their economic discrimination.

The results of the study were outlined in chapter five, where it was found that women in SMEs are utilising ICTs to empower themselves by exchanging information with various businesses using different types of platforms such as their blogs, Flickr, Twitter and, Facebook. They can network with other businesses, and promote their products and services through the social and business networking sites which has resulted in an increase of their customer base. Women in SMEs are utilising DVDs and CDs to backup their business data and information, and for business transactions they are using Internet banking. Their self-esteem has improved as they are able to use ICTs to enhance their business decisions while independently running their own ventures

From the study, the benefits derived by women in SMEs from the utilisation of ICTs were flexibility, the ability to work anywhere where they are comfortable, access to available information, the management of expenditure, and the utilisation of social and business networking sites such as Facebook, blogs, Flickr and LinkedIn to advertise their services and products

The women in SMEs, interviewed in this study, highlighted several challenges that they face. The first was training. Most of them have taught themselves how to use ICTs as they were not computer literate when they first set up their businesses. Besides training it was evident from the study that the other challenges that women in SMEs have experienced are the malfunction of their home or Service Provider networks, the breakdown and upgrading of equipment and the

fact that some of their external entities still have not applied ICTs to communications, such as emails.

6.3 Conclusion

The research looked at how women in SMEs were utilising ICTs in their businesses to empower themselves in order to bring an end to their economic discrimination. The objectives of the study were met. Women in SMEs are at an advanced stage of utilising ICTs in their businesses. They have utilised business and social networking sites to exchange information, promote their products and increase their customer base.

The challenges faced and the benefits derived by women in SMEs from utilising ICTs were highlighted. Some of the benefits acknowledged were the flexibility that ICTs grant women in SMEs as they are able to work anywhere anytime, the ability to manage expenditure and to have access to available information. There are challenges that women in SMEs still face such as access to finance, access to markets and lack of technological training. This study recommends the following:-

- The Government should offer training on how to manage businesses and how to use ICTs through its agencies or ministries especially the ministry that represents women and children. Even private companies could contribute to the upliftment of the women in their societies, as it is their corporate social responsibility, because when women are trained they impact their communities positively, as the saying goes "educate a woman and you educate the world".
- Bodies such as the Chamber of Commerce, and the City Council could arrange workshops with established businesses and invite women business owners to show case their businesses. There is a need to have a place that can provide information and support for new business owners where they can draw inspiration to enable them to improve the running of their businesses.

6.4 Further research

The limitation to the study was that the study was done in five suburbs of the Cape Metropolitan area only. In future the research could be done covering the whole Cape Metropolitan area.

For future research an analysis could be done to investigate the differences between challenges faced by SMEs run by women in rural areas and those in urban areas, who have adopted ICTs to empower themselves.

Another future research area could be to explore how women in SMEs are taking advantage of the fast growing social and business networking technologies such as Facebook, LinkedIn, Flickr, Twitter and Skype to promote the marketing of products and as a means to enhance their publicity. This could be a way to compare marketing in terms of using old methods against the new methods of using ICTs.

This study will contribute to the body of knowledge by providing the literature with information on how women are leaving their professional careers to establish their own businesses in a South African context. They seek flexibility and independence as they want to work from home nurturing their families, while at the same time using different types of ICTs to support and showcase their services.

Bibliography

Abor, J. & Quartey, P. 2010. "Issues in SME Development in Ghana and South Africa", *International Research Journal of Finance and Economics*, 39: 218 -228.

Alam. S., Khatibi, A., Ahmad, M. & Ishmail, H. 2007. Factors affecting E-commerce adoption in the Electronic Manufacturing Companies in Malaysia. *International Journal of Commerce and Management*, 17(12): 125-139.

Al-Ashtal, A. 2010. Empowering Women through ICTs. Relating Policy to Knowledge. *Sheba Centre for Strategic studies*.

Alberto, B.M. & Fernando, L.L. 2007. A firm-level analysis of determinants of ICT adoption in Spain. *Technovation*, 27: 352-366.

Al-Lamky, A. 2007. Feminizing leadership in Arab societies: the perspectives of Omani female leaders. *Women in Management Review*, 22(1): 49.

Apulu, I. & Latham, A. 2009. Information and Communication Technology Adoption: Challenges for Nigerian SMEs. *TMC Academic Journal*, 4(2):64-80.

Babbie, E. & Mouton, J. 2009. *The Practice of Social Research*. Oxford University Press, 270, 49,166-167.

Babbie, E. 2010. *The Practice of Social Research. Twelveth Edition*. Wadsworth, Cengage Learning: 84, 193.

Bacon, N. & Hoque, K. 2005. "HRM in the SME Sector: Valuable Employees and Coercive Networks," *The International Journal of Human Resource Management*, 16(11):1976-1999.

Baggallay, S. 2011. The cost of women in the workplace. http://www.tomorrowtoday.co.za/2011/01/14/the-cost-of-women-in-the-workplace/ (20 July 2011).

Baharul Islam, K.M. 2009. Rural Entrepreneurship for Women: A Case for Wealth Creation by Africa's Rural Poor amidst Global Financial and Economic Crises. African Economic Conference. Fostering Development in an Era of Financial and Economic Crises. 11 – 13 November 2009. United Nations Conference Centre. Addis Ababa, Ethiopia.

Baldwin, A., Lymer, A. & Johnson, R. 2001. Business Impacts of the Internet for Small and Medium-Sized Enterprises, in Barnes, S. & Hunt, B.; (eds.), *E-Commerce and V-Business:* Business Models for Global Success, Butterworth Heinemann:103-120.

Beckinsale, M. & Ram, M. 2006. Delivering ICT to ethnic minority businesses: an action-research approach. *Environment and Planning C: Government and Policy*, 24(6):847-867.

Berry, P., von Blottnitz, M., Cassim, R., Kesper, A., Rajaratnam, B. & van Seventer, D.E. 2002. The Economics of SMMEs in South Africa. Trade and Industrial Policy Strategies. Johannesburg, South Africa.

Best, M.L. & Maier, S.G. 2007. Gender, Culture and ICT use in rural South India. *Gender, Technology and Development*, 11(2): 137-155.

Blaikie, N. 2000. Designing Social Research. Cambridge Polity:8.

Bless, C. Smith, C.H. & Kagee, A. 2006. Fundamentals of Social Research Methods. An African Perspective. Fourth Edition. Juta and Company Ltd: 106.

Brush, C., Carter, N., Gatewood, E.& Hart, M. 2004. Clearing the hurdles: Women building high-growth businesses. *Prentice – Hall*, Upper Saddle River, N.J.

Buiten, D., Monareng, K.N., Sparrow, I. & Brijmohan, E. 2007. "Agenda Issue. ICTs Women Take a Byte". *Agenda Feminist Media*: 71.

http://www.agenda.org.za/content/blogcategory/88889071/ (1 June 2010).

Business Women Association South Africa.

www.bwasa.co.za/Portals/4/docs/BWACensus2010Report.pdf (1 June 2010).

Buskens, I. & Webb, A. 2009. *African Women and ICTs. Investigating technology, gender and empowerment.* Zed Books, London.

Carter, S. 2000. *Enterprise and small business: Principles, Practice and Policy*. Prentice-Hall. London.

Carter, S., Anderson, S. & Shaw, E. 2001. Women's business ownership: a review of the academic, popular and internet literature. Report to the Small Business Service, Glasgow.

Cassar, G. 2004. The financing of Business Start-Ups. *Journal of Business Venture*, 19(2): 261-283.

Celebration. Http://blog.celebration.co.za/ (10 August 2011).

Centre for Women's Business Research. Knowledge that means business. <u>Http://www.womensbusinessresearch.org</u>s Business Research. (2 October 2011).

Corso, M., Martini, A., Pellegrini, L. & Paolucci, E. 2003. Technological and organisational tools for knowledge management in search of configurations. *Small Business Economics*, 21(4):397-408.

Dejene, Y. 2007. Promoting Women's Economic Empowerment in Africa. Africa Economic Conference, Addis Ababa. 15 – 17 November 2007.

Department of Trade and Industry. 2005. South African Women in business. A burgeoning force in our economy. A special Report. Pretoria: DTI.

Department of Trade and Industry.2003.

www.thedti.gov.za/publications/WomeninBusinessSisebenza.html. (20 May 2010).

Dlodlo, N. 2009. Access to ICT education for girls and women in rural South Africa: A case study. *Technology in Society*. Elsevier Ltd, 31:168.

Dolan, C. 2002. Gender and employment in high-value agriculture industries. *USAID Development Research Management Portal*.

Elnaggar, A. 2008. Towards gender equal access to ICT. *Information Technology for Development*, 14(4) 208-293.

Erogul, M.S. & McCrohan, D. 2008. Preliminary investigation of Emirati women entrepreneurs in the UAE. *African Journal of Business Management*, 2(10):187.

Falkena, H., Abedian, I., Blottnitz, M., Coovadia, C., Davel, G., Madungandaba, J., Masilela, E. & Rees, S. 2001. "SMEs' Access to Finance in South Africa, A Supply-Side Regulatory Review", The Task Group of the policy Board for Financial Services and Regulation, www.finance.gov.za/documents/smes. (30 May 2010).

Fan, Q. 2003. Creating A Conducive Legal & Regulatory Framework for Small and Medium Enterprise Development in Russia. A Policy Dialogue Workshop, St. Petersburg, Russia September 14-16, 2003: Importance of SMEs and the Role of Public Support in Promoting SME Development.

Gibb, H. 2003. Gender mainstreaming good practices from the Asia Pacific Region. The North-South Institute, 2001. International Trade Centre.

Gillard, H., Howcroft, D., Mitev, N. & Richardson, H. 2008. "Missing Women": Gender, ICTs, and the Shaping of the Global Economy. *Information Technology for Development*, 14 (4): 262–279.

Global Entrepreneurship Monitor, 2006. Report on Women and Entrepreneurship. Babson College and London Business School.

Government Gazette of the Republic of South Africa. 2003. National Small Business Amendment. Http://www.info.gov.za/gszette/acts/2003/a26-03. (9 August 2010).

Gray, D. E. 2009. *Doing Research in the Real World. Second Edition*. Sage Publications Limited, 35-36,373.

Green, L. 2004. Gender-based Issues and Trends in ICT Applications in Education in Asia and the Pacific, UNESCO. Bangkok.

Griffiths, M. & Moore, K. 2006. The women in IT (WINIT) Final Report, Greater Manchester: University of Salford/ESF, ISBN-905732-05-8.

Gurumurthy, A. 2006. Promoting gender equality? Some development-related uses of ICTs by women. *Development in Practice*. Oxfam GB, 16(6):612-613.

Gurumurthy, A. 2004. Gender and ICTs. Overview report. Brighton, United Kingdom. *Bridge*. <u>Http://www.bridge.ids.ac.uk/reports/CEP-ICTs-OR.pdf</u> (9 August 2010).

Hafkin, N. J. 2002. Are ICTs Gender Neutral? A Gender Analysis of six case studies of Multi-Donor ICT Projects. UN/INSTRAW Virtual Serminar Series on Gender and ICTs, 14.

Hammer, A., Jabara, C., Bloodgood, L. & Grossman, N. 2010. Small and medium-sized Enterprises: Overview of participation in United States Exports. *United States International Trade Commission Publication 4125.*

Hennink, M., Hutter, I. & Bailey, A. 2011. *Qualitative Research Methods*. Sage Publications: 16.

Herman, C. & Debbie, E. 2005. Women IT technicians – moving through the glass partition. In: Crossing Cultures Changing Lives: Integrating Research on Girls Choices of IT Careers, 31 July – 3rd August 2005, University of Oxford, UK.

Holliday, A. 2009. *Doing and writing qualitative research*. Second Edition. Sage Publications: 89-90.

Huyer, S. 2005. Women, ICT and the Information Society: Global perspectives and Initiatives. ACM International Conference, International Symposium on Women and ICT: Creating Global Transformation, Baltimore MD.

Huyer,S. & Sikoska, T. 2003. Overcoming the gender digital divide. Understanding ICTs and their potential for the empowerment of women. Instraw Research Paper Series number 1. http://www.un-instraw.org/en/docs/gender_and_ict/Synthesis_Paper.pdf (9 August 2010).

Ibarra, H. & Zahidi, S. 2010. The Corporate Gender Gap Report, World Economic Forum.

International Telecommunications Union. 2005. Tunis agenda for the Information Society. http://www.itu.int/wsis/docs2/tunis/off/6rev1.html (20 August 2010).

Islam, M. S. & Hasan, M.N. 2009. Multipurpose Community Telecentres in Bangladesh: Problems and Prospects. *Electronic Library*, 27(3): 537 – 553.

Jain, S. 2004. ICTs and Women's Empowerment: Some Case Studies from India. . http://www.ifuw.org/seminars/2007/jain.pdf. (9 August 2010).

Jalbert, S.E. 2000. *Women in business in the Global Economy Study*. Centre for International Enterprise, Washington, DC.

James, T., Roodt, J., Primo, N. & Evans, N. 2006. Women in the Information and Communication Technology Sector in South Africa. Meraka Institute, 3.

Kapurubandara, M. & Lawson, R. 2008. Availability of E-commerce Support for SMEs in Developing Countries. *The International Journal of Advances in ICT for Emerging Regions*, 1(1):3-11.

Kitching, B.M., Mishra, R. & Shu, X. 2005. Female entrepreneurs in transitional economies: A comparative study of women in the business workplace in India and China. Aberu Discussion Paper.

Kotelnikov, V. 2007. Small and Medium Enterprises and ICT. United Nations Development Programme – Asia-Pacific Development Information Programme (UNDP-APDIP) and Asian and Pacific Training Centre for Information and Communication Technology for Development (APCICT).

Kvale, S. & Brinkmann, S. 2009. *Interviews. Learning the craft of qualitative Research Interviewing. Second Edition.* Sage Publication, 1,124,128.

Locke, S. 2004. "ICT Adoption and SME Growth in New Zealand," *Journal of American Academy of Business*, 4 (1/2): 93-102.

Long, J. 2005. There is no place like home?: Domestic Life, Gendered Space and Online Access. ACM International Conference, International Symposium on Women and ICT: Creating Global Transformation, Baltimore MD.

Luka'cs, E. 2005. The economic Role of SMEs in World Economy, Especially in Europe. *European Integration Studies*, (1):1-3.

Luttrell, C., Quiroz, S., Scrutton, C & Bird, K. 2009. *Understanding and operationalising empowerment. Working paper for the poverty-well being platform.* London, United Kingdom: Overseas Development Institute.

Maier, S. & Nair-Reichert, U. 2007. Empowering Women Through ICT-Based Business Initiatives: An Overview of Best Practices in E-Commerce/E-Retailing Projects. *MIT Press*, 4(2):43-44.

Makombe, I.A.M. 2007. The impact of women's entrepreneurship development programmes on empowerment programmes: Findings from Tanzania. *Africanus*. Unisa Press, 37(1):55.

Manueli, K., Latu, S. & Koh, D., 2007. ICT Adoption Models. 20th Annual Conference of the National Advisory Committee on Computing Qualifications. Nelson. New Zealand.

Maps of the Western Cape. http://www.aboutsouthafrica.com/maps_westerncape.htm. (21June 2011).

Marcelle, G.M. 2000. Transforming Information & Communications Technologies for Gender Equality", Gender in Development Monograph Series # 9.New York: *UNDP.*

Marlow, S. & Patton, D. 2005. The financing of small business – female experiences and strategies, International handbook of women and small business entrepreneurship. United States of America. *Edward Elgar*, 719.

Martin, L. M. & Wright, L. T. 2005. No gender in cyberspace? Empowering women entrepreneurship and innovation in female-run ICT small firms. *International Journal of Entrepreneurial Behaviour & Research*, 11(2):163-170.

Martinez, J. & Reilly, K. 2002. Empowering women for public policy advocacy. Looking behind the internet to enable citizen information systems. Background paper prepared for the Instraw Virtual Seminar series on Gender and ICTs. www.un-instraw.org/en/research/gender_and-ict/virtual-seminars.html. (9 August 2010).

Mathur-Helm, B. 2005. Equal opportunity and affirmative action for South African women: a benefit or barrier? *Women in Management Review*. Emerald Group Publishing Limited 20(1): 56.

Mbarika, V.W.A., Payton, F.C., Kvasny, L. & Amadi, A. 2007. IT Education and Workforce Participation: A New Era for Women in Kenya?, *The information Society*, 23(1)1-18

Melhem, S. & Tandon, N. 2009. Information and Communication Technologies for Women's Socio-economic Empowerment. World Bank Group Working Paper Series: 73.

Meridian International Centre the Maxum Business Incubator at the Hub. www.mdwit.org/index.php?ht=d/ContentDetails/i/336/pid/180 (27May 2010).

Microsoft Office 2007: Print screen (http://www.microsoft.com/en-us/default.aspx). (9 August 2010).

Mijumbi Epodoi, R. 2005. Women in the Information Society, Bridging the Gender Gap. Edited by *UN CHRONICLE*, 36: 41-42.

Mijumbi, R.2002. ICTs as a tool of empowerment of women: experiences from the use of a CD ROM by rural women in Uganda. Division for the Advancement of Women (DAW). United Nations: 1-12.

Mistry, S,H. 2010. Women in the Corporate World. Access to information technology. *The Business Forum Journal.* The Business Forum Institute.

Modimogale, L. & Kroeze, J.H. 2011. The role of ICT within Small and Medium Enterprises in Gauteng. *IBIMA Publishing*,1-12.

Mom Diary. http://momdiary.co.za/category/what-people-are-saying-about-the-new-m-o-m-diary/ (11July 2011).

Momtreprenuer. http://www.momtrepreneur.co.za/the-business-coach-book-review/ (11 July 2011).

Morgan, D.E. 2008. Women in Africa's Development: Pushing for Progress through Entrepreneurship Education Complimented by On-going Coaching Sessions. A Case Study Paper. The Fifth Pan-Commonwealth Forum on Open Learning. University of London, UK, 13-17 July 2008, 1-5.

Mostert, J. & Ntetha, M. 2008. Information and Communications Telechnologies (ICTs) in Secondary Educational Institutions in the Umhlatuze Municipality, South Africa: An Insight into their Utilisation, Impact and the Challenges Faced. *South African Journal of Libraries and Information Science*, 74 (1) 23-40.

Mouton, J. 2006. *Understanding Social Research*. Van Schaik Publishers, 110.

MTN Business South Africa.

<u>www.itweb.co.za/index.php?option=com_content&view=article&id=33174:mtn-sa-empowers-eastern-cape-community-with-r27m-investment&catid=69&Itemid=58</u> (1 June 2010).

Mukongolo, M. 2010. Job creation versus job shedding and the role of SMEs in economic development. *African Journal of Business Management*, 4(11):2288-2295.

Munyua, A.W. & Mureithi, M. 2008. Harnessing the power of the cell phone by women entrepreneurs: New frontiers in the gender equation in Kenya. *Grace Research Report*. Kenya.

Mutula, S. & Van Brakel, P. 2007. ICT skills readiness of SMEs in the ICT sector in Botswana with respect to information access. *The Electronic Library*, 24(3):402 - 417.

Nagarajan, K.V. & Potter, E. 2000. *Women Entrepreneurship. The current state of business disciplines*. Dahiya, India. Spellbound Publications.

Ndiwalana, A. & Tusubira, F.F. 2006. ICT in Small Businesses: How can Academic Networks be more relevant?. *Open Access:* 1-4.

Nel, J.P. & Com, D. 2007. *Epistemology Vs Ontology*., Mentornet. http://www.mentornet.co.za/files/documents/EPISTEMOLOGYVSONTOLOGY.pdf:63 (24 July 2010).

Nguyen, T., Sherif, J. & Newby, M. 2007. Strategies for successful CRM implementation. *Information Management and Computer Security*, 15(2):102-115.

Ngwenyama, O. & Morawczynski, O. 2007. Factors affecting expansion in emerging economies: an analysis of ICT infrastructure expansion in five Latin American countries. *Information for Technology Development*. http://www3.interscience.wiley.com/

O'Neill, R.C.& Viljoen, L. 2001. Support for female entrepreneurs in South Africa: Improvement or decline? *Journal of Family Ecology and Consumers Science*, 29:37-44.

OECD. 2001a. Science, Technology and Industry Outlook: Drivers of Growth: Information Technology, Innovation and Entrepreneurship, OCED, Paris.

OECD. 2004. ICT, E-Business and SMEs. OCED, Paris.

Olatokun, W. 2008. Gender and National ICT Policy in Africa: Issues, Strategies and Policy Options. *Information Development*, 24(1):53 – 69.

Olawale, F. & Garwe. D. 2010. Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach. *African Journal of Business Management*, 4(5):729-731.

Ongori, H. 2009. Role of Information Communication Technologies Adoption in SMEs. Evidence from Botswana. *Journal of Information Technology*, 1:79 – 85.

Orhan, M. & Scott, D. 2001. Why women enter into entrepreneurship: an explanatory model. *Women in Management Review*, 16(5):232-243.

Parmentier, M.J.C & Huyer, S. 2008. Female Empowerment and Development in Latin America: Use Versus Production of Information and Communications Technologies and International Development, 4(3):13-20.

Perrons, D. 2004. Globalization and Social Change, Routledge, London.

Pitroda, S. 2002. Changing the focus of IT: From industry to people. *ASCI Journal of Management*, 31(1-2):9-15.

Premkumar, G. 2003. A meta-analysis of research on information technology implementation in small business. Journal of Organisational Computing and Electronic Commerce, 13(2):91-121.

Rahim, R. A. 2008. Creating a world of equal opportunities. *Global Knowledge Partnership*, Malaysia. www.i4donline.net.

Richards, L. & Morse, J.M. 2006. *Readme first for a user's guide to qualitative methods. Second Edition*. London Sage Publications, 111.

Ritchie, B. & Brindley, C. 2005. ICT adoption by SMEs: Implications for relationships and management. *New Technology, Work and Employment*, 20(3):205-217.

Rosser, S.V 2000. Women, science and society. New York: Teachers College Press.

SA Kids on the Go. http://www.sakidsonthego.com/activity_list.php?activitytypeno=5 (20 August 2010).

Sadi, M. A. & Al-Ghazali, B.M. 2010. Doing business with impudence: A focus on women entrepreneurship in Saudi Arabia. *African Journal of Business*, 4(1):2.

Saghir, A., Ashfaq, M. & Noreen, A. 2009. Gender and Information and Communication Technologies. *The Journal of Animal and Plant Sciences*, 19(2):94-97.

Sandys, E. 2005. Gender equality and empowerment of women through ICT UN Division for the Advancement of Women. http://www.elds.org/static/DOC20345.htm. (20 August 2010).

Sannikova, E. 2007. Regulatory Impediments to Enterprise Development: Mobilising Women's Economic Potential. International Conference on Reducing Barriers to Entrepreneurship and Encouraging Enterprise Development: Policy Options. Salle VII, Palais des Nations 18-19 June 2007.

Sanyang, S.E. & Huyang, W. 2008. Small and Medium Enterprise for Women Entrepreneurs in Taiwan. *World Journal of Agricultural Science*, 4 (S):884-890.

Sarmento, J. 2009. Information and Communication Technologies for Development. Examples from India and Uganda. *Revista Electronica Teoria de la Education. Educacion y Cultura en la sociedad de la Informacion*, 10(2):196.

Sein, M.K. & Ahmad, I. 2001. A framework to study the impact of information and communication technologies on developing countries: The case of cellular phones in Bangladesh. *BIT World International*, Cairo, Egypt.

Selwyn, N. 2002. "E-stablishing an Inclusive Society? Technology, Social Exclusion and UK Government Policy Making." *Journal of Social Policy*, 31(1): 1-20.

Sengupta, A., Long, E., Singhal, A. & Shefner-Rogers, C. 2007. The Sada Says "We Women Have Our Rights". *International Communication Gazette*, 69(4): 335-353.

Small Business Administration (SBA). Office of Advocacy. 2009. *Frequently Asked Questions*, updated. http://www.sba.gov/advo/stats/sbfaq.pdf(20 August 2010).

Small Enterprise Development Agency.2004. http://www.seda.org.za/Pages/Seda-welcome.aspx. (31 August 2010).

Statistics South Africa Annual Report 2005

http://www.statssa.gov.za/publications/AnnualReport/AnnualReport2005.pdf. (24 August 2010).

Steup, M. 2005. Epistemology. http://plato.standord.edu/entries/epistemology/ (24 August 2010).

Storey, D. 1994. "Understanding the Small Business Sector", Routledge, London

Strandberg, N. 2002. Conceptualising empowerment as a transformative strategy for poverty eradication and the implications for measuring progress, United Nations Division for the Advancement of women (DAW), 1-11.

Stromquist N. 2003. Women, Education and Empowerment. The Theoretical and Practical Bases for Development. Google book, 45.

Taylor, M. & Murphy, A. 2004. SMEs and E-Business. *Journal of Small Business and Enterprise Development*. 11(3): 280-289.

Terry, A. & Gomez, R. 2010. Gender and Public Access Computing: An International Perspective. *Electronic Journal of Information Systems in Developing Countries*, 43(5): 1-17.

Thas, A.M.K., Ramilo, C.G. & Cino, C. 2007. Gender and ICT: United Nations Development Programme – Asia-Pacific Development Information Programme – E-Primers for the Information Economy, Society and Polity: India: Elsevier. www.apdip.net/news/gender. (5 December 2010).

Tran-Nguyen, A. & Zampetti, A.B. 2004. Trade and Gender: Opportunities and challenges for developing countries. New York and Geneva: United Nations Conference on Trade and Development, United Nations Inter-Agency Network on Women and Gender Equality, Task Force on Gender and Trade. http://www.unctad.org/en/docs/edm20042_en.pdf (12 May 2010).

UNDP, 2004. Promoting ICT for Human Development in Asia, Realising the Millennium Development Goals, Sri Lanka Regional human Development Report, Colombo, UNDP.

UNESCO. 2003. Gender Issues in the Information Society. A UNESCO Publication for the World Summit on the Information Society - Geneva, December 2003.

United Nations Economic Commission for Europe. 2004. Women's Self Employment and Entreprenuership in the ECE Region, Regional Symposium on Mainstreaming Gender into Economic Policies, 28 – 30 January 2004, UNECE Secretariat, Geneva.

United Nations, 2005. Strenghtening the capacity of national machineries through the effective use of ICT, in UN (Eds). Economic and Social Commission for Western Asia (ESCWA). Beirut, UNESCO

United Nations. 2009. Women, poverty and economics. http://www.unifem.org/gender_issues/women_poverty_economics/. (20 June 2011).

USAID publication. 2005. Development Alternatives, Inc Gender and Pro-Poor Growth.

Varghese, T. 2011. Women Empowerment in Oman. A study based on Women Empowerment Index. Far East Journal of Psychology and Business. 2(2):37-53.

Viju,M. 2010. Women entrepreneurship in Middle East: Understanding barriers and use of ICT for entrepreneurship developement. *International Entrepreneurship Management Journal*. Springer Science + Business Media, LLC.

Vodanovich, S., Urquhart, C. & Shakir, M. 2010. Same but different: Understanding Women's experience of ICT in the UAE. EJISIDC. 40(4) 1-21.

Welman, C. Kruger, F. & Mitchell, B. 2005. *Research Methodology. Third Edition*. Oxford Southern Africa, 2, 8-9, 69,165-166

Winn, J. 2005. Women Entrepreneurs: Can We Remove the Barriers?. *International Entrepreneurship and Management Journal.* Springer Science and Business Media,381-398.

Winn, J. 2004. Enterprenuership: Not an easy path to top management for women. Women in Management Review, 19(3):143 – 153.

Women Entrepreneurs Grow Global. http://womenentrepreneursgrowglobal.org/category/global-branding/. (31 August 2010).

WOMENACTION. Use of New Information and Communications Technology. http://www.womenaction.org/women_media/eng/2/ict.html. (31 August 2010).

Wooden Elements. http://www.woodenelements.co.za/custom-carpentry.html. (31 August 2010).

World Bank Group Gender and Development. 2006. http://www.doingbusiness.org/documents/Women_in_Africa.pdf (31 August 2010).

Zappala, S. & Gray, C.W.J. 2006. *Impact of e-commerce on consumers and small forms*. London. *Ashgate*.

Zawada, B, Wallmach, K., Ngcobo, M.,& Mabule, R.2007. Advisory Report on the Provision of Government Information and Services for Socio-economic Development in Local South African Languages of Choice, Using ICT Platforms. Research Commissioned by the Presidential National Commission on Information Society and Development. Pretoria. Department of Linguistics. University of South Africa.

Zikhali, W. (2009) Women in organisational management in Zimbabwe theory and practice, Thesis (Ph.D.) Development studies. University of Fort Hare, 2009.

Interview Schedule

Survey questionnaire to be used for interviews with women in SMEs.

This survey's aim is to investigate ICTs for empowering women in SMEs in the Cape Metropolitan Area Western Cape.

The questionnaire is expected to take approximately 20 minutes.

Informed consent

Participation in this survey is completely voluntary. Participants are assured that all their information will be strictly confidential and anonymous. No references will be made to specific individuals. All responses will be used for academic purposes. All questions are answered to your satisfaction. Your utmost honesty and cooperation in this survey is greatly appreciated.

Sponsor: Cape Peninsula University of Technology

Estery Ruhode
MTech Research Student
Faculty of Business
Cape Peninsula University of Technology
ruhodeestery@yahoo.com

Corrie Uys (Mrs)
Research Supervisor
RISC
Cape Peninsula University of Technology
uysc@cput.ac.za
021 460 3258

Dr A Koch

Co-Supervisor Cooperative Education Cape Peninsula University of Technology kocha@cput.ac.za 021 460 3024

Key Definitions:

Information and Communication Technology (ICT): - An umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them.

Section A. Personal details

1. Which type of business are you in?	
2. How many employees do you have?	

3. What is your turnover for the year? Approximately.

4a. What made you start your own business?
4b.Were you working before?
4c. In what capacity?
5. When you started your business, what were the main obstacles/problems you faced?
6. What have you done to overcome any of the obstacles?
Section B. Benefits derived and Challenges faced from ICTs. 1. How do you communicate on business matters?
2. Which types of ICTs are you using?

3. Which type of ICTs are you comfortable in using?

3a. How long have you been using ICTs?
4. How has your business benefited from using the ICTs?
5. Is it easy for you to make business decisions using ICTs? How?
6. Now that you are using ICTs, are you able to strike a balance between your work and family?
7. Do you face any challenges when using ICTs? What are these challenges?
8. How do you promote and distribute your products?
9. Has the use of ICTs improved your self-esteem? If yes how? If not why?

10. Are ICTs easily accessible in terms of cost?
Section C: Utilising ICTs to increase their business growth?
1. Do you exchange information with other businesses using ICTs? If yes what type of information?
2. Does the ICTs give you the freedom to network with other businesses? If yes how? If not why?
3. How do you advertise your business?
4. Do you make use of the internet? If yes what do you use it for in particular? If not why?
5. Do you use email in your business? For what purposes?
6. Do you make use of decision making systems such as spreadsheets in your business? For what purposes?

7. Has your business benefited from any radio and television programmes? If yes what are they, If no why?
8. Do you enjoy using DVDs and CDs in your business? If yes for what purposes? If not why?
9. Do you make use of internet banking to pay your suppliers or do any other business relate transactions?
10. Does ICTs give you the opportunity to stand up for yourself in business? (as woman). If yes how, not why?
11. Has the use of ICTs increased your customer base or helped your to reach new clients? If yes how, not why?

Thank you