

PART 1: OVERVIEW & BACKGROUND INFORMATION

1. INTRODUCTION

1.1 Overview

South Africa has officially been a democracy for 10 years and has had a taste of both the positive and negative aspects sides of all that comes with a democratic government. The face of South Africa's economic and social sectors has changed dramatically in some areas and less dramatically in others.

One of South Africa's major initiatives in all sectors is that of job creation and addressing the challenges of creating a knowledgeable and driven workforce. The aim of such an initiative is to create an indigenous knowledge base that can be used to help solve the problems and create opportunities within South Africa, so that industry does not have to spend millions of dollars seeking answers and guidance from the outside world. This spend could then be utilised more effectively be more useful if it were circulating within our own development sectors and helping promote job creation, job retention, and a shared indigenous knowledge base.

The Information and Communication Technology (ICT) sector has had the brunt of the most diverse yet short-lived opportunities to make money in South Africa and beyond. The Y2K frenzy that circumnavigated the globe for the last three years of the previous century housed a boom in companies that concentrated whole-heartedly on upgrading systems to be compatible with the change of millennium. Many of these companies lasted for a very short time and only the dynamic few survived the transition. So did this influx of job creation have a positive influence on South Africa or did it impact negatively on the market by saturating it with unemployed computer specialists? Either way, the future must guarantee sustainability in the workplace and enough elasticity for the market to host these specialists. The country as a whole loses these professionals on a daily basis to other countries that use them in turn, to make them money in South Africa.

This trend places major pressure on the ICT sector in South Africa to create enough opportunities within our own markets to retain these specialists and in turn to create new opportunities within the sector. There are many obstacles to be overcome to ensure a well balanced sector. To name a few:

- The cost of education and the access to education in proportion the social status that most South Africans find themselves in;
- The ever increasing cost of labour and retaining highly skilled professionals;
- The absence of knowledge sharing and the inability of different areas of the ICT sector, both in the on a private and public sector, to talk to each other;
- Encouraging youth to seek areas of opportunity within our borders and not to look overseas where the "big money" is;
- Handling the influx of foreign innovation and how to integrate new technologies and ideas into our markets without skipping the important stages of development; and.

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- How to implement “home grown” ideas successfully to compliment current structures and trends in South Africa.

The research that will be undertaken will identify the major trends that can assist growth within the ICT sector in South Africa by looking at market trends and opportunities locally and abroad. Research has been done in this sector by the South African IT Industry Strategy (SAITIS) in 2000 and this research will complement this report by using it to as a parallel understand the situation that South Africa was in during that project. That project will however not be the only point of reference for our research.

The research will focus on the following to ensure that the relevant models and trends are utilised to define the gaps and areas of growth to assist the industry as a whole:

- Results of the SAITIS project of 2000;
- South African context: current projects and initiatives undertaken within the ICT sector and the extent to which they contribute to solutions;
- Cross-sectors views concerning other models and initiatives that have been drawn up and undertaken to address the areas of growth and job creation within those sectors;
- International case studies and models that have worked/failed in other developing countries as well as developed countries addressing industry job creation issues within their countries;
- Comparison of well known and utilised models from industry and the academic environment that have evolved from studies and reviews on this topic within the ICT sector;
- Government initiatives and projects aimed that aim at job creation and industry development and growth both locally and abroad; and
- Initiatives that relate to sustainability as well as growth throughout different sectors within the broader scope of ICT.

1.2 *Current views, strategies and initiatives*

- Already existing are various SETAs that address the current skills levels of employees for the sector (Isett Seta – the ICT specific Seta and the Services Seta – cross sector). Under the auspices of the Department of Trade and Industry (**the dti**), the Department of Communications (DoC) and the Department of Science and Technology (DST) strategies for business development and incubation of new ICTs are already in place (The Savant project and the BEE ICT Companies database, The Competitive Fund, The Innovation Fund, CSIRs ICT incubator centres, regulatory frameworks to expand and stimulate the ICT sector, the African ICT Achievers Awards). These initiatives address specific needs of the ICT sector.
- The broad-based approach can be seen in the strategic plans developed by the Department of Communications' National IT Plan and the current development of the ICT Charter. Addressing the Youth issue is the Youth Development Trust that also addresses the current status of youth development within the ICT sector. Tertiary institutions are focussing on not only creating a skilled labour force but on creating environments for innovation and development for the ICT sector. This can be seen through the various graduate programmes in Information Science and Computer Science which not only address ICT specific needs but cross-sectoral issues such as like business development, knowledge management and social development.

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- The above-mentioned approaches are not exclusive to one another but are complimenting each other. The broad based initiatives create strategies for holistic views that identify specific needs, which feed into the need-specific programmes. Need-specific programmes address key issues that will have an overall influence on the sector and ultimately lead to change and expansion of feed into changing and expanding the current views as adapted by the broad-based strategies.
- What comes to light is that the proper channels to link the need-specific programmes with the broad based strategies are not always functioning or not properly in place. These obstacles lead to duplication and could sometimes hamper the development of the ICT sector. What is lacking is a mechanism to bond these two perspectives and to create a link between the different initiatives.
- The SAITIS project between Canada and South Africa: The strategy is based on four pillars of development. The project is notable in that the strategy has been developed as part of a participative process whereby all key stakeholder groups were involved, including government, business, labour, academia and civil society. Stakeholder participation was secured through working groups, workshops and executive-level fora. Governance was provided by a South African Project Steering Committee elected by, and representative of key, stakeholder groups.
- *Government Initiatives:*

The South African government is taking the following initiatives to create jobs within the ICT sector:

ISETT SETA and the Department of Labour have undertaken the following initiatives to skill labourers so that they are competitive in there their jobs.

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NSDS Objective 1: Developing a culture of high quality lifelong learning				
NSDS Success indicators	SETA Target To March 2005	SETA Target for 2002-3	SETA Assumptions	Assistance from the Department of Labour
1.1 By March 2005, 70 per cent of all workers have at least a Level One qualifications on the NQF	By March 2005, 95% (11000) of all workers to have a level One qualification on the National Qualifications Framework	By March 2003 92% (3 000) of workers in the sector to have level One qualification on the National Qualifications Framework.	Availability of data	To define baseline data against which progress to be assessed To provide assistance to the SETA in the use of the standard M&E system
1.2 By March 2005, a minimum of 15 per cent of workers to have embarked on a structured learning programme, of whom at least 50 per cent will have completed their programme satisfactorily	By March 2005, a minimum of 30 %(42600) of workers to have embarked on a structured skills development programme, of whom at least 60 %(25560) have completed their programme satisfactorily.	By March 2003, a minimum of 10 %(14000) of workers in the sector to have embarked on a structured skills development programme, of whom at least 30% (4200) have completed their programme satisfactorily.	NQF fully developed for sector training Assessors trained. ETQA functioning Maths/science improved at school level In-company and branded product training forms part of the national standards	To provide baseline data To provide assistance to the SETA in the use of the standard M&E system
1.3 By March 2005, an average of 20 enterprises (to include large, medium and small enterprises) and at least five national government departments, to be committed to, or have achieved the Investors in People Standard	By March 2005, at least 40 private enterprises in the Sector (to include large, medium and small firms) and SITA to be committed to, or have achieved, an agreed national standard for enterprise-based, people development.	By March 2003 at least 10 private enterprises in the Sector (to include large, medium and small firms) and SETA to be committed to, or have achieved, an agreed national standard for enterprise based, people development.	Personal development skills training, e.g. management development, form part of national standards	To provide assistance to the SETA in the use of the standard M&E system

Based on baseline data of 142 000 people in the sector, these are the targets.

- SSP committee meetings
- Training for people who have qualifications less than NQF 1 – train 11000 people by March 2005, Therefore 2000 by March 2003.
- Participate highly and facilitate the development of Unit standards
- Training for 14 000 people should be taking place. In companies, skills development programmes etc.
- Matrix Committee between SSP and ETQA on RPL. Implement RPL programme based on existing RPL projects e.g. Construction SETA
- Track WSP's to see how many people are on structured learning programme
- Sponsor a multi-media learning programme

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- *Academic Initiatives*
 - The LINK Centre at the University of Witwatersrand looks at various developments within the ICT sector and develops strategies and projects to address the challenges and needs of the ICT sector.
 - Various tertiary institutions have graduate programmes in place to develop skilled ICT employees and to develop and stimulate new ICTs. Some of these efforts are multi-disciplined and address sectoral and cross-sectoral issues relating to ICTs.
 - Researchers in research centres and tertiary institutions develop various research projects that relate to subject matters of gender, equity, skills development, application of ICTs and new strategies for job creation for the ICT sector.
- *Examples of International developments and research projects include the following:*
 - The World Bank and various other UN Organisations are doing collaborative work on creating and developing the ICT sectors globally as well as the influence ICTs has across various sectors. The ICT4D projects, the Development Gateway and DotForce and WSIS initiatives are all mechanisms used to influence and develop the global ICT sector.
 - Under the auspices of the Commonwealth various initiatives are implemented to develop the ICT sector and link it with other sectors. Amongst these initiatives are a network called the Commonwealth Network of Information Technology for Development, the Commonwealth Institute and the Commonwealth Telecommunications Organisation. These structures create proper channels to link the various initiatives within member states, develop the ICT skills and regulate this industry.
 - Regional initiatives of the African Union, Nepad and SADC includes an e-Commission for Africa and IT Task Team for Southern Africa that combines and link various initiatives within Africa and its sub-regions. The IT Task Team of Southern Africa is closely aligned with the developments within the ICT sector of South Africa.
 - Within countries like India, Egypt and the United States of America various structures and initiatives have been created to combine the various initiatives within the ICT sector. These structures include creating a proper environment for the development of ICTs, ICT incubator centres and creation of proper channels and networks. Examples of these environments are the Smart Villages project in Egypt¹, Silicon Valley in the USA and the ICT city in Mumbai, India².

¹ See Part 3 Point 1.2.

² See Part 3 Point 1.3.

1.3 Context of the project

This research project is the result of various research initiatives and meetings held during the past two years relating to the development of the ICT sector and the impact it has on the job market. Previous research concentrated on the developments within the sector and empowerment issues. The aim of this project is to develop an understanding of the dynamics that will create jobs within the South African ICT sector.

The establishment of NEDLAC aims to create social dialogue between Industry, Government and Labour movements. Since its inception various forums have been established to address key issues faced by all stakeholders. The ICT Sector Summit of 2002 focussed on the challenges faced by the ICT sector as well as how the ICT Sector can contribute towards the development of South Africa.

At the NEDLAC meeting in 2003 it was decided that under the auspices of FRIDGE at the IDC, a research project into Job Creation will be conducted.

This research project was commissioned after another FRIDGE research project relating to Research into an Agency, Mechanism or Institute for the ICT Sector. It was realised that during the study both these projects are interconnected and that the development of any possible model for development within the ICT sector will have an impact on any views that would be developed for Job Creation. This report therefore has to be read hand-in-hand with the Report on Research into the ICT Development Agency/Institute or Mechanism (September 2004).³

1.4 Definitions

The view taken in understanding the Job Creation can be explained as follows:

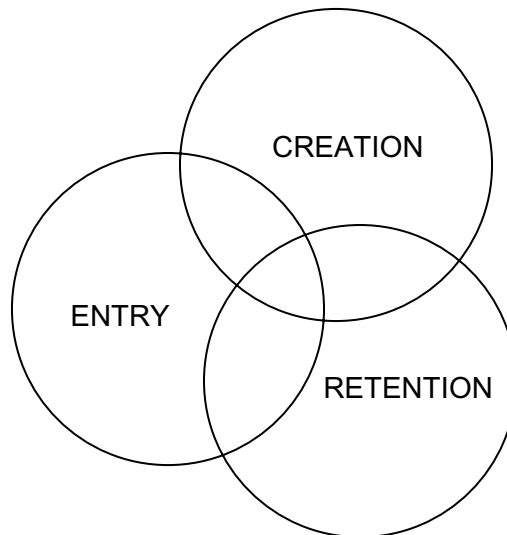


Diagram 1: Understanding Job Creation

³ See Venter & Rogers 2004.

- The key issues relating to the labour market within the ICT Sector can be seen as 3 spheres:
 - Entry – what are requirements for entry into the labour market?
 - Creation – how are new jobs created?
 - Retention – how are jobs sustained?
- The 3 spheres are constantly interacting and influencing each other. It also shows the inter-relationships between the different spheres.

1.5 Structure of the Report

This report is divided into 3 main parts:

- PART 1 – Overview and Background Information
 - Focus on current views, methodology and the current status of research
- PART 2 – Models and Recommendations
 - Focus on models, strategies and recommendations
- PART 3 – Appendices
 - Consists out of International and South African case studies and a list of sources used for this report