

Support provided by corporate social responsibility programmes for the creation of universal access to ICT: a content analysis of corporate websites

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ABSTRACT

This study analyses messages within corporate web pages as physical indicators of the following: the extent to which sampled companies provide information communication technology (ICT) to the South African society in terms of geographical spread; the types of ICTs they provide; the nature of their support; and the members of society targeted. Through latent coding, it seeks to deduce whether the companies realise their role in social development by focusing their corporate social responsibility programmes on societal needs and to establish whether their support is broadly aligned with government priorities.

Although the study is exploratory in nature, it reveals the following noteworthy issues: The geographical spread indicates that seven of the 11 companies analysed focus their support for ICT on the country as a whole; most companies tend to provide a whole range of technological equipment rather than one type; the provision of equipment is coupled with training; and the support for ICT is largely aimed at schools.

It is inferred that the companies realise their societal obligations; support government priorities; and are committed to social development by creating appropriate mechanisms for access to ICT.

Keywords

information and communication technology (ICT)
corporate social responsibility programmes
corporate social investment (CSI)
corporate social responsiveness
social development
SAIT IS Baseline Studies
content analysis of web page

Concise indication of content

A content analysis of corporate web pages to determine

the support provided by corporate social responsibility (investment) programmes for creating access to information communication technology (ICT) for all South Africans, in accordance with government priorities.

OPSOMMING

Hierdie studie analiseer boodskappe op korporatiewe webblaaie, as fisiese indikatore van die volgende: die mate waartoe maatskappye in die steekproef inligtings- en kommunikasietegnologie aan die Suid-Afrikaanse gemeenskap voorsien in terme van geografiese verspreiding; die tipes inligtings- en kommunikasietegnologie wat hulle voorsien; die aard van hul ondersteuning; en die lede van die gemeenskap wat hulle teiken. Deur middel van latente kodering word gepoog om afleidings te maak of die maatskappye hul rol in sosiale ontwikkeling besef deur hul korporatiewe sosiale verantwoordelikhedsprogramme op gemeenskapsbehoefies te fokus en om te bepaal of hul ondersteuning breedweg in lyn met regeeringsprioriteite is.

Alhoewel die studie verkennend van aard is, bring dit die volgende noemenswaardige kwessies aan die lig: Die geografiese verspreiding dui daarop dat sewe van die 11 maatskappye wat geanaliseer is, hul ondersteuning van inligtings- en kommunikasietegnologie op die land as geheel fokus; meeste maatskappye neig om 'n hele reeks tegnologiese toerusting eerder as een tipe te voorsien; die voorsiening van toerusting met opleiding gepaard gaan; en die ondersteuning hoofsaaklik op skole gemik is.

Daar word afgelei dat maatskappye hul verantwoordelikhede teenoor die gemeenskap besef; regeeringsprioriteite ondersteun; en verbind is tot sosiale ontwikkeling deur die skepping van gepaste meganismes vir toegang tot inligtings- en kommunikasietegnologie.

1 INTRODUCTION

This research was triggered by the findings of the South African Information and Technology Industry

Strategy (SAITIS) Baseline Studies, conducted under the project management of the Canadian International Development Research Centre (IDRC). The SAITIS Baseline Studies aimed to provide an overview of the status of information and communication technology (ICT) in South Africa (James 2000).

Amongst other findings, the SAITIS Baseline Studies reported that over 80% of the 456 organisations (IT vendors and users) that responded to its national study, indicated that they did not invest in any IT social responsibility projects during the last year. Furthermore, that only 15% of South African information technology (IT) companies spent over R 50 000 on IT social responsibility projects (James 2000). Although the provision of ICTs is crucial to the socio-economic development of the country, there seems to be little interest or awareness in the private sector of creating universal access to ICTs.

2 CLARIFICATION OF MAJOR CONCEPTS

2.1 Corporate social responsibility

Davis and Blomstrom (in Carroll 1996:34) define corporate social responsibility as *'the obligation of decision makers to take actions which protect and improve the welfare of society as a whole along with their own interests'*. This definition suggests two *active* aspects of social responsibility: To *protect* the welfare of society, which implies the avoidance of negative impacts on society; and to *improve* the welfare of society, which implies the creation of positive benefits for society.

Hargreaves and Dauman (1975) provide a procedural explication of the term corporate social responsibility, with three distinguishable levels of responsibility. The first level covers *'basic responsibilities'*, referring to technical and routine obligations. At the second level, *'organisational responsibilities'* are intended to secure the well-being and needs of strategic stakeholders. When a company adopts *'societal responsibilities'* - the third level - it becomes involved in the wider community by assisting in the creation of a *'healthy overall environment'*. What distinguishes societal responsibilities from the other categories is that it covers a wider constituency, emphasising the welfare and prosperity of society.

Carroll (1996) focuses on the types of social responsibilities that businesses have, attempting to place economic and legal expectations of business in perspective by relating them to more socially oriented concerns, ie to ethical as well as to voluntary/ discretionary (philanthropic) responsibilities. The distinction between the latter is that ethical responsibilities are expected in a *moral or ethical* sense, while voluntary/discretionary responsibilities are not (although the societal expectation that they be provided is always present).

Mersham (1992:54-55) sees corporate social responsibility in the South African context as a national development philosophy with a moral imperative: *"... the concept of social responsibility includes an organisation's relationship to the society in which it*

operates, and its involvement in the problems of national significance that face that society."

2.2 Information and communication technology (ICT)

The South African IT industry developed through the transfer of technology from the West, mainly the USA and the UK. In its early days, there was a clear separation of the IT and communications industries. This is no longer the case - nowadays the industry is frequently referred to as the ICT (Information and Communication Technology) industry (James 2000:7).

According to Hamelink (1997), ICT is the application of technological methods to solve human problems concerning the collection, transmission, storage, and analysis of information. Information and communication technologies are said to encompass all different forms of communication among human actors; between human beings and electronic systems; and among electronic systems.

ICTs include a vast array of technological devices that can be subdivided into capturing, storage, processing, communications and display technologies (Hamelink 1997). Each of these components will be explained for, although they are different instruments and devices, and at times separate, they function as a whole and in an interrelated manner:

- *Capturing* technologies are input devices that collect and convert information into digital form. These include keyboards, mice, touch screens, bar code readers, image scanners and palm-size camcorders.
- *Storage* technologies are tapes, floppy disks, hard disks, CD-ROMs and smart cards.
- *Processing* technologies create the systems and application software required for the performance of digital ICTs.
- *Communications* technologies include local area networks (LAN's), wide area networks (WAN's such as the Internet), modems, cellular phones and fax machines.
- *Display* technologies include devices such as display screens for computers, digital television, printers, CD players and voice synthesizers.

The common feature of ICTs is *'digitization'* - the process through which information (whether relayed through sound, text, voice or image) is converted into the digital binary language used by computers. The use of digital language facilitates the convergence of computers, telecommunications, office technology and audio-visual consumer electronics. Their integration allows information to be handled faster, with improved reliability and at lower costs (Hamelink 1997).

2.3 Redefinition of social development

For millennia, social development was *"tantamount to social survival: the daily goal of the majority of people was to get by, make a family, and steal a few moments of joy out of the harshness of the human condition."*

With the advent of the industrial age, social development came to involve the goal of improving people's livelihood" (Castells 1998:10).

Social development today is determined by the ability to establish a synergistic interaction between technological innovation and human values. Technology per se does not solve social problems. But the availability and use of ICTs are prerequisites for economic and social development in the Information Era (Castells 1998:2-3).

3 PROBLEM STATEMENT

A large number of South Africans do not have access to information technology, and more specifically, to information communication technology. It is said that millions of South Africans will be bypassed by the Information Revolution - many do not even have access to a telephone. Women and children are counted as part of the multitudes that are 'information poor'. Yet ICT pervades all aspects of modern society. Millions of people around the world have access to the telephone, are connected to the Internet, have cellular phones, use CD-Roms, use touch screen technology - the list is endless (James 2000).

As the Information Revolution increases its impact around the world, the issue of who has access to these technologies has great importance. International connections to the information communication networks and services influence people's access to jobs, education, healthcare, as well as their full participation as citizens. According to Draft Discussion Paper Nr 2 ... (USA 2000), the major question is whether these technologies and systems will lead to increasing disparities between the connected 'information elite' and the large majority of 'information poor', or whether they can be used to support widespread development and a more just society.

One of the major issues of social upliftment and empowerment is how the responsibility for creating access should be shared between government and business (Mersham, Rensburg & Skinner 1995:76).

3.1 Government Efforts

The South African government recognises the importance of ICT in transmitting and disseminating information and its role in social development. This is evidenced by the various initiatives it has undertaken to provide universal access to ICT to all South Africans, across the length and breadth of the country, in urban as well as rural areas. It has appointed the Universal Service Agency (USA) as the organisation to provide universal access by establishing 'telecentres' with basic ICTs throughout the country (James 2000).

A telecentre can be described as a facility that offers the public access to advanced IT and telecommunications equipment, together with some degree of support and training and a range of information-based services. These centres are also referred to as community technology centres or community teleservices centres, depending on their location and the services they offer (Conradie 1998). The USA will

provide three basic types of telecentres in which telephone lines, personal computers, printers, scanners, copiers, fax machines, overhead projectors and screens will be found (USA 2000).

However, the USA is not able to achieve universal access and service on its own (USA 2000). As a result it has formed partnerships with government departments such as the Government Communication and Information Service (GCIS) and other international organisations with expertise such as the International Development Research Centre (IDRC), a Canadian NGO.

There are several South African initiatives under way at the national level, including those launched by the Department of Communications (info.com 2025); the Department of Arts, Culture, Science and Technology (the Foresight Study and the Innovation Fund); the Department of Trade and Industry (Technology and Human Resources for Industry Programme, better known as THRIP); and the State Information Technology Agency (SITA). At the provincial level, the Cape IT initiative and the Gauteng SDI are the most well-known (James 2000:9-11).

3.2 Private Sector efforts

The SAITIS Baseline Studies found that the South African IT industry has been created through foreign multinational support and is very dependent on their continuing participation. South Africans seem to have little confidence in their own IT abilities and many are fearful, insecure and inhibited when it comes to the adoption of information technology (James 2000:158).

Of importance to this research is that the SAITIS study found little investment in the provision of IT to communities, especially by IT companies. The private sector seemed to have little awareness (or interest) in creating universal access to ICT as a tool for development (James 2000). Although the findings of a survey by Rockey (1998) indicate that 96% of CSI practitioners who responded, invested in education and rated Mathematics, Science and Technology as their third most important education priority, the study cited only two examples of support for ICT -that of Silicon Graphics and Intekom's mobile high technology vehicle which visited schools, and Telkom's project to connect 1 000 schools to the Internet.

The South African government has expressed the intention, and is positioning the country, to be part of the global information network. However, the cooperation of the business sector in this venture is necessary, as business is one of the major stakeholders in ensuring universal access for our whole society - business has the funds, the infrastructure and the expertise. Moreover, as Castells (1998:11) has mentioned, a technological literate population is in the interest of the business sector, be it as employees or as consumers. One of the ways through which the business sector can provide awareness of, and access to, ICTs is through their corporate social responsibility programmes.

To summarise the problem, a large number of South Africans do not have access to IT, and more specifically to ICT. This hampers their full and meaningful participation in the information society. Therefore the government considers it a national priority to provide universal access to ICT and have multiple initiatives under way to increase such access (assisted by international donor agencies). Since the government cannot possibly achieve this alone, they need assistance from the private sector in this regard.

According to the SAITIS Baseline Studies (James 2000) and a survey by the Corporate Social Investment and Development Handbook (Rockey 1998), the private sector seems to be lacking in this regard. Such assistance could reasonably be expected from business, since most of them adhere to the principles of corporate social responsibility. A logical vehicle for channelling such support would be by means of their corporate social responsibility programmes. In the past, however, little information on such programmes have been made available. It is the objective of this study to determine whether business in effect makes a contribution toward social development in the form of support for the creation of universal access to ICT.

4 RESEARCH QUESTION

To what extent do corporate social responsibility/ investment programmes support the creation of universal access to information and communication technology (ICT), as a contribution towards social development? Subquestions:

- What is the extent, nature and target of support provided for ICTs?
- Do CSI programmes contribute towards social development by supporting government priorities?

5 LITERATURE REVIEW

The research question posed by this research is based on two theoretical frameworks. The first is corporate social responsibility/investment and the second is the role of information communication technology (ICT) in socio-economic development.

5.1 From Corporate Social Responsibility (CSR) to corporate social investment/ involvement (CSI)

5.1.1 *The development of corporate social responsibility in South Africa*

Business firms operate in a society that offers them opportunities to make a profit - in turn they have the obligation to serve societal needs. This obligation is called *social responsibility* (Chung, in Grunig 1992:240). The concept developed during the eighteenth century, when the technology of the Industrial Revolution in England resulted in extensive air pollution problems. Companies' involvement at that time was aimed at reactive response to the 'offence' they caused, having to pay more and more in an effort to earn the esteem of the community. According to Davis (in Stoner 1978:77), *"In the long run those*

who do not use power in a manner that society considers responsible, will tend to lose it".

In South Africa, business progressed through three distinct phases in their thinking about their role in society: 'Philanthropy', 'Good Citizenship' and 'Corporate Social Legitimacy' (Visagie 1993). In the 1960's and early 1970's, the justification for business involvement with socio-economic development was based on the *philanthropic* character of Christianity, ie business has a moral obligation towards the underprivileged. The poor is a by-product of capitalism and thus the responsibility of the administrators of capitalism.

The *Good Citizenship* approach was introduced in the late 1970's, early 1980's by the social justice drive, when business realised their 'responsibility' in a country where violence and rebellion became a reality as a result of perceived oppression. This was followed by *Corporate Social Legitimacy* - an approach where business was no longer prepared to admit co-responsibility for the deprived in society, since it implied admission of guilt for a sin not committed.

Visagie (1993) prefers the term *Corporate Social Involvement* to describe this new era (in most of the South African literature it is referred to as *Corporate Social Investment*) - whilst not denying corporate citizenship or its related responsibilities, 'investment' rather implies a proactive intervention and corporate commitment to development. The true purpose of CSI in South Africa is therefore *"to assist, through socio-economic involvement, in the development and maintenance of a socio-economic and socio-political environment that is conducive to the pursuit of real economic growth"* (Visagie 1993:6).

Mersham, Rensburg and Skinner (1995) is of the opinion that, although the terms 'social responsibility' and 'social investment' are used interchangeably elsewhere in the world, in South Africa they are often interpreted differently. Whereas corporate social responsibility (CSR) contains the implication of redressing inequalities of the past (expected by the black majority), the term corporate social investment (CSI) is preferred by business for the reasons already spelt out by Visagie (1993). This is corroborated by Rockey's study (1998) which found that 47% of the respondents preferred the term 'corporate social investment' (CSI) while 23% preferred 'corporate social responsibility' (CSR).

5.7.2 *Corporate Social Responsiveness (CSR2)*

Sethi (in Carroll 1996) proposes a three-stage schema for classifying corporate behaviour in responding to social or societal needs:

- *Social obligation* is corporate behaviour in response to market forces or legal constraints (based on legal and economic criteria only).
- *Social responsibility* implies that corporate behaviour should conform to prevailing social norms, values and expectations.
- *Social responsiveness* places emphasis not on *how* corporations should respond to social pressure but

rather *what* their long-term role in a dynamic social system should be.

Frederick (in Carroll 1996) also distinguishes between corporate social *responsibility* (CSR₁) and corporate social *responsiveness* (CSR₂). He sees the focus of the latter as concentrating more on the pragmatic matter of responding effectively to environmental pressures, rather than on the philosophic questions of social responsibility (CSR₁).

The corporate social *responsiveness* dimension discussed by some authors (as having an alternative focus to that of social responsibility) is in actuality the action phase of management's response to the social sphere. It can be said that social responsiveness enables organisations to rationalise and operationalise their social responsibilities (Carroll 1996).

For the purpose of this research, the term corporate social investment (CSI) is preferred, referring to corporate social responsibility (CSR) in its widest sense - as the effort of business to improve the welfare of society by creating positive benefits for, and emphasising the welfare and prosperity of, all its members - conforming to prevailing social norms, values and expectations, and concentrating on the pragmatic matter of responding effectively to societal needs and government priorities through CSI programmes, rather than on the philosophic questions of social responsibility.

5.1.3 Corporate social investment (CSI) programmes

The challenge for the business sector in South Africa is to make a visible and adequate contribution towards socio-economic and socio-political reconstruction and development. One of the most significant obstacles preventing accelerated development, is the lack of institutional capacity within local communities. The private sector must therefore also focus on people centered development and the establishment of appropriate processes to enhance such development (Visagie 1993).

Corporate social investment programmes could be (and already are for some companies) an important vehicle to become involved in the development process, their focus and direction often dictated by the socio-economic realities of the South African society (Visagie 1993).

For CSI programmes to be effective and efficient, companies should be involved in three major areas:

- As a corporate citizen, a company has a responsibility to assist in the maintenance of society through grants and donations to nongovernmental organisations and development agencies.
- It has an obligation to render support to existing development projects.
- It also has an obligation to create appropriate support mechanisms and programmes to facilitate development. *"In the process, the private sector provides a delivery system for the transfer of technology from its source to appropriate recipients"* (Visagie 1993).

In a survey of managers of large firms, Holmes (in Carroll 1996) points out that there seems to be no consensus amongst business executives on the social issues that should be addressed by them. Examples of pertinent issues abroad during the last decade was consumerism, the environment, the advancement of women and minorities, and the disclosure of information. In South Africa, 54% of CSI spending goes towards education, followed by job creation (11%), health (8%), and 7% each for community/rural development, and housing (Rockey 1998:44).

In this country, CSI is an important contributor towards training and capacity building programmes for black communities. The education and skills training backlog inherited from past inequalities is clearly beyond the resources of any government to attain. The emphasis is on literacy and numeracy programmes; training programmes in the technical and technological fields; supplying equipment to schools; and making bursaries available (Mersham, Rensburg & Skinner 1995).

5.1.4 Communicating and disclosing CSI information

In the past, publicity surrounding CSI programmes in South Africa has been a sensitive issue since organisations did not want it to be seen as marketing-driven (Mersham, Rensburg & Skinner 1995). Little has therefore been reported on the extent of companies' CSI support. However, this seems to be changing as organisations over the past five years are increasingly communicating, and even marketing, their CSI activities to internal and external stakeholders.

The Corporate Social Investment and Development Handbook (Rockey 1998) reflects a growing need for corporates to both receive and send out information regarding their CSI programmes. The most important channels for communicating such information have been articles in internal publications, sections allocated in annual reports, a separate CSI annual report, local and national newspaper reports, and radio and television coverage. The updated version of the CSI Handbook (Rockey 2000) reveals that financial and IT companies are leading industry in communicating this information on their corporate websites.

5.1.5 Aligning CSI programmes to government policy

Grunig (in Grunig 1992:240) sees corporate social responsibility as one of the characteristics of an excellent organisation. Because the CSI function is a strategic one in an organisation, it has to be aligned not only to the corporate strategy of the organisation, but also to the strategic issues facing the country (Chung, in Grunig 1992:240). Business leaders must be concerned about whatever concerns society (Sherwin, in Sturdivant & Vernon-Wortzel 1990:15). The South African government, as shown earlier, sees the provision of universal access to ICTs as one of the national priorities. However, this cannot solely be a governmental role, since it will require a massive technological upgrading of the country, companies

and households as well as a dramatic investment in overhauling the educational system. Such a strategy is of the highest interest to everyone, including business and particularly high technology companies (Castells 1998:11). However, it is a momentous task that requires the collaboration and involvement of the business sector through their CSI programmes.

5.2 Social development and the role of information and communication technology

There is a prevailing expectation that the progress that has taken place in ICT over the last decades will have a profound impact on societies and their socio-economic development. Hamelink (1997) points out that there are two opposing positions to the role of ICT as an important tool for development: the Utopian and the dystopian position.

5.2.1 The Utopian position

The proponents of the 'utopian' position see ICT as a revolutionary force that can fundamentally transform societies and individual lives. For them, the technological process is inevitable - it is inconceivable that people would decide not to adopt technological innovation (Hamelink 1997).

ICTs, according to Morna and Khan (2000:19), have been the greatest change agents this century and promise to play that role even more dramatically in the next millennium. ICTs are changing every aspect of human life, communications, trade, manufacturing, culture, services, education, research, national defence and global security. ICTs are revolutionising the way people and societies interact, how they set their national and development agendas, conduct their business and compete in international trade.

Morna and Khan (2000:19, 32) further assert that multitudes of people cannot imagine life without cellular telephony. Their research on the use of ICTs has revealed that cellular phones have outstripped all predictions by covering 70% of the South African population. E-mail has made it possible to communicate with a number of people across time zones and receive replies almost immediately. The Internet, for those who have access to it, has proven to be a multipurpose tool through which people can perform a variety of tasks - itself one of the strongest tools for empowerment.

ICTs can be said to be a functional equivalent of electricity in the industrial era (Castells 1998:3). Simply put, there can be no social and economic development unless a country and its citizens are part of 'the network'. Be in the network and you can share, and over time, increase your chances. Be out of the network and your chances vanish since everything that counts is organised around a world wide web of interacting networks (Castells 1998:6).

Being in the network does not only relate to people as individuals, it also refers to countries. South Africa has chosen (if there is choice in such issues) to be part of the global network and part of the global market. Such a decision is a strategic one since once it is made, a country has to structure its social and

economic development agenda around it. With the adoption of the Growth, Employment and Redistribution (GEAR) macro-economic policy, South Africa has placed itself firmly in the global economy. A global economy is one whose core activities work as a unit, in real time, on a planetary scale (Castells 1998:5). Facilitating and driving this is information and communication technology.

5.2.2 The dystopian position

On the other hand, the proponents of the 'dystopian position' stress that ICT will reinforce socio-economic disparities, inequality in political power and the gaps that exist between the 'knowledge elites' and the 'knowledge disenfranchised'. The dystopian position also forecasts a perpetuation of capitalism, massive job displacement and deskilling (Hamelink 1997).

Much as ICTs have changed the way the world functions, millions of people are excluded from 'the network' - they have been bypassed by the Information Revolution and do not even have access to a telephone. This exclusion from the network has far reaching ramifications for the socio-economic development of people, countries and regions. Even though markets and economies are global in nature, the jobs of millions of people around the world are not. But their standard of living, economic standing, what they know and do not know, is determined by the globalised sector. The position of people and their standing in society ultimately depends on whether they are included or excluded from the global economy, whether they are switched 'on' or 'off' (Castells 1998:4).

Studies conducted by the International Development Research Centre (IDRC) and the United Nations Research Institute for Social Development (UNRISD) have found that the majority of people in most countries are excluded, switched 'off' either as producers, or consumers, or both (Castells 1998:5). African women across the continent are almost always excluded from access to ICTs because of their gendered roles in society. The triple roles of women (marriage, reproduction and domestic duties) are barriers to their participation in the Information Revolution. The information 'super-highway' is still predominantly male-oriented and often used as a forum for gender discrimination, intimidation and even harassment (Huyer 1997). Furthermore, it is not only women who are 'information poor'. The poor in general, including children and the youth, are particularly vulnerable.

In South Africa there is a fear and insecurity inhibiting the adoption of ICTs. Many South Africans view ICTs as elitist and far too complex for the average person to understand and use. The SAITIS Baseline Studies suggest that part of the solution in reducing the stereotypes and perceived elitism, is the integration of information technology (IT) into every day life and providing IT training that is affordable and accessible to the majority of the people (James 2000:158).

The two positions described above have important implications for policy makers such as governments. They should understand that ICTs are shaped by socio-economic, political, cultural and gender variables, geography as well as market forces, and know how these forces interact. This understanding will make for pro-active policies and programmes and will allow for conscious social choice (Hamelink 1997).

Conradie (1998) among others, states that for developing countries such as South Africa, the question is not whether they should participate in the 'information society', but rather how information technologies can be made available and applied to development. Castells (1998) asserts that "*information communication technology is the essential tool for economic development and material well being in our age-it conditions power, knowledge and creativity ...*" There is little chance for a country or region to develop in the new economy without its incorporation into the technological system of the information age.

6 RESEARCH METHODOLOGY

This exploratory qualitative study employs a non-participant, cross-sectional, field design (Smith 1988:181-182). Content analysis, a research method used to make objective and systematic inferences about theoretically relevant messages (Dane 1990:170), has been selected for the following reasons:

- It identifies the intentions and other characteristics of the communicator;
- It reveals the focus of individual groups or institutions;
- It can be used in the analysis of a variety of documents (in this case web pages) and focuses directly on the text (Weber 1985:9);
- It is best used as a comparative technique and its most prevalent use is to investigate the content communicated in a message (Dane 1990:170).

The aim of the study is to establish whether CSI programmes support the provision of access to ICTs. The population of this study is therefore defined as all companies in South Africa with CSI programmes.

6.1 Multi-stage sampling procedure

The *Corporate Social Investment Handbook* (Rockey 2000) was used as the sampling frame. It does not claim to be a comprehensive directory of all companies with CSI programmes, but only includes those that responded to its survey.

The CSI Handbook revealed that information technology (IT) companies, followed by those in the financial sector, lead the industry in communicating their CSI programmes via their websites (Rockey 2000:93). This interesting fact warranted further investigation for two reasons:

- It contradicts the SAITIS Baseline Studies which found that companies in the IT sector are doing little to provide access to technology (James 2000).

- Web pages were not on the preferred list of communication channels used by companies to communicate their CSI programmes (Rockey 1998).

It was therefore decided to conduct the research by analysing the websites of companies in the IT and financial sectors.

All companies listed in the CSI Handbook under the heading 'Information Technology' (IT), 'Financial Sector' and 'Telecommunications Sector' were thereupon selected, as an *accessible* sample (Telecommunications falls under the IT sector - James 2000:2). These sectors are of particular theoretical interest, deemed to have the expertise and the infrastructure to support the provision of ICTs. It can therefore be said that judgement sampling (a type of purposive sampling) was employed to select the particular industry sectors to be sampled. A census was then taken amongst all the companies, in these specific sectors, on the sampling frame.

- This procedure produced a list of 32 companies (all with social responsibility programmes and corporate websites), forming the *primary sampling units*.
- A first investigation of the corporate websites revealed that 20 of these companies included their CSI programmes on their websites (forming the *secondary sampling units*).
- Of these 20 companies, 11 mentioned support of ICTs on their websites-forming the *final sampling units* that were to be analysed to determine the research question: the *extent* to which ICTs were supported, the *nature* of the support and the *members of society* that were targeted for the support.
- One site could not be accessed.

The analysis will now focus on the 11 web pages that fulfils the sampling requirement, arrived at by a process of elimination (see Table 1).

6.2 Target element

In communication research, the two most prevalent categories of elements are communicators themselves or their communicative outputs. In this study, those corporate websites mentioning support of ICT as part of their CSI programmes - as the *objective communicative outputs of organisations* - are analysed. The final sampling unit is always a study's target element (Smith 1988:76).

6.3 Unit of observation and unit of analysis

The unit of *observation* is the corporate web page -the specific material to be measured (Dane 1990:176). The unit of analysis/recording unit is sentences that indicate the existence of the identified categories (support of ICTs), extracted from the selected company web pages. Sentences have been selected as it is easier to detect the context and intention of the communicator than it would be from single words. Paragraphs are considered too large and

Table 1

Multi-stage sampling procedure: The corporate websites in which support for ICT is mentioned

The primary sampling units = companies with CSI programmes (and web pages)	Secondary sampling units = companies whose web page includes mention of its CSI programme	Final sampling units = support of ICT is mentioned on web page	Website not accessible
1. Nedcor	Yes	No	
2. Swiss Reinsurance	No	No	
3. EDS	No	No	
4. Southern Life	No	No	
5. Liberty Life	Yes	Yes	
6. FNB	No	No	
7. Commercial Union	No	No	
8. MNET	Yes	No	
9. Rand Merchant Bank	Yes	No	
10. IBM-SA	Yes	Yes	
11. MTN	Yes	Yes	
12. Sanlam	Yes	No	
13. Thintana Consortium (Consortium of SBC Int. Telkom Malaysia)	Yes	Yes	
14. Multichoice	Yes	Yes	
15. CSIR	No	No	
16. OTIS	No	No	
17. Orbicom	No	No	
18. Investec	Yes	No	
19. Telkom	Yes	Yes	
20. Microsoft	Yes	Yes	
21. Philips			X
22. NBS	Yes	No	
23. Standard Bank	Yes	No	
24. 3M	No	No	
25. 3COM/SchoolNet	Yes	Yes	
26. Vodacom	Yes	Yes	
27. Momentum Life	Yes	No	
28. M-Web	Yes	Yes	
29. Old Mutual	Yes	No	
30. Nortel Networks	Yes	Yes	
31. BOE	No	No	
32. Hollard Insurance	No	No	

may include other issues not connected to the one under investigation (Wigston, in Du Plooy 1995:157).

6.4 Content Categories

The narrative data are measured nominally by grouping related data into categories. The study takes a theory-to-data perspective, starting with four preformulated categories believed to adequately characterise the variable 'support for ICT' (Smith 1988:267). The categories to be tested were selected based on important aspects pointed out in the literature review.

Category A: The extent of support provided for ICT

Extent of support was subdivided into two levels (categorised as A1 and A2).

- **Category A1** - Range or scope of the support (geographical spread).

This category indicates the range or scope of the support provided by different companies, in geographical terms. Is the support concentrated in one province or one locality, or does it tend to be national (including all the provinces).

- **Category A2** - The type and depth of ICTs provided.

This category indicates whether the company only provides one type of equipment or whether it provides a whole range of technological equipment, collectively known as ICTs. For instance, do companies provide one computer or one fax machine, or do they tend to provide an entire laboratory with technological equipment ranging from computers with Internet and CD Roms, to faxes, TVs and VCRs.

Category B: The nature of support provided for ICT

This category indicates whether companies give only the equipment for providing access to ICTs, or whether the provision of the equipment is coupled with training.

Category C: The target of support provided for ICT

This category refers to the target population at which the support is aimed. Is the support targeted at children and youth, to women only, to men only, or to all members of society?

6.5 Coding

The study utilises both manifest and latent coding:

- **Manifest** coding is the actual physical count of those elements that are present in the message (Du Plooy 1995:159). In this study, the very simplest form of counting is employed which, according to Carney (1972), simply establishes whether 'a thing is there or not'. The first research subquestion is a non-frequency type of question, utilised to ascertain 'what is said', rather than how many times it is said. It is not important to know how many times indicators (sentences) appear on a company website with reference to a specific category, but rather whether each category of support is actually mentioned by each company. (The only frequencies of interest to the study is how many of the 32 companies first identified from the sampling frame mention CSI programmes on their websites, and how many of those mention support of ICT. However, these frequencies do not form part of the manifest coding, since it was treated as part of the multi-stage sampling procedure).
- **Latent** coding provides the interpretation and the symbolism underlying the physical data, and is therefore subjective (Dane 1990:177). In this study, it is used to answer the second subquestion - namely to deduce whether the companies being analysed are aware of and attempt to fulfil their societal obligations; whether their CSI programmes support government priorities; and to gain insight into their intentions with placing the messages on their web pages.

6.6 Reliability

Three types of reliability are pertinent to content analysis: stability, reproducibility and accuracy (Krippendorff 1980:130-154):

- **Stability** was achieved by having the same coder code the content more than once.
- **Reproducibility** was increased by having more than one coder (in this case the two researchers) code the text, as well as by fully describing the research methodology.
- **Accuracy**, being the extent to which the classification of text corresponds to a standard or norm, is not relevant to this study.

6.7 Validity

No validation was done by using different research methods or comparing the results with the findings of other studies. However, a concerted effort was made to carefully define concepts and categories, based on the literature. The coding scheme is mutually exclusive and exhaustive, and the sample reflects the research problem (Du Plooy 1995).

7 FINDINGS OF THE STUDY

7.1 Category A1 – extent of support for ICT, according to geographical spread

Company	Nationally spread	Provincial or local spread?
1. Liberty Life	Learning Channel Online, a premier education resource for high school students in South Africa.	A miracle collaboration of people and technology has taken place at Myeka High School, a prototype, in Kwa-Zulu Natal.
2. Thintana Consortium	R21,2 million to set up computer centres in 200–300 disadvantaged secondary schools equally distributed in all nine provinces.	
3. IBM-SA		Mr Mandela invited IBM SA to become involved in the Ohlanga High School Project (local)
4. MTN	300 communities throughout SA have been connected to the most modern form of communication ...	
5. SHOMA Education Foundation	Shoma has worked closely with National and Provincial Education Department to develop a curriculum ...	
6. 3COM/SchoolNet	3Com is donating computers worth R1 million to 10 lucky schools in SA.	
7. Telkom Foundation	The Telkom Foundation has a commitment to provide 1 000 schools in SA with equipment and rebates.	
8. Microsoft		Microsoft invests in SA disadvantaged communities. Digital villages in Ellisras, Thembisa, Thaba Nchu, Tongaat, Ndevana.
9. Vodacom	Vodacom provides telephony services in a total of 2135 phone shop units to rural areas in nine provinces in SA.	
10. M-Web		In an effort to meet the educational needs of the disadvantaged sector in the Western Cape, certain schools were selected A fully equipped Cyber Café was launched in Parliament. Three centres were launched in Soshanguve, Mitchells Plain and Nqutu in Kwa-Zulu Natal.
11. Nortel Networks Foundation		Nortel Networks will entail the establishment of three provincial hubs: E-Cape, N-Cape, and Gauteng.

7.2 Category A2 – Type and depth of ICTs provided

Company	Type and depth of ICTs provided
1. Liberty Life	The project established and overcame the hardware and infrastructural barriers of setting up a computer room/education centre in a remote location.
2. Thintana Consortium	Computer centres with 10–20 networked computers with Internet access will be installed in the selected schools.
3. IBM-SA	IBM extended its contribution with R2 million being spent on upgrading classrooms, toilets and paving, as well as the formation and equipping of a laboratory with 20 networked computers.
4. MTN	Community pay phones.
5. Shoma Education Foundation	Uses multimedia technology to meet the needs of educators who are faced with the challenge of implementing outcomes-based education in local schools. Shoma employs a three-phase approach that uses satellite television, the Internet and collaborative lesson planning to ensure educators are fully engaged and take ownership while they acquire new skills.
6. 3COM/SchoolNet	Competition – Take part ... and win a minimum of 10 PC's for your school, as well as network equipment to connect to LANs.
7. Telkom	To 1 000 schools: computer and software, printer; R150 telephone rebate till Dec 2000; free Internet connection till Dec 2000; 2-day training course for two teachers. Also laboratories in various universities, colleges and technikons ...
8. Microsoft	Software with licences, digital villages in rural telecentres established by USA
9. Vodacom	To each phone shop: 5–10 phone booths and phones in a transportable steel container, a shop counter and cupboard space. After 18 months fax and data services were added. In addition, mobile telephones to educational institutions servicing rural institutions.
10. M-Web	Three IT laboratories fully equipped with computer hardware, software, and Internet connectivity to the value of R250 000 in two schools in Mitchells Plain, Cape Town and a community centre in Gugulethu. A fully equipped Cyber café in parliament with access to the Internet.
11. Nortel Networks Foundation	The three hub sites will consist of networked computers and telecommunications infrastructure in a community access facility.

7.3 Category B – Nature of support mentioned

Company	Nature of Support
1. Liberty Life	Myeka High has been a prototype to show how a previously disadvantaged rural school has been able, through the utilisation of convergent technologies, to leapfrog itself into the future. The project also showed how rural educationists, urban technologists and passionate people can seamlessly collaborate.
2. Thintana Consortium	Training a minimum of 10 educators per school ... 4 900 educators and 100 learners to receive a one-day face-to-face introductory training ... 10 educators from each school will complete training conducted by distance education model.
3. IBM-SA	Creating a capacity for self-help. Not clearly mentioned.
4. MTN	Payphone programme has created jobs/skills training/economic empowerment.
5. Shoma Education Foundation	Educators are fully engaged and take ownership while they acquire new skills. Shoma has gained insight and experience from local and international best practice to design a course for SA educators
6. 3COM/SchoolNet	Takes form of a competition. Not mentioned.
7. Telkom	Two teachers per school are trained in basic computer and internet literacy. Laboratories are also established in various tertiary institutions to provide a managed facility that enables students/communities around them to understand, learn and utilise the Internet and related network and software technologies.
8. Microsoft	Computer literacy programmes/centres to improve education and IT knowledge to disadvantaged South Africans. Microsoft will establish digital villages in USA telecentres and ensure that the trainers are sufficiently trained to manage them.
9. Vodacom	Phone shops to franchised operators, providing telephone and free emergency services to rural areas (including Black entrepreneurs). Also mobile telephones to educational institutions servicing rural institutions. No training mentioned.
10. M-Web	A fully equipped Cyber café in Parliament with Internet access, training and technical support provided. Also training in Word, Excel and Internet usage to Cheshire Home for the physically handicapped in Claremont, Cape Town.
11. Nortel Networks Foundation	These hub sites will consist of networked computers and telecommunications infrastructure ... appropriate educational support and training will be available at these hubs, including the training of dedicated technical interns at each site ... development of partnerships with local community, ensuring sustainable project.

7.4 Category C – preferred target population

Company	Targeted section of society
1. Liberty Life	High school students.
2. Thintana Concoortium	Educators and learners (in secondary schools).
3. IBM-SA	School children and teachers.
4. MTN	Communities.
5. Shoma Education Foundation	Teachers and school children.
6. 3COM/SchoolNet	School children.
7. Telkom	School children/teachers, tertiary students/communities around them.
8. Microsoft	Disadvantaged communities and educational institutions.
9. Vodacom	Rural communities/ Black entrepreneurs.
10. M-Web	Educational institutions (schools), parliamentarians and the disabled.
11. Nortel Networks Foundation	Schools and the community at large.

In the following section, the findings are analysed by category and the conclusion will summarise pertinent issues identified in the course of the study.

8 DISCUSSION OF FINDINGS

Over the whole analysis, there were only two instances where no reference was made on the website as to the specific category and two instances where inferences had to be made since indicators were not clear. This increases the validity of the categories.

8.1 Number of corporate websites in which support for ICT is mentioned

Of the 32 web pages identified initially, 20 (62.5%) include references to their CSI programmes. This finding supports Rockey's (2000:93) claim that companies in the IT (including telecommunications) and financial sectors are ahead in using the Internet to communicate their CSI programmes. However, the fact that 12 of the 32 identified companies did not refer to their CSI programmes does not necessarily mean that they do not have such programmes, nor that they do not support ICT. It only means that they did not communicate their CSI (and by implication their support for ICT) by means of their web pages (ie they might have used other means).

These first two steps in the data analysis serves as a process of elimination, identifying companies which mentioned CSI programmes as well as support for ICT on their websites. The remainder of the content analysis therefore only concentrates on the 11

companies that made mention of support for ICTs on their web pages.

8.2 Category A1 - Sentences pointing to the extent of the support for ICT (according to geographical spread)

There is doubt concerning only one company's geographical spread (3COM/ SchoolNet). It is deduced that the spread is *national* because of the phrase: '3Com is donating computers worth R1 million to 10 lucky schools in SA.' Since this message appeared on a company's web page, it is assumed that the competition to which is being referred, is open to pupils *from all schools* in South Africa. (However, this does not mean that the prize winners will be evenly spread throughout the country.)

Seven of the 11 companies (64%) support programmes that have a national focus, while four have a provincial focus. (Liberty Life has different projects, some with a national and some with a provincial focus.) One company (IBM) was categorised as having a local focus, since only one project was mentioned on the website. (However, this does not exclude the possibility that IBM supports more than one project, but did not mention it.) These findings are positive, because it indicates that 10 companies (91%) are concerned about, and committed to, the spread of ICTs beyond their own localities. The Telkom Foundation for instance indicate that it is "*committed*" to providing computers to 1 000 schools across the country, while Liberty Life's

Learning Channel Online is *"a premier resource for high school students in South Africa"*.

M-Web's ICT projects are concentrated in the *Western Cape*. In addition to an Internet cafe in Parliament, it also has projects in Mitchell's Plain and Gugulethu. At times, a targeted and focused intervention is appropriate as it allows for depth and a realisation of more impact.

8.3 Category A2 - Type of ICT provided

One company (MTN) specifies the provision of only one type of equipment - community pay phones. The other 10 indicate a whole range of technological equipment such as an *"education centre"* (Liberty Life), a *"laboratory"* (IBM), *"multimedia technology"* (Shoma Foundation), *"digital villages"* (Microsoft). Six of the 11 companies in the study provide *"Internet connectivity"* or *"network computers"*. Furthermore, it is possible that Liberty Life's *"computer room / education centre"* and Microsoft's *"software with licences"* and *"digital villages"* provide Internet access -however, this is not spelt out. These findings are a strong indication that business fully realises that being in 'the network' allows people to increase their chances, since anything that counts is organised around a world wide web of interacting networks (Castells 1998:6).

MTN and Vodacom are the only two that provide cellular telephones and payphones. This is understandable since it is their area of expertise, being the dominant service providers. The Shoma Education Foundation is the only company providing satellite television to schools and Microsoft the only one mentioning the provision of computers with software to telecentres.

Words that are in the plural such as *"computers"*, *"payphones"*, computer *"centres"* imply that all the companies provide multiple computers or phones rather than one. This is an indication of the commitment of business and their preparedness to contribute to the 'massive technological upgrading of countries' (Castells 1998:11).

8.4 Category B - Nature of support mentioned

Seven of the 11 companies mention training directly. Others, such as Liberty Life, speak of *"how rural educationists, urban technologists and passionate people can seamlessly collaborate"*, and IBM of *"creating a capacity for self-help"*. It is therefore possible that the latter two companies might be offering training, but it is not directly mentioned. Nortel Networks says it also offers *"appropriate support"* while M-Web says it offers *"technical support"*. All these sentences indicate that the computer equipment is not provided in a vacuum, but supplemented and supported by training.

Vodacom does not mention training, nor does 3Com. The latter's website invites high school students to enter a competition in which the lucky prize winners each receives 10 computers for their schools. However, it might be significant that 3Com is

providing the computers to schools in partnership with SchoolNet, a project of the IDRC. SchoolNet is an international organisation that has expertise in providing ICTs and related training to schools.

8.5 Category C - Target population preferred

In all instances, it is very clear who the preferred target for support is. The word *"school"* appears consistently in eight of the 11 web pages, while Microsoft mentions support for *"educational institutions"*. This indicates a clear bias towards schools, teachers, school going children and youth. In supporting schools, the companies reach a large number of learners in a single instance. The facilitation role of the teacher ensures that the skills are transferred to the learners in a guided and controlled manner.

MTN focuses on *"communities"*, while Microsoft also supports *"disadvantaged communities"* (in addition to schools). Vodacom supports *"rural communities and Black entrepreneurs"*.

8.6 Societal obligations

In addition to the manifest coding, the intentions of the organisations in their efforts to fulfil societal obligations and support government priorities are inferred from sentences on their web pages, such as the following:

- 'As a major player in the technology sector, Telkom is committed to improving the quality of teaching and learning in the country.'
- The project fitted well into IBM SA's responsibility programmes' focus on education and the advancement of rural communities ...'
- 'MTN is pro-active and dynamic, channelling funds and resources into the development of previously disadvantaged areas.'
- The Shoma Foundation uses multi-media technology to meet the needs of educators who are faced with the challenge of implementing outcomes-based education in local schools with the inherited legacy of an apartheid education system.'
- 'Microsoft SA aims to develop computer literacy programmes and centres to improve education and information technology knowledge to disadvantaged South Africans. This needs to be done proactively in a partnership as it is clear that the government cannot, on its own, redress the imbalance.'

9 LIMITATIONS OF STUDY

The first limitation of this study is that it utilised the Corporate Social Investment Handbook (2000) as the data source to find a list of companies that have CSI programmes. The author of the Handbook states that it is not a directory of all South African companies with CSI programmes, but only of those that responded to her survey. Had this study utilised other sources, it may have found more companies with CSI programmes and an interest in supporting the provision of ICTs to the South African society.

The second limitation is the research method employed. Content analysis, as used in this study, has the following limitations:

- Since the study is exploratory in nature, it ideally should have been supplemented by a survey or face-to-face interviews with the identified companies to confirm and expand on the findings of the content analysis.
- The findings are based on an analysis of web pages only. The support of ICT should also be measured by an analysis of other communicative outputs (eg annual reports or CSI brochures or executive speeches), or an analysis of communicators themselves (eg expert interviews with, or surveys of, CSI executives).
- The unit of observation was web pages, which change frequently. A similar study conducted in the future may not find the same information. Therefore a longitudinal, rather than a cross-sectional design might overcome this problem.
- The study is qualitative - it has not made use of statistical inferences to compare or to rank the CSI programmes and their projects, nor to point to any relationships or correlations. Any inferences are based solely on latent coding.
- In conjunction with manifest coding the study utilised latent coding. The latter is subjective because it depends on the value judgement of the researcher (Wigston 1995:159).
- The study did not utilise established content categories such as the Laswell Value Dictionary or the Harvard Dictionary Categories (Weber 1995:27-28), but developed its own categories.

10 CONCLUSION

This study is concerned with messages within corporate web pages which are physical indicators of the geographical *extent* to which the sampled companies provide ICT to the South African society; the *types* of ICTs they provide; the *nature* of their support; and the *targeted members of society*. It also, through latent analysis, seeks to deduce whether the companies realise their role in social development and to establish whether their intentions are broadly aligned with government priorities and/or societal needs.

It is not the aim of this research to compare the CSI programmes as to which is best or worst or the biggest. Since the study is qualitative, it only makes inferences based on latent coding and does not present the findings as conclusive. Although exploratory in nature, a number of noteworthy issues are revealed.

The geographical spread indicates that seven organisations focus on the country as a whole: If these kinds of efforts are sustained and complemented by government efforts, universal access for the whole

country and all its people may one day become a reality.

It is clear that, where companies are active, they give generously. The fact that companies such as Nortel Networks speaks of providing "*provincial hub sites*"; Microsoft is involved in providing "*digital villages*"; and Telkom has a "*7 000 schools project*" is a clear indication that companies who are involved, do so comprehensively and substantially. Attention is drawn to the fact that the companies in the sample are not the only ones that are active in the field of CSI, nor the only ones supporting ICT - they are the ones who are communicating it via their web sites.

A number of South African companies (or international companies based in the country), are committed to providing access to ICT. However, the support is clearly biased towards schools. It is inferred that companies seem to realise the important role of education and have a renewed faith in the education system and its ability to produce computer literate citizens - people who will have the technical skills and whatever else it takes to be part of the global information network. Schools are probably regarded as fertile ground in which to plant the seed of technology, in preparing the ordinary people of South Africa to be part of the Information Revolution.

Within institutional contexts, the activity of saying something is often more important than what is being said (Krippendorff 1980:47). Historically, most companies did not disclose or communicate about their CSI for fear of it being seen as publicity or marketing efforts (Mersham, Rensburg & Skinner 1995). From the findings, it is inferred that this has indeed changed - as was also indicated by the literature review. The companies analysed seemed to have no qualms in communicating what they were doing for whom.

The very fact that companies have CSI programmes indicates that they are aware of societal expectations of business and are willing to make a contribution towards social development. A modern use of content analysis is to see data as *instrumental* when it is taken to be a manifestation of particular values or interests of their producer (Krippendorff 1980:171). In this study, the support provided for ICT by the companies in the sample indicate their focus on people centered development, their involvement in problems of national significance facing society, and their pro-active intervention and commitment to development by creating appropriate support mechanisms.

Microsoft's web page personifies the realisation of their obligations towards society and their long-term role in social development, by stating: 'Microsoft has adopted a long-term approach to ensure that technology makes an impact in education and training by investing in South African disadvantaged communities'.

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APPENDIX: LIST OF WEB PAGES ANALYSED

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