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Using a Conceptual Framework to Explore  
E-commerce and Marketing Appropriation in a  
Rural South African Development Organization

Joan Helen Rhodes

*Thesis Submitted*

*for the Degree of Doctor of Philosophy*

*to the Department of Information Systems*

*University of Cape Town*

*August 2004*

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*Declaration*

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Jo Rhodes

## *Abstract*

This study uses a conceptual framework to enquire into the local appropriation of Information Communication Technologies (ICTs) within a rural, gender development organization. The purpose of this research has been to examine how ICTs can be integrated with an extant rural development organization to improve the effectiveness of trading activities. Three major viewpoints, development, technology and development and marketing were examined and these contributed to the conceptual framework, used in this study to guide and direct the research process. An interpretative field study using participative action research was the main data collection methodology.

The research results were analysed using the concepts of development, marketing and E-commerce as derived for the conceptual framework. In addition, a broader sociological perspective, Actor-Network Theory, was used to encapsulate the concepts of power, position, organisation, arena and agenda as part of the local dynamics of the appropriation of ICTs and marketing.

The main findings showed that rural trading activities are perpetually constrained by dependency relations at regional and national levels. This was often the result of an organisation attempting to achieve self-reliance through limited social and economic interaction in a small physical space that constrained development. The role of the state in securing self-reliance is fundamental, as the spontaneous activity of local groups can never have any real impact if not nurtured and empowered through the action of planners and politicians

Marketing, was understood as an extension of the development context, but seen to be both connected to and different from development and this epistemological ambiguity caused problems in applying the marketing concept. Additionally, the structure and functioning of the organisation added barriers to the effective implementation of marketing. This lack of understanding coupled with the cultural resistance to change was a deterrent to the use of marketing. Marketing was impacted on by wider horizontal and vertical relationships. Self-reliance isolationist contexts were restrictive to the marketing of the outputs of a supply-led production model within a peripheral and marginalised microenvironment.

Marketing was found to be an organisational enabler through directing a unified integrated approach to conducting business. E-commerce was seen to enable this process through its perceived advantages over other existing communication. Further, these advantages were considered as a means to counteract some of the existing organisational difficulties that inhibited the successful uptake of a marketing approach and to change from a supply led model into a market demand model. Additionally, the integrated use of existing ICT assets, E-commerce principles and marketing was seen as an approach to building, enhancing and maintaining organisational strength.

Although development, marketing and E-commerce interact with and impact on each other, it is the socio-economic difficulties at the developmental level that will inhibit the successful uptake of both marketing and E-commerce. The research showed that E-commerce was viewed as a means to support marketing and that marketing was a means to achieve organisational change. This research supported the notion that successful ICT adoption must be in conjunction with changes in organisational structure, culture and work processes in a contextually appropriate way including a sufficient assessment of the local socio-political risks.

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**LIST OF ACRONYMS USED**

AMA	American Marketing Association
ANC	African National Congress
ANT	Actor Network Theory
AR	Action Research
B2B	Business to Business
B2C	Business to Consumers
B2G	Business to Government
C2C	Consumer to Consumer
C2G	Consumer to Government
CONTRALESA	Congress of Traditional Leaders
CGE	Commission on Gender Equality
CRM	Customer Relationship Management
CT	Critical Theory
EDI	Electronic Data Interchange
GAD	Gender and Development
GEAR	Growth Employment and Redistribution Strategy
GNP	Gross National Product
HSD	Human Scale Development
ICT	Information Communication Technology
IGP	Income-Generating Project
ISP	Internet Service Provider
IT	Information technology
NAD	Native Affairs Department
NEC	Native Economic Commission
NEPAD	The New Partnership for African Development
NGO	Non-Government Organization
NFFT	The National Foundation for Fundraising Training
NTCA	National Telephone Co-operative
OECD	Organisation of Economic Co-operation and Development
OPP	Obligatory Passage Point
PAR	Participative Action Research
PAC	Pan African Congress
PC	Personal Computer
PDM	Product Development Management
PTO	Permission to Occupy
RDP	Reconstruction and Development Program
RWA	The Rural Women's Association
SADC	The Southern African Development Community
SANT	South African Native Trust
SARS	Severe Acute Respiratory Syndrome
SIPRS	The Southern African Development Community ICT Policy and Regulatory Support Program
SCM	Supply Chain Management
SME	Small Medium Enterprise
TNCs	Transnational Corporations
TRC	Truth and Reconciliation Commission
UNDP	United Nations Development Programme
USA	Universal Service Agency
WID	Women In Development

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## CHAPTER ONE: INTRODUCTION

### 1.0 BACKGROUND TO THE STUDY

The 2003 UNDP Human Development Index positions South Africa 111 out of 175. South Africa fell 28 ranks from 1990 primarily because more people were dying younger from AIDS illnesses. Added to this the high levels of economic and racial inequality in South Africa are striking. It ranks as the third most unequal society, surpassed only by Brazil and Guatemala (UNDP 2001). Other sources (World Bank Group, 2000, 2001, CIA World Fact Book) confirm that South Africa is still battling to overcome apartheid legacy, which translates into increasing poverty and continual job losses. This intensifies poverty in the rural areas as many of the redundant migrant labour workers no longer remit wages to their villages (one of the major sources of income in many South African rural villages).

In South Africa, rural<sup>1</sup> areas were developed as peripherals to the apartheid "core". They provided human-dumping grounds to accommodate the then Nationalist governments' policy of separate development and were exploited as sources of cheap labour. Capitalist, apartheid development and Bantustan under-development were two sides of the same coin. The legacy of this policy was *'large poverty stricken rural communities... poorly run and they lack a strong revenue base'* (Ntsebeza 2001: 320).

This already uneven development picture hides further inequity. Odedra-Straub (2001) notes that economic development for women in rural Africa is even slower, and that sustainable economic development is proving to be a conundrum, perhaps compounded by the lack of migration paths in development models to transform self-help projects into profitable businesses. This view is further validated by the example of a rural development model (The Rural Women's Association of Sekhukhuneland-RWA) which concentrated on eradicating malnutrition via food security and education programmes and on developing small income generating projects to route products (for example, vegetables, maize, wire fencing, bricks) into the local (and impoverished) local, rural economy. Whilst this in some cases was

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<sup>1</sup> In most countries, this term indicates a low-density population or a dependence on farming. Here, this term is not applicable in this sense as in apartheid South Africa many areas defined as rural were areas without services with high population density of displaced (through forced removals) people with no economic base.

successful as a survival strategy, it did not significantly increase the economic fortunes of rural women.

Small, medium and micro-enterprise development, as a solution to the rise in joblessness, has been a major focus of post-apartheid South African government policy. In Africa, micro enterprise predominantly means 'survivalist informal enterprise', much of which involve women searching for ways to sustain themselves, rather than an answer to an identified need in the marketplace. Most of these enterprises fall short of even a minimum wage income standard (Duncombe and Heeks 2001, Rogerson 2000, Sharma et al 1990). Furthermore, as these enterprises rarely offer an opportunity for expansion into viable businesses, it seems that additional factors are required to "jumpstart" sustainable economic growth in the rural areas. Sustainable economic development focuses on people and engages them in assessing needs, planning, and implementing development initiatives. Goldsmith and Brinkerhoff (1990) define sustainability as a condition in which institutions' outputs (services and products) are valued highly enough that their inputs (finance, materials and labour) are continued. This definition can be a little misleading as it follows that all food outputs in a hungry community are likely to be valued. Sustainability notions are distorted when donor money is used to initiate income generation projects (as is the case for many rural projects) because conceptually it is difficult to apply the basic 'sales revenues minus cost of sales equals gross profit' equation as a basis for costing future business activities. It is perhaps only when donor funds cease, that a true assessment of the value of the outputs can be made. Added to this is the difficulty of converting outputs into cash when producers can only sell their goods into impoverished markets where customers cannot pay market prices, and this distorted pricing effect may ultimately contribute to an unsustainable development process.

The notion exists that rural economic development can be transformed from a survivalist genre into a more profitable mode using technology that enables, enhances and aids marketing activities, leading to improved access to, and trade with, profitable markets. The World Bank Group Development Report on Poverty (2001) findings suggest that the most effective anti-poverty policies are those that enhance the efficiency of trading markets used by poor people (as purchasers and vendors). Recent findings (World Bank Group 2003), present growing evidence that ICT is a powerful tool when used appropriately as part of an overall development strategy. However, it is not a magic drug for growth. Opening markets, breaking

up telecom monopolies and improving education are all far more important concerns (The Economist 2003).

In rural African communities, women normally care for the family, as well as being the economic providers. Whilst these women can be very resourceful in forming self-help groups it appears that the real practical problem they experience is in the understanding and translation of market opportunities into effective trading activities. This limited knowledge (e.g. human, leadership, technology and physical) is one of the major barriers to accessing markets. The research of Mchombu (2000) and Miller *et al.* (1993) appear to support this in noting the lack of integration of marketing information and leadership skills in the process of development.

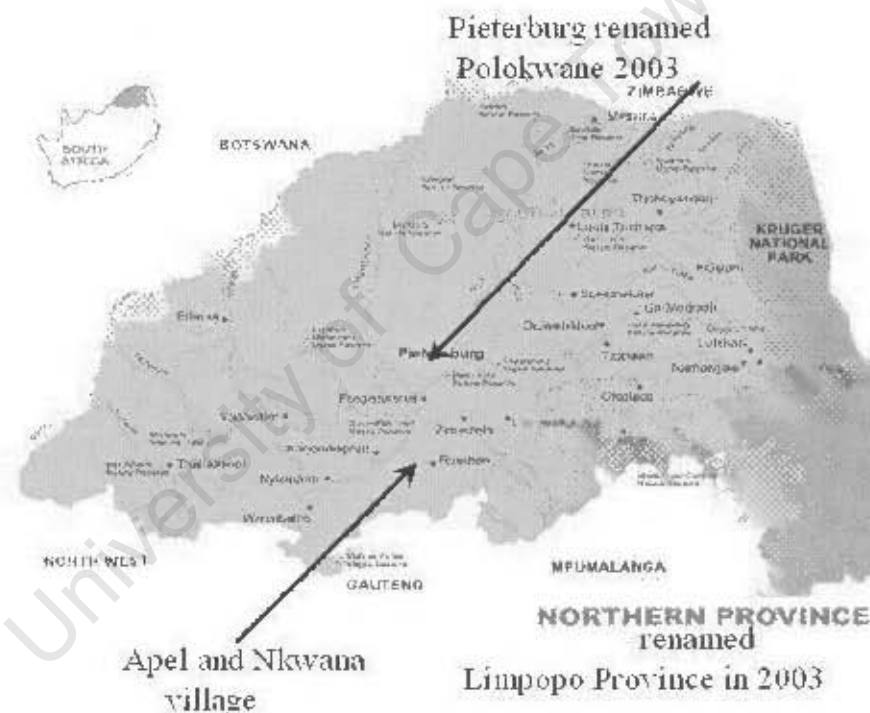


Figure 1.1 The RWA Locations

It is the intention of this study to explore how the integration of development, marketing and E-commerce can further improve marketing efficiency in a rural community. A specific case

is used, the Rural Women's Association of Sekhukhuneland (RWA), to explore the conceptual links between marketing, E-commerce and development.

## **1.1 RURAL SOUTH AFRICAN ECONOMIC PROGRESS**

The RWA started as a Roman Catholic development initiative; head quartered in the village of Apel, in Sekhukhuneland, 150 km southeast of Polokwane in the province of Limpopo (Fig.1.1). In 1992 the RWA, a legally incorporated, Section 21, not-for-profit, community-based umbrella organisation, began operating. Within 4 years the RWA self-help projects eradicated both child malnutrition-caused mortality and hunger, and generated a small income for some of its members. Despite this very commendable achievement, substantial economic growth and prosperity have eluded these rural communities. Rural poverty remained a major problem and the limited access to markets remains unchanged. Acknowledging the successful work of the RWA, it is clear that the presence of donor and government sponsored Information Communication Technologies (ICTs) impacted insignificantly on local economic development. To migrate from this situation, to a new model that examines and makes sense of economic development in the developmental context, other factors need to be included in the analysis. Marketing is one such issue and its role in development is discussed in the next section.

### **1.1.1 Expanding Economic Development: The Missing Links**

The research of Phororo and Prasad (1996) in the rural district of Semonkong, Lesotho, where 61% of farmers are female and 70% of produce is farmed in home gardens, identified marketing weakness as the major constraint to expanding economic activity. This finding was reinforced by the work of Sotshongaye and Moller (2000) in their research into the self-assessed development needs of rural women in KwaZulu Natal. As well as marketing weakness, they noted a number of other major obstacles to sustaining community projects, including the lack of capital resources, the lack of markets and the restrictions imposed by a poor access road and limited transport. However, this research did not provide insights into how to usefully integrate marketing activities into the farmers' trading operations. Similarly, the RWA struggled to increase economic activity in the face of an undeveloped market place, limited transport and bad roads. As the RWA had limited transport facilities, most produce and goods were sold locally (within a couple of kilometres), resulting in a buyers' market of suppressed prices. Local buyers (other rural women) had limited income (relying mainly on

small pension payouts and meagre repatriated wages) and often crops and goods (such as maize, bricks, fencing and furniture) were sold for less than the input values (e.g., seeds, fertiliser water, labour). This problem was compounded by the women's inexperience in identifying and developing markets. A study by Rhodes (2001a, 2001b) showed that the RWA's business inexperience, as well as the lack of understanding of marketing principles, was a major barrier to increasing profitable economic activities.

### 1.2 ICTs AND SUSTAINABLE HUMAN DEVELOPMENT

Needs, other than material consumption and production have to be included into the understanding of development for sustainability to be a reality. Traditional economic accounting, which produces a standard international comparator of gross national product (GNP), leaves out essential elements. For example, a country can show steadily rising income whilst destroying its ecological and environmental assets through such things as soil erosion and forest denudation. Sustainability implies long-term stability and this suggests that institutions are key actors and therefore sustainability depends on the actors in the network sharing the same goals and approaches, philosophy and terminology. Human sustainable development is more about building the capacity for understanding and action at the grass roots of society and integrating democracy as an attribute of social structures. This means less authority bound structures and processes, a greater measure of grass roots involvement and more symmetry in the prevailing power relations. Through this model of development, economic growth can be accelerated, leading to reduced inequality and poverty alleviation.

Recent discussion of the role of ICTs in development is suffused with contradiction and paradox. The panoply of recent technological innovation and the convergence of content, computing and telecommunications have created new and pervasive applications, such as E-commerce and E-marketing, all of which can impact significantly on organizational processes. Marcelle (2002) provides a concise and comprehensive definition of ICT. *'Information and communication technologies (ICTs) are a complex and heterogeneous set of goods, applications and services used for producing, distributing, processing and transforming information - included in this set are the outputs of industries as diverse as telecommunications, television and radio broadcasting, computer hardware and software, computer services and electronic media (e.g. Internet, electronic mail, electronic commerce,*

*computer games). ICTs are a systemic, pervasive set of technologies that are associated with fundamental institutional, social and economic restructuring.'*

Whilst popular development dialectical reasoning points to the promise of significant economic and social transformations, little effort, so far, has been made to understand the changes enabled by the new technologies, and how they can be usefully applied to an African rural environment. One question that is frequently asked in the development debate is what is new about ICTs that can change development in the 21st century? The UNDP (2001) answers that it is the pervasiveness of ICT that is different to any other technology. *'ICT goods and services have diffused at rates, which set many records. Comparisons with other kinds of technologies shows that ICT goods and services took a much shorter time to reach a comparable percentage of the population in wealthy countries. For example, as reported by the International Telecommunications Union (ITU-BDT) development division, average compound annual growth rates over the period 1990-1998 for fixed telephone lines was 6%, while it was 52% for mobile subscribers and 81% for Internet hosts. When these growth rates are translated into user numbers, the figures present an even more dramatic picture. At the rate of growth reported, it took only 8 years for the Internet to grow from a network consisting of 213 host computers supporting only several thousand users, to its present estimated size of 56 million Internet hosts and 190 million users. The number of countries connected to the global network has also grown from just over 20 in 1990 to more than 200 in July 1999. (ITU).*

This pervasiveness suggests that the technology has almost endless use possibilities in an almost endless range of locations, all of which can break down barriers to human development in at least three ways not possible before. Firstly, it can break down information barriers, as the World Wide Web can deliver low cost information to poor and rich alike. Secondly, it can break down barriers to participation, as it is an easy and cheap way to communicate. Poor people in particular suffer from high communication costs, in part due to their geographical remoteness. Thirdly, it has the capacity to break down the barriers to economic opportunities.

Morales-Gomez and Melesse (1998) point out the macro assumptions commonly attributed to ICTs, namely, increased efficiency of structure, strengthened competitive capacities and strengthened global competitive capacity. Additionally they refer to the large accessible

window to the greater knowledge of the 'outside' to strengthen democracy, increase social participation and remove barriers to modernization. Returning to the question of technology and economic growth, the World Bank Group Human Development Report (2001) indicates its belief that harnessed effectively, ICTs could offer dramatic improvements in development opportunities to the poor.

Many reasons are cited for the unsuitability of ICTs to rural development, such as the lack of connectivity, low tele-density, limited Internet access, scant ICT and computer education, limited literacy and human and technological networks. Africa still lags behind in this transition to an information economy, and although it accounts for approximately 13 per cent of the world's population, only 0.6 per cent of Internet users worldwide are on the continent. The average tele-density in sub-Saharan Africa, for instance, is only 2 lines per 100. Despite these barriers it is considered axiomatic that if the developing world turns its back on technological innovation, it condemns itself to continued marginalization. The World Bank defines as 'marginalized' the group in which technology diffusion and skills building have a long way to go, where large parts of the population have not benefited from education, and the diffusion of old innovations such as electricity, phones and television has been limited.

Experience shows there is no simple ICT implementation blueprint. New models and new ways are required in order to direct ICT use towards meaningful human development, and consequently economic development. It is the intention of this study to examine how ICTs can integrate with a women's development organization, and to uncover new ways and models that can help in the local appropriation of technology as a means to increase trading efficiencies.

### **1.2.1 Donor Funded Technology Transfer**

Most technology transfer, at the local African rural level, is donor led. The study of Baarks and Heeks (1998) of the process of donor funded technology transfer found that donors are good at shifting boxes from the west to developing countries, but making those boxes operational at the other end is problematic and often they fail. They attribute this to the scant attention paid to the fact that technology is more than just equipment, it has a surrounding shell of infrastructural requirements and technical and managerial skills. Often these

necessary elements in the surrounding shell are missing. The RWA experience of receiving donor-funded technology concurs with this analysis.

### 1.2.2 Gender and Technology

*'Information Technology can offer significant opportunities for virtually all women and girls in developing countries ... but ... most women within developing countries are in the deepest part of the divide (digital) – further removed from the information age than the men whose poverty they share. If access to and use of these technologies is directly linked to social and economic development, then it is imperative to ensure that women in developing countries understand the significance of these technologies and use them'* (Hafkin and Taggert 2001).

*'For decades, we have known that the best way for Africa to thrive is to ensure that its women have the freedom, power and knowledge to make decisions affecting their own lives and those of their families and communities. At the United Nations, we have always understood that our work for development depends on building a successful partnership with the African farmer and her husband. Study after study has shown that there is no effective development strategy in which women do not play a central role. When women are fully involved, the benefits can be seen immediately: families are healthier; they are better fed; their income, savings and reinvestment go up. And what is true of families is true of communities and, eventually, of whole countries'* (Annan, 2003).

Richardson's (2000) findings strengthen the latter arguments, linking women and technology to improved social and economic development. His research showed that women with access to ICT services increase their ability to generate income and enable them to help empower other rural women. The UNDP (2002) reinforces this notion in indicating that the ICTs 'promise' of substantial cost savings and potential to reach into new markets make them attractive to women. That the majority of the rural poor in developing countries are women, who generally experience more difficulties in accessing ICTs than do men, raises concerns about the ability of ICTs to significantly impact on country development if women's ICT needs are not specifically addressed.

The importance of gender in ICT development is axiomatic. AFRE-FEM (1998) notes the crucial need for programmes that target women for improved ICT access and training and the

use of Internet applications. Achieving this has so far proved illusive and as yet there are no robust models of adoption. Lacking research in the development field to draw from, the business experience of linking ICT with business processes is considered next.

### 1.2.3 ICTs and Business Processes

Information Technology (IT) is not simply a tool for automating existing processes, but is more importantly an enabler of organizational changes that can lead to additional productivity gains (Dedrick, Gurbaxani and Kraemer 2003). Avgerou (2001) notes that at the level of the business firm, it is well accepted that the most significant benefits accruing from IT are often consequences of the technology supporting organizational change where an organization is best understood as a continual process of movement. Avgerou's research further suggests that IT systems do not deliver sizeable benefits, unless they are part of an effort to introduce wider changes in the organization. Mardle (2003) concurs by noting that there are very few instances of companies that have been able to create a successful business from scratch with ICTs. Beard (2003) cites Majchrzac and Salsman (1989) as saying that inadequate planning of the necessary organizational change to adapt and take advantage of the technological change is one of the primary reasons for not achieving the potential capabilities of technology to significantly improve organizational performance. The spectacular failures of the 1990's phenomena of business process re-engineering illustrated that it was the micro dimension, that is, at the level of the individuals involved, where change is necessary.

At the community development level Gurstein (1999, 2000) agrees with Avgerou's findings, noting that whilst ICT is useful in overcoming distance sensitivity, the presence of electronic resources alone will not meet a community's needs unless projects promote the use of local information systems. Gurstein (1999) notes that ICT success is limited when it is not linked to projects with economic activity and suggests that marketing is one such example. Thorngate (1995) concurs adding that only contextually relevant, accessible, affordable information will result in increased benefits.

The inference drawn from the preceding argument is that successful ICT adoption must be contextually appropriate and in conjunction with changes in work processes, in structures and in products and services. Additionally, high network costs and the issues of interconnection will affect the adoption of ICT and has often these factors have been found to be a key reason for failure (World Bank Group 2004). To optimize success, organizational change, such as the

introduction of marketing, must be locally meaningful, not merely a transfer of organizational practices. Organizational innovation must be appropriated within the local socio-economic context. Studies that relate to the restructuring of work processes that provide continuity of local society values are required in order to expedite Information Technology benefits.

Generally, organizational development practices are predominantly informed from within the Northern private business sector and are not often successfully transplanted outside of this context. Literature search in this area found no examples that relate to an African, gendered, rural, socio-economic development context.

This study inquires into the appropriation of ICTs relating to a specific organizational process - marketing - within a rural, gender development organization. The findings can contribute to the alignment of technology and organizational practices within a particular social context and lessons inferred could be used in other rural development organizations.

#### **1.2.4 Summary**

The transformative nature of ICT offers a potentially unprecedented opportunity to overcome existing social divisions and inequalities. Many academic commentators assume that ICT can 'empower' individuals (D'Allesandro & Dosa 2001), and increase levels of social interaction and civic involvement. Morales-Gomez and Melesse (1998) note that increasingly, social, economic and political progress is linked with the ability of countries to make informed, knowledge-based decisions, and that ICTs are playing an increasingly crucial role in many societies. The growing trend to view ICTs as a panacea for underdevelopment has stimulated many hopes and expectations, which puts mounting pressure on government and development agencies to introduce them quickly. This urge to play 'catchup and leapfrog' often results in inadequate and insufficient assessments of the risks ICTs pose to sustainable development.

The paradox exists that whilst ICTs can address rural development challenges, they have yet to do so in an observable way. Strategists, academics and policy makers alike are struggling with the conundrum of ICT-led development issues. Turning technology into a tool for human development requires enabling the use of these technologies to achieve local benefits and will presuppose concentrated efforts across a span of disciplines such as IT, management, marketing, finance and leadership. Simple access to the Internet and other ICTs is insufficient

to significantly improve the probability of economic success in marginalized groups. ICTs are neither a panacea for development nor a replacement for real world processes (Huyer and Sikoska 2003).

The present understanding of the usefulness of ICTs is increasingly juxtaposed against a wider organizational change linked to economic activity, in particular, activities requiring marketing. There is scant literature that examines this concept in a rural development model, perhaps because of the scarcity and difficulty of locating such an organization. The RWA is a useful case in which to examine these propositions, as it was a successfully established, gender development organization with substantial human, physical and ICT assets. In line with its development agenda of becoming more business oriented it opened a mini industrial park in the village to encourage local economic activities. Sadly, these activities have failed to translate into significant increases in income for the women who are still in survivalist donor-supported mode.

The RWA has acknowledged that a lack of marketing understanding and a lack of access to profitable markets for their products stymied their trading activities. Some of the questions that need to be addressed include: Can developmental and business agendas be blended? How can they be blended and where, if any, are the limits? Rather than an examination of technology, an analysis of the social and cultural factors, which determine the effective application and alignment of ICTs within a development organization, is required to provide further illumination. The above discussion illustrates the missing links and constraints in economic development among women in rural African communities. In order to progress beyond the existing status quo of development, it is necessary to think and do things differently.

This study examines the RWA decision-makers' perception of the use of ICTs to address information gaps and blockages and to inform and strengthen decision-making capacities. A multi-layered approach is taken in this study, observing ICT innovation in interaction with the changes experienced by the actors, the organization, the business process (marketing) and the social context in which it takes place.

### **1.3 RATIONALE OF THIS STUDY**

This study builds on the existing RWA development success factors (discussed in section 3.3.4) and within this, provides a new way for the RWA management to consider marketing and ICT concepts. In particular, this study will explore the process and opportunity of applying E-commerce principles to enhance marketing planning activities, which could expand and improve the economic activities of African women in rural areas.

Literature review (Kotler 1980) demonstrates that planned marketing activities can enhance product and service development. Thompson (1997) notes that whilst the structural characteristics of a perfectly competitive market are well known (many buyers and sellers, no barriers to entry, perfect information), deviations from perfect competition leads to measurable welfare and consumer losses. Information technologies can affect almost every structural characteristic of these markets and improve economic performance by reducing transaction costs and market thinness. Market thinness is defined as a condition of a market in which the structure of the market (i.e., low trade volumes, few buyers and sellers, scarcity of market information, barriers to entry) inhibits or prevents prices from attaining the relationships that characterise perfect markets. The dominant presence of one or more of the structural causes of thinness results in significant transaction and communication costs and inefficient prices. These structural causes of thinness can also be seen as market imperfections. Thompson (1997) suggests that ICTs can reduce many of the structural causes of thinness.

The recent E-commerce developments in B2B (business to business) and B2C (business to consumer) further reveal the potential benefits of cost efficiency and productivity gains. Business transactions, where the buyers and suppliers connect electronically, enhance business efficiency through lowering transaction and communication costs. E-commerce has the potential (Timmers 2000, Turban *et al.* 2003, Rappa 2000, Cunningham 2000) of increasing business effectiveness through widening market potential and better meeting customer needs, whilst providing opportunities for enhanced product and service innovation, and ultimately addressing some of these structural causes of thinness or market imperfections.

Nevertheless, E-commerce also brings new entry barriers, requiring better organisational capability to manage complex business relationships. Additionally, there are new

opportunities for new intermediaries who can shift the focus away from pure price competition. Furthermore, bypassing intermediaries has implications for cost reductions, as well as being linked to competitive strategy. In the E-commerce development and implementation phases, particular attention has to be given to areas such as marketing, leadership, Information Technology skills, computer literacy, physical resources and support, training and development and scalability and sustainability. There is an important role for ICTs in rural populations, but only if they are both envisioned from the perspective of users and developed through their active participation. The discourse on ICTs for development is often well crafted for institutional reports, but seldom corresponds to what is really happening on the ground (Gumucio-Dagron 2003).

The primary focus in much of the E-commerce literature is global and corporate in nature. Although theory exists on the use of marketing and E-commerce in business transactions, there is little attention given to the integration of marketing and E-commerce activities to create a new business environment for rural communities. The potential to correct market imperfections in the rural community could have significant benefits to the economic growth and well being of people living in these areas.

#### 1.4 SIGNIFICANCE OF THE STUDY

NEPAD (the New Partnership for African Development) targeted ICT as a priority sector for the achievement of sustainable development in the 21<sup>st</sup> century. Its objective to diffuse ICTs, double tele-density (currently 1 per 1000) and achieve E-readiness for all countries in Africa. This intention is paralleled by The Southern African Development Community (SADC) ICT Policy and Regulatory Support Program (SIPRS) which aims to advance policy harmonization by producing model policies in key areas, including human resource development and information sharing. It is expected that the SIPRS project will lead to greater liberalization of the ICT sector and foster a competitive market within the region. (World Economic Forum 2003).

The lack of research relating to the developmental impact of ICTs generally, and more specifically relating to African rural women, has been noted by a number of sources. The emphasis of ICT projects has been more often on providing access to information than on finding innovative ways to apply ICTs to specific local needs. The UNDP Human

Development Report (2001) states that neither statistics nor literature exists on the position of women in information technology in Africa, as users or as IT professionals, or what impact IT has had on them. Further, there is little empirical research that focuses on the economic impact of the integration of ICTs with women's entrepreneurial and revenue generating activities. Heeks (1999b) points out the need for theoretical research. His investigation into the area of ICT and economic development leads him to state that there is no empirical evidence to support the claims made for and against the use of ICTs. He further states that the role and impact of these technologies and models, in relation to rural economic development, are still obscure. Molla (2002) supports this view and his research concludes that current IT research in developing countries mainly originates from multilateral development agencies and focuses on macro-level issues and requirements, with only a few addressing organizational issues. He notes the following limitations in the existing research. '*Much of the current knowledge of E-commerce in developing countries is based on speculative arguments about the potential of E-commerce; and continues'..... The studies consist more of prescriptions and anecdotal descriptions without much thought to theory and analytical methods for studying the interplay between contexts and organizations: the descriptive studies are often limited to a single case and there is a poor link to theoretical frameworks: there is little conceptual and empirical research on E-commerce in developing countries at an organizational level*' (Molla 2002: 49).

The debate surrounding this area of research suffers from a lack of unambiguous evidence and much of the comment is based on speculation, not research. Added to this is the problem that many existing studies take a techno-centric approach and that without a broader context of research the use of technology may be pointed in the wrong direction and budgets wasted in building 'white elephants'. Bringing the benefits of ICT to small and medium enterprises (SMEs), especially micro businesses, in developing countries is a challenging task for policy makers and international aid agencies (Humphrey, Mansell and Schmitz 2003).

Monteleagre and Ramiro (1999) call for better fieldwork to analyze the dynamic interplay between the social and the organizational setting in which the ICT is embedded. They note that often, the substantive issues relating to the process of developing and implementing ICTs in regard to work processes are generally ignored. This study examines ICTs from a business process enabler perspective (marketing) and it considers how this can move community development from an *ad hoc*. model to a sounder theoretical framework that can, at a later

stage, be tested and validated. The framework could be used in other rural organisations to assist in their economic development. There could be an opportunity in later research to link the model to other existing models (such as procurement models, change models, urban development models) and in this way provide greater integration between urban and rural economic frameworks. Finally, this research may contribute to the better allocation of scarce development funds; better understanding of technological decisions; significant reduction in transaction costs; and ultimately contribute to poverty alleviation. Further studies may have the opportunity to determine the relative impact of E-commerce, marketing and development on economic outcomes.

On a more practical note, it was felt that the study could enable the RWA to reach more profitable customers, which might lead to greater sustainable economic development. This could be realised through the provision of new E-commerce and marketing knowledge, skills and understanding that the RWA would acquire throughout the duration of the study. Furthermore, the study could result in improved networks of trading partners through which more businesses could be generated.

### 1.5 CONSTRUCTING THE RESEARCH QUESTIONS

Darlington and Scott (2002) reason that qualitative studies often grow out of a particular time and place. Added to this, research questions can often grow out of a strong ideological commitment and the pursuit of social justice. This study's evolution can be explained in this manner. In 1997 I had been working with the RWA for 18 months when I became aware of the proposed South African Government telecentre programme. I had little idea what a telecentre was, but I motivated for one to be donated to the RWA, as I believed (deterministically) that technology equated with progress.

Many questions presented themselves. How could a rural women's self-help organization harness technology to reduce barriers to trade and expand their level of economic growth? What models of marketing and activities would be appropriate to the context? What are the barriers to implementing a marketing model? (E.g., lack of awareness and understanding of how marketing works) How could E-commerce models (and what type of E-commerce models) build marketing expertise into a rural development model? What existing infrastructure could be used as a basis for the migration from one model to another and what

would be the factors that need to be incorporated into a community business model? My preliminary research questions were shaped by the presence of the RWA telecentre: - *How can the telecentre be used to build an Internet model for building a local commodity exchange? Can the existing telecentre infrastructure (human and technical) be used to develop E-commerce activities in rural communities, which can enhance marketing? How to best utilise existing community assets to expand market access?*

Later, further literature review highlighted marketing as a missing factor in rural development and as this expertise is often organizationally situated, I refined the focus of the questions as follows. *Can E-commerce enable marketing in an African Rural Women's Community Based Development Organization? How would the integration of E-commerce, marketing and development activities in a rural African community enhance business transactions and result in greater profitability and growth?*

The literature search unmasked a number of assumptions I had built into my earlier questions, such as technology being the prime agent of change, and that the awareness of the benefits and opportunities of technology are rapidly understood, and adopted. This thinking took place in 2000 and 2001 when the E-commerce euphoria was at its height and the explosion of dotcoms promised magic solutions to a wide range of problems. The events surrounding the dotcom crash alerted me that it was too premature to implement E-commerce in a rural location but that the meaning of technology and trade, and the interrelation between these concepts needed to be explored. This presented the idea of using a conceptual framework that integrated development, marketing and E-commerce as a way of exposing and teaching these concepts to the research participants. In this way I would be able to observe their present understanding of marketing along with their perceptions on the use and applicability of E-commerce as a marketing and organisational enabler.

The final set of research questions that were used to guide the research study was as follows.

*How and to what extent, can business and development principles be blended, in a rural women's development organisation, using ICT concepts?*

*What are the barriers to implementing marketing and what marketing applications and activities are appropriate to the context?*

*How can E-commerce impact on marketing planning opportunities in a South African rural community based organisation?*

## **1.6 STRUCTURE OF THE THESIS**

This thesis is structured into seven chapters including this one. Chapter one introduced the research area through exploring some reasons for the limited economic success in rural South Africa and follows with the argument for the role of ICTs and marketing as enablers in sustainable human development. The rationale and significance of the study were given, followed by the construction of the research questions and the thesis chapter outlines.

Chapter two is the literature review of the theoretical underpinnings of this study. It starts with a description of economic development theories that significantly contributed to world development in the last two centuries. This is followed by a discussion on alternative development notions that are assumed in this research. The impact of technology on development and the application and development of E-commerce are detailed. The chapter ends with the presentation of marketing theory. It is the synthesis of the latter three knowledge domains that shape the conceptual framework used in the research and outlined in chapter four.

Chapter three is devoted to an overview of the RWA research situation. The RWA development process, tracked since 1996, includes historical antecedents, the legacy of complex Bantu Authority power issues, the prevailing conflicts and the introduction of technology. The scoping study is included here as it shapes the approach to the action research project used in this study as discussed in chapter five.

Chapter four describes the conceptual framework used in the action research project. It is shaped from the findings of the literature survey and the pilot research. As well as defining the concepts and models being used in this study to investigate the research questions the framework also guides and directs the research methodology.

In chapter five the research methodology used to gather the data – action research - is discussed. This chapter includes the argument influencing the methodology selection, the research approach and design, and lastly the interpretation approach, Actor-Network Theory, employed in the data analysis, is discussed.

Chapter six, analyzing and interpreting the research results, is in three parts. Part one examines the results of the Action Research project and is divided into three sub-sections, development, marketing and E-commerce. Part two takes a broader sociological perspective in examining the RWA ICT implementation, the telecentre, using Actor-Network Theory . The third and final section of this chapter seeks to apply the integrative insights derived from the research findings, to the initial conceptual framework .

Chapter seven summarises and concludes the study. The theoretical and practical contributions are discussed as is the larger relevance and value of this study (i.e., its contribution) and its limitations and suggestions for future studies.

### 1.7 CHAPTER SUMMARY

This chapter introduced the research area by arguing that economic development in rural Africa is slow and for women even slower. World development agencies conjecture that rural economic development can be accelerated and expanded using technology that enables, enhances and aids the implementation of marketing activities, resulting in access to and trade with profitable (and often remote) markets. The research questions in this study will seek to explore these ideas in relation to an established rural organization with access to ICTs and will explore the gap between theory and practice.

Chapter two follows. This chapter will review the three theoretical domains - development, ICT and marketing, which underpin the conceptual framework used in this research study.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0 INTRODUCTION**

This chapter reviews the different theories related to (1) development, (2) ICT (E-commerce) and (3) marketing and is divided into three main parts. Part 1 commences with the historically evolving nature of development and the economic theories shaping world development in the last two centuries. This section proceeds with a review of alternative development thinking in the form of Todaro's notions of development and Human Scale Development, both of which underpin the philosophical approach followed in this study. The section concludes with a debate of the role and position of technology in development. Part 2 explores a specific application of ICT, namely the development and application of E-commerce and how it is positioned in relation to promoting economic development. The final part of this chapter focuses on marketing theory. Prevailing academic notions (Beard 2003, Gurstein 1999, 2000, Avgerou 1998, 2000, 2001) suggest that ICT success is limited unless it is linked with a business process. Consequently, in this study, ICT is considered in conjunction with marketing as a business process. This part finishes by reflecting on the interaction between marketing and E-commerce.

These latter three areas were considered in this research to be important contributors to the development of the conceptual framework (discussed in chapter four), which was used to direct the research process. The literature examination in this chapter will provide the theoretical input into building this framework.

### **2.1 TRAJECTORY AND MEANING OF DEVELOPMENT**

The archaeology of development dates back to at least the late 18th and 19<sup>th</sup> century with the church solicitude tackling poverty in its crusade to develop and civilize people. The 1930's League of Nations response to China's call for assistance during the Four Modernisations is another notable example of pre Marshall Plan development. Since the 1947 Marshall Plan, it seems that development and economic development have been taken to be almost synonymous resulting in modernist developmentalism, which assumed a top down American and Eurocentric influenced approach dominated by instrumental reason.

Development is a vague word whose meaning can be attached to a wide range of domains and disciplines such as economics, gender, organizations, personal growth and software development, to name a few. Development, as a concept, is usually connected with the ideal of improvement. Merriam Webster's on-line dictionary defines development as *'the act of improving by expanding or enlarging or refining; a process in which something passes by degrees to a different stage (especially a more advanced or mature stage), a state in which things are improving'*.

Development over time has passed through numerous different phases. *'The different approaches to development over the years can perhaps most briefly be reflected in terms of their names and terminology: ... 'redistribution with growth', 'interdependent development', 'meeting basic needs', 'top-down development', 'bottom-up development'... development', 'autarchic development', 'agropolitan development', 'empowerment', 'sustainable development' and now also 'antidevelopment', 'postdevelopment' and perhaps even 'postmodern development' (Simon 1999: 19). Simon notes that 'there has never been consensus or unanimity about the definition and conceptualization of development, let alone the means to achieve or promote it. Nevertheless, modernization and its more recent offshoot, neoliberalism, has remained the dominant orthodoxy' (ibid: 11).*

Development, as a concept, is historically based on ethnocentric, dogmatic faith in science and technology as a route to (paternalistically) save people from superstition and rescue them from backwardness. Furthermore, the modernist notions of western knowledge (educated, scientific) having superiority over indigenous knowledge have underpinned development concepts. Development has in some quarters become something of a grubby, tainted word representing an inappropriate, outmoded failed 'project' borne out of the Marshall Plan and applied to poorer countries. *'Development fostered a way of conceiving of social life as a technical problem... to be entrusted to ... the development professionals.... these professionals sought to devise mechanisms and procedures to make society fit a pre-existing model that embodied the structures and functions of modernity... Ignoring each society's history and social traditional (the local) and creating feelings of inferiority, ignorance and rejection of local culture' (Escobar 1995: 52-53). Escobar points out that these realities still underpin most forms of understanding of the third world four decades on and that '...the discourse and strategy of development produced its opposite: massive underdevelopment and impoverishment, untold exploitation and oppression. The debt crisis, the Sahelian famine,*

*increasing poverty, malnutrition, and violence are only the most pathetic signs of the failure of forty years of development...*' (*ibid*: 4).

As economic development has restricted itself to the measurement of economic indicators such as GNP it reduced the world into two categories of the developed and the underdeveloped. In this way it created what Escobar (1995) termed the "problematization" of underdevelopment. He noted that the problematization of underdevelopment causes the disempowerment or even inferiorisation of the "underdeveloped countries". By this he meant that the need for development first required the perception of being underdeveloped along with the resultant burden of inferiority and shame. People did not consider themselves poor until they were told they were poor. As ICTs exposed other more affluent lifestyles to the poor in this way, they can be considered part of the problematization of underdevelopment.

In the era of rapid economic growth during the 70's, problems of poverty and unemployment were perceived as being of secondary importance to economic growth. In many countries that experienced economic growth and modernization, development was accompanied by blatant visible manifestations of social deprivation (International Social Work 1996). The last forty odd years of development failure, witnessed as the degrading state of poverty in which the majority of Third World<sup>2</sup> inhabitants suffered, can be attributed to the predominantly economic nature of mainstream development approaches. The profoundly mechanistic assumptions of economic rationality did not counter poverty as poor people were more often than not excluded from any beneficial effects arising from liberalised markets (Max-Neef *et al.* 1989). Many countries (predominantly in, but not confined to the Third World) were typified by the co-existence of conditions of deprivation and prosperity. The co-existence of economic modernization alongside severe and widespread poverty resulted in distorted or under-development.

The traditional concept of poverty eradication through economic development is limited. It measured only quantitative indicators and ignored the reality of the existence of multiple poverties (e.g., subsistence, protection, participation, identity, educational, associative, environmental) each with its own set of pathologies that impacted on socio-political factors

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<sup>2</sup> Acknowledging the term Third World is open to wide interpretation and historically has been misused and abused. It is used in this study simply as a means of succinctly demarcating the underdeveloped areas of Africa, Asia and Latin America. It is used interchangeably in this study with the term lesser-developed countries.

and interrelated and interactive human needs. The 1980s saw a change in direction in the concept of development, now expanded to encompass the notion of sustainable development. The 1987 *'Our Common Future Report'* prepared by the United Nations' convened World Commission on Environment and Development launched to the world the strategy of sustainable development as the great alternative to the then current impasse.

Sustainable development concepts evolved out of failed modernization development theories, and acceptance of development as multi-faceted, connecting the social, economic and cultural dimensions of life. It was erroneously envisioned that *'Sustainable development would make possible the eradication of poverty and the protection of the environment in one single feat of western rationality'* (Escobar 1995: 192). Statistics bear witness to the failure of sustainable development as highlighted by the Communication and Natural Resource Management manual (2003:11). *'Between 1970 and 1999 the natural wealth of the earth's forests, freshwater ecosystems, oceans and coasts declined by 33 percent. Today, 58 percent of the world's coral reefs and 34 percent of all fish species are at risk. Within the next 25 years 48 countries accounting for 35 percent of the world's projected population will face water shortages.'*

Estevan (1992) asserted that the word development always implied a favourable change, an upliftment of conditions from the inferior to the superior, from worse to better. Whilst Escobar (1995), one of the more outspoken academic critics, supported this notion he questioned how (and by whom) the language of development shapes goals and outcomes. Where does this language come from? Escobar observed development as a discourse, where discourse is defined as a *'specific series of representations, practices and performances through which meanings are produced, connected into networks and legitimized'*. He reasoned that discourses are not free-floating, independent constructions, but shape and often universalize a particular view of the world as well as providing partial, situated solutions. He argued that by perceiving development as a discourse it could not simply be reduced to the structures and logic of economics. Escobar claimed that extant development approaches cultivated *'a way of conceiving of social life as a technical problem... to be entrusted to ... the development professionals.... these professionals sought to devise mechanisms and procedures to make society fit a pre-existing model that embodied the structures and functions of modernity...'* (Ibid: 52-53). He viewed development as guilty of ignoring each society's history and social traditions (the local) and creating feelings of inferiority, ignorance

and rejection of local culture. Escobar asserted that these realities still underpin most forms of understanding of the Third World, four decades on.

Commenting on the impact of development models and processes to date, Escobar remarked that *'...the discourse and strategy of development produced its opposite: massive underdevelopment and impoverishment, untold exploitation and oppression. The debt crisis, the Sahelian famine, increasing poverty, malnutrition, and violence are only the most pathetic signs of the failure of forty years of development...'* (1995: 4). Todaro believes that *'development is not purely an economic phenomenon but a 'multidimensional process involving the reorganisation and reorientation of entire economic and social systems.....and it typically involves radical changes in institutional, social and administrative structures as well as in popular attitudes'* (Todaro 1989: 62). There can be no accepted doctrine of development theory, only a continually evolving pattern of insights and understandings.

Manfred Max-Neef, a Chilean economist, supported Todaro's view by articulating *'the inappropriateness of conventional models of development, that have lead to increasing poverty, massive debt and ecological disaster for many Third World communities'* and advocated that an alternative development philosophy must generate a capacity for greater self-reliance and create a new praxis (Max-Neef 2003). He noted *'the pressing need to modify substantially our concepts and approaches to development'* and he warned that *'we watch the feverish and obsessive doings of the technocrats who design solutions before having identified where the real problems lie'*. (Max-Neef *et al.* 1989: 11). If we accepted the objects of development as being a shifting away from an unsatisfactory life condition to one that is more preferable, both spiritually and materially, then the history of failure of world development is in reality the development of underdevelopment of the Third World.

### 2.1.1 Development Theory

This section considers the predominant approaches shaping world economic development. Development theory history focussed on two opposing bodies of macro theory (i.e., rooted in two traditions). The first was the structural-functionalist social theory, neo-classical economic tradition and the second, theories that emanated from Marxism and Imperialism (Graaf 2001). Both appeared to have underlying modernist assumptions in subscribing to the notion of progress and development as desirable outcomes. The differentiating factors between the two traditions were mainly in the means to achieve the goals of development. Both were macro

economic streams and both were frustrated by the continual failure of development initiatives. Many writers believed this failure jeopardized the epistemological foundations of both kinds of theory with some of the failure attributed to the prevalence of Eurocentric-ness. As many of the policies flowing out of development theory proved to be out of touch with reality and therefore unsustainable there was a need to acknowledge the role of individual actors using a micro perspective. The difference between macro and micro theory brings to the fore theories such as phenomenology and ethnomethodology. The following sections will examine the theories of modernization, dependency and critical theory.

### 2.1.1.1 Modernisation Theory

The notion of economic development in lesser-developed countries was a post World War 2 phenomenon. Development began with the implementation of the 1947 USA Marshall Plan against the backdrop of the cold war and the USA's attempt to avoid losing the new post-war states' political allegiance to the Soviet communist block, whilst simultaneously positioning itself as a world super power. The strategy, which advocated and promoted economic development and modernization in the Third World, was formalized in the body of modernization theory. Modernization, lacking a theory of its own (So, 1990) was predicated on the two distinctive and yet interrelated disciplines of Classical Evolutionary Theory (Compte 1974) and Functionalist Theory (Parsons 1951), which together attempted to theorise a model to understand the transition of societies from traditional to modern. Classical evolutionary theory assumed that social change was unidirectional from a primitive to an advanced state, hence predetermining human evolution. Secondly it assumed that the rate of social change was slow, gradual and piecemeal and that social change was evolutionary, not revolutionary. This implied that the process of moving from primitive to complex modern societies takes centuries to complete. Furthermore, modernisation theory postulated that economic change was preceded by social change as the value systems of traditional societies, which emphasised collective ideals and action based on kinship and community, hampering development by restricting necessary individual mobility. Functionalist theory, as outlined by Parsons (1951), had the following tenets: that human society was like a biological organism with different parts corresponding to the different institutions that make up a society; that each institution performs a specific function for the good of the whole. Functionalist theory stated that societies tend towards harmony, stability, equilibrium and the *status quo*.

Levy (1967) held that modernisation occurred through contact between modernised and non-modernised societies and that previous indigenous patterns always changed at this encounter. The progressive and evolutionary tenets of modernisation assumed that exposure to science and technology would transform peoples' value system. Being a transformative process modernisation required societies to abandon traditional ways of thinking and traditional ways of human relations. In a word, modernization presumed that societies must drop traditional structures, cultures and values, and adopt those of Western European and North American societies. Modernisation theory explained the lack of development as a lack of modern values, institutions and policies. Theorists believed that they could find a universally applicable model and replicate the experiences of the west in underdeveloped economies . However, the experiences of Ethiopia and Zimbabwe disputed a major pillar of modernisation by demonstrating that the process could be stopped or reversed and that social change was not necessarily progressive or irreversible.

The evolutionary assumptions of uni-directional development blinded development theorists to possibilities of alternative scenarios within the framework of modernisation (e.g., assuming democracy is an integral part of development). In the first development decade of the 1950s, development theory, practice and policy were dominated by the modernization approach, an approach that continued into the 1960s, but it suffered serious criticism from the 1970s onwards. One of the most powerful critiques of modernisation theories came from the dependency school of thought. It argued that the problems of underdevelopment were not internal to the Third World but externally driven by the advantages that previous colonial powers held as a result of their position in the world economy.

#### 2.1.1.2 Dependency Theory

Dependency theorists viewed underdevelopment as a consequence of predatory first world activities and as a consequence of western underdevelopment in developing countries. They further saw western capitalism as needing underdevelopment to fuel its own growth. Dependency theory, prevalent during the 60s and 70s, was pessimistic in viewing the world as a pre-structured entity of underdevelopment that only a revolution could reverse. It argued that after de-colonization, Third World countries remained locked in a cycle of economic exploitation by and from their dependency on the developed (core) world. This theory viewed post colonial development as concerned with only three things: sourcing raw materials for the first world, providing investment outlets and supplying markets for manufactured

goods. Capital flow into the Third World (the peripheries) was not aimed at industrial development but at the development of economic activities that directly served to benefit first world growth.

The first stage of underdevelopment was the exploitation of a periphery country's natural resources by the core countries. This was followed by the development of a transport network to facilitate the export of raw material to the core, and reinforced with the availability of cheap western goods for import by the periphery, led to the collapse of local industry. Frank (1996) suggested that this core / periphery relationship of dependency ran in a chain-like fashion through the global system, locking countries and regions into a cycle of dependency and underdevelopment. This underdevelopment was characterized by an unequal exchange (as raw material prices over time drop and manufactured good prices rise), by a migrant labour force, (which destabilizes society), and by a continual transfer of capital from periphery to core. As a result of this, Third World economies were unable to replicate western capitalist relations of production but instead became "useful" appendages shaped to suit the needs of advanced economies. This development style resulted in a "coin" of development, on the one side western capitalist growth and on the other Third World underdevelopment.

Dependency theory denied the free market concept arguing that the world economy was set in a global system of a powerful core and a weak periphery. Dependency theory argued that Third World countries were locked into a cycle of economic exploitation, with the periphery economies servicing the needs of the core economies. Whilst this may not be strictly true today, structural conditions persist, as a result of this development approach, which continue to act as a major growth impediment. An example of this was Mozambique's transport network that was built for the intention only of getting raw material to port. Further parts of the country could not be meaningfully developed until a massive investment of infrastructure occurred. This situation was at times exacerbated by the imposition of World Bank and IMF macro-economic policy loan finance conditions (structural adjustment).

In the case of South Africa, Bundy (1972) attempted to disprove the assertion that tribal custom was holding back African farmers, who at the time were not adopting new agricultural technology. Bundy refuted this claim with evidence of the 1830 rise of wealthy African peasantry employing new farming technology, the plough. They were later crushed by the South African government and turned into migrant workers as part of a deliberate plan to

underdevelop rural areas to adopt the periphery role to develop the (white) core of the South African economy. This was a clear example of dependency theory's claim of active underdevelopment resulting from purposeful oppression. South Africa was positioned as an ascendant semi-periphery in 1979 but Apartheid increasingly curbed the health of the economy during the 1970s.

A major weakness of dependency theory was its inability to explain the 'Asian tiger' phenomenon. Wallerstein's (1981) World System Theory was seen to be an extension and improvement of Dependency theory, adding a third level, the semi-periphery, to explain the rise of the Asian tigers. Wallerstein contended that the world was a system, a single unit of a carefully patterned whole with determined roles and positions that behaved in a certain way. Each country had a predetermined role and was held in place by very powerful forces - a predetermined pecking order of power relationships. He asserted that countries could jump levels but only when the world was in turbulence. Despite this enhancement, dependency theory was criticised as being pessimistic, deterministic and economistic, ignoring the role and impact of people in development.

Dependency theory, Modernisation and World System Theory have been much criticized. Frank (1996) noted that the spread of capitalism damaged Third World countries whereas modernisation theorists claim the lack of Third World country development was due to a lack of capitalism, the presence of corruption and inefficient government policies. The dependency system perspective showed that it was not possible for countries to develop at will because development and underdevelopment were two sides of one coin. Additionally pre-structured positions of power stymied development in the periphery countries. Whilst dependency theory debunked the modernist approach to development it was also unable to make significant progress in development. Although the dependency approach was soon discredited, it was the first to highlight the importance of the global to understanding and addressing the national and local. *'Former colonial territories may experience some industrialization and economic development in restricted areas, but as a result of the dominance-dependence relations and hence unequal exchange, the global periphery (South) was dependent upon and exploited by the global core (the North)'* (Simon 2000: 9)

2.1.1.3 Critical Theory

Habermas' (1972, 1974) Critical Theory (CT) emancipatory argument (that individuals must be involved for successful development) embraced some of Karl Marx's theory but rejected its dogma and its lack of scientific rigor. CT was in stark contrast to positivist theory (with its concealed interest in control and manipulation) as it examined the relationship between human reason and human freedom and commented on the use of distorted reasoning, which it saw as blocking the passage of society's development. Further, CT provided a perspective in looking at development using a modernity lens and merging macro and micro theory. This was considered an important enhancement in the quest to understand development. It posited that authentic modernity was a result of morphogenic change (that is change that triggers more changes and is autocatalytic) and that this modernity revolves around new modes of communicative rationality and new modes of democratic decision-making. Habermas defined modernity in relation to development as the advance towards the future rather than a break with the past and or a celebration of the present. He noted two major paths to modernity, one being a capitalist path where the economy and market forces dictated and the second path a bureaucratic socialist one where modernity was achieved through the state's efforts at rationalization. In both cases society was beset with a different crisis. Modernization has taken on a restrictive meaning and has almost become synonymous with a desire for a continuous increase in economic growth where the state was moving towards ever increasing efficiency and where efficient state administration and economic growth (science and technology) defined the path of society's progress.

The domination of instrumental reason (i.e., the belief in a technical solution) in society needs to be subjected to critical reflection because the 'knowing' or meaning has been removed from society. As a result technology as a technical solution was often unworkable as it neglected meaning (context). Habermas discerned this as dangerously reductionist as it disturbed the realm of 'communicative rationality'. Democracy becomes subverted in the modernization process through the operation of the ideology of science and technology. To counter this, due attention should be given to generating more equal forms of social participation Any solution has to be grounded in respect for the cognitive involvement of all those who will be affected to prevent them becoming onlookers in the development process. CT moved development thinking closer to the concept of people centred development and away from macro and difficult to implement theories such as modernization and dependency.

However, it, like the preceding theories, sprinkled little light on the role of ICTs in local micro socio-economic development.

Other development notions, considered alternative, to the above discussed theories, place people and individuals centrally within the development equation. The domain of people centred development is contemplated next through the lenses of Todaro's notions of development and the concepts of Human Scale Development (Max-Neef *et al.*, 1989).

### 2.1.2 Alternative Development Perspectives

For Todaro, the observed development catastrophes of the last 40 years led him to conclude that development must encompass the entirety of a social system to move people to a position in life both materially and spiritually better. He posited three core values of development, those being, life sustenance (the ability to provide basic needs), self-esteem (to be a person) and freedom from servitude (to be able to choose). Life sustenance concerns itself with the provision of basic needs, which are necessary for life such as food, shelter, health and protection. The absence or chronically short supply of these factors is classed as underdevelopment. Self-esteem relates a sense of self worth and self-respect. The third, freedom from servitude, is the ability to choose and have these choices expanded meaningfully to escape from social servitude, ignorance and dogmatic beliefs.

With adherence to these three core values, Todaro advocated people centred development, a concept expanded by Max-Neef *et al.* (1989) as the notion of Human Scale Development. Both approaches emphasized the importance of the 'local' through understanding that the local was embedded in complex relationships with other actors and forces. People centered development supported the premise that the capacity for local structures and systems to maintain or sustain progressive changes within the society was an essential part of sustainable development notions. This approach was suggested as a counter to *the 'sterile confrontation between traditional developmentalism and neo-liberal monetarism.'* (Max-Neef *et al.* 1989: viii) and as an open option (rather than as a model) that needs to be understood and practiced as a process in constant motion rather than as a final solution.

#### 2.1.2.1 Human Scale Development

HSD (Human Scale Development) is rooted in the work of the economist, Dr. E.F. Schumacher. In 1955 Schumacher (2002) travelled to Burma as an economic consultant and

developed the principles of what he called "Buddhist economics". These were based on the belief that good work was essential for proper human development and that production from local resources for local needs was the most rational way of economic life. HSD, with its strong emphasis on the role of creativity in development, flowing from the bottom upwards, provided a conceptual framework, which challenged existing theories and policies. HSD was *'focused and based on the satisfaction of fundamental human needs, on the generation of growing levels of self-reliance, and on the construction of organic articulations of people with nature and technology, of global processes with local activity, of the personal with the social, of planning with autonomy, and of civil society with the state.'* (Max-Neef *et al.* 1989: 8)

The main contribution of Max-Neef *et al.* to the understanding of needs was the distinction made between needs and satisfiers. Human needs were seen as few, finite, classifiable and universal through all human cultures and across historical time periods. What changed over time and between cultures was the way these needs were satisfied. Unlike Maslow's sequential need hierarchy, HSD treated human needs as an interrelated and interactive system where needs were simultaneous and complementary and trade offs were features of the process of need satisfaction. The dynamics of fundamental human needs do not obey hierarchical linearities as Maslow suggests. Accepting this premise means that there is no fixed order of precedence in the actualization of needs and that no need is more important than any other. (Assuming that deprivation is not so severe that the urge to satisfy this need may paralyze other need satisfaction).

Table 2.1 shows the Max-Neef Needs and Satisfiers grid. This grid forms the basis of the model. It provided insight into why development often fails to actualise the fundamental human needs in society and explained many of the problems arising from a dependence on mechanistic economics.

	Being	Having	Doing	Interacting
Creation				
Subsistence				
Protection				
Affection				
Understanding				
Participation				
Idleness				
Identity				
Freedom				

Table 2.1 Human Scale Development Needs and Satisfiers Grid: Max-Neef *et al.* 1989

Fundamental human needs were categorized as subsistence, protection, affection, understanding, participation, recreation (or leisure as in time to reflect, or idleness), creation, identity and freedom. Needs were also defined according to the existential categories of Being, Having, Doing and Interacting, and from these dimensions, a 36 cell matrix was developed which could be filled with examples of satisfiers for those needs. Satisfiers were not the available economic goods but were related to Being, Having, Doing and interacting, all of which contributed to the actualization of human needs. Satisfiers included such things as organization, political structures, values and norms and had diverse effects in various contexts. Satisfiers also had different characteristics with 6 main types identified as: violators or destroyers, pseudosatisfiers, inhibiting, singular, synergistic and exogenous. Table 2.2 lists the categories of satisfiers that can be chosen to include in the matrix and offers examples of each type. The matrix is intended to be illustrative and not normative.

To achieve Human Scale Development, satisfiers need to be related to social practices, forms of organization and political models and values, as well as to goods and services. Satisfiers were not in and of themselves economic goods; rather economic goods were objects or artefacts, which affected the efficiency of a satisfier. It was the historical assumption made between needs and economic goods that led to the prevailing mechanistic economic development approach. *'Within poor countries local and regional realities seem doomed to subordinate their development to the decisions of centralized political and economic interests' and that 'dependent relations from the international space to the local spaces and from the technological to the cultural domain generate and reinforce processes of dominance'* (Max-Neef *et al* 1989:57).

HSD suggested that the move to self-reliance would break this dismal cycle and promote development practices that satisfied fundamental human needs. Self-reliance was seen in terms of a horizontal interdependence not as an isolationist tendency. Sustainable development was achieved through self-reliant human scale development, which flowed from the individual level, upward to the regional and national levels.

Satisfier Type	Description	Example
<b>Violators or Destroyers</b>	<b>Paradoxical in that they can annihilate the possibility of satisfaction over time and are invariably imposed on people</b>	<b>Authoritarianism, National Security, Censorship</b>
<b>Pseudo</b>	<b>Generate a false sense of satisfaction, generally introduced through propaganda and advertising and persuasion</b>	<b>Chauvinistic Nationalism, Formal Democracy, Cultural Control, Charity,</b>
<b>Inhibiting</b>	<b>Over satisfying a given need, which curtails the satisfaction of other needs. Often originate in deep-rooted customs habits and rituals</b>	<b>Paternalism, Obsessive Economic Competitiveness, Over Protective Family</b>
<b>Singular</b>	<b>Satisfy one particular need and neutrally impact on other needs, characteristic of plans and programs of assistance and development</b>	<b>Programs to provide food and housing, Nationality, ballot</b>
<b>Synergistic</b>	<b>Satisfy a given need whilst also contributing to the fulfilment of other needs, usually anti authoritarian</b>	<b>Democratic Community Organizations, Self managed programmers, Direct democracy</b>
<b><u>Exogenous</u></b>  The above four are exogenous satisfiers	<b>Usually imposed, induced, ritualized or institutionalized as in violators and destroyers, pseudo, inhibiting, singular, generated at the top and imposed downwards</b>	<b>See above</b>
<b>Endogenous</b>	<b>Generated by the community at grass roots level, derived from liberating processes.</b>	<b>Community need identification by the community members</b>

Table 2.2 Categories of Satisfiers: Max-Neef *et al.* 1989

The role of the state in securing self-reliance was fundamental, as the spontaneous activity of local groups could not have any real impact if not nurtured and empowered through the action of planners and politicians. Global processes and self-reliant micro-organizations and processes needed to support each other effectively so that there was no co-option of the micro by the macro. Both vertical and horizontal complementarity between the micro organizations

was required for self-reliance to succeed. This approach was not the observable reality in rural underdevelopment in many Third World countries including South Africa.

### **2.1.3 Summary**

This section started by discussing the range of development definitions, the changes in definitions and scope over time and the political and economic influences underpinning and driving development. Encapsulating the essence of development in tight definitions is both difficult and perhaps meaningless as development is a system, not a task.

Development can be likened to picking a number of organisms from a biosphere, putting them together and trying to create a self-sustaining complex system. One does not know the sequence of the introduction of the organisms necessary for the system to stabilize; neither does one know when to introduce the organism or when to remove it. Similarly when humans try to create complex systems such as sustainable socio-economic development they are guided mostly by informed guess work (empirical observation of development in places where it is stable and institutionalized).

There will always be speculative debate surrounding the definition and praxis of development implementation over the last few decades. Modernization was one of the earliest theoretical approaches to development with a 'uniform universal process fit all' model. The post World War 2 Neo-Marxist dependency school viewed underdevelopment as a continuous process driven by the capitalism system. The plethora of development theories each with particular inherent strengths and weaknesses suggested that development has no accepted doctrine or paradigm (Todaro 1994). Rather it should be viewed as a process of continual evolution guided by experiential insights. Whilst economic development was an essential component, it was not the single component of development. The necessity of redefining development to encompass more than economic growth and more social objectives was well recognized (Todaro 1994).

The 1960s and 1970s development results showed that only a few developing countries had increased growth rates whilst the majority continued to be plagued by growing indebtedness, social inequality, political repression and poverty. From the 1980s there seemed to be recognition that developing countries had their own trajectories, which differed from the western industrialized trajectory. This shift made room for the sustainable development

movement, which changed the development focus away from the western model of economic growth into local models integrating cultural and ecological dimensions. A new spirit of self-reliance (McGeary and Michaels 1998) was taking root amongst many Africans through local models of development. This trend engaged with the Human Scale Development practices advocated by Max-Neef *et al.* (1989). Additionally from the late 1980s onwards information and knowledge was projected as the saviour of failing economies. Increases in information activity did not necessarily imply increases in economic growth but the failures and the conundrum of ICTs in development suggested that human development would not necessarily result from economic growth and technology alone but that human development was likely to support economic growth.

The development approaches based on the economic criteria of GDP and following linear stages is well criticized (Max-Neef *et al.* 1989, Escobar 1995, Sen 1993). Development was redefined to be more inclusive of social well-being and political and environmental considerations were included. There was a move to re-centralize on human beings in the form of people centred development, which was in dispute with traditional linear stage development models.

Many of the development models discussed in this section were macro models, difficult to appropriate at the micro level, as they were not directed at people. As Todaro and HSD were more people oriented and centred this makes appropriating of these concepts at the micro-level more possible. As this research concerns itself with the micro-level and with human beings the definition of development assumed in this research is: *sustainable development is achieved through self-reliant human scale development which flows from the individual level to the local, regional and national levels, and which is horizontally interdependent and vertically complementary*' (Roode, 2002: 18).

The next section will discuss the theory relating to technology and its role in development.

## 2.2 TECHNOLOGY AND DEVELOPMENT

Much of the developed world in the last 20 years has been transformed by technology, which was positively linked to economic power and prosperity. History shows that technological innovation was essential for human development, evidenced by the use of such things as Stone Age tools, fire, the printing press and the railway. Technology was increasingly seen as a human development enabler, supporting people to increase their incomes and thereby

increase the quality of their lives. A major impact of technology was in the area of communication as evidenced by the ascent of the printing press, telephone, television, fax and the Internet, all of which reduced social isolation and enabled people to be better informed and hence more participative in the community and the economy.

To argue that technology causes increased equality or inequality is a technologically determinist view. This point was illustrated by the empirical observation that despite the substantial body of literature outlining the potential benefits and roles of the new technology in development (World Bank Group 2001, 2000, UNDP 2001, Madon 2000, Laudeman 2003, Dalsgaard 2001, Chapman and Slaymaker 2002, Heeks 1999a, 1999b, Morales-Gomez and Melesse 1998) in many developing countries, technology remained insignificant. There were many reasons for this, some because of the perceived incompatibilities between technologies and culture and others because of the lack of economic and human resources to acquire and use the technology. To believe that technology can in and of itself solve social problems without due regard to the contextual factors and conditions is naive.

The use of technology has often been seen as synonymous with innovation and technological innovation viewed, by some, as a self-perpetuating mechanism capable of transforming social systems by permanently and positively altering values and patterns of beliefs (Corea 2000). This implies that the use of technology in developing economies could transform its structure. Partly this has been explained by noting that new technology requires new skills so that, inherently, learning has been a part of technology use. Learning behaviours could result in morphogenic change, whereby the changes automatically cause more changes, which can transform social systems. Technology could also result in morphostatic changes, where the changes are superficial and often fleeting, ending in stagnation. Morphostatic change was often the result of introducing technology into a situation with little cultural orientation towards improvement. Following this argument then, the introduction of technology into impoverished societies suggests that the benefits of technology to development require the simultaneously interlinking with other factors to promote a culture of improvement.

Despite this thinking, there were many examples in many countries where technology was used as a development tool using a predominantly technical focus, which resulted in failure of the technology to impact on the social system. As a modernization tool, technology needed to be embedded in the social system.

The most common way of introducing ICT into Third World countries has been through telecentres (Benjamin 2000, Whyte 1998). Telecentre was a loose term for a centre that provides a local community with access to communication and information where the customers pay, per use, at rates set by the telecentre operator. The South African experiences of government and donor sponsored rural telecentres have been less than successful. The majority of the government-initiated telecentres (section 3.3.3) are dysfunctional. This experience further supports the notion that successful incorporation of technology into development initiatives needs to pay attention to a number of multifaceted multidisciplinary considerations such as people, organizational structure and development, financial constraints, structural change and behavioural change.

### **2.2.1 Development Theory and Technology**

The modernist perspective suggested that Information Technology could support the Third World to leapfrog the various stages of development and catch up with the modern world but the evidence of widespread underdevelopment did not support this claim. The use of ICTs in development was linked closely with the theory of modernisation but there was little empirical application of the theory in the form of real life examples to illustrate how ICTs would address underdevelopment. The post-war concept of modernisation was synonymous with western ideals and perceptions as showcased by America. Technological advancement was the focus of development programmes administered in a linear, rules-bound style, which retrospectively, were shown to be the downfall of the modernist era. The anticipated economic trickle down effect did little to alleviate poverty or to establish a platform on which sustained economic growth could occur (Rondinelli 1994). Modernisation failed in part because of the erroneous assumption that scientific and technological economic growth equalled development.

In trying to establish the impact of technology on development, dependency theory provided a dismal scenario. Grimes (1992) postulated that the convergence between computer technology and increasingly accessible telecommunications (ICTs) provided the possibility for two distinct development strategies. The first was where the periphery linked with Transnational corporations (TNCs), and the second was where the periphery and the conurbation connected. These different development routes, Grimes argued, resulted in different outcomes. By adopting IT and producing for TNCs, micro-enterprises (the

periphery) may find themselves locked into global commodity chains of sweatshop labour conditions, as was the case with some of Nike company's subcontractors. While this strategy may not immediately benefit regional and local development (as it is unlikely to be accompanied by the decentralization of firms' administration units and networks), it could certainly build a market for ICT products locally and hence provide the capability of decentralization later on. Ignoring the applications and use of IT, peripheries may find themselves "locked" out of markets and morphing into what Castell (1998a) described as "black holes" of "informational capitalism" resulting in black holes of human misery.

A further threat of technology to the peripherals was from global outsourcing. Dillman (1998) discussed the threat of "telecolonialism" to peripheries that used technology for development. In telecolonialism, core interests exploited the resources of the periphery either by sucking out its market potential or exploiting its skills by means of teleworking. This development strategy could result in the perpetuation of the extant dependency form of development where the unequal power relationships between core and periphery resulted in exploitation of the weaker party.

Additionally, technology may engender the "hollowing out" of peripheral economies (Lowe, 1999). A hollowed-out economy consisted solely of a market, without production skills. These skills were marginalized because there were no production facilities attracted to the centre. Instead, peripheral representatives of central interests replaced local productive capability. Marketing replaced productive creativity and administration replaced production.

Because peripheries linked to TNCs may perpetuate unequal power relationships underdevelopment was the likely outcome. The use of technology implied that the negative underdevelopment prophecy of dependency theory might be perpetuated. This position was strengthened by the fact that underdevelopment of technological infrastructure in most of the world remained a major obstacle for global development with only 3% of the world population accessing the Internet (Cloete 2001).

What then are the potential strategies for "periphery" development and how can rural economic development be linked into the information economy? In some locales, specifically in South Africa, this can be detrimental to the track record of strong unions (who have fought for and successfully secured living wages for their members). While this strategy may not

immediately benefit regional and local development it can build a market for ICT products locally and hence provide the capability of decentralization later on.

Grimes (1992) documented the results of field trials with Norwegian telecottages where the strategy employed was to provide teleservices as a form of import substitution to municipalities. He concluded that where municipalities thought locally in purchasing goods and services they could play a significant role in helping small enterprises become established. While this research may have limited application to a rural African setting it did suggest that the strategy of targeting municipalities was worth pursuing. In Africa, the population patterns typically support a very small number of very large centres in most countries, often only one – the capital city. In many African countries, all or most of the Internet Service Providers (ISPs) are found in the capital city and the pattern of adoption of Internet and mobile telephony generally radiates from capital cities.

If dependency theorists are correct, in that there is no such thing as a free market, then ICTs will not be a transforming influence for the redistribution of opportunity from the core to the periphery. Instantiations of this are seen in the areas of call centres, accountancy, audits, service support, software development and the phenomenon where skilled jobs are moved offshore to Third World countries at one tenth of the previous rate. Some would argue that as this reduced labour fee is still larger than what the person could earn in the local economy it is a net benefit. However, what is not a net benefit is that Third World economies are still being shaped to fit the needs of the world 'core' economies and that these peripheries are enclaves that are often separated from the rest of the economy. Castells (1999, 1998b) seems to support the depressing dependency notions relating to technology in development. He noted that societies everywhere around the globe were being fundamentally altered through the diffusion of ICTs and that a new society was in creation as evidenced by the '*structural transformation in the relationships of production... power... and experience*' (Castells 1998a: 340).

The 1990s development process improved standards of living in some areas of the world, but Asia, South America, and the United States, in particular, were characterized by increasing inequality, as the upper income levels benefited disproportionately from economic growth (Cloete 2001). Castells (*ibid.*) believes that ICTs acted like a powerful 'peripheralising' force and entrenched power structures that prevented the peripheries developing in any other way than to serve the core.

Whilst not directly asserting that ICTs were at the root of growing inequality and social exclusion, Castells (ibid) contended that their advantageous use in a global capitalist system catalyzed phenomena that seem to be leading to increasing social inequity. Castell feared that sub-Saharan Africa ran the risk of being virtually deleted from the world economy and to avoid these countries needed to meet two conditions. The first was to command adequate ICT infrastructure and the second was to generate sufficient human capacity to operate it. Africa, he claimed, did not have the required resources and South Africa had only some of what it needed, but hardly enough.

On the other hand Critical Theory has a more optimistic view of the impact of technology on development. It points to the revitalizing of participatory practices as one of the key factors of development success. There is a need to shatter restrictive communication with all the restrictive consequences for patterns of social interaction. This in effect would nurture the development process and ensure that it was more equitable and meaningful to the members of the community in which the development was taking place. Technology could substantially broaden the process of development through its powerful and low cost ICT capability. It could break down traditional tribal power in rural areas and spread knowledge and information from government and donor web sites to the micro level. The South African telecentres that were placed in remote rural areas gave access to central and provincial governmental structures and information. More people could be authentically involved in the democratic process through this type of inclusion. This way true empowerment could begin to develop as local people had the tools to question their political leaders, to demand accountability and transparency, to form geographically distant strategic alliances and partnerships and to benefit economically from government outsourcing initiatives through timely access to tender documents.

Revitalizing participation requires new modes of communication and democratic decision-making. The capability of connecting and networking with a range of different opinion makers and influencers, would enhance the reflective ability of some communities. The 1995 Fourth World Conference of Women in Beijing was an example of communication capability that globally connected, interconnected and provided discussion forums amongst a diverse range of women. The cyclical and spiral nature of the Internet network was ideal to facilitate such things as list-serve discussions. The acquisition of more in-depth meaning and

understanding of gender issues led to women being more effective in the decision-making bodies that impacted on gender.

### 2.2.2 Technology and Modernity

*'What struck me so forcefully was how small the planet had become during my decades in prison.... [ICT] had shrunk the world, and had in the process become a great weapon for eradicating ignorance and promoting democracy'. (Nelson Mandela 1994)*

When Nelson Mandela started his incarceration he could have had very little inkling of the impending ICT revolution that would be taking place shortly before his release. The rate of growth of ICT diffusion and the take-up of newer technologies has been exponential and has rapidly created the network world of today. As at 2002, of the 6.2 billion people in the world, 1 in every 5 had a cellular mobile telephone. Cellular mobile telephone subscribers (1.15 billion) exceeded the number of main telephone lines in operation (1.10 billion). Around 10% of the world population used the Internet (605 million). In the last three years, South Africa added 6.9 million cellular mobile telephone subscribers, 2 million television receivers, and 1.2 million Internet users (Paua 2003).

The impact of ICTs as development tools in part has been attributed to the assumption that ICTs facilitated transformation from a traditional society to a modern one (World Bank 2001, 2000, UNDP 2001, Maddon 2000, Laudeman 2003, Dalsgaard 2001, Chapman and Slaymaker 2002, Heeks 1999a, 1999b, Morales-Gomez and Melesse 1998). Avgerou (2000a) noted that ICT was a triumph of modernity and that in the context of developing countries, IT was seen as one of the most significant forces of modernization.

The following section discusses Giddens' (1990) modernity concepts and in particular the role that both time and space play in modern ICT use. Time and space are basic categories of human existence, and are fundamental to defining the context in which technology and hence ICTs interact with organizations and societies.

The modern era (also referred to as modernity, post-modern society, radicalised modernity or late modernity) began in the 16<sup>th</sup> century with the profound change in popular belief systems

away from a traditional, religious and superstitious focus, towards scientific reasoning. This questioning of customs and traditions in relation to destiny precipitated a reflexive society; a society where people monitored the results of their own actions and analysed them as a way of predicting and controlling the future. Giddens (1990) noted three dominant sources of the dynamism of modernity (each connected to the other): the separation of time and space, the development of disembedding mechanisms and the reflexive appropriation of knowledge. These factors, he asserted, were the cause of the modern world careering like an out of control juggernaut. Each of these three factors will now be discussed in turn.

### Separation of time and space

Time and space are crucial for understanding the context and also for describing the social processes surrounding the use of ICTs, which maintain the social context. Modernity presupposed a move from a traditional state to a modern one and with it a change in time and space relations. Whilst pre-modern societies possessed modes of time calculation, such as the calendar, this time and place link was usually imprecise. Time was usually a function of other social-spatial markers (for example 'when' was usually connected with 'where' as in I will meet you at sundown in the pub). Place and space largely coincided, with place generally applying to a locale or geographic situation. Space was inseparable from time, which followed a cyclic route, with logical temporal sequences.

The critical turning point for the division between time and space was the introduction of the mechanical clock. Invented by Benedictine monks, the mechanical clock made possible the idea of precise regularity, without which capitalism would have been impossible. The invention and wide diffusion of the clock was a key point in the separation of time from space. This led to the concept of 'emptying out of time' (Giddens 1990:19), which is the preconditioning for the 'emptying of space', or otherwise understood as the separation of space from place. Hellems (1998) gave a powerful example of one of history's first example of the political exercise of control through the detachment of time and space. Napoleon effectively used the telegraph to transport the message separately from the messenger as part of his military strategy. The railway, the telegraph and the telephone created the need for a common global time determination, resulting in the international time line and in this way setting the framework of global time co-ordination (Dimitrakopoulou 2002). Seen within this framework of modernity, the symbolic forms of communication are

produced and distributed under the circumstances that are defined by the time-space distanciation.

The advent of modernity increasingly separated space from time through the capacity to foster relations between 'absent' others. The resulting changes wrought by ICTs provided many examples of this, such as the phenomenon that many people in their work or social life have diverse connections with people who live thousands of miles away and often with people they have never met. Modern relations can be characterized by locational distance and the absence of face-to-face interaction. In this way locales can be thoroughly shaped by extremely distant social influences. No longer is the locale conditioned by place and the actors in this place, but often by 'invisible', in addition to distanciated, relations.

A message that was transmitted during a face-to-face discussion allows zero time-space distanciation, while other technical means, such as paper or a tape recorder, could expand its availability in time and space. The Internet allowed maximum time-space distanciation and produced a new concept of global (instant) time. The notion of timelessness was developed on the Internet.

Allowing the idea of timeless time to exist (as the concept of time changes on-line) upsets the cyclical and continuous notion of traditional time. The notion of timelessness on the Internet was extended by the Internet's capacity to store masses of information with 24/7 availability.

The emptying of time was, according to Giddens, the precondition for the emptying of space and hence, the co-ordination across time gave control of space. The level of time-space distanciation is much higher in the modern era than at any other time, with globalisation being seen as a stretching process of the relations between local and distant.

### The development of disembedding mechanisms

The bracketing of time and space by social relations and the severing of time from space facilitates the potential of re-combinations. The separation of time and space is crucial to '*the extreme dynamism of modernity*' (Giddens 1990:20) as it is the prime condition for '*the lifting out of social relations from local contexts of interacting and their restructuring across indefinite spans of time-space*' (ibid: 21).

Giddens terms this disembedding, which results in the proliferation of expert systems as a disembedding mechanisms in which we are forced to trust if we wanted to live in the modern world (for example we trust that a plane will take us to our destination). The concept of trust connects to time-space distanciation in that it is related to absence in time and in space (i.e., we have no need to trust a person we can see and who has transparent thought processes). *'Modernity is characterised by trust in abstract systems, yet such trust is fragile for the following reason: Widespread lay knowledge of modern risk environments leads to awareness of the limits of expertise....The faith that supports trust in expert systems involves a blocking off of the ignorance of the lay person when faced with the claims of expertise; but realisation of the areas of ignorance which confront the experts themselves...may weaken or undermine that faith....Experts often take risks "on behalf" of lay clients while concealing, or fudging over, the true nature of those risks or even the fact that there are risks at all. More damaging...is the circumstance where the full extent of a particular set of dangers and the risks associated with them is not realised by the experts. For in this case what is in question is...an inadequacy which compromises the very idea of expertise'* (ibid: 130-1) For example, every time we catch a plane or drive a car we are trusting expert systems. It is a given that people trust a car to work (mostly). Increasing numbers of people globally trust the expert systems of E-commerce to purchase goods and products and to move themselves from one side of the planet to the other without ever seeing a physical piece of evidence that their bookings exist. This level of trust was recently instantaneously magnified in Hong Kong and China, where, during the Severe Acute Respiratory Syndrome (SARS) epidemic E-commerce purchasing levels increased significantly in response to fear of infection from crowded public transport and shopping spaces.

### The reflexive appropriation of knowledge

Modernity is inherently globalizing, connecting individuals to large-scale systems both locally and globally and at the same time modernity is characterized by wholesale reflexivity, which includes reflection on the nature of reflection. This reflexivity of modern social life means that *'social practices are constantly examined and reformed in the light of incoming information about those very practices, thus constitutively altering their character'* (ibid: 38). We live in an uncertain world as all applied knowledge has been reflected upon and we can never be sure that any element of knowledge will not be revisited and revised. The so-called information age corresponds with modernity as the need for information is caused through social reflexivity.

### **2.2.3 Summary**

The jury is still considering the impact of ICTs on development. ICTs have significantly transformed modern societies during the last 20 years. However using technology as a development tool with a predominantly technical focus has often proved to be a failure. Often technology use has, disastrously, neglected the multifaceted and multi-disciplinary considerations that relate to people, such as organizational structure and behavioural change

Technology has substantially impacted on space by separating it from time allowing the fostering of distanced relations with absent others. This in turn fostered the ability to lift out social relations from local contexts. This disembedding allowed the connection of individuals to large-scale systems both locally and globally. What this translates into is constant change, constant reflexivity and the institutionalization of doubt. We can never be sure what we know now will not change; rather we wonder when it will change and how it will change. The implications of this on the process of development are far reaching. If technological change equals continual uncertainty, this is a problematic arena from which to develop people.

Additionally, distancing and the disembedding of social relations facilitate processes that could damage the economies of developing countries. These trends have aided the effect of hollowing out of 'peripheral' economies in shaping the skill level in the country to fit 'core' country needs. There is evidence of increased social inequity with some poorer countries, particularly in Africa, being digitally deleted from world economies. Whilst ICTs support the spread of 'tele' jobs in developing countries such as call centers and back-end processing, this continues to create enclaves, which are often separated from the rest of the economy. Interestingly the recent offshoring outsourcing trends are ringing alarms in developed country economies and resulting in social backlash from organized groups such as unions.

It is a truism that ICTs can broaden the scope and inclusiveness of the development process at substantially lowered costs (outside of capital costs of acquisition). They have the potential to break down tribal authority and spread knowledge from the macro to the micro level and benefit local communities through geographically distant strategic alliances. But whilst there seems to be no outright denial of ICTs and E-commerce as modernising tools, there is insufficient information in the literature to answer many pertinent questions such as:

- What are the necessary and sufficient conditions for E-commerce to take root in a development context?
- What are the necessary social conditions?
- What are the main beneficial opportunities for the application of E-commerce in an organisation making the transition from socio-economic development to profit maximisation?
- What enterprise pre-conditions must be in place for this beneficial application of E-commerce?

The next section will explore literature relating to the development and application of E-commerce in pursuit of some of the answers to the questions posed.

### 2.3 APPLICATION OF E-COMMERCE

The concept and practice of E-commerce is not new. The practice of conducting business using electronic mediums goes back as far as the era of the telegraph and telephone in the mid-nineteenth century (The World Bank Group 2001). E-commerce can be as simple a concept as are "electronic" and "commerce" respectively, yet the name has been interpreted to mean many things from online trading to catalogues sent by fax transmissions. The term E-commerce traditionally referred to the inter-organisational systems that emerged during the 1970s and 1980s. Interestingly, what is now broadly termed E-commerce has gone under the names of Digital Commerce, Web Commerce, Electronic Transactions, Non-Store Shopping and Online Business.

The use of the Internet for commercial transactions started to gain momentum around 1995. With the launch of the World Wide Web, E-commerce attracted even greater attention in business, particularly in the area of value creation and efficiency (Chen, Ingraham and Jenkins 2001).

#### 2.3.1 A Review of E-commerce Definitions and Frameworks

E-commerce describes a wide range of activities. Multilateral and international institutions tend to maintain a very broad view of E-commerce. Some definitions appear to be very broad, generic and specify neither network archetypes nor business activities. While institutional definitions appear to be very broad, definitions from academia are narrower and focused in terms of applications and business support (Molla 2002).

The term E-commerce is often used interchangeably with Internet commerce and web commerce and the enormous range of activities under the spectrum of E-commerce definitions and frameworks is dazzling. E-commerce has evolved in its short history through the following different phases : 1995-Brochureware, 1997-E-commerce, 1999-E-business and 2000-E-enterprise (Hoque 2000). Brochureware used the Internet as a medium to reach out to customers around the world and provides the benefit of low cost global marketing as well as low cost product and service information repositories. First generation sites were mostly static documents and simple multimedia and history now views this phase as a primitive and inefficient use of Internet resources. The E-commerce phase was synonymous with the period of dotcom mania and focused on consumer transactions and interactions between the company and the consumer over the Internet. A number of business models emerged during this phase, such as e-tailing, consumer portals, bidding and auctioning, consumer care, customer management and electronic bill payment.

E-Business focuses more on B2B applications that facilitate transactions between the company and its business customers and partners over the Internet, exploring organizational core competencies with a process aggregation orientation. E-Business is about repositioning brands and companies, cannibalizing distribution channels through disintermediation and establishing new markets through re-intermediation via the net (Kalakota, Robinson and Tapscott 1999, Rayport 2000).

The most successful E-businesses have been the established bricks and mortar companies seeking process improvement and the emerging innovations from here are virtual market places, procurement and resource management, extended value chain and customer relationship management. The final phase is described as E-enterprise, seen as an extension of the business process reengineering movement. It is a convergence amongst companies that have both B2B and B2C segments and where the entire value chain of supply and demand combines traditional bricks and mortar assets with the efficiency of cybermediation that exhibits some of the most impressive efficiency gains. Hoque (2000) predicted that as E-enterprise was about engineering and re-engineering inward and outward facing processes, that the consequences of it would be crumbling industry boundaries, the extinction of antiquated industries and the rise of new industries.

There are many different criteria to identify and describe E-commerce models. Timmers (2000) used degree of innovation (lower to higher) and functional integration (single to multi-function) to identify a list of E-commerce models such as e-shop, e-auction and value chain integrators - that is, an extension of a traditional way of doing business. Bambury (1998) used the dimensions of "transplanted" vs. "native" Internet businesses to identify the different E-commerce models - that is, greater emphasis on an entirely new function that did not previously exist. More recently, Hartman *et al.* (2000) provided a more comprehensive framework for five E-commerce models: E-business storefront, infomediary, trusts intermediary, E-business enabler, and infrastructure provider/communities of commerce. These five models are not mutually exclusive and organizations could implement them concurrently. However, the E-commerce storefront (in the form of B2B or B2C domain) seems to be the most popular.

E-commerce can be classified into five main categories as follows: Business to business (B2B), the most established part of extant E-commerce activities where a company uses an electronic network for supply chain management and payments; Business to consumers (B2C), which consisted mostly of electronic shopping malls accessed via the Internet; Business to government (B2G), relating to mostly business interactions with government such as tax requirements, and Consumer to consumer (C2C) and consumer to government (C2G) (European Commission 2000).

Although the latter classifications are commonly used, the literature appears to be inconsistent regarding what these classifications actually represent. To date, major research progress has taken place in the B2B and B2C categories and as a result, these two collectively represent what is meant by E-commerce in most of the existing studies (Molla 2002).

This study accepts the broad definition of E-commerce given by McKay and Marshall (2004) as being '*commercial transactions mediated via the internet including all those computer mediated activities involved in supporting that revenue generation.... the advertising and marketing activities that take place over the internet to support such sales, the provision of information and after-sales service over the Internet, and any other internet based activity that supported or enabled the transaction to take place*' (*op.cit.*: 4).

**2.3.2 The Impact and Value Chain of E-Commerce**

Although the impact of E-commerce on business and individual lives means different things to different people, trading and networking perspectives have expanded beyond imagination. The net revolution is about realigning business models around global, dynamic value chains and integrating business architecture and information architecture into enterprise architecture (Hoque 2000, May 2000, Turban et al 2003).

E-commerce can bring about the possibility of breakpoint changes – changes that so radically alter customer expectations that they redefine the market or create entirely new markets. When this happens, all other companies, including those that try to ignore the new technologies, are likely to be impacted by changes in markets and customer expectations.

Benefits are derived both from electronic trading of physical goods and services and electronic trading of information-based content that can be delivered through the network, for example, voice, images and text. The electronic trading of physical goods and services represents an improvement in terms of efficiency and effectiveness. It also widens market potential by better meeting customers' needs as well as providing a means for enhanced product and service innovation. It has been suggested that E-commerce brought a form of perfect competition where the barrier of entry is relatively low. This results in the possibility of marginal or customer-oriented pricing with minimal, at the moment, legislation and regulation by public authorities (Timmers 2000).

More recently, the impact of E-commerce has been examined under the notion of value chain construction and deconstruction. This process has also been used to create new business models to build new values (Porter 1985, Timmers 2000). Bloch *et al.* (1996) offered a framework that described the value a business could extract from pursuing an E-commerce strategy. The framework suggests that business could use E-commerce in three broad ways – to improve, transform and redefine the way they do business, to realize the actual value gain in E-commerce and the use of business applications to capture the potential of the Internet and World Wide Web. It was suggested that the Internet was most successful when it “enabled” companies to integrate their web sites with existing fulfilment, logistics and marketing (Biehn 2001). Zott *et al.* (2000) further suggested that E-commerce provides extra value because it

enhances transaction efficiency, strengthens the supply chain, increases the size of the product and service offering and increases timesaving.

### **2.3.3 Business Models and E-commerce**

Magretta (2002) posits that *'the terms 'business model' and 'strategy' are amongst the most sloppily used in business'* and that *'people use them interchangeably to refer to everything'* (op.cit.: 2) and to be meaningful the terms must be defined clearly. Whilst the concept of a business model is not new the impact of the information age and the Internet need to be understood in order to identify new value propositions emerging. A business model is an attempt to identify an organization's customers and how a firm will make money and sustain its profit stream over time. One of the most comprehensive definitions of a business model is offered by Dubosson-Tornay, Osterwalder and Pigneur (2002) which incorporates the range of themes found in other definitions *'A business model is nothing else than the architecture of a firm and its network of partners for creating, marketing and delivering value and relationship capital to one of several segments of customers in order to generate profitable and sustainable revenue streams'* (op. cit.: 7).

Commercial enterprises, either explicitly or implicitly, operate within a business model that defines how they will make money and survive into the future. Slywotzky, Morrison and Andelman (1997) claimed four components to any business model. The first is customer selection (i.e., from whom the firm makes money). The second is value capture (that is, how the firm makes money). The third is differentiation and strategic control (that is, how the firm protects its profit streams over time). The fourth is scope, (that is, how the firm defines its activities and its role and partners in the value chain). Each firm's business model can be different from others as each firm has its own goals and priorities.

### **2.3.4 Potential E-commerce Benefits**

The literature is rich in listing the potential, the breadth and width of E-commerce driven business benefits. Of significance to this research is the potential to significantly reduce operating and marketing transaction costs as encapsulated by the historical richness and reach tradeoff (Evans and Wurster 2000). In addition, there is the potential advantage of rapid market response to changing needs through shortened supply chains and the enabling of low

cost customization of marketing communications. These benefits could radically reshape customer relationships for both global companies and local enterprises.

Traditionally, firms were forced into a trade-off between richness and reach. Richness refers to the quality of information, as defined by the user and covers accuracy, bandwidth, currency, customization, interactivity, and relevance. Reach is measured by the number of people who participate in the sharing of that information (Evans and Wurster 2000). E-commerce could provide for “mass customization” without compromising “mass production” (Hartman *et al.* 2000) and allow businesses to reach a large number of people with rich information. As a result of this recent low cost advantage benefits can accrue such as greater access to new markets and improved customer relationships. These benefits are more likely to accrue to firms with a high degree of entrepreneurial orientation than to their conservative counterparts (Fillis, Johansson and Wagner (2003). One major caveat to the latter is around the issue of trust. Deeter-Schmelz and Kennedy (2004) note that in business relationships characterized by high levels of information exchange, trust, cooperation and adaptation, the Internet offers less significant advantages to business. Where developing countries attempt to adapt E-commerce to their context, key factors around business trust, information security and socio-cultural factors need to be considered (Aljifri, Pons and Collins 2003). It seems, however, according to McCrohan (2003) that market forces will continue to drive the fast pace of E-commerce regardless of the concerns for security.

Another major E-Commerce benefit is the reduction of marketing, operation and transaction costs (Oxley and Yeung 2001). Transaction costs (market or hierarchy) refer to the cost of coordination in the production and marketing of a product. Market transactions referred to those that support coordination between buyers and sellers. Reduced coordination (transaction) costs could benefit both suppliers and consumers. The organization could provide the same level of service and the same quality of product at reduced prices (Hartman *et al.* 2000). However although E-commerce has been much hyped as a potentially transformational force in many industries it can present considerable structural and cultural challenges (Hughes 2002).

The development of ICT innovations (including E-commerce) has been an important step in providing both “rich” and “reach” information to consumers. However, there are still considerable gaps between the potential and actual benefits derived from E-commerce. The

application and potential benefits derived from E-commerce must take into consideration the context of developing and developed nations. Much of the current knowledge of E-commerce in developing countries is primarily based on speculative argument. There is a poor link to theoretical frameworks and the national context. The issues of access and cost of access, capability, and telecommunications infrastructure remain largely unaddressed in the developing world. Of critical importance is the understanding that the mapping of benefits attributed to firms in first world environments is not automatically transferable into a development environment. Therefore, E-commerce studies in developing contexts that do not take into consideration contextual factors might not produce similar results.

### 2.3.5 Summary

The rapid and continuing spread of E-commerce is undisputed. The prevailing application of E-commerce in the literature is (unsurprisingly) business-to-business and business to consumer, predominately located in the Northern Hemisphere. E-commerce today remains mostly a US and Western based activity. Although connectivity has significantly improved in many parts of the developing world there are still significant disparities in the level of Internet penetration across world regions (UNCTAD 2002).

Whilst acknowledging the likely benefits that can accrue from E-commerce, namely, cost reductions and business (marketing) efficiencies, these are perhaps more relevant to large business than development organizations and micro-enterprises. However, the view exists that, potentially, E-commerce can benefit local socio-economic community development (UNCTAD 2003) but the case exploring these potential benefits to organisations migrating from socio-economic development projects into business projects (concerned with profit maximisation) has yet to be explored.

E-commerce benefits are usually presented in positive terms but transferring these concepts to an underdeveloped context raises a number of barriers, which point strongly to the need to understand the area of E-commerce from a bottom up experience of these enterprises. This will contribute to the charting of a possible and probable E-commerce stepping-stone trajectory and migration path that could optimize benefits and minimize adverse effects.

As the benefits of E-commerce are most likely to materialize from its integration with appropriate organizational business processes (or models), the next section will discuss the

business process most relevant to the exploration of E-commerce concepts in this research, namely, marketing.

## **2.4 APPLICATION AND DEVELOPMENT OF MARKETING**

Marketing has evolved from its early origins in distribution and selling into a comprehensive philosophy of relating any organization dynamically to its markets. Modern marketing encompasses all activities that represent working through markets, that is, trying to effect potential exchange. In order to relate the importance of marketing to the conceptual framework used in this study, this marketing section will discuss the concepts and frameworks of marketing, marketing philosophies and strategic marketing and finally the application of these issues to conceptualizing the marketing framework used in this study.

### **2.4.1 The Concept and Framework of Marketing**

The term marketing, for most people, means a set of business activities. These activities can be product development, pricing, distribution and communication. Marketing is the set of tasks with which to find and stimulate buyers to consume the firm's output. Others may extend the meaning of marketing to include the continuous monitoring of customers' changing needs and developing new products and services, or modifying existing ones, to meet these needs (Boulding et al 1997, Svensson 2002).

The concept of marketing evolved through many stages (Kotler & Levy 1969, Kotler 1972, Enis 1973, Gronroos 1990). With the expansion in the nature and scope of marketing, little attention was given to explaining the boundaries within which the concept was applicable.

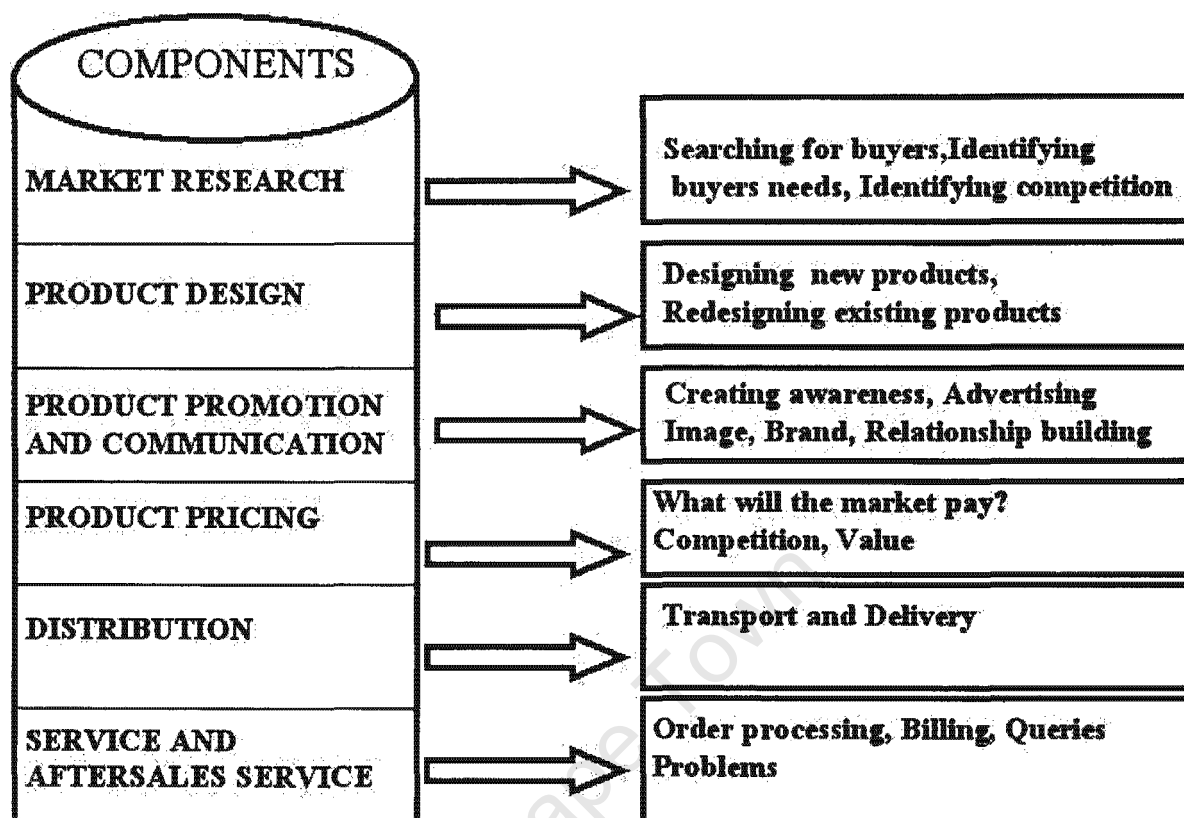


Figure 2.1 Kotlers' Marketing Model. Source: Kotler 1991

Although it was difficult to reconcile the dynamic nature of marketing, attempts were made to define the concept. Raymond and Barksdale (1989) provided a definition of the marketing concept proposing that *'the marketing concept (provides) a single prescription for running a business successfully. The consumer must be recognized and accepted as the focal point for all business activities, and knowledge of customer needs and wants should be the starting point for all major business decisions'* (ibid.: 42). Others supported this applied concept of marketing, such as McGee and Spiro (1988) and AMA (1985). McGee and Spiro stated that *'the marketing concept involved specific techniques by which one seeks to identify and satisfy consumer needs. The concept involves what is commonly referred to as the marketing mix, the marketing tools a manager combines in a specific way to deal with a specific marketing situation'* (ibid: 25). The notion of marketing mix included price, product, promotion and place. This definition aligned with the American Marketing Association's (AMA) view. The AMA defined marketing as: *'the process of planning and exacting the conception, pricing, promotion and distribution of ideas, goods and services to create exchange and satisfy*

*organizational objectives'* (AMA 1985: 1). However, in the teaching literature of marketing, the marketing concept was seen as a managerial prescription relating to the attainment of an entity's goal (Houston 1986:13). That is, an entity achieves its own goals most efficiently through a thorough understanding of the costs associated with satisfying those needs and wants, and then designing, producing, and offering products in light of this understanding. This concept of marketing shared a similar viewpoint with Kotler (1991) who defined marketing as '*a social and managerial process by which individuals and groups obtain what they need and want through creating, offering and exchanging products of value with others*' (*ibid*: 10).

<b>Philosophy of the firm</b>	<b>Assumptions</b>
<b>Production</b>	the more we make the more profitable it becomes. So let's get out there and make the customers buy
<b>Cost</b>	that the only way to improve our profit is to reduce our marketing and production costs
<b>Selling</b>	consumers will normally not buy enough of the company's products unless they are reached with a substantial selling and promotion effort
<b>Marketing</b>	that the main task of the company is to determine what a chosen set of customers' needs, wants and preferences are to adapt the company to delivering the desired satisfaction
<b>Societal</b>	that the main task of the company is to generate customer satisfaction and long-run consumer and public welfare as the key to satisfying organizational goals and responsibilities

**Table 2.3 Marketing Philosophies**

Whilst the definitions may be varied and different from each other a number of common themes permeated all definitions. Marketing was clearly something that concerned the

relationship between producers and consumers (Foxall 1989). Additionally the notion of an exchange relationship was central to the concept of marketing (Bagozzi 1975, Houston and Gasseneheimer 1987). Finally, the main objective of marketing was to maximize benefits to the organization through the notion of exchange of value between producers and consumers for the purpose of satisfying human needs and wants and this process had to be managed to obtain the desired outcome (as suggested in Kotler's 1991 definition). This view of marketing encompasses the notion of exchange, value and management. Hence, Kotler's framework of marketing is a popular model used by many researchers and practitioners and this marketing framework was adopted in this study (Figure 2.1).

### **2.4.2 Marketing Philosophies and Strategic Marketing**

The adoption and implementation of any marketing framework depends on the philosophy of the firm. These philosophies guide the firm's exchange relationship between producers and customers, the value chain and the satisfaction of customers and management activities. It was suggested that there are five common philosophies. These are production, cost, selling, marketing and social marketing. (Kotler 1991, Bonoma 1985). These philosophies are summarized in table 2.3. Organizations establish their own philosophy and then seek ways to implement the marketing framework that fits in with it. Any framework of marketing is based on the basic concept of marketing, the philosophy of the firm and the implementation of its activities.

The development of the firm's strategic marketing process (Figure 2.2) depends on the firm's overall strategy derived from the organization's philosophy. A strategic marketing process is a managerial process of analyzing market opportunities and choosing marketing positions. This process programs and controls the activities that create and support the viable businesses that served the company's purpose and objectives. The specific steps in the strategic marketing process are: market opportunity analysis, target market selection, competitive positioning strategy, marketing systems development, marketing plan development and plan implementation and control (Kotler 1991). The knowledge obtained from the strategic marketing process is applied in appropriate marketing activities to provide extra value for stakeholders.



Fig. 2.2 Kotler's Strategic Marketing Process. Source: Kotler 1991

### 2.4.3 Marketing and Business Models

Marketing is a discipline that focuses on the study of exchange processes and relationships. Goods and services are not really produced until they are at the point of consumption. Hence, marketing is truly a part of production. Transport, storing, grading, wholesaling, retailing, buying and selling are all part of marketing. Selling was one of the most vital functions performed and advertising was an important part of the selling function. However, firms under different circumstances have different emphasises on each of the above activities, resulting in different marketing strategies and business models.

Kotler (1991) defined marketing as a social and managerial process by which individuals and groups obtain what they need and want through creating, offering and exchanging products of value with others. The AMA (1985) defined marketing as the process of planning and exacting the conception, pricing, promotion and distribution of ideas, goods and services to create exchange and satisfy objectives. Although there were numerous definitions and

approaches in marketing, marketing activities and the general marketing framework (Kotler 1991) has been well established.

The marketing concept focuses on three key issues: customer orientation, integrated effort and profit direction (McGee and Spiro 1988). First, customer orientation is derived through generating knowledge of the customer through an understanding of market needs and wants, and taking necessary actions to respond to the demands of target customers. Second, integrated effort refers to total organizational unity in attempting to achieve marketing purposes successfully. Third, profit direction is intended to focus the attention of the organization on achieving profit rather than simply sales volume. Finally, the societal marketing concept calls for a balance between these three considerations of company profits. This study has captured these key issues of marketing in the RWA and integrated them with E-commerce principles so that a viable business model was explored in order to support sustainable economic development among rural women in Africa.

In summary, in order for the RWA to bring extra value to the community, RWA participants may need to acquire marketing competencies and capabilities. Furthermore, the application of the strategic marketing process could be expected to enable the RWA management to improve and refine its marketing strategy according to the changing environment.

#### **2.4.4 E-commerce and Marketing**

A common assumption in much of the literature (Hoffman and Novak 1996) on the Internet as a marketing and business tool was that it was a revolutionary technology that would be a boon to consumers and investors. With hindsight Duffy (2004) suggests that the promise of E-commerce in marketing was less about revolution and more about evolution and that marketers have known that the Internet is simply another channel with some unique opportunities.

There is no doubt that the use of the Internet in E-commerce is growing rapidly and changing commerce in a variety of ways. However, to date, the most significant source of growth of business on the Internet has been in business-to-business (B2B) commerce rather than business-to-consumer (B2C) commerce. B2B commerce on the Internet was estimated at \$43 billion in 1998 and B2C commerce at \$8 billion (Forrester Research Inc 1998). The B2B figure grew to \$1.4 trillion by 2003. (IDC and the World Information Technology Services

Alliance). It has been suggested that the increased B2B and B2C activities were associated with the transfer to the Internet of transactions that already occurred electronically through existing electronic data interchange (EDI) systems. It was not at all clear how much B2B and B2C commerce were conducted on the Internet that would not have occurred through some other electronic medium. Thus, it is important to note that this market growth may be characterized more by changes in market share from other technologies to the Internet than by the development of new markets.

Internet commerce is a new technology that has made some things simpler, cheaper and easier. Keeney (1999) suggested the benefits of the Internet included minimizing errors in transactions, lowering costs of products and services, reducing the problems of physical distance and creating new markets between buyers and sellers. The Internet was a new way for businesses to communicate and sell products and services to consumers, but it joined other media and distribution channels as vehicles for these tasks. The Internet has some features, such as hyperlinks and combination of sound, prints, television and telephones that are different from those found in other media. However, other media also have unique characteristics, which the Internet does not have.

Thus, the view that the Internet will have a positive impact on consumer welfare is open to question. For example, the Internet is at a decided disadvantage, because it cannot serve consumers without access (still a majority) or provide such sensory information as taste, smell, touch and texture. Also, with more information on the Internet, it can be a source of misinformation. Finally, whilst the use of E-commerce and marketing activities can enhance the exchange processes and the relationship between the buyers and the sellers, it is also important to keep in mind that business fundamentals (the components of a business model) are the same whether business is conducted using E-commerce or traditional models.

### 2.5 CHAPTER SUMMARY

This chapter surveyed the macro theoretical areas that relate to the research study undertaken. Examination of the development, E-commerce and marketing literature strongly suggests that potential benefits can accrue from the use of ICTs in development. However, ICTs cannot be used as a technical tool for development but must be used contextually and within a framework of other disciplines such as marketing and organizational development.

Concomitantly the literature review exposed the gap between the use of these predominately western business concepts in the developed world and the application of them to Human Scale Development at the local community level in Southern Hemisphere environments.

Local appropriation is vital to the successful adoption of ICTs and marketing. Local appropriation of ICTs is about communities and groups selecting and adopting communication tools according to their specific and particular information, communication and structural needs, which have been developed by the users within their own socio-economic contexts. Additionally, of crucial importance to ICT research is the variation in the organizational and broader context within which technological innovation is embedded (Avgerou 2000, Walsham 1993). Avgerou (*ibid.*) noted the substantial evidence indicating the significance of including local context to exploring the potential of new ICTs in developing countries. She further postulated that a researcher must view ICT innovation in relation to socio-organizational change not only as a technical and rational change but also through the inclusion of the social and cultural aspects involved.

The issues relating to development, ICTs and marketing discussed in this chapter contribute to the development of a conceptual framework that views ICT within a local context and in relation to socio-organizational change, which is discussed in chapter three. The conceptual framework is presented in chapter four and guided the action research project reported on in chapter five.

Chapter three, which follows, contextualizes the research undertaken. The turbulent socio-political history and its impact on the local development dynamics are described, as is the RWA case history. Lastly, the results of the research pilot study are included as these results contributed to the development of the conceptual framework in chapter four.

## **CHAPTER THREE: THE RESEARCH SITUATION**

### **3.0 INTRODUCTION**

As this research is both contextualist and interpretivist it is appropriate to include both the historical and socio-political context along with the national context in which it was situated. The 'local' was embedded in complex relationships with other actors and forces and in this case, there was a long and complex history of unequal power relationships and economic marginalization in which community local development processes were embedded. The quirky but antithetical effect that the introduction of ICTs had on their host organization, the RWA, can only be explained contextually.

Acknowledging that local communities do not exist in isolation from other social, political and economic contexts, the objective of this chapter is to establish an overview of the research study situation. Section 3.1 starts with an exploration of the local history, which shaped and continues to influence local development agendas. Section 3.2 follows with an overview of the particular and prevailing development issues. Section 3.3 charts the case of the Rural Women's Association, and then discusses its shaping influences, progress and results, with particular reference to the RWA telecentre. Section 3.4, the final part of the chapter outlines the results of the scoping study conducted prior to the main data collection phase. This was included here as the results of the scoping study informed the approach taken to the main study (the Action Research project).

### **3.1 THE HISTORICAL FRAME**

The RWA is located in the old Sekhukhuneland, a region beset with a violent history of resistance and conflict, spanning the past 100 years. Delius (1996) provided one of the few sources of published information relating to the region. His book, augmented with discussions we had in Johannesburg, October 2003, provided the basis for this section.

Sekhukhuneland formed part of the once powerful Pedi Kingdom. In 1879 the, until then, invincible Pedi tribe was defeated by the British. This defeat effected substantial changes to the reigning political order. The Pedi heartland was '*converted virtually overnight, into crown lands, company farms and increasingly privately owned farms*' (Delius 1996:10). Shortly after, the Pedi landlords were downgraded to the status of tenants, paying rent and taxes to the new rulers and landlords and living within reserves.

In the 1920s, the Native Affairs Department (NAD), fearing for the capacity of the reserves to sustain a growing population, considered that increased rural impoverishment might result in mass migration to urban areas, swamping the white people. In 1930, the Native Economic Commission (NEC) concluded that the 'irrational, uneconomic and unscientific nature' of African society and agriculture, attributed to the cultural practice of stocking cattle, was causing serious soil erosion. The solution, 'reorganization' of rural society, resulted in the substantial reduction of Pedi land and cattle stock, fencing of lands, and the 'modernization' of African society through expanded agricultural education. A body of 'scientific developers' backed by legislation was marshaled to enforce the reorganization policy. Disguised by the State as a mechanism to provide more land to the congested Pedi reserves, the 1936 Native Trust and Land Act (which became known as the 'trust') invested power over all Pedi land to the South African Native Trust (SANT). Initially, Pedi chiefs supported the 'trust' but the repressive nature of the legislation soon exposed it as a tool to dispossess the Pedi of their land by introducing regulations forcing land 'rehabilitation', in particular, forcing the reduction of cattle in the reserves. The cattle culling strategy created immense anger as forced stock sales resulted in white farmers buying cattle from the Pedi at steeply discounted prices. Culturally, cattle are regarded as a pension mechanism in the Pedi nation, as well as a measure of wealth.

The National Party, which came into power in 1948, introduced increasingly repressive legislation starting with the 1951 Bantu Authorities Act. The then Prime Minister Hendrik Verwoerd took control of the NAD, replacing the existing staff, who were mainly agriculture development professionals, with ideologically sympathetic appointees drawn from Afrikaans universities. The new order, schooled in the South African Bureau of Racial Affairs ideology, deemed that Africans should be developed within their own cultures and not drawn into a European world. This ideology translated into long-term racial separation where chiefs would rule as a separate society of African culture within South Africa.

Many, but not all, senior royals in the Pedi paramouncy believed there could be sizeable benefits from co-operating with the Nationalist government and that it would be useless to resist it. Some, however, feared for the popular legitimacy of the Paramouncy. *'This began the major cleavage between chiefs and commoners and shaped the contours of the conflict and provide reoccurring refrains in current history'* (Delius 1996: 4).

Fetakgomo, the ANC (The African National Congress) resistance movement in the region, rejected both Bantu Authority and the land 'trust'. Consequently it was banned in 1957 and the State began to alienate chiefs against each other in the region by rewarding the headmen that supported Bantu Authority with the position of an independent chief. Whilst only a small number of headmen accepted this offer, it succeeded in creating a profound schism between a small minority supporting Bantu authority and the overwhelming majority opposing it. The State attempted to crush the opposition through a series of arrests and deportations of senior royals thereby precipitating the 1958 Sekhukhuneland revolt. During this time the ANC camp of chiefs killed nine chiefs supporting Bantu Authority and torched their properties. Villagers refused to pay taxes and boycotted businesses owned by the Bantu-aligned chiefs and their associates.

Over 300 people were arrested and put on trial over the following two years. The State eventually restored the deported chiefs and then intensified their repression of any opposition. Finally, as desired by the Apartheid government, the 1959 Bantu Self Governing Act was implemented, where eight units (the homelands) were demarcated to provide a fantasy arena of economic and political African aspirations within a white ruled country. To consolidate their position, the State, in 1960, banned the ANC and PAC (Pan African Congress) and destroyed Umkonto we Sizwe (the spear of the nation, the military armed wing of the ANC).

In 1962 the Lebowa Territorial Authority, which incorporated Sekhukhuneland, was finally established by the State, although it failed to secure the participation of the Pedi Paramouncy. The state intensified its' campaign to break Pedi power, co-opting a handful of chiefs, who were mostly headmen, with the promise of chiefs' appointments, but the majority remained steadfast in their opposition to the government. By 1970 Sekhukhuneland had 54 chiefs compared with only three 15 years before. Delius's observation is that this increase in numbers caused a rupture that festers till this day and underlies current conflicts and developmental difficulties. The Pedi Paramouncy held out for over 30 years against the apartheid government but Bantu Authority was its death knell. A new substructure of headmen now enjoyed state recognition as salaried chiefs. They began to exploit their power within the apartheid structures (e.g., registering only work seekers that obeyed their command), and became less responsive and responsible to the communities they ruled.

Historically, migrancy was seen by the community as a voluntary, but necessary evil to preserve the rural way of life (that is, to raise money to pay taxes, bride-wealth, build a

homestead, accumulate cattle and then retire). Migrant remittances were the lifeblood of reserve economies. The enforcement of the influx control law meant many men had to accept the extended contracts they had previously shunned which precipitated an increased number of female headed households with no male remittances to depend on. Along with this, the 1960s saw the beginning of large-scale female migrancy.

The 1983 recession was a defining event in the region, with many migrants retrenched from their jobs in the white areas and required by law to return to the reserve. The wealthiest sector of Pedi society now, were the state financed chiefs, enriched through such things as the power to grant business permits, sign employment contracts and pension applications. Another dynamic at this time was the rapid expansion of education. The rise in the number of educated youth coincided with the national recession and left many youths in economic limbo. These factors contributed to the marginalisation of the youth, marked by an escalation of theft and violence in the area.

Villagers were struggling to survive in an environment of continuously diminishing resources whilst vastly expanded numbers of chiefs caused reoccurring friction within chiefdoms. Many chiefs abused community funds and imposed heavy levies on villagers to raise money for such things as buying cars and building houses for themselves. Chiefs were seen to be colluding in the misery of their subjects, forming a bitter, acrimonious setting leading to a resurgence of suspicion of witchcraft. Successful business people were believed to rely heavily on traditional medicines, which are known as 'muti' and in 1977 a wave of witch killings swept through Lebowa ending in 14 people being executed. In 1980 a further 20 'witches' were executed.

### **3.1.1 The 1986 Sekhukhuneland Revolt**

From 1983 onwards, returning ANC aligned university students began to politically organise their home communities. Apel and Nkwana (the head office and satellite centre of the RWA) were deeply involved in spreading this youth movement known as the comrades. The comrades politically leveraged ongoing simmering land disputes, already framed in the 1960s, to turn Apel and Nkwana into 'no-go' areas in 1986. This period became known as the Sekhukhuneland revolt.

During 1986, after a number of students had been shot and tortured and buses and taxis hijacked all over Sekhukhuneland, the comrades declared war on the Lebowa Government. The comrades viciously enforced the consumer boycotts and targeted all 'enemy' property. Horrific stories appeared daily in the press, some, of old women forced to eat soap powder and disinfectant bought by them from places deemed to be the 'enemy'. Education ground to a halt, non-attendance by youth at meetings was punished brutally, persons and property threatened and regular hijackings for political use of vehicles occurred frequently. Following this outbreak of political resistance the South African National Party imposed a repressive countrywide 'state of emergency'.

The behaviour of the comrades sent shock waves throughout the community. To usurp the role of the chiefs and apartheid ruled magistrates, the comrades instigated their own 'peoples courts'. They took control of the villages, defying all authority, threatening elders and denouncing the institution of chieftainship. During this turmoil, people ascribed much of the conflict they were experiencing to the practice of witchcraft. Debated by the comrades in the surrounding villages, this issue was generally resolved peaceably except in Apel and Nkwana. Between February and April 1986, 32 people in these two villages were accused of witchcraft and killed.

### 3.1.2 Witchcraft Accusations

*'In the specific circumstances of Apel and Nkwana witchcraft emerged as a dominant concern and no leader felt able to stand against it. The eradication of witches was seen as a fundamental part of the creation of a new community freed of oppression, iniquity and misfortune which had dogged life under apartheid... the young men who undertook the task brought to it the certainty and energy of adolescence and the conviction that radical action could trump where their parents' cautious measures had failed' (Delius 1986: 198-199).*

Fuelled by the repressive changes of the last decade, it seemed that witchcraft accusations became the scapegoat for the high level of conflicts in the villages. Communities 'infested' with witches and believing themselves to be without defences turned to the comrades as their only rescuers.

Delius asserted that the accusers and the accused were mostly bound together by genealogy and space but separated by age and gender. The accusers based their accusations on historical vendettas within and between families and neighbours. In the naming of witches, there was

evidence of youths taking revenge over specific past grievances, as a significant factor in witchcraft was based on jealousy. Therefore, main targets were people who worked hard and had tangible material gains. It appeared that successful people engendered community suspicion.

As male migrancy patterns resulted in an increased number of female-headed and female-linked households, many of the local disputes occurred between women. As a consequence, young men who traditionally had control over women, found they were less able to assert their male supremacy. This jarred with the rural African cultural belief that women must be under male authority to stop them using the forces of nature destructively. These changed dynamics, Delius believed, may have been an opportunity that the youth manipulated, to force respect from their elders and women, evidenced in that most of the accusations were against females.

By mid 1987, after months of State led shootings, beatings, detentions and torture, the comrades were vanquished. In 1990, although the ANC was unbanned, the uncertain position of chiefs was still a thorn in the side of local democratic government.

### 3.1.3 Summary

The people of Sekhukhuneland endured generations of poverty, deprivation and violent turbulence compounded by years of debilitating drought. An age-old conflict between the villages of Apel and Nkwana simmers, as over the last 100-year period there has been no dispute settling mechanism outside of a fractious chieftainship within a fractured community. The various chiefs have been legitimized at different times, some by Bantu Authority (Nkwana) and some, in the past and most recently, by the ANC (Apel). The 1980s Apel centered youth generational revolt, against elders and women, shaped the politics of destruction that affect the area even today. The past conflicts informed the current conflicts and as a result, many development initiatives (e.g., Operation Hunger, health programs) in this area failed. The following section introduces some of the particular prevailing socio, cultural, political, economic and legal factors that impacted on development and the RWA.

## **3.2 SOUTH AFRICAN DEVELOPMENT ISSUES**

This section describes the features of South African development. It starts with an overview of Government macro-policy and moves on to the issues impacting on rural gender development such as traditional authority, the effect of the constitution and the impact of the phenomena of witchcraft.

### **3.2.1 South African Development Policy**

The new ANC government's GEAR policy (Growth Employment and Redistribution strategy) accompanied South Africa's liberation from Apartheid onto the global stage. This policy was referred to by some as the ANC's home-grown version of the World Bank's notorious Structural Adjustment Program (SAP), adopted in response to the rise of globalization occurring at the time of liberation. GEAR was an economic reform strategy with the intention to fast track economic growth, create jobs, provide ubiquitous services and ensure a safe work and home environment. Many saw it as a failure as it did not deliver on the promise of 1.3 million new jobs by 2000 (SA country report). In fact, over 500,000 jobs were lost during this time adding to the already wide poverty gap.

The first official economic policy of GEAR was the pro-poor Reconstruction and Development Program (RDP). It identified land and agrarian reform as the most important issue facing the country. Launched in 1995 the RDP formed a key part of the ANC's strategy for a new democratic South Africa. The RDP became shorthand for all aspects of state-driven development and socio-economic restructuring in South Africa but despite this, there was little positive advancement of gender rights and land reform in South Africa (Turner and Ibsen 2000).

### **3.2.2 Witchcraft Accusations**

Poverty in South Africa is predominantly a rural phenomenon. 75% of poor African households live in the congested rural settlements of the former homelands (Hargreaves and Meer 2000). Homelands were concentrated settlements of ethnic populations controlled through tribal authorities during colonial and apartheid rule. The apartheid spatial divisions were a costly legacy, isolating many communities geographically, socially and economically and rendering the poor dependent on the central economy.

The government rural development framework acknowledged safety and security as a precondition for social and economic development and recognised that the poor continued to be traumatised and wounded by inter-communal conflict. Rural poverty was rooted in landlessness but sharply exacerbated by lack of access to economic inputs and infrastructure, clean water, sanitation, healthcare and other basic services.

Despite the 1994 land reform programme of land restitution, redistribution and tenure reform, only around 1% of land (as opposed to the 30% target) was redistributed to black people but 1996. After 1996 the ANC economic development framework focused on the enabling of rural communities to transit from subsistence to market production. From the outset they focused on agrarian reform and women's right to land. Whilst the 1996 economic development framework focussed on enabling rural communities to transit from subsistence to market production, entrenching the market as a tool for development, these market oriented development initiatives failed to significantly reduce poverty. The limited progress on gender rights and land reform provoked widespread criticism of the ANC's approach to rural development. It appeared that linking gender equality with land reform resonated problematically and created more problems than it solved.

### **3.2.3 Gender, the Constitution and Development**

The new South African constitution affirmed a commitment to gender rights that was incompatible with the formal recognition afforded to un-elected authorities (Rangan and Gilmartin 2002:1). The Constitution abolished Bantustans whilst at the same time protected the status of existing traditional /tribal authorities through the Congress of Traditional Leaders (CONTRALESA). In the past both colonial and apartheid governments maintained rule in the spatially concentrated Bantustans through the tribal authority mechanisms. Abolishing part of this framework whilst retaining the power of chiefs created serious political contradictions, as the constitution enshrined a democratic bill of rights whilst at the same time it protected tribal authorities and both were expected to function alongside each other.

The notion of equal rights for women conflicted with traditional customary law where gender was not treated equally. Customary law maintained practices that enshrined existing social hierarchies and male privilege. CONTRALESA vehemently opposed land tenure and the creation of new rural municipalities (as they eroded their domain of official powers) by invoking the protection afforded them under the constitution.

Chapter Twelve of South Africa's Constitution recognised "the institution, status, and role of traditional leadership and customary law" but did not elaborate on this status or role nor did it prescribe institutions. The Local Government Transition Act of 1994 also failed to explain fully the role of traditional leaders. Consequently, many of the Amakhosi (chiefs) and other traditional leaders complained about both their lack of status and powers in the new dispensation, as well as the lack of clarity regarding their role. This policy vacuum created extensive divisions. Civic organisations and political parties, labelling it undemocratic, feudal and unnecessary, challenged the legitimacy of traditional leaders. That traditional systems were encouraged, reinforced and sometimes constructed by the former apartheid government also undermined their legitimacy among some groups. The situation was potentially explosive and morbid and for this reason the government choose to move slowly.

Rural poverty was connected to the issue of landlessness and women's access to land was often denied through the practice of customary law (despite the existence of legal agreements to the contrary). This translated into a situation of accommodation politics where, in reality, women's protests went unaddressed, reinforcing gender biases in rural development.

This ambiguous socio-political environment led to an increase in conflicts and eventually to an eruption of witchcraft accusations, used both as political control and gender oppression strategies at the local level. The next section describes the issues relating to witchcraft and its adverse effect on development and the organizations (RWA) that operated within this turbulent space.

### **3.2.4 Witchcraft - A Gender Domination Strategy**

In some parts of South Africa witchcraft is still a dominant fear, particularly in Limpopo and the villages of Apel and Nkwana, where beliefs in supernatural powers were deeply ingrained. Decades of violent repression and armed struggle against it led to a culture of violence and witchcraft with witch-hunts one manifestation of this violence. RWA members were living in a world where witchcraft was pervasive, accusations were often an inherently political act and this all took place under the auspices of chiefly authority.

Witchcraft is an ancient world phenomenon. Between 1486 and 1686, in Europe, half a million witches were executed by the church resulting in the eradication of knowledge such as birth control which was a factor causing women to loose control over their lives. Also, a witch-hunt was a convenient way to eliminate enemies across Europe (McFadden 2000).

Witchcraft in Africa was a theory of evil and a system of evil, a result of ill relationships or disharmony between the living, nature and the divine. It allowed people to make sense of arbitrary misfortunes that afflicted them and to put blame onto a specific person rather than on chance. Mostly, witchcraft paradigms coalesced around the question of 'why are we suffering'? Invoking witchcraft provides ways of answering, "why me, why now?" Suffering and misfortune were interpreted as a sign of actions by invisible power and witchcraft beliefs provided a framework in which suffering could be comprehended (Niehaus 2002).

Witchcraft was not a singular system of belief. African witchcraft beliefs led to a theory of causation. It was a labelling rather than an explanatory device, a way of making sense of adversarial random coincidences in space and time. It revolved around the feeling of undeserved misfortune based on the belief that a person's well being depended on his or her interrelationships with other people and with nature. Female sexual power was seen as a source of dangerous power that needed to be controlled and occasionally destroyed by men, as it represented a female power-challenge to the dominance of men.

In most cases, sorcery cases were reported when there were feelings of jealousy and hatred or when one or more members of society performed abnormally – that is, either extremely poor or excellently. The one who performed well was thought to be the sorcerer – having extraordinary or spiritual powers, and the one who performed badly was the one who was bewitched. Evil manifested in ill relationships and disharmony between the living. Contention, jealousy and hatred fuelled most cases.

When witchcraft accusations occurred, there was retrospection of old grudges and grievances; things once deemed innocent were re-examined in a sinister light; recent quarrels assumed new dimensions. Offences needed to be healed through reconciliation: when an 'offence' against the ancestors had been committed, the offender suffered failure, things did not go well until the condition was healed through reconciliation (ritual and maybe animal sacrifice).

Van Binsbergen (1997) in his work on witchcraft and social conflict explained that firm rules to solve conflicts were not sufficient, that dropping these rules was an acknowledgement of shared humanity, even if this entailed foregoing the protection of the law of the land. This approach was known as Ubuntu, which is explained in Zulu as "umuntu ngumuntu nga bantu" and in Sotho as 'motho ke motho ka batho' (man is only human through his relations with

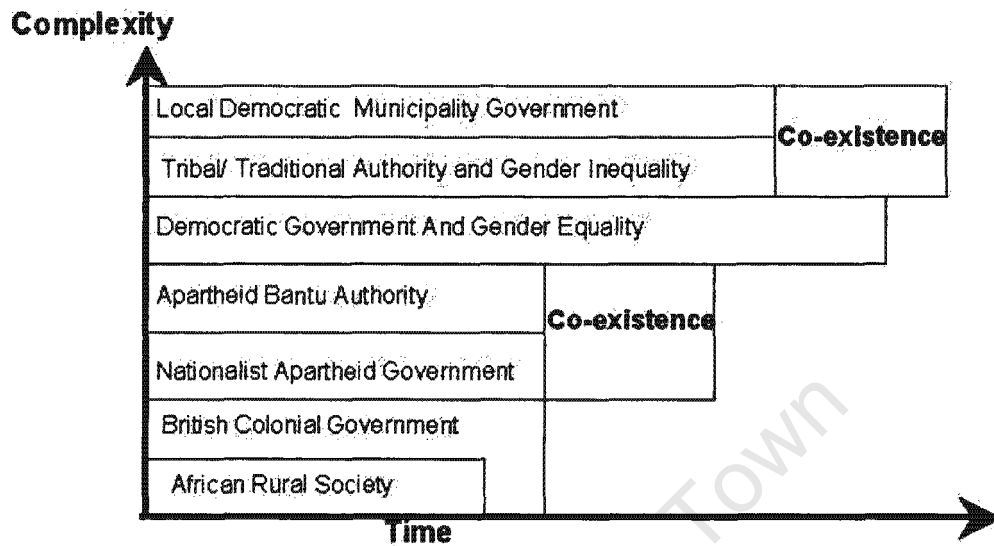
other humans) which was the basis for reconciliation. The issues must be resolved for the wider good of the entire community and not just for the parties involved in the conflict.

Some former witch-hunters testified at the South African post-apartheid Truth and Reconciliation Commission (TRC 2003), that witchcraft related violence was politically motivated. The chaotic transition from an apartheid state to democracy put strain on the rural area, which found an outlet for this in witch-hunting. The available statistics from Kohnert (2003) asserted that witchcraft related violence increased dramatically in South Africa in the 1990s and in Limpopo province the death toll was in the 1000s. This destabilized the social and economic environment and the political setting of a whole region.

In 1996 the Limpopo ministry of Safety and Security created a commission of enquiry into witchcraft, violence and ritual killing. The situation necessitated the provision of a witch sanctuary (Helena village, also known as Garamase) 35 km west of Polokwane City, where hundreds deemed guilty and in danger of being killed by mob action took refuge. The Commission on Gender Equality (CGE 1998) passed the Thoyandou declaration of ending witchcraft violence requesting that witchcraft related violence be declared a national priority crime.

Witchcraft is a complex subject spanning many levels of understanding. Ntloedibe-Kuswani (2003:9) notes that witchcraft works through *'associating women with inferiority, impurity and evil, which results in some women accepting lower and powerless roles at home and in public... and these social constructions create a gendered division of labour. ...and denies them opportunities in powerful and influential sectors of society'*. Associating women with evil was a patriarchal society strategy to exclude women from empowered roles. Historically and universally it was used as a violent gender oppression strategy. A consideration of the social impacts of witchcraft cannot be divorced from the importance of building sustainable development in a fledgling democracy new to gender equality. An understanding of witchcraft - baloyi, the Sotho word that is closest to the term witchcraft, is important in the sense making of gender development in this context.

# Layers of Complexity



**Figure 3.1 The Layers of Complexity**

Although post-apartheid South Africa was crafting a modern state modelled on liberal principles, this proved to be more challenging in Apel and Nkwana (the villages housing the offices of the RWA) where everyday life was lived within a deep-rooted fear of malicious supernatural forces. The new democratic and gendered government approaches were placed upon layers of other forms of conflicting government and belief systems. At present two conflicting models of government, underpinned by different belief systems co-exist in a state of heightened tension. Figure 3.1 pictorially represents the layers that Apel and its surrounding area have been steeped in over time.

In Apel, social disturbances (such as murder and theft) are often attributed to evil people and evil power. The residents of this area existed in a space of spiritual insecurity, where the Sangoma played a major part in harmonizing society. A Sangoma is a spiritual doctor, a medium of sacred or transcendental power. Recent events (the murder of the RWA telecentre security guard, and the theft of valuable agricultural equipment) precipitated witchcraft accusations from some of the RWA members, who were the older, mostly illiterate members. This resulted directly in the closure of many of the RWA projects as the RWA management and some of the project members battled to solve the conflict between them.

Witchcraft has serious repercussions for conflict resolution, which is a fundamental base for sustainable democratization and development (Kohnert 2003). Additionally, as women were more vulnerable to accusations than men and as that vulnerability increased with age (Gorman and Heslop 2002), gender development was particularly at risk from this phenomenon. Hunger, poverty and unemployment can all create jealousies that can quickly turn to anger and vengeance.

### *Types of witchcraft*

Ntloedibe-Kuswani (2003) describes four different levels of witchcraft. Heart witchcraft, relating mostly to ancestral wrath, and the breaking of taboos, exists when one is not happy with what another person has said and done. By being offended the ancestors' attention was captured, he or she withdrew their protection from the offender, which exposed him or her to harmful forces. Manifestation of heart witchcraft included livestock loss and crop failure and healing was through reconciliation or maybe a sacrifice to restore the right relationship.

Word witchcraft was where the offended person speaks (casts a spell) and calls the ancestors to restore the broken relationship. Often a finger was pointed instead of a negative word spoken, as the former action was easier to withdraw. Steps needed to be taken to reconcile before the problem escalates. Night witchcraft involves the thokolosi (a zombi) who can enter anywhere without keys and day witchcraft, the most severe form, is characterized by strong hatred, malice, greed and envy. The purpose here was to injure or kill. Possessions can be destroyed and disappear, or in the extreme case, something might be set upon someone to cause his/her death. This form of witchcraft was generally associated with women and especially old age or powerful women. In many African rural contexts as in Apel and Nkwana *'life must be lived with a presumption of malice and with cases of witchcraft, silence and discretion ... the norms.... because it would enable the witch to gain knowledge of those seeking to counter the attack'* and that *'peaceful community life requires constant vigilance against and protection from witchcraft attack as well as efforts to minimize the impact of social jealousy and procedures to defuse the desire for vengeance'* (Ashforth 2001:16 and 21).

### **3.2.5 Prevailing Local Development Conditions**

Historically, development in Apel and Sekhukhuneland was highly politicised. Delius (1996) gave, as an example of this, the new road built in 2001 from Apel to Jane Furse, which he

believed, did not optimize economic potential. A road built from Apel to Lebowakgomo, which connected with the major town in the province, Polokwane, may have been a better trading opportunity for the villagers in the area. Despite this new road to Jane Furse, villagers still made the two hour journey by public taxi, to Polokwane, to buy supplies, conduct banking, etc.

The former transitional local government set up after the first democratic election in 1994 was a democratically instituted municipality. Fetakgomo municipality incorporated Apel and Nkwana and was a special presidential area prioritized for integrated rural development, with a keen focus on gender empowerment. This paved the way for development agencies to re-enter the area. During the period of my research, Kagiso, a major South African development organization, met with the municipality to discuss the optimal way to implement a project in the area. In discussion with them I learned that a number of sizeable developments (both government and donor initiated) were at this time frozen because of difficulties with and resistance from the chieftainship.

The chiefs were reluctant to relinquish their power over the villagers, as this was a major source of their prestige and income. Although Parliament withdrew the PTO (the Permission to Occupy) legislation, chiefs still exerted influence over the use and allocation of tribal trust land, which was a major point of departure for development. *'The traditional authorities face additional challenges to their official powers and domain given the recent changes to municipal boundaries and election of new local government representatives'* (Cousins and Hornby 2000:10). There was a feeling that to challenge the chiefs raised the specter of dangerous friction. Delius noted (1996) that when there was a cleave in the community, there was a greater need to accommodate compromise and co-operate in order to avoid, violent and morbid conflict. As at this stage traditional leaders were calling for the ANC to be replaced by themselves, the government response was caution, evidenced by the municipal government's reluctance to invoke the constitution to force the chiefs to comply with land issues.

Delius (*op.cit.*) concluded that the area's long history of being conned and deceived by many and varied power brokers resulted in a palpable fear and mistrust of outsiders. The witch-hunt and concomitant execution of 37 women in Apel in the 1980s was still fresh in the minds of the villagers. They perceived that a conflict at this stage had the potential to bring about a repeat of past events. Claassens (2000: 129) noted that *'it is in this context of constitutional, contradictory, administrative bedlam and altercations over democratic versus traditional*

*forms of local governance that all development initiatives are framed*'. The politics of accommodation and evasion gave rise to considerable confusion and conflict and undermined the prospects for gender equity in land reform and rural development. It was within this turbulent, conflict-ridden space that the Rural Women's Association (the RWA) was founded, less than seven years after the 1986 Sekhukhuneland revolt.

The next section describes in detail the RWA, the factors shaping its growth and its impressive record of achievement.

### 3.3 THE RURAL WOMEN'S ASSOCIATION

The RWA was a Roman Catholic initiative started by Sister Lydia Pardeller (Sister Lydia) of the Franciscan order of nuns. Before arriving in South Africa she spent 20 years in the Cameroon and 5 years in Ethiopia setting up women's projects. In 1992, Sister Lydia was charged with locating the 'poorest of the poor' community in South Africa, to facilitate improvement in the lives of women and children. Her search led her to the village of Apel, in Sekhukhuneland, 150 km southeast of Polokwane, formerly Pietersburg, the major town in the Limpopo Province (formerly Northern Transvaal and the Northern Province). This province is the poorest in South Africa with the highest levels of household poverty (62%) and individual poverty (70%) and with the highest level of non-urban population (89%) in South Africa. There were approximately 15,000 people in the community around Apel village in 1999 (Benjamin 2001a).

Sister Lydia spent 6 months identifying influential women involved with previous community initiatives in Apel and the surrounding villages. Selection of these future RWA leaders was inclusive of the main tribal and religious groupings in the area. Together they completed a comprehensive, inclusive and participatory community needs assessment. The results informed the 1992 launch of the RWA, which was a legally incorporated Section 21 not-for-profit community-based umbrella organisation with the following objectives.

- Eradicate poverty in the area
- Ensure food security
- Assist rural women to feed their families
- Generate and improve rural women's income
- Improve literacy levels
- Empower women to work for themselves and their families
- Provide life skills and capacity for self-help
- Promote child development and early learning importance

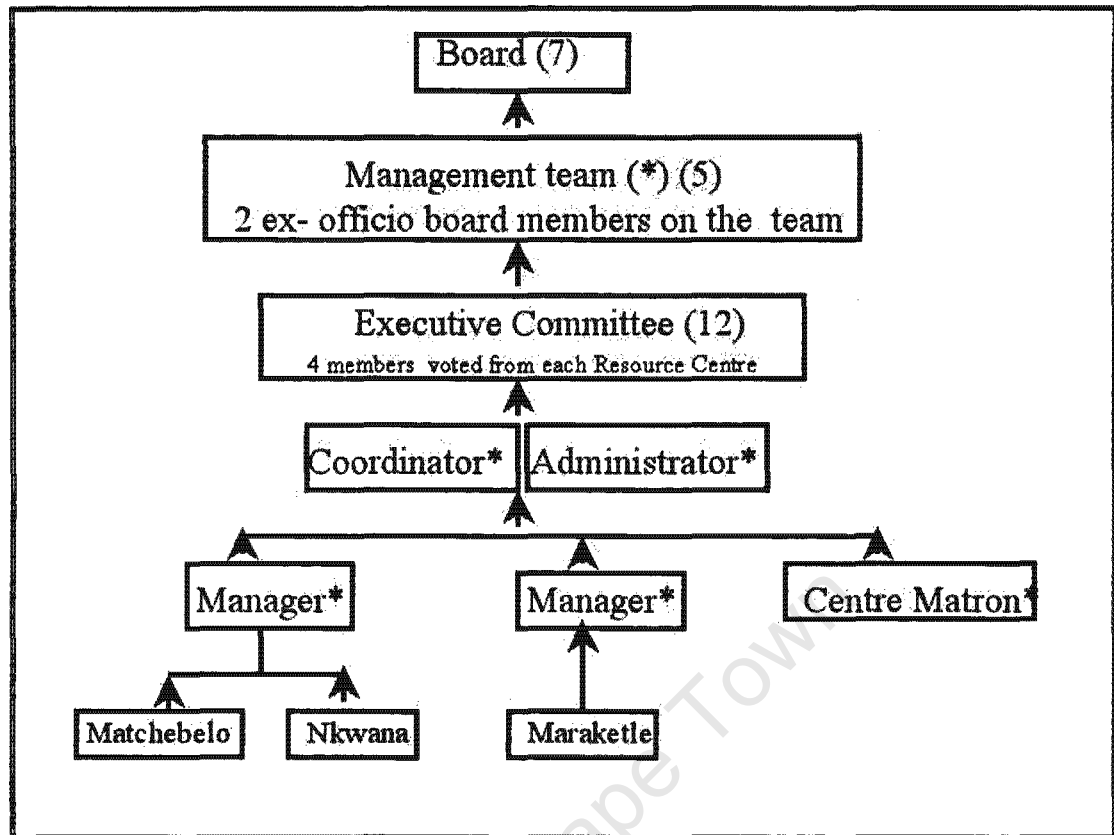


Figure 3.2 The RWA Organisational Chart

The organisation expanded from one to three resource centres in 1999 and was governed by a board of directors. Fig 3.2 shows the RWA organisational structure with numbers of people in brackets.

As religion was a key influencer of the RWA's mission the following section highlights some of the key trends relating to religion and development.

### 3.3.1 Religion

Religion in South Africa had a much-honoured role in development and struggle politics. A number of religious organizations, including the Catholic church, the Anglican church, Salvation Army, Promise Keepers, Operation Mobilization, Campus Crusade, and the Church of Jesus Christ of Latter-Day Saints, the Muslim World League and the Zionist International Federation operated in the country, doing missionary work, giving aid and providing training. The Roman Catholic Church congregation in South Africa grew steadily in numbers and influence in recent years and consists of approximately 9.5 percent of the population. The Roman Catholic Church's relationship with other churches has become more open, and it works closely with other churches on the socio-political front. Roman Catholic development

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work was often institutional in that the church owned the projects and the infrastructure relating to the projects. It generally operated in welfare mode, providing free services and aid. Sister Lydia believed this model nurtured poverty and dependence, and additionally, encouraged the community to internalise physical, emotional and intellectual poverty. She advocated a different approach to counter the mental poverty problem - the self-help model - which she described as *'Where people own the assets, land, and where the community members show the developers what they want, where they want it and how they want it to happen...here the church owns nothing, stays in the back ground it is more flexible, responsive, allows beneficiaries to assume full responsibility and results in a maintenance, culture, here there is no rescue from failure for the community, they must invest themselves in the projects'* (Interview, RWA Facilitator 2000 Appendix 3).

The 1996 census figures (Statistics South Africa) showed that approximately 84 percent of the South African population belonged to the Christian faith. The 4000 or more African Independent Churches made up the largest grouping of Christian churches, with a total membership of more than 10 million. The Zion Christian Church was the largest African Independent Church with 10.7 percent of the population. The majority of these persons adhered to traditional indigenous religions with a common belief being the importance of ancestors. Ancestors were regarded as part of the community and as indispensable links with the spirit world and the powers that control everyday affairs. Ancestors were not gods, but because they played a key part in bringing about either good or ill fortune, maintaining good relations with them was vital. Followers of traditional indigenous religions also believed that certain practitioners might manipulate the power of the spirits by applying elaborate procedures that were passed down through word-of-mouth. Many persons combined Christian and traditional indigenous religious practices.

Whilst religion was pervasive at the individual and community levels it was often an unacknowledged and unseen force in development. There seemed to be a disarticulation between the worlds of development and religion, with religion often seen as the spiritual world and development as the material world. Often the communities they served had a higher regard for and trust in the church, than in government and non-government organizations (Narayan 2000).

Religions' vocal opposition and critique of the World Bank structural adjustment and debt recovery policies along with the recent 2000 Jubilee campaign coalition were seminal actions

that brought religion and development closer (Marshall 2001). Nevertheless, as Narayan (2000) warned, religion could also contain the seeds of conflict that delay and destroy what has been built.

In addition to religious influences, the gender situation impacted on local development and is discussed in the following section

### 3.3.2 Gender

Gender, like class and race, has fundamentally been a socially constructed relationship and refers to the different roles men and women play in society, each determined by cultural, social and economic factors, which differ within and between cultures and countries. A gender approach acknowledges from the outset that unequal gender relations have a profound impact on development. Whilst gender means different things to different people and has often been interchanged with the word woman, in this context it refers to inequality. Unequal social relations between men and women played out in unequal access to power and resources and perpetuated women's subservient position to men. The United Nations Secretary General eloquently paraphrased the role and importance of women in the development equation. *'For decades, we have known that the best way for Africa to thrive is to ensure that its women have the freedom, power and knowledge to make decisions affecting their own lives and those of their families and communities. At the United Nations, we have always understood that our work for development depends on building a successful partnership with the African farmer and her husband. Study after study has shown that there is no effective development strategy in which women do not play a central role. When women are fully involved, the benefits can be seen immediately: families are healthier; they are better fed; their income, savings and reinvestment go up. And what is true of families is true of communities and, eventually, of whole countries'* (Annan 2003).

Prah (1990) backed this notion. He noted that the bulk of the domestically consumed food in rural Africa was produced by women and that they played a crucial role in the support of "domestic solidarity", served practically as head of households and set the pace for the adoption and diffusion of technological innovations. He further noted that much of the informal learning took place through the interaction between women. This indicated that special care must be taken to ensure women's meaningful involvement in all stages of the development effort. In many cases male social dominance continued to seriously inhibit the economic liberation of women. As the majority of women in South Africa were triply

oppressed (i.e., they were black, female, rural and poor), the RWA focused on female economic empowerment. Sotshongaye and Moller (2000) confirmed, through their research, that it was still rural women in particular who bore the largest burden of poverty in South Africa. They further noted that often women's projects remained 'marginal to the mainstream of development efforts' (i.e., men did not see these projects as important and had low priority in funding and supporting them). Sister Lydia noted that apartheid left rural women with little ability to believe in their own capability whereas other African countries had a long history of transmitting skills from generation to generation; this transmission mechanism was damaged in Apartheid South Africa. *'The homelands were designed to be consumers of white products, the pension money was used to buy things from the white businesses, producing for the rural people was against the apartheid policy, they never got to make a whole thing, only a part of something, so quality has not become known in the community'* (Interview, RWA Facilitator Appendix 3 p: 2. 2000)

Various approaches to gender can be found in the literature. In the 1970s the focus was on WID (Women In Development), which viewed women as an untapped resource in the economy. Whilst income-generating projects (IGPs) were a notable outcome of WID, it neglected the area of gender relations and did little to try and shift the position of women in relation to men. GAD (Gender and Development) followed, which was a merger of WID and WAD (Women and Development) (Serote, Mager and Budlender 2001). The RWA gender approach was more aligned to the WAD approach, as it promoted a more political and inclusive set of strategies, requiring the inclusion of the relations between men and women in the power context in which development was occurring. It was committed to the redistribution of power to bring about gender equality. Experience of rural development showed that men tended to dominate organisations, and aligned with rural cultural values, women deferred to men and rarely performed meaningful management or leadership roles in their presence. As the RWA was a gendered approach to development it was considered prudent, when the RWA started, to institute a women only membership policy. In time it was anticipated that the strength of rural women would grow to the point that they would not need the protection of a women only organisation.

### *Achievements*

Whilst Sekhukhuneland remained one of the poorest areas in South Africa, the women of Apel significantly improved their lives through the RWA activities, as evidenced by the following results achieved by 2000, eight years after its inception:

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- Three women's resource centres ( Maraketle, Nkwana and Matchebela)
- A resource centre with conference facilities and numerous units to house entrepreneurial activities.
- 30 organised, legally constituted project groups (with over 2000 members)
- 16 vegetable gardens (with around 80 women benefiting from each garden).
- Agricultural - Maize production
- 2 restaurants
- Continuous poultry production
- Wire Fencing production
- Brick production
- House construction
- A carpentry shop producing Montessori pre-school teaching aids
- 14 sewing projects supplying local school uniforms and traditional and modern dress design
- 1 shop (used for training women in accounting and financial skills)
- Community ABET (Adult Basic Education Training) education theory and life skills training programs
- Vocational and business skills training programs in partnership with the Department of Labour
- A government sponsored Telecentre (with computers, internet, fax and phones).

### 3.3.3 The Telecentre

The RWA telecentre was donated through the USA, (Universal Service Agency), a statutory body responsible for ensuring universal access to all telecommunications services for disadvantaged communities in South Africa, established under the 1996 telecommunications Act 103. This program is committed to providing sustainable telecentres and socio-economic information services to disadvantaged communities and in line with this the RWA was awarded a telecentre through this body. Telecentre is a loose word used to describe a place where public access to computers, training and the Internet are offered along with a number of business services, typing, photocopying and telephones.

The Telecentre programme was heralded as one of the most important initiatives of the 1990s to ensure that developing communities made use of modern ICTs. Telecentres were believed to be the vehicles through which micro and small enterprises could find and timely evaluate market information and source better and less costly inputs (National Telephone Co-operative–NTCA 2000). For these commendable beliefs to become a reality, strategies to expand trade and commerce in the market place had to be applied creatively. One difficulty was that no one in the community seemed to know how to leverage the so-called "transformative" power of the telecentre to give birth to significant economic development.

Benjamin's (2001b) USA telecentre programme research concurred with this analysis, predicting that it was unlikely to be a sustainable programme. In 2000 he noted that many of the 65 telecentres were either failing or weak. Secondly, the telecentre model used was weak and inappropriate to the conditions and the political pressure on the USA to deliver often obliterated the practical considerations such as support, training and technical maintenance. He posited that within the USA ... *'no effort was made to encourage the supply of CDs of relevant information, to encourage information brokerage, to conduct information needs analysis or to supply training and templates for developing local information.....without information services or connection to the Internet, the only use of the computers was for training and.... typing...'* (op. cit. :150) *'A major reason that the telecentre services had little engagement with local needs was that most telecentres neither saw it as their role to provide information services, nor had the skills to support or develop them ... this left the role of computer equipment as machines to be learnt... not as tools to be used in meeting local problems.'* (op. cit. : 153)

The USA was unclear on how ICTs in disadvantaged areas could be used for development purposes, and so could not promote a shared aim beyond the rhetoric of universal access to ICTs. Most telecentres were seriously underutilised and unable to raise income to support operational expenditure. Furthermore, there was a lack of leadership, business know-how, marketing knowledge, and change management skills to successfully embed these telecentres into meaningful structures. Benjamin concluded that unless the telecentres were embedded into the economic well being of the community they would have very limited impact on redressing poverty issues.

The capital outlay of the USA telecentre model was around R200, 000 per telecentre and often usage of and potential for income generation did not warrant such capital outlay. Few of the centres made sufficient income to pay salaries or to provide for equipment depreciation (Stavrou and Benjamin 2000). No telecentre was able to set aside money for depreciation and in most cases there were greater technical problems than anticipated (power cuts, computer crashes and lightning strikes). The USA Telecentres were heavily dependent on donor support. Whilst these projects stressed community participation and sustainability none proved to be self-sustaining when funding ended. Of the 64 USA telecentres only three were even functional and only four had Internet access.

The RWA telecentre equipment, installed in 1998, comprised 4 computers (two with Internet provision), 6 telephone lines and a photocopier. Two RWA members, appointed as telecentre managers, were given 6 weeks training and then charged with the responsibility of building a financially viable business. After this (in the RWA telecentre) there was minimal support and guidance. Unfortunately the telephone lines stayed unconnected for 4 years due to a dispute between various government departments and Telkom (the South African monopolist telephone provider).

#### **3.3.4 The RWA Development Model**

The focus of the RWA model was on poverty alleviation for women and children, through self-reliance. This model emerged in response to the questions Sister Lydia posed – *‘How could development for women be implemented in a patriarchal African rural environment? What would work best for the women and what would be long lasting? How can authentic ownership be implemented?’* (Interview, RWA Facilitator 2000 Appendix 3)

Through her 30 years of Catholic Church development work in Africa, Sister Lydia evolved this particular development model and applied it to the RWA. Despite the adverse socio-political environment in which they operated, the RWA results were impressive. A study by the International Water Management Institute (1999) suggested that the following factors contributed significantly to the success of the RWA.

**Authentic Leadership and Need Identification:** Much of the RWA’s success was attributed to the methods, leadership, mentoring and discipline provided by Sister Lydia. Her work was influenced by 36 years of Roman Catholic missionary development experience in Africa. This experience guided her belief that nothing sustainable could be developed until the right potential leadership and support was identified and nurtured and authentic needs were negotiated and prioritised. She noted that missionaries often initiated projects before identifying local needs, resulting in frequent failure. This led her to develop a model of beneficiary ownership. Her success as a development practitioner was shown through the continued sustainability of projects she implemented in the Cameroon in 1978 and in Ethiopia in 1986.

**Donor Money Spent Exclusively on Project Implementation:** Many RWA members worked as volunteers for months and years. No one was paid a salary. All donor money was spent on project seed funding. The women accepted the premise that sustainable income was to be generated from business activities not from donor money.

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**No Donor Agenda Driven Funding:** Donor funding was declined where it was seen to interfere with the autonomy of the organisation. It was believed that this strategy contributed to creating authentic leadership, control and ownership within the RWA.

**Financial investment from beneficiaries:** Groups initiating security food gardens were required to save R2000 in a bank account towards start up project costs. This reinforced the notion of sustainability at inception and projects were less likely to collapse if donor support was suddenly withdrawn.

**A Step Approach:** The food security garden project was the first development step in self-sufficiency. Once food security was established the project participants were encouraged to engage in income generating projects supported by the RWA who provided vocational and business training and start up equipment and materials.

**Leaders Are Chosen Not Elected:** The problems of tribal fighting, jealousy and self-interest can destroy a rural organisation. Sister Lydia's experience indicated that electing untrained women could contribute to this. To militate against this problem, she identified potential leadership in conjunction with local people at the start of a project and comprehensively and continuously trained and mentored them. The RWA constitution included an election process to provide decision-making representation to the wider community such as tribal authority.

**Tight Financial Controls:** The RWA executive leadership had 6 years of financial training and mentoring prior to assuming financial control of the organisation. This engendered trust between the RWA and its donors and partners. Furthermore an ethos of strict financial discipline was ingrained in the RWA membership. For example, every member was required to have a receipt for all monies spent (difficult when it comes to taking public taxis and buying in the cash economy) in order to be reimbursed.

**Incorporation of Tribal Authority:** Historically the chiefs held the 'Permission to Occupy' power over the tribal trust land. Land for development projects had to be accessed through them. The chiefs' support provided much needed help to the RWA in providing land and enlisting the support of influential males (such as the Premier of the Province).

**Flat Organisation Structure:** The RWA had a flat structure whereby project team leaders and members worked together and reported directly to Sister Lydia and to a board of Trustees.

**Focus on Women's Development:** Sister Lydia's experience indicated that it is women who significantly reduce poverty. Her experience of patriarchal societies such as South Africa, Kenya, The Cameroon and Ethiopia informed her that exclusive women only membership was an inherent strength in an organisation such as the RWA.

**Collectivism, Autonomy and Self-Reliance:** Donor Money was used only to fund training, infrastructure, equipment, and productive assets. It was not used for salaries. The organisation's resources were used collectively by groups of women to start income generation projects. Projects later became autonomous (own bank accounts), self-reliant (wages were generated through selling products) beneficiary co-operatives (members owned the project jointly and equally shared income). Members were free to leave the co-operatives to start their own business but were required to return all the RWA equipment.

I asked Sister Lydia in 2000 if she would change the model for future use, or keep it as is. She answered that from the beginning of the development she would make the projects less reliant on donor funding and increase local participation in funding the infrastructure, base all activities and training on business and competition principles, and start a savings and loan scheme early on in the development.

### *The Author's Initial involvement with the RWA*

In 1994 I founded a Section 21 company, The National Foundation for Fundraising Training (NFFT), which provided fundraising management training to Non-Government Organizations (NGOs). During September 1995 Sister Lydia requested me to train people from her organization in fundraising management. After a few months of discussions I set off, in great trepidation, to a part of the country I was extremely unfamiliar with. All I knew of the area was that it had been a marginalized homeland under the Apartheid government. It was extremely poor and desolate and had a reputation for violence and witchcraft. To add to my doubts there was no road map of the area.

In January and February 1996 over a 6-week period I trained 40 members of the RWA in two blocks of two-week sessions. After the training, I discussed with the RWA the idea of hosting a 'special event'. This is a strategy that I regularly implemented as a platform to strengthen

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local and national fundraising. It improved public relations, built image, exposed project successes to donors and potential donors and nurtured and mobilized people of top financial influence. People (donors) give to what they know - and the RWA, as an organization, was little known outside of overseas church groups and church funding agencies.

We staged an impressive event, the opening of a mini-industrial park, for brick, wire, and carpentry production, which was a 'first' in Apel. Over 2500 women attended from the area. Many walked long distances, with firewood on their heads, to build the cooking fire, and many dressed in the elegant Sotho tradition. Two schools sent their drum majorettes, the Provincial Premier, Mr. Abel Ramakhlodi, cut the official ribbon and a number of foreign embassy dignitaries and some South African corporate donors, astonishingly, made the long trek to the village. Both national and international media representatives attended the event and the RWA received substantial media coverage.

The success of this event broadened my development thinking to include marketing issues. Initially, I considered marketing only as a corporate image-building tool to increase fundraising effectiveness. Now I refocused on marketing concepts and principles in relation to the RWA trading activity and to how the RWA telecentre could contribute to local development.

At that stage I deterministically believed that Information Technology was a sufficient requirement for poverty alleviation. During that year I fundraised for multimedia computers, childrens' educational software, the Internet and cell phones. The RWA management were now able to communicate more frequently, despite the geographically limited and weak cell phone signal. The only other available telephone at that time was a one-line 'wind up' manual system routed through a series of operators. Admittedly, I had vested interests in providing the Internet as I was writing numerous funding proposals with the women. Whilst the advent of direct dialling meant we could fax to each other, it only marginally speeded up the writing process. Faxing a thirty page document, then getting the women to make their changes, then faxing back to me and deciphering all the changes and then repeating the cycle was inefficient, de-motivating and frustrating for all. I wanted to email file attachments and have the women directly change the proposal text and email this back to me.

Prior to commencing on the main research inquiry, I conducted a pilot study to test some of the assumptions found in the literature and to check consensus with the RWA management

relating to problem identification. This research is described in the next section as it was a significant shaping force for the conceptual framework developed in Chapter four.

**3.4 THE SCOPING RESEARCH**

The scoping research completed in December 2000 had the following aims: to benchmark the activity of the RWA; to measure the RWA current connectivity and computer literacy levels; to map current use, understanding and problems of marketing within the RWA; to track developments of the RWA telecentre and to explore the perceptions as to how the telecentre related to marketing and to local economic development. Appendix five provides the questionnaire and discussion guide used and lists the participants. The main points of the research results follow.

<b><i>STRENGTHS</i></b>
<b>1. An excellent reputation in the area of providing quality products and services to the community</b>
<b>2. Enjoys the backing and endorsement of all the local chiefs</b>
<b>3. Has a telecentre</b>
<b>4. Has legal documentation of land agreements</b>
<b>5. Its self-help development ethos</b>
<b>6. Substantial gender power in a patriarchal environment</b>
<b><i>WEAKNESSES</i></b>
<b>1. Lack of understanding of the application of community information, e.g., the possible benefits that the telecentres can provide</b>
<b>2. The telecentre managers do not have the opportunity to extend the knowledge, skills and potential benefits of its services to the local producers</b>
<b>3. Lack of understanding of the potential benefits of community E-Commerce</b>
<b>4. Lack of knowledge in marketing and market research and its link to E-Commerce and community information potential</b>
<b>5. Insufficient understanding of the principles and interrelatedness of Kotler's marketing model</b>
<b>6. Inability to determine customer needs and create competitive advantage (market information)</b>
<b>7. No formal budgeting procedures</b>
<b>8. No structured program to train and retain leaders and skilled personnel</b>
<b>9. Sister Lydia Pardeller (the founder) recently left the RWA.</b>

Table 3.1 RWA Strengths and Weaknesses

Qualitative analysis of the interviews with the four key players (RWA executive members) reviewed the strengths and weaknesses of the current RWA as set out in Table 3.1. The analysis pointed to 3 major areas of weaknesses in the RWA operation. These were: lack of knowledge and skills to capture the benefits of E-commerce; lack of understanding of marketing principles; limited leadership and management skills.

### 3.4.1 Application of Marketing Principles

The importance of marketing in the delivery of goods and services is well accepted (Kotler 1980). The objective of introducing the marketing model to the RWA was to enhance local peoples' potential to find profitable markets and deliver products to them. Kotler's (1980) marketing model was used to analyze RWA activities. Generally the women understood marketing as a process where goods were taken to a specific physical place and where traders came at a specific time and on a particular day to display and sell their goods.

Amongst the RWA leadership there was a lack of understanding of the application of sales and marketing principles. The RWA leadership had only a basic understanding of marketing as a range of activities covering selling and promotion and identifying buyers (albeit it very restricted to the immediate marketplace). For example, when asked to describe their marketing activities they replied. *"We put up posters and we travel to villages telling people about us"; "We give brochures to all drivers and vehicles that come through the village"; "We have a list of telecentre services up outside the telecentre "; " I do promotion, I give free juice with a plate of food and free custard and jelly to get people to come to the restaurant"; " I go to funerals and weddings with no invitation and I watch what they do, how they do it and ask how much they are being charged, then I look at my own catering and see how I am doing".* (Rhodes 2002:276)

The research results indicated inadequate market research information to search for and identify buyers' needs. This was evidenced by the glut of products each year from the food security gardens. The glut caused low prices and difficulty in selling the produce (often the surplus was left to rot). It was noted that the RWA development model was never intended to be a commercial trading operation but as a means to eradicate death by malnutrition (which had been successfully achieved).

There was a lack of awareness about the potential benefits of market research. Mchombu (2000) noted that it was difficult to provide information to women in small businesses

because so little was known about how they seek information, how they use it and what problems they encounter. The RWA leadership saw market research as an expense without potential benefits.

Internal market research also proved a task beyond the capability of the RWA management in that they were, for example, unable to retrieve internal production figures of the income generation projects outputs (for example, crops harvested, brick production, wire fencing stocks). Although the RWA was well placed to uncover some of the internal and external market information, the lack of a formal structure and the necessary processing power, storage channels and appropriate communication to capture, manipulate and disseminate this vital information was not available.

Data was generally gathered sporadically and manually and transmitted orally. Without adequate market information the RWA was unable to provide value added, innovative market demand products or services. Additionally it was also unable to price its products and services competitively.

The RWA did not fully comprehend the linkage between quality and price as shown by the pricing of chickens in their poultry project. The RWA chickens had a reputation for quality in the area, for example, one RWA member observed *'The people always ask for the Roman chickens because they are fat'*. There was a continual shortage of chickens in the area with demand frequently exceeding supply. Whilst perceived as better quality, the RWA chickens were priced the same as the competitors' chickens. The customers bought the competitors' chickens only when the RWA supply was exhausted. Despite these factors the RWA was reluctant to change its pricing strategy. The belief existed that because they were a community organisation they should not charge more. It was also unable to link the cost of inputs (such as chicken feed, chick vaccinations and poultry house heating) to quality and hence was probably taking a smaller profit margin than its competitors.

Whilst the RWA management had some understanding of what competition was and how it impacted on their business, they were not able to relate this sufficiently to the marketing model. Conceptually they seemed to span both development and marketing philosophies, which at times caused confusion. For example, some responses were: *'People buy from us because they know that buying from us supports the development of the village'*; *'Buying from us results in more women being educated and having the opportunity to start their own*

*business*'. Local competitors offered discounts, credit and gave 'parties' to attract customers. The RWA leadership felt these tactics were inappropriate for them to use as they were funded with donor money, which was to be spent directly on their projects.

There appeared to be an ideological struggle between development needs and the need to migrate income-generating projects into profit driven businesses. Some responses were: *'We are part like a business and part not like a business'*; *'To do marketing we must sacrifice for sustainability as money will be spent on marketing and not on more stock'*.

None of the project members (outside of the management) had received any training in marketing yet they were responsible for marketing their goods and products. Additionally they were isolated from other levels outside of the local levels and lacked a strategic network at the regional and national level that could lead to regional and national market place opportunities for some of their products and services.

### 3.4.2 Awareness and Usage of ICTs

All the RWA management had some understanding of what the Internet and email were and how these could be employed to enhance their business activities. They articulated this as follows: *'It is talking to people to share information, to talk about problems and identify solutions'*; *'We can use it when we want to communicate with people far away and do not want to use the post'*; *'We can advertise ourselves and get to use other peoples' experience'*; *'Connecting to government and businesses and getting information on what people want, who can buy what and from where.'* *'To find cheaper raw materials'*

### 3.4.3 Summary

Although the RWA had extensive physical, human and technological assets, and were successful in providing food security, it had not meaningfully transformed the level of economic wealth for its members.

Rural women in South Africa historically were denied access to education and to trading opportunities and there was an observable gap in their understanding of business models, information technology and their potential benefits to the community. Because the women were relatively new to business concepts they had little experience in identifying and developing markets. In addition to the above problems, rural women had little social status and power, poor leadership and management skills, limited ICT and marketing skills and little

self-confidence in managing these new developments. The inability to utilize existing ICT facilities and the telecentre assets effectively for trading activities demonstrated the consequence of this limited understanding.

The RWA telecentre as a vehicle for a community information system had not succeeded in any substantial way. Whilst it had begun to generate some income through the provision of local software training programs the centre had not made significant inroads into reaching break-even point and had not improved the general economic situation among the RWA members.

The results from the scoping study suggested that merely adopting the principles of marketing without harnessing them to the potential of E-commerce, or without building the model from the ground upward with the full participation of the local users, might curtail future growth. For E-commerce to become a reality other concepts such as marketing and development needed to be locally combined and locally appropriated and a “natural” intervention point for E-Commerce within the context of existing operations needed to be uncovered as a major starting point.

The ‘missing link’ here appeared to be the inability of rural communities to optimize existing facilities and resources. It was now necessary for the RWA to explore migration paths to transform the current status of self-sufficient income generating projects into a sustainable model of growth, which could increase the general living standard and well being of women in this area.

Modelling the principles of E-commerce and marketing around the local developmental conditions was seen to be a requirement for the successful integration of information and communication technology.

These scoping research outcomes were used to formulate a conceptual framework (discussed in chapter four) that integrated development, marketing and E-commerce along with a research strategy to introduce the framework using a participative research methodology (discussed in chapter five) which would attempt to uncover how and where E-commerce might empower the marketing process within the RWA trading operations.

**3.5 CHAPTER SUMMARY**

The RWA was affected by all of the issues discussed in this chapter the continuing effects of history, conflict with traditional authority, dubious access to legally owned land, witchcraft disturbances and the effects of hypocritical government accommodation politics. Despite this, the RWA was regarded as a rare example of successful development in a region characterised by political complexity, instability and conflict. It grew, in a short space of time, into a modern, legally incorporated, highly resourced (money, people, skills, equipment, infrastructure) organisation, with a successful track record of achievements and with a wide range of support (the Provincial Premier, local government, national and international donors). The overview of the situation highlights the multi-layered social complexity of the RWA development context encompassing church, chiefs and the local municipality. The scoping research highlighted areas for further secondary research, namely the integration of development, marketing and E-commerce.

The next chapter builds on the results of this scoping study to conceptualize a framework of marketing, E-commerce and development which is used to guide the research design and data collection.

## **CHAPTER FOUR: THE CONCEPTUAL FRAMEWORK**

### **4.0 INTRODUCTION**

This chapter is in three sections. The introduction, is followed by section 4.1 which shows the development of the framework components, section 4.2 is the discussion relating to the framework rationale and section 4.3 is the chapter summary.

### **4.1 THE DEVELOPMENT OF THE FRAMEWORK COMPONENTS**

The conceptual framework presented in this chapter is based on the understanding of the problem area as explored in chapters one, two and three. The framework encapsulates a number of requirements. The first is the application of an E-commerce model, the infomediary model (which is an extended e-conomy model) (Hartman *et al.* 2000) and is used as a way to view and discuss marketing principles electronically within a specific organisational structure. Second is the integration of marketing principles (Kotler 1980) with the RWA development model, as a means to focus on revenue maximisation.

#### **4.1.1 The Infomediary Model**

The first model to be discussed is an E-commerce model, the Infomediary Model (Hartman *et al.* 2000). Recent E-commerce literature discusses a range of issues such as:

- How trade can be enabled electronically.
- How E-commerce speed can enhance trading activities.
- How E-commerce can act as an efficient supply chain, diminishing barriers such as culture and language.
- How E-commerce can reduce administration costs and provide better quality service.
- How E-commerce can link producers and consumers more effectively and how remote communities can benefit in using these tools.

In E-commerce, the infomediary model was rapidly becoming an important business model on the Web. E-commerce precipitated the shifting of power from sellers to buyers and the attendant free distribution of a huge amount of price and product information led to the need for one-stop-shopping (Sheng-Tun Li and Li-Yen Shue 2003) . This phenomenon fuelled the growth of the infomediary model.

Depending on relationships between sellers and buyers, an infomediary was classified into four types (Grover and Teng, 2001): specialized agents, generic agents, supplier agents and

buyer agents. The specialized agent serves a specialized market with a closed relationship with both providers and customers. The generic agent features open relationships between providers and customers. It uses open search capabilities for any customer to look for a provider. The supplier agent has a vested interest being the provider of the information. Finally, the buyer agent establishes relationships with a core set of buyers, and works on their behalf with any number of suppliers. The benefits to members of joining such an infomediary system were many. Firstly, members gain control by integrating with the service providers. Secondly, members improve their operating efficiency significantly, through accessing information and services from the infomediary in a uniform format, substantially increasing marketing communication capability and reducing costs. Thirdly, members are able to access historical information that was currently impossible to do, because the infomediary is able to maintain an updated database.

An infomediary model in effect creates an e-marketplace. Many examples of infomediaries are found in the business world such as travel aggregators ([www.travelocity.com](http://www.travelocity.com)) and NetBuy ([www.netbuy.com](http://www.netbuy.com)), a business which enables real time intercompany electronic supply chains through a comprehensive on-line service for standard electronic components from a variety of suppliers. South Africa has a number of infomediaries around the area of aggregating business suppliers. Datatcentrix, a local IT company, piloted a project to link all of South Africa's fast moving consumer goods retailers with distributors and suppliers via a central product catalogue. Whilst it described itself as a VASP (value added service provider) it is similar to an infomediary.

Primarily, the infomediary model offers a technological approach to creating markets by harnessing and disseminating information in a cost-effective way. Using technology successfully to provide a solution requires the incorporation of such factors as skills development, education and training. This view fits with Cyphers (1997) who noted that technology was a difficult concept to define because it was not an object but rather, it was a way of doing things which translated to a way of thinking. He further stated that *'in a significant sense, then, it can be said that economic development is indistinguishable from the on going application of technological knowledge to production'* (*ibid*: 404), and that in the absence of a continuous application of technological change, development would inevitably falter.

The infomediary model was selected, as it was, conceptually, a logical fit with the role of the RWA within the community in which it operated.

#### **4.1.2 Development and the Infomediary**

Schilderman's (2002) research revealed that some institutions (including public, private companies, NGOs and local authorities) adopted the role of producers or providers of information. He grouped these under the heading infomediaries and noted their increasing use of ICTs to access global knowledge, but was concerned that they may not be transferring such information to the poor in appropriate ways. Often the development of the livelihoods of the urban poor appeared to be constrained by inadequate links between communities and institutions such as NGOs, local authorities, government departments and private sector companies. This was exacerbated as the livelihoods of the poor were constrained by inadequate links between communities and the infomediaries. An added problem was that often these infomediaries were spatially dislocated from the community locale. Schilderman's (2002) research further asserted that the urban poor received most of their livelihood information by word of mouth, and were highly dependent on their social networks for information, support and advice. Urban development was not effective at disseminating that knowledge to the urban poor, resulting in only limited uptake and impact at the grassroots level. Additionally, the poor were affected by social exclusion in the case of reciprocal networks where they were unable to offer anything in return. If trust dissolved between network participants then these networks disintegrated or split into conflicting factions. Often the information supplied by these infomediaries was supply led rather than in response to community needs. The experience of poor people's interaction with these remote and external infomediaries included rudeness, humiliation and harassment. This left the poor feeling powerless, unheard and silenced.

#### **4.1.3 The RWA as an Infomediary**

The infomediary model was used to conceptually assess the potential power of information and communication technologies, which could be used by the RWA to enhance business activities and to explore how they could mitigate the problems of managing information for

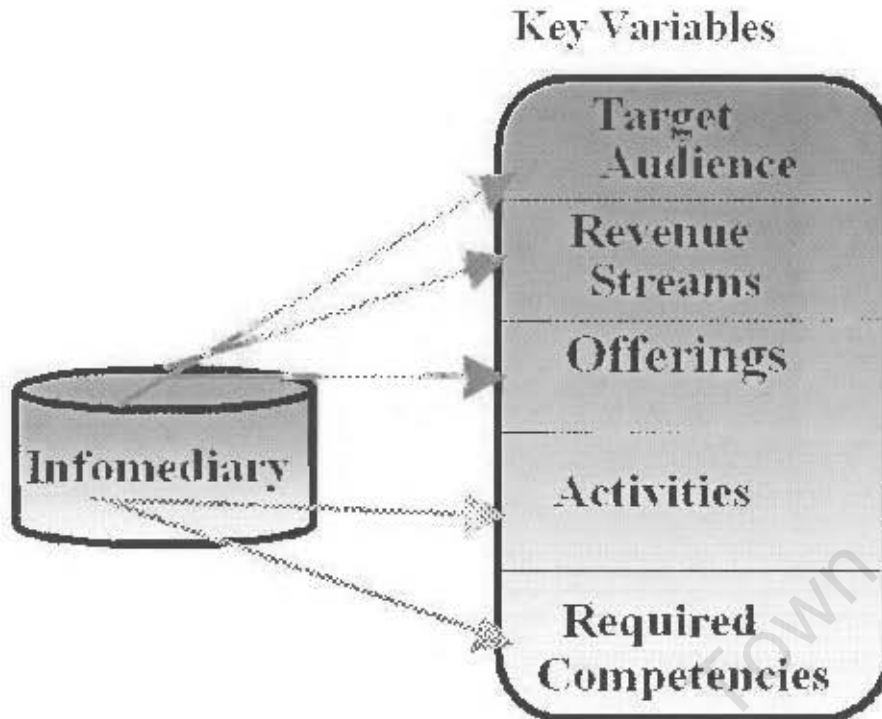


Figure 4.1 The Infomediary Model. Source: Hartman *et al.* 2000

marketing purposes. The infomediary model of Hartman *et al.* (2000) (Fig. 4.1) was used here as the basis of a community business model. The infomediary was defined as an approach to enhancing, building and maintaining interactive relationships (predominantly electronic) within the organisation and with its customers, government, suppliers and perhaps the general public. The RWA was well positioned to fulfil the role of infomediary by providing its members with information, knowledge or experiences that could add value to a particular business transaction. An example of this was in the RWA forming relationships (usually maintained telephonically), with other NGOs to participate in the RDP tender process. It then attempted to organise the membership income generating projects (IGPs) to produce and supply the tender requirements (production and quality levels). In this way the RWA was a content aggregator that connected buyers and sellers as within the RWA it alone had the skills and resources to identify and build relationships with customers. The IGP members had few resources to effectively market their produce. The infomediary connected buyers and sellers and provided value by offering advice and personal service.

One of the major advantages of the infomediary model is it does not require its own inventory or means of production. This fits with the existing RWA operation where the project groups

owned the production assets and the inventory (as long as they remained RWA members) but struggled to locate and communicate with profitable customers. They were limited to selling to other impoverished women within their community.

An infomediary typically focuses on developing numerous partnerships, developing extensive local content and promoting the web site to an ever-increasing number of buyers. Relationship building was a well-established process in the RWA as evidenced by its wide support from international donors. The infomediary concept supports the marketing function in its capacity to provide extensive processing and communication power thereby increasing transactional efficiency by reducing the total number of transactions required to meet a given volume of exchange. It was often the case that rural producers spent unproductive time trying to (often unsuccessfully) create markets for their produce and the time taken to market decreased available production time. In this model, local producers would need only to communicate with a central infomediary (the RWA.) The advantage to the RWA in acting as an infomediary was the opportunity to generate revenues for marketing activities and generate a profit for the RWA, its members, local entrepreneurs and the telecentre through commissions from sales, subscriptions and membership fees and advertising.

Figure 4.1 represents the infomediary model. The key variables connected by arrows from the infomediary link what the authors perceive as the key concepts of the infomediary model. This model was used to map what the perceived RWA capabilities were in relation to the capabilities needed to implement an infomediary model (Fig.4.2) The following figure expanded on the above model by considering each variable in the model and then exploring the RWA potential activities and functions in each part of the model. Considering the RWA as an infomediary suggested significant potential for the application of activities to improve its economic position.

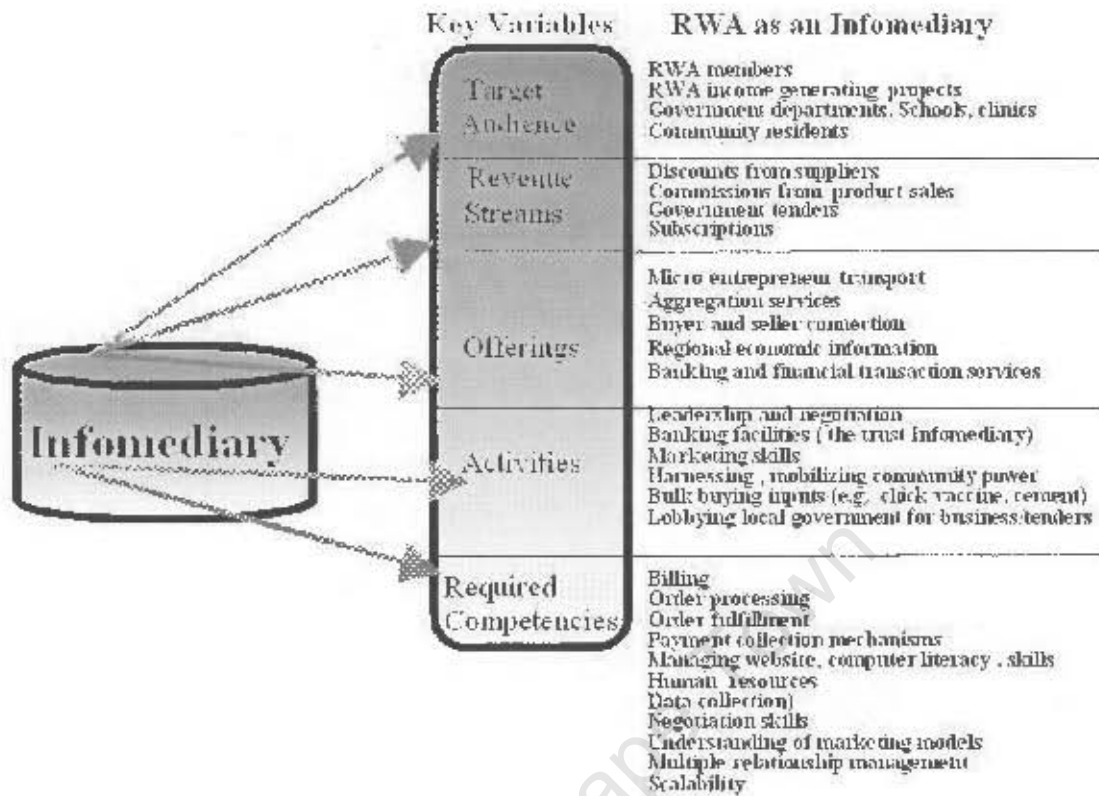


Figure 4.2 The RWA as an Infomediary

This seemed particularly relevant in the area of aggregation. Many of the RWA projects (such as the food security gardens, brick making, fence making and poultry) grew or produced small quantities that were not cost effective for wholesalers to buy. Additionally the members' lack of skills and resources (such as literacy, business English, Afrikaans, technical know-how, marketing, transport) prevented them from identifying potential customers, negotiating prices and co-ordinating enough groups to supply a required wholesaler quota.

The RWA as an infomediary was positioned to offer this service to its members by handling the logistics (such as identification of profitable markets, relationship building, negotiation, financial transactions, order scheduling and quality control). An infomediary model supported the marketing function in its capacity to provide extensive processing and communication power thereby increasing transactional efficiency by reducing the total number of transactions required to meet a given volume of exchange. The RWA as an infomediary was also positioned to exploit the potential for bulk-buying materials for its members. The project groups struggled to compete on price with competitors, as they had no access to wholesaler production inputs (such as flour for the catering groups, chicken vaccine for the poultry

groups, material for the sewing groups). Project members took frequent trips by public taxi to purchase raw materials in small amounts, paying high prices for these as well as taxi fares for the 90-minute journey. The RWA as an infomediary with its extensive resources (ICTs, transport, business, technical) was well placed to aggregate the raw material needs of the project groups and supply them with lower cost inputs as well as reaping a commission from the savings incurred. This had the potential to break the cycle of low production caused, in part, by the low prices the members could charge to their customers (mainly other local impoverished community members) and the lack of profit margins caused, in part, by high input materials cost.

All project groups had a savings account but this was unable to provide the financial transaction capability required for trading efficiently with wholesalers and other businesses (they had no cheque account facilities nor electronic payment facilities and had to travel to the physical location of their account for every transaction required). For each project group to have a bank account would be both difficult (very few banks would grant these small groups banking facilities) and expensive in terms of bank charges. The RWA, with access to a long established bank account and with the option for telephone and Internet banking could cost-effectively fulfil the role of banker to its project groups.

#### **4.1.4 ICT as a Marketing Tool**

The first model in the conceptual framework, the E-commerce model, exploits the interactive capabilities of ICT, applied to a particular business process (marketing) within the extant socio-political development context. The second part of this conceptual framework is a marketing model (Kotler 1980), as it was established that marketing was a deficient skill in the RWA and that without marketing it would be difficult to trade meaningfully. Once this knowledge was at hand, the right product or services at the right price could be marketed to potential customers. The following diagram (discussed in section 2.4.1 as Figure 2.1) was used in the pilot exploratory research (section 3.4) with the RWA leadership to discuss their understanding of a marketing model and was later extended through to the Action Research project, for purposes of continuity.

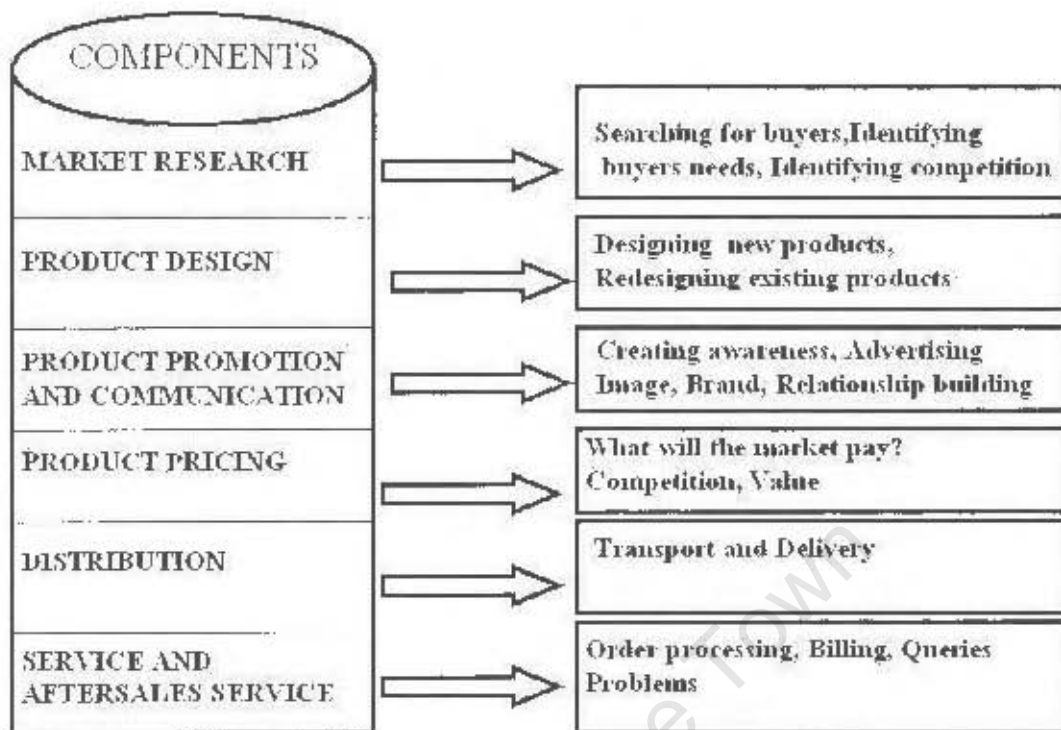


Figure 4.3 Marketing Model. Source: Kotler 1980

Kotler (1980) defined marketing as the human activity directed at satisfying needs and wants through exchange processes. Exchange is the act of obtaining a desired object from someone by offering something in return. Transactions are the exchange unit of measurement and the notion of multiple transactions leads to the concept of a market. A market is the set of all actual and potential buyers of a product. Markets develop in stages starting with self-sufficiency (which was the RWA position) where producers are ready to trade surplus. This occurs decentrally (where one seller sells to number of other self sufficient traders), or it happens centrally (where one merchant sells the surplus goods of many self sufficient producers). Central marketing increases transactional efficiency by reducing the total number of transactions required meeting a given volume of exchange. It is the concept of markets that defined marketing. If a marketer did a good job of identifying consumer needs, developing products, pricing, distributing and promoting them effectively, Kotler (*ibid.*) concluded, the goods would sell very easily.

Kotler's marketing model was useful as a starting point to map what the existing RWA capabilities were in executing core-marketing activities Acknowledging the marketing

philosophy of the firm (in this case, the RWA's philosophy – societal marketing which incorporates development objectives as well as marketing aims), marketing decision-making was based on consumer needs and wants, consumer interests, the RWA interests and the community's interests. Profit was still be a major test of business success in serving the community. It has been argued (Drucker 1973) that profits are really a by-product of doing business well and not the moral aim of business. Business, like other institutions of society, prospers only by maintaining legitimacy in the eyes of consumers, employees and the general public. Legitimacy is grounded in the institutions' commitment to serve higher moral aims. Management needs to have a good understanding of the latter framework and develop a marketing plan that can integrate E-commerce activities and development principles. In summary, in order for the RWA to bring extra value to the community, the RWA management and project participants needed knowledge and competencies in marketing (as discussed in Kotler's 1991 framework) and had to ensure that the strategic marketing process would align with the total business model.

#### **4.1.5 The Development Context**

The third part of the conceptual framework is the development context, which encompasses such factors as culture, religion, society, gender, education, and leadership within the locale. The complex and unique conditions in which the RWA operated (discussed in section 3.2) impacted on development issues. Figure 4.4 represents the development model used by the RWA to direct its organisation activities.

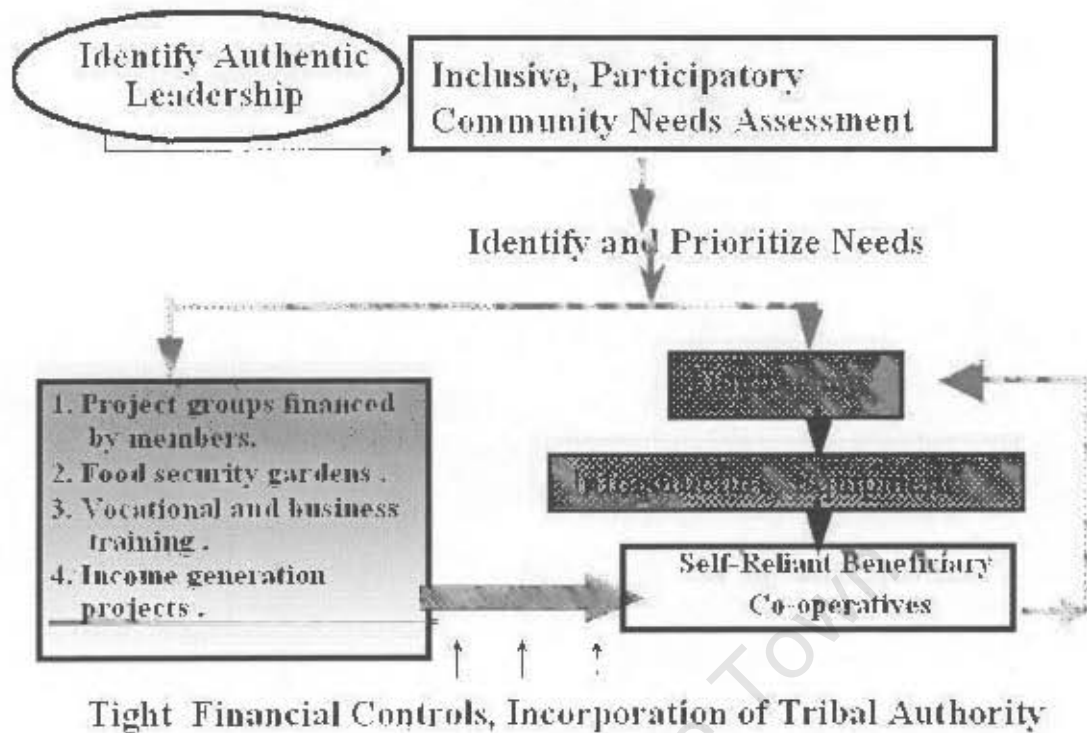


Figure 4.4 The RWA Development Model

The then RWA facilitator using her 30 years of African Catholic church development experiences constructed the development model. As it was not a validated model it is used here only as a means of describing reality, and not normatively. The RWA management used the model to direct strategies and actions that were explicitly aimed at reducing and alleviating poverty. Whilst it seemed successful in that it eradicated malnutrition, its impact was limited as there was no substantial increase in local economic development. The model is included here as a sense-making device to interpret the research results in chapter six. However, as it did not sufficiently address the local socio-political complexities the development concepts posited by Todaro and Max-Neef *et al.* (discussed in section 2.1.2) were included and this expanded model was used to interpret the research results.

#### 4.2 THE CONCEPTUAL FRAMEWORK RATIONALE

Whilst academics and development institutions acknowledge the potential power of technology to promote economic growth, there has been limited research to indicate how this could be done, particularly in rural areas. Mardle (2003) in asking the question why it is so difficult to show that ICT can alleviate poverty believes it is in part because ICT focuses on new ways for people in poverty to earn cash and in this way focuses on the wrong processes.

##### *The Conceptual Framework*

There has been virtually no research and discussion integrating development, marketing and E-commerce into a model, with which a rural development organisation could direct its migration strategy from self-help models towards more profitable outcomes.

The conceptual framework presented here acknowledges that none of the three different aspects of the framework could be considered separately as all three perpetually acted on each other to evolve into a pattern that reflected the interplay between them within the particular context. The conceptual framework is in congruence with the ARI model (Romm & Taylor 2000), which emphasises action that is analytically sound rather than explaining a set of data. The model, based on the three main components of Action, Reaction and Integration assumes that Action (demand), Reaction (supply) and Integration (aggregation) propel each other to sustain community informatics projects. The ARI model suggests that "demand" related activities should be initiated first, as there has to be a commercial reason for them to proceed. This premise fits with the proposed framework as the RWA had a number of income generating projects with the potential to proceed commercially (that is, the RWA had established some demand related activities).

The limited research on the use of ICTs as a tool for socio-economic development generally focused on urban experiences. Whilst this was useful for learning lessons, the literature and discussions with those working with rural communities indicated an overwhelming need to focus on the interaction of people and technologies and on what people could do with technology. As current research was generally techno-centric and urban, it was 'uninterpretable' in the rural context in which technology was to be used. This was considered to be a vitally important factor in developing a rural business-trading model. Heeks (1999a) posited that a systemic, contextual view of technology was needed in order to meaningfully understand the issues related to integration and implementation.

Technology cannot sit in a vacuum. It exists in an environment of institutions (i.e., the integration of organization, groups and markets). Technology only affects part of a broader social process, which must be included in developing an integrated community business model. Heeks (1999b) further discerned that the potential contribution of technology and ICTs to micro-enterprise development could only be assessed by first understanding current information practices and needs, as developing business required information about several different things: Supply (finance, labour technology and raw materials); Demand (market opportunities, market characteristics, demand, location, price, size, quantity) and

Environmental factors (competitors, government, legal). This view concurred with the approach taken here to integrate marketing into a framework in order for the RWA decision-makers to appropriately understand the role of information in business and trading. Consequently, the proposed framework that integrated people, technology, marketing activities and development principles could provide a guide for rural development organizations in directing resources to greater economic outcomes.



Figure 4.5 The Conceptual Framework

The conceptual framework used here is the integration of three models (development, E-commerce and marketing) as represented in Figure 4.5. This framework has been developed in order to explore these issues with the research participants during the research process.

#### 4.3 CHAPTER SUMMARY

This chapter discussed the rationale for the conceptual framework developed here. It was used in the action research as a tool to participatively explore the particular appropriateness of ICTs to development within a specific context and within a particular organization. The framework was used with the research participants (RWA managers) to explore and consider the interrelatedness and meaning and mental maps resulting from their understanding of the

conceptual framework. The research required an interventionist strategy, as concepts such as marketing and E-commerce were both new and relatively unknown amongst the intended research participants and necessitated the use of learning facilitation as part of the research.

The next chapter will discuss Action Research, the research methodology used, the particular way in which it was applied and the research process followed to implement the action research project.

University of Cape Town

## **CHAPTER FIVE: METHODOLOGY**

### **5.0 INTRODUCTION**

The previous chapter introduced the conceptual framework guiding this research. What follows, in this chapter, is a discussion of the philosophical assumptions underpinning the research and details of the research techniques, strategy and design applied in the study. This research is interpretivist and contextual. The phenomenon under study is a social construction and the purpose of the research has been to examine how ICTs can be integrated within a particular rural development organisation, and to uncover new ways and models that can further the local appropriation of technology for improving the effectiveness of trading activities at the local economic level.

The research strategy adopted was an action research project with the RWA management team. Initial observations, interviews and discussions were conducted in December 1999 in a pilot study, which established the RWA baseline understanding and application of marketing and ICT. This was followed by a further 5-week field trip in September/October 2002. The main data collection technique used in the research study was in-depth group discussions.

The chapter is divided into five sections. The first section debates epistemological factors relating to the choice of research method. Section two and three detail the origins, background and issues related to the selected methodology, Action Research (AR), and then consider the rationale for using Participative Action Research (PAR). Section four defines the scope of the research and outlines the research design. The final section examines the interpretative framework used, Actor Network Theory (ANT).

### **5.1 METHOD SELECTION**

Method is performative, that is, it has effects, it makes differences, it can enact realities and it can help to bring into reality what it discovers (Law and Urry 2002). Performativity is based on the belief that society is not a given but is an outcome of the actor's constant efforts to define it. Different research practices make multiple worlds; these may be very unlike each other but may be equally true and equally valid. This is so because the 'real' is made within relations, real is a relational fact. We are observing what is exposed to our method of questioning and new realities are created as they interact. In this way, reality is produced in dense extended sets of relations. There is no single world (Kayatekin Serap Ayse 1998) to observe.

### **5.1.1 Epistemological Considerations**

How to choose methodology to best fit the research study characteristics and the aims of the investigation? A starting point is to reflect on Meta theory. Meta theory (the philosophy of science or epistemology of science used to critically reflect on the nature of scientific enquiry) has particular notions of what the aims of social enquiry should be and these notions lead to clear preferences for research methodologies and techniques. Three Meta theories or paradigms (Positivism, Phenomenology / Interpretivism and Critical Social Science) are briefly reviewed here to guide the decision of a 'best fit' methodology for this particular study. Whilst not an exhaustive list these three theories have been clearly linked (Mouton 2001) to three major research methodological traditions (quantitative, qualitative and participatory approaches).

Positivism considers that the social sciences and the natural sciences are similar enough to be able to use the same research methodology. Preference is given to experimental, quasi-experimental and quantitative methods. Quantitative research methods (also referred to as conventional, positivist or traditional) in this tradition measure phenomena using an agreed metric. For this to be possible the studied phenomena must be well enough understood within a body of established knowledge. Conventional research extracts, tests and extends new hypotheses from an existing body of theory, adding the results to the pool of knowledge. Without a body of theory this tradition is unlikely to be an appropriate methodology for the present research.

With Phenomenology/Interpretivism the aim of the enquiry is to understand (not to analyse or explain). The research participant is consciously and continually involved in social construction of his/her own reality. It is contextual, personal and subjective. Qualitative methods are used in this school of research to explore mental processes and or perceptions in a variety of cultural settings and to understand how people meaningfully fit phenomena into their daily lives. Use of this method is indicated where there is no body of existing theory and where contextual meaning is required.

A third research paradigm is Critical Social Science theory. This approach aims to emancipate people from alienation through linking causal analysis with phenomenological investigation. The ultimate aim is to transform the relations of dependence and enlighten the social actors so they can view their social situation in a new way. The preference is to use qualitative techniques, which incorporate elements of social transformation such as participation.

The area of enquiry of this research is complex (it involves people and systems) and very little is known about the use of ICTs to develop local rural economies. Further, E-commerce and ICTs (a significant part of my enquiry) are emergent, highly unstable, immature and not yet fully diffused. This suggests the need for an interpretivist, exploratory, interventionist research approach to develop a new body of empirical knowledge from which theories might be postulated at a later stage.

Grunbaum (1990) notes that human behaviour is not amenable to causal description as each person is unique and human activity involves a complex and diverse number of variables. Attempting to unravel them is complicated and it is difficult to accurately determine which is the dependent or the independent variable (for example will a decrease in poverty cause an increase in E-commerce use or will an increase in E-commerce use cause a decrease in poverty?) How can the researcher be sure that the change that occurred is because of the variable observed and not through a myriad other variables that cannot be sufficiently isolated to test and measure?

The lack of a body of knowledge relating to the area under investigation discourages the choice of quantitative methods. The current body of theory cannot be used to structure research hypotheses to prove/disprove. In this enquiry *'there are rarely control groups, where operationalising key constructs in behavioural terms is highly problematic, where the politics of the setting are often overwhelming and where values and ethical issues are critical and complex...'* (Darlington and Scott 2002:1). This implies that a qualitative methodology is the appropriate methodology to follow, as it is particularly applicable where there is need of a lengthy and deep involvement in a natural setting necessary to uncover knowledge as a representation of the participants' reality (Wood 1999). The latter conditions are inherent in many areas of this enquiry.

Consequently quantitative methodology is ruled against in the 'bestfit' decision process. Additionally, I am in agreement with Trauth (2001), who argues that the choice of methods may not be a choice at all: That the amount of uncertainty surrounding the phenomenon under study is an important factor in the choice of research methods and that the less that is known about a subject the more difficult it is to measure it and hence quantitative methods cannot be applied. She further notes that it is with qualitative research methods that we can understand the deeper structure of a phenomenon and increase understanding of the phenomenon within

cultural and contextual situations. This relativistic interpretivistic understanding, where participants attach appropriate meaning to phenomena is a key research objective of this study.

### 5.1.2 The Socio-Political Context

This research is situated in a Third World socio-political-economic development space. It involves deliberate external intervention in an underdeveloped and gender oppressed context. Such a situation ethically demands that care be taken not to damage anyone and that emancipation is a desired outcome of the intervention. Research alone, which is unaccompanied by capacity building, may be considered ethically questionable in this context. This point is particularly relevant as I have been involved with the participants of the research study for several years as a consultant, trainer and as a volunteer. This suggests that a move into a research only role may be seen as exploitive.

My historical involvement implies that I am unable to observe objectively and will make no strong claim to neutrality or objectivity. I am in agreement with Lindblom and Woodhouse (1993: 31) who suggest '*there is never a point at which thinking, research, and action is 'objective' or 'unbiased. It is partisan through and through, as are all human activities in the sense that the expectations and priorities of those commissioning and doing the analysis shape it.*'

This research enquiry required the participants to consider traditional marketing principles and ICTs (E-commerce) within a particular local context as an integrated model. To achieve this, direct intervention (learning facilitation) was required in order to concretise these concepts, instantiate them and facilitate conceptual operationalisation by the participants.

Alternate qualitative methodologies were considered and rejected for use in this research. Ethnography was dismissed as inappropriate as it is based on observation and the intervention aspect of this research invalidated this approach. Grounded theory was rejected, as it is a more "aloof" methodology, and would not have allowed me to use the deep involvement that I had with the people of the RWA.

### 5.1.3 Final Selection Criterion

As the RWA is a development organisation, ethics dictates that the research methodology used in this study support the existing and future aims and objectives of their development

***Methodology***

agenda. It is considered that the methodology needs to integrate a number of attributes in order to satisfy this requirement. These include the following factors. Firstly, regarding participants as practitioners and as equals (as opposed to subjects to be studied). Secondly, stressing the importance of collaboration in the generation of local knowledge to solve local problems using actual experience. Thirdly recognising and supporting the development values of mutual respect through understanding others' aims and interests, maintaining self-esteem, non-coercion, non-manipulation, support for democratic values and linking research explicitly to a change process (House, 1990). An interpretative field study using Participative Action Research (PAR) was selected for this study as the most appropriate technique and methodology capable of satisfying the requirements outlined above. The next section examines the origin, background and issues of Action Research (AR), the approach that PAR is derived from.

## **5.2 ACTION RESEARCH**

Although PAR is the methodology used in this study, AR is a route to understanding PAR (Elden and Lewin 1991) so the discussion begins with an overview and critique of AR followed by a discussion of some key methodological issues.

### **5.2.1 Origin and Nature**

AR draws predominantly on qualitative methodologies. The major difference between AR and other qualitative methods is that it intends to achieve two sets of outcomes simultaneously, those of action and research. AR is an umbrella term for a host of research activities with the intention to produce new knowledge through seeking solutions and improvements to real life situations that will foster change. AR is described as being like a broad church with a diverse and divided congregation (Dickens and Watkins 1999). Grundy (1982:363) strengthens this position by stating that '*it is not in the methodologies that action research differs, but rather in the underlying assumptions and worldviews of the participants, that cause the variations in the application of the methodology*' as depicted in Figure 5.1

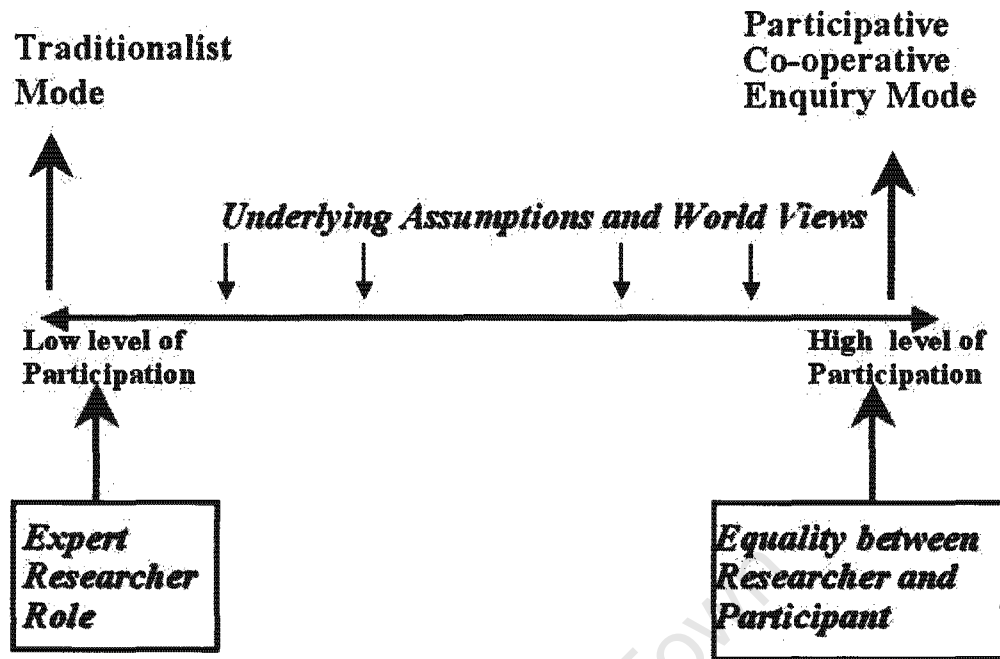


Fig. 5.1 Action Research Continuum. Source: Compiled from Elden and Lewin 1991, Dickens, 1999, Mumford 2001 and McTaggart 1998.

Literature review reveals a broad spectrum of action research models (Swepson 1998) with Lewin at the traditionalist end of the continuum and at the other end, a participative co-operative inquiry type model which attempts to break down barriers between practitioners and researchers (Rolf 1996). Lewin developed one of the earliest AR models in 1946 whilst conducting social research in a period of great social challenges brought about by World War II. He viewed AR as a way of generating knowledge about a social system while at the same time attempting to change it. It filled a gap in the research world as it concerned itself with the study of general laws and the diagnosis of a specific situation. Based on his observations Lewin found that AR produces consistently successful results.

Whilst much of the literature points to Lewin as the originator of AR, Masters (2000) argues that the origins of AR are unclear within the literature. She notes that a number of movements over time have influenced AR. These include the science in education movement of the nineteenth and early twentieth century, the experimentalist and progressive educational work and the group dynamics movement in social psychology and human relations training. Many disciplines, including IT, education, health, applied behavioural science, human relations and

development have adopted AR as a research methodology. It is a powerful tool for investigating the interplay between humans, technology, information and socio-cultural contexts (McKay and Marshall 2001).

AR is an emergent methodology in that its content and data are informed by previous cycles. This is achieved by moving iteratively backwards, forwards and sideways through cycles of data content. Method, data and interpretation and action develop simultaneously and from cycle to cycle. There are cycles within cycles, and the participants or researcher may have to fine tune research actions moment by moment as understanding of the situation grows. AR has been likened to a double helix where the research and actions proceeds as two intertwined spirals to eventually yield a better understanding of questions which best fit the local content. It is through observing and reflecting on that experience, casting abstract/theoretical concepts and generalisations and by testing the implications of these concepts in new situations that new actual experience will develop and will start the next new cycle (Zuber-Skerritt, Ortrun 1991). The dominant model of AR is the cyclical approach.

Considered as an alternative approach to traditional social science research, AR can include the following attributes: Inclusion of practicality (where results lead to practical and immediate improvements during and after the research process); Participation and collaboration, (where there is no researcher-subject paradigm); Emancipation (where all participants in the process are equal); Interpretation (where the solution is not based on the researcher's interpretation but on the views and the interpretations of all involved in the inquiry); Critique (where all participants act as critical and self-critical change agents); and as an enhancement and extension of both participants' and researchers' skills sets.

### **5.2.2 Action Research Definitions**

AR is a problem and issue-centred approach to research and reducing it to a single bounded definition is neither useful nor possible. There are a plethora of definitions to choose from but all have a common characteristic of the dual goal of benefiting practical problem solving as well as generating new knowledge. For this reason the researcher is often serving two masters that can result in conflict with each other. Fulfilling them both can be problematic. Table 5.1 condenses a representative range of academically accepted definitions found in the literature.

Author	Definition
Mumford (2001)	A vague concept defining research that involves practical problem solving for theoretical relevance.
Hult (2001)	A process to increase understanding of the totality of a given situation
Dickens (1999)	An umbrella term for a host of activities with no definitive approach.
McTaggart (1998)	A form of collective self enquiry undertaken by participants in a social situation in order to improve rationality and justice of their social practices
Cunningham (1993)	A spectrum of activities that focus on research, planning, theorising, learning and development
Holly (1991)	A complex innovation as it embodies the process of innovation and therefore is a major change strategy.
Gibson (1985)	Collective, reflective enquiry undertaken by participants within a social setting

Table 5.1 Action Research Definitions

One of the most inclusive and encapsulating definitions in the literature is from Hult and Lennung (2001:248) who assert that *'Action research simultaneously assists in practical problem solving and expands scientific knowledge, as well as enhances the competencies of the respective actions being formed collaboratively in an immediate situation using data feedback in a cyclical process aiming at an increased understanding of a given social situation, primarily applicable for the understanding of change processes in social systems and undertaken within a mutually acceptable framework'*.

These definitions have a common theme of the inclusion of reflective practices in order to bring about change and transformation. Mumford (2001) backs this notion and views AR as assisting organisations to change by altering situations in ways that are seen as better. This immediately raises a political dimension in that a person is deciding what is better and for whom.

The diversity of AR definitions results in a number of different models and approaches. Small (1995) proposes four models of action research: participatory, empowerment, action and feminist. He notes, however, that all models have similar underlying principles and differ

### **Methodology**

only in the implementation of the research to take cognisance of the context. Whilst there may be a wide range of definitions and models, the dominant model is cyclical and recognises that as facts rise in context and are given existence through a particular set of interactions and interrelationships, they cannot be divorced from the situational, historical and socio-political context.

Swepson (1998) notes the confusing spectrum of literature around AR and its concomitant methodologies. She remarks insightfully that while visions are essential for creating myths that give guidance and meaning to our lives, they are not realities that can be achieved. To avoid this trap she suggests that action researchers keep the vision and values of action research separate from their methodologies, which should be viewed as the practical input for local conditions.

### **5.2.3 A Critique**

Pitfalls and dangers are inherent in most, if not all, research methods. As AR studies the interconnections, interdependencies and dynamics of a total living system in order to understand the totality of a given situation, it is a complex technique vulnerable to a measure of criticism relating to rigour and validity. Secondly, the principles of action and research are so different as to be seen as mutually exclusive and to link them together is to create a fundamental internal conflict (Dickens and Watkins 1999). Thirdly, the broad spectrum of typologies in AR further compounds the validity of AR as an approach to theory building. In short, AR can be seen as a mode of inquiry that in practice is known to be difficult to manage successfully and there is little guidance, in the literature, on how to practically conduct AR in the research field (McKay and Marshall 2001).

Many criticisms levelled at the practice of AR can be viewed as a consequence of the different philosophies governing the research community. Some authors (Rolf 1996) argue that AR receives criticism as it is not generally seen to be positivistic and as such has major conflicts with traditional research along a number of dimensions (e.g., lack of generalisability; its reflective nature, and its inherent humanistic approach). However, discussions relating to the superiority of qualitative over quantitative and vice versa are not particularly useful.

Argyris, Putnam and Smith (1987) and Argyris and Schon (1991) note that some criticism of AR arises from situations where it has, perhaps, been used inappropriately. They propose that the following conditions be present to counter criticism of the methodology: (1) It must be in

a situation where people (participants and researchers) reflect and develop their own work and their own situation. (2) This experience is made public to other participants and other persons interested in and concerned about the work and situation. (3) The data gathering by participants is related to their own questions. (4) Participants engage in open discussion, are free to interrogate the data and (5) democratic decision-making, power sharing and self-management are evident in the process. McKay and Marshall (2001) support the latter premise, arguing that part of the problem with AR is a consequence of the way in which some researchers think about AR. Whilst they endorse the dominant cyclical paradigm of AR, they add that what may be of more practical use is to consider it as two interlinked cycles superimposed on each other whilst still interlinked and contingent on one another.

AR philosophy acknowledges that research is not value free or neutral and will affect the individuals and systems studied. The researcher is an active participant, not, as in the case of a positivist researcher, an impartial spectator. Consequently, the role of the researcher and the ethical approach taken, particularly in data interpretation, is paramount to the validity of AR. Unlike with the positivistic tradition, the researcher is a participant and must be alert to the dangers of deceiving himself/herself about what he/she is doing and what he/she is in a position to do. He/she may not be able to hide or deny his/her theoretical interests and concerns, which may result in naive empiricism. It is essential that researchers ensure that the theoretical framework used does not become disconnected from the realities confronting the practitioners and that the final goal (to generate practical wisdom) is kept in view (Elliot 1990).

#### **5.2.4 Summary**

Action research is a style of research rather than a specific method where, generally, researchers work explicitly with and or for people rather than undertaking research on them. Its strengths lie in its focus on generating solutions to practical problems (Meyer, Pope and Mays 2000). AR is most appropriate in complex systems where variables interact in complex ways that change over time (Bennet and Oliver 1992). AR has established itself as a strong research method in the fields of social sciences and human services (Bennet and Oliver 1992, Cunningham 1993, Heller 1986, Small 1995). It is particularly useful in the examination of complex relationships between people and events that revolve around innovation and change for local needs. As appropriate action is based not on previously conducted research but on knowing how particular actors define their present situations and what meaning they give to events, AR can improve the success of action taken. Additionally, AR is a process in two

ways: firstly, as a series of activities within a cycle and, secondly, as a series of cycles - it can usefully integrate the meanings from different cycles and from activities in cycles.

The action research project approach followed in this research is premised on the McKay and Marshall (2001) paradigm. They assert that AR is more than a just a problem solving method, and for it to work best it should be used from within a firm conceptual framework. In this way actions to improve a situation are then part of an integrative strategy within which to test and refine theories about aspects of a specific problem. This study is situated within a conceptual framework of marketing, E-commerce and development as discussed in Chapter four.

### 5.3 PARTICIPATIVE ACTION RESEARCH

Referred to as post-positivist, critical constructivist and critical interpretative methodology (Wadsworth 1988), PAR emerges from development work in low income countries, predominantly Latin American countries in the South, which examined critical perspectives and practices, and, from recent knowledge growth in the North (Master 2000, Tandon, 1996). A number of movements have influenced PAR over time including Marxist influences (Rahman 1993), in that it singles out the poor and oppressed to assert themselves through self-mobilization. Some of the earliest references to PAR and its antecedents appear in the educational literature. Whyte (1991) deliberates on the three major streams of intellectual development shaping PAR, namely, social research methodology, participation in decision making by low ranking people in communities and organizations and socio-technical systems thinking regarding organisational behaviour.

PAR, as an approach to research, takes into account people's history, culture interactional practices and emotional lives and actively involves members of the community in which the research is being carried out (Simonson and Bushan 1993). It is a way of explaining a particular social world by working with the people who live in it in order to construct, explore and improve theories about it so they can better control their well-being (Elden and Lewin 1991). This results in the development of a shared local theory, which combines the different expertise, and frames of reference of the parties.

Coetzee (2001) claim that two distinct hemispherical schools of PAR exist in the world. The Southern Hemisphere school is committed to working almost exclusively with and for grass-roots organizations in Third World rural areas, which are poor, underprivileged, socially and economically exploited and oppressed. These groups are seen to be culturally vulnerable to

colonisation by the dominant culture and commonly the research interaction with them is characterised by unequal power relations (McTaggart 1998, Coetzee 2001). It is suggested that this Southern Hemisphere PAR tradition is the most ethical research approach as it enables people to systematically examine their own problems and issues and formulate powerful and sophisticated accounts of their situations. This is in contrast to the historical approach to development, which relied heavily on imposing external, often unsustainable, Euro-centric or Western solutions. Lewin (1946) supports this proposition that causal inferences about the behaviour of human beings are more likely to be valid and enactable when the human beings in question participate in building and validating them.

Whyte (1991) and his colleagues are among the first to discuss PAR and to distinguish it from participatory research in general. PAR is set apart from participative AR by the notions of participation, collaboration, empowerment, knowledge and social change, which other forms of research generally do not embrace. He describes the double objective of PAR being to produce knowledge and action directly useful to a group of people with the second objective being to empower people at a deeper level through the process of constructing and using their own knowledge (Reason 1992, Cameron et al 2000).

### **5.3.1 The Meaning of PAR**

Kemmis and McTaggart (1998:5) define PAR as '*collective, self reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social practices*'. Conducting PAR is to cyclically plan, act, observe and reflect more carefully, more systematically and more rigorously than is usually the case in day-to-day living. As with grounded theory and ethnography, PAR forces researchers to go through a rigorous process of checking the facts with those with first hand knowledge before any reports are written, endowing PAR with important qualities as a method for examining the plausibility of theory and in formulating new hypotheses. That is, it can reshape and redefine extant concepts.

### **5.3.2 The Researcher's Role**

The PAR researcher is required to accept a significant role-shift from traditional research. The researcher must be willing to relinquish the unilateral control that historically the traditional researcher has maintained (Rogers and Palmer-Erbs 1994). Here, the role is that of resource person, not an expert, acting as a catalyst to assist stakeholders in defining their problems clearly, and supporting them to work towards solutions (Stringer 1996). The researcher is a key actor collaborating with others in a network to bring about a change in the identified

problem area. Whilst the researcher is often expected to provide the intellectual framework, and the research process, the participants in the study provide socio-economic-political knowledge of the context. The researcher stimulates change (rather than imposes it) to enable people to consider several courses of action and the probable results and consequences of each action. Finally, the researcher develops and maintains social and personal interactions that are non-exploitative, resulting in enhancing the social and emotional lives of all people who participate. Taken to its logical conclusion participants should eventually be able to perform their own future research. This paradigm shift has been gaining momentum in a number of domains including business applications (Whyte, Greenwood and Lazes 1991).

### 5.3.3 PAR Critique

Checkland (1992) argues that the major critics of AR/PAR coalesce around the issues of rigour. He states that a legitimate rigorous action research methodology requires an explicit methodological framework and that many AR/PAR approaches ignore this requirement. Consequently examiners are likely to suspect these studies of being far less rigorous than conventional research. Dick (1993) advocates a solution to this is to identify and use a published approach by an author who has sufficiently explained and justified it and to document and argue any deviations one takes from it. Further he recommends using a cyclical procedure as in these way later spirals and cycles of information and interpretation from previous cycles are challenged. In contrast Ramphele (1990:12) says of her PAR experience with Western Cape hostel dwellers: *'what seems to emerge from this experience is that there is no need for rigidity in research methodology. Each situation demands individual assessment to ensure optimal utilisation of a variety of research tools'*. Heeks (1999c) would seem to endorse Ramphele as his concern is that PAR is being used as a container concept with a multiple of approaches and techniques that are often applied in ignorance to the political and cultural conditions, and where participation is not authentic. The experience of this author's PAR study concurs with Ramphele's view. The complex and volatile research study continuously impacted on by the political transition from tribal authority to democratic local municipality government demanded flexibility of the research design.

A further criticism of AR/PAR (Heller 1986) is its lack of generalisability or external validity. This criticism generally relates to the difference in research traditions and can be answered by discussing the trade-off between the need to be responsive to a local situation and the need to generalise universally. Wadsworth's (1998) research suggests that for a PAR inquiry to be successful it needs to encompass the following steps. Stopping, raising a question, planning

ways to get answers, engaging in fieldwork, generating new answers and putting these into new actions, and in this way is no different from the ethos of traditional research. The important distinctions are in degree rather than in kind. Wadsworth (1998) posits that PAR differs from other methods of research in that it is more conscious and explicit about naming the problem, more planned and deliberate, more systematic, more careful in documenting and recording action and more self-sceptical which develops deeper understandings of the situation. In contrast conventional research is more linear.

The literature review suggests that it is the combination of an appropriate theoretical framework and cyclical participant feedback model that provides rigour in PAR. This approach allows for possible errors and misinterpretations to be checked and rectified continually with participants against the evolving learning that takes place and for the new meanings to form the basis of the next cycle of research. Whyte (1991) asserts that it is the unsuitable use of PAR that is mostly responsible for generating the common criticism levelled at PAR.

### **5.3.4 Validity and Rigour**

McTaggart (1998) attests that much of the literature on validity relates to positivist thought and cannot be directly related to the issues of validity in qualitative research. Positivist research can appeal to established statistical tests to certify reliability and validity whereas qualitative research has not had such a tradition. Heron (1998:44) asserts that “research cycling” enhances validity; that is, by moving to and fro between reflection and experience. “Research cycling” goes from experience to ideas and ideas to reflection. It strips the content of vagueness, ambiguity, illusion and confusion. It also deepens, diversifies, amplifies and renders more interdependent the developing research propositions. This can occur individually, collectively and interactively. However, the spiral process may often be disorderly which makes it difficult to trace a clear connection between data sets, assumed causal relationships and implemented measures.

This type of research requires a high level of tolerance of ambiguity and confusion as new ideas may be found by cycling through the stages of confusion. However, research cycling, whilst being an answer to some of the concerns of validity and rigour, raises other issues of concern. Argyris (1985) argues that a number of potential pitfalls occurring through “research cycling” need to be guarded against. One is falsification.

To avoid this the researcher must be vigilant in watching how ideas may fall short when taken to the experience phase. The ideas have to be realistic enough for people to become authentically involved with them, but a level of detachment is needed to ensure that participants remain watchful of its shortcomings (i.e., holding alternative ideas readily in mind). Another problem in “research cycling” is collective or consensus collusion where the participants tacitly agree to choose a pseudo reality (i.e., collude in not mentioning disconfirming experiences). Wood (1999: 5) notes that it is necessary to test our meanings on the people who gave them to us: *‘There is not one truth, not one single explanation of anything but ...many overlapping truths operating at different levels and constantly subject to change.* Hence, it is necessary to have a formal devil’s advocate in the process to seek disconfirming experiences. All participants can play this role when they want the freedom to confront some possible collusion if they are concerned with validity.

The high propensity for human delusion and collusion demands a high degree of vigilance and it is probably better to make all the reflective parts of the research group exercises even if data gathering is with individuals. In order to maximise both the distinct individual effect and the collective reciprocal effect, reflection should be both autonomous and fully open to influence from the other participants’ experience and reflections.

Chambers (1994: 158) suggests two measures of rigour for development research to ensure the quality of the process: Trustworthiness and relevance. *‘Trustworthiness is the quality of being believable as a representation of a reality; relevance refers to practical utility for learning and action.* Trustworthiness relates to the actions of the outsider in dealing with distortions and biases through open observation and through critical reflective judgement. Feedback and shared analysis with peers and local people can greatly increase the trustworthiness of research.

The spiral nature of PAR ensures continual corroboration between all participants and the researcher. Because assumptions about causal relationships are continually tested, misunderstanding in the communication can be continually identified and corrected ensuring that the data is rigorous. This continual and rigorous cross-checking process allows participants to point out serious misinterpretations and errors in facts. Further rigor results where research notes can be sent to key informants for further critiques. This multi-directional cross-checking process ensures a far higher standard of factual accuracy than could have been

achieved by standard social research methods. Whyte (1991) argues that PAR provides the rigour that other standard models may lack.

Reflection, interpretation and collaboration of evidence and findings all add rigour to the PAR process. Dick (1999a) adds that as data collection and interpretation tend to co-occur, later cycles can test data and interpretations from earlier cycles.

Rigour increases with participation. Participation increases commitment and elicits higher involvement, which increases the diversity of the data and the opportunities to use participants as a source of challenge to each other and to the researcher. When participants are involved as co-researchers the advantages can increase further as they are then not only researchers, but also interpreters and research designers. The discussion between different participants and between participants and researchers can offer a dialectic, which can challenge weak or inconsistent data or interpretations.

PAR is driven by the data, by the situation and by the people at the time and can be described as emergent (Heron 1998). As understanding grows action becomes better informed and so does the methodology that is being used. Rigour can be improved by being responsive to the situation as one can refine interpretations and actions as the research proceeds and in this way continue to improve methodology.

### **5.3.5 Appropriateness**

Selecting an appropriate research methodology will reflect the nature of the domain and phenomenon being studied in order to produce results relevant to the world. Additionally, research methods need to encompass the search for connectivity between the development problem, within an understanding of the social and political conditions (Arce 2001, Whyte 1991).

The context of this research is Third World and African, and focuses on the gender-oppressed and the poor. It has been undertaken in an area where women are still vulnerable and marginalised (having survived the oppression of apartheid but still enduring the domination of traditional patriarchal authority). As such, morally and ethically, the research process must apply itself to several concerns, such as emancipation and access to power and resources (Brinton Lykes 1997). Secondly, it must support local understanding and increase local capacity so that the community can continue to take ever-greater control of all their projects.

It must enable authentic participation whereby participants can critically analyse their own problems, generate their own solutions and reflect on the experiences and practices in their daily lives.

PAR benefits the excluded, impoverished, marginalised and oppressed by, for example, '*increasing their self-esteem, their participation in institutional decision making and their access to political influence or economic resources*' (Krimerman 2001: 63). The latter are essential to sustainable development. The following points are made in argument of PAR as the most appropriate methodology for the research of this study.

PAR is an applied research method, which actively and authentically involves members of the community in which the research is being carried out (Simonson and Bushaw 1993). In this way, as a methodology, it fits with the sustainable development concepts of Max-Neef *et al.* (1989) and with the African culture of alliance rather than with the positivist approach of separation and hierarchy. Finally, it fits the most recent development paradigms of putting research capability in the hands of the deprived and disenfranchised to give them the power to transform their lives for themselves through lessening the dependence on external resources (Decker & Decker, 2003:29).

Wadsworth (1998) notes that PAR addresses the problem of handling enormous complexity in large, cybernetic human systems (rural communities) where groups can learn to critically and systematically analyse their own particular situations and problems and generate solutions. PAR stimulates community-initiated action thereby instilling a sense of immediacy and personal identification. Further, it induces people to apply what they have learned and in so doing creates shared ownership. (McLure and Bassey 1991, Wadsworth 1998)

Wadsworth (1998) asserts that the success of PAR is driven by a group of participants who are well-grounded in the context and the environment. Added to this, Stringer (1996) posits that it is necessary to take into account people's history, culture, interactional practices, current relationships and emotional lives. Both of these latter conditions apply to this research situation. I have been involved with a core group of participants (the RWA management) over a period of 7 years and have spent time living in the village and experiencing a little of their daily lives and problems. This helped me to relinquish a measure of my 'outsider' status and nurtured a relationship of trust with the RWA membership.

The richness of PAR depends on the insiders (internal participants) and outsiders (external agent/researcher) effectively recombining their expertise to produce a new, third explanatory framework. Insiders are expert in the specifics of the situation and know from personal experience how things work and how elements are connected to each other (values, attitudes, local culture, etc). Outsiders may have the industry expertise and the systemic inquiry ability to integrate with the insiders' problems. The research approach taken in this study reinforces the importance of local knowledge through combining insider and outsider expertise. This is considered particularly important as apartheid history of the past 50 years has ignored, degraded and destroyed local knowledge. As local communities hold local information in different languages, in diverse epistemological frameworks, an appropriate reference group is essential to unlock, aggregate, add value to and disseminate this information. The RWA is the natural reference group to undertake this task and the PAR process results in focussing on local and relevant development needs.

The PAR philosophy of the researcher being an active collaborator in the research addresses one of the problems of working with rural communities. In traditional research, researchers leave the field after project completion. Limited ongoing relationships exist and communities that worked closely with the researcher to bring about change in their locale can view this disappearance as abandonment. The rapid opening and closing of relationships is a cultural trait of the non-marginalised, one, which may not be understood by the participants (McNicol 1999). In this study, the researcher worked explicitly with people rather than undertook research on them; this alleviates some of the ethical issues raised in researching in areas of poverty. Since this study has been conducted in an African rural setting with characteristics similar to those described above and fits the criterion of PAR research, this approach was considered to be the most appropriate methodology for this study.

### **5.3.6 Interpretivist Principles in Field Studies**

This research is interpretivist in that it assumes that knowledge of reality is gained only through social constructions such as language, consciousness and shared meaning, derived through the understanding of the phenomena that people assign to it. That is, the social phenomena must be understood in the social contexts in which they are constructed and reproduced. Interpretivism has its roots in hermeneutics, phenomenology and anthropology and Klein and Myers (1999) proposed a set of principles to both improve and evaluate the quality of research standards relating to such interpretivist field studies in Information Systems. They acknowledge that whilst not all of the principles will apply in every situation

*'their systematic consideration is likely to improve the quality of future interpretive field research in information systems'* (Klein and Myers 1999: 70).

The seven principles integrated into this research are as follows: (1) the hermeneutic circle is applied through the methodology of participative action research where human understanding is achieved through perpetual iterations of the interdependent parts. The terms part and whole are given a broad and liberal interpretation here as the whole relates to a historical story and a part can relate to the conceptual model used in this research (discussed in chapter four), and other actions or experiences.

This leads to the use of principle (2), namely, contextualisation, which is applied through critical reflection of the social and historical background of the research setting, outlined in chapter three, enabling the reader to see how the current situation under investigation emerged and how historical factors affected the RWA. Additionally, the use of this principle shows that there is an inevitable difference in understanding between particular interpreters, created by the historical distance between them, and that it is important to seek meaning in context.

(3) The principle of interaction between the researchers and the subjects plays its role through the way in which the author begins to critically reflect on the differing versions of events, which emerge during the fieldwork. This follows from recognising that the participants are as much interpreters as the researcher, a point endorsed through the principles of participative action research used here. This principle is further applied here by describing the social interaction between the participants and the researcher.

(4) The principle of abstraction and generalisation pertains to the critical reflection during data interpretation using concepts that describe the nature of human understanding and social action. In this research the findings are discussed in relation to Actor-Network Theory as a sensitising device to view the world in a certain way and to provide both specific implications and rich insight as research contributions.

(5) The principle of dialogical reasoning is in use when the researcher considers possible contradictions between the theoretical preconceptions guiding the research design and actual findings and invokes subsequent cycles of revision. This involves confronting the preconceptions that guided the original research design with the data that emerge through the

research process and in so doing acknowledging the importance that prejudice, prejudgement and prior knowledge play.

(6) The principle of multiple interpretations requires sensitivity to possible differences in interpretations among the participants as human actions are conditioned by a social context involving multiple agents. It is in use here when observing the related events through different lenses of gendered development and traditional authority.

(7) The principle of suspicion requires sensitivity to possible biases in participant narratives and is in use here to reveal the effects of socially created distortions and false consciousness. This is attended to through considering the social world behind the words of the actor, a social world that is characterised by power structures, vested interests and limited resources to meet the goals of various actors who construct and enact the social world.

The principle of the hermeneutic circle is the umbrella principle under which the other principles expand interdependently as part of the whole, where the whole is a shared meaning which emerges from the social interactions and where participants appropriate ideas from the researcher and vice versa. The whole evolves through a series of iterations as a shared emergence of meaning, a revised understanding of the significance of the data and how the data support some theoretical insights.

The principles are neither deterministic nor mechanistic as it is the researcher that chooses what to say, depending upon the audience and the story he or she wants to tell, which means the researcher must decide how (and which) principles to apply in any situation. Systematic attention to all these principles in the research design and implementation is intended to improve the cogency and plausibility of the research account. This approach improves the defence of interpretivist work by ensuring that no important interpretivist element is neglected and further, it avoids the need to justify work using positivist criteria.

The following section reviews the approach taken in shaping the conceptual framework used here to guide the data collection.

5.4 RESEARCH DESIGN

This section introduced the research design and implementation. Firstly, the referent conceptual framework directing the action research project is discussed. This is followed by a review of the data collection process and a description of the research setting. The section ends with a review of some pertinent participation issues and with some ethical points.

5.4.1 The Research Framework

Figure 5.2 represents the six-step research framework used to operationalise the research study. It is based on the action research model used by McKay and Marshall (2001) and incorporates the conceptual framework (chapter four, Fig 4.5), which underpins the action research project and emerges from the first three steps of the research framework as shown in Fig. 5.2. The starting point, step one, was to explore interests and questions relating to the research area.

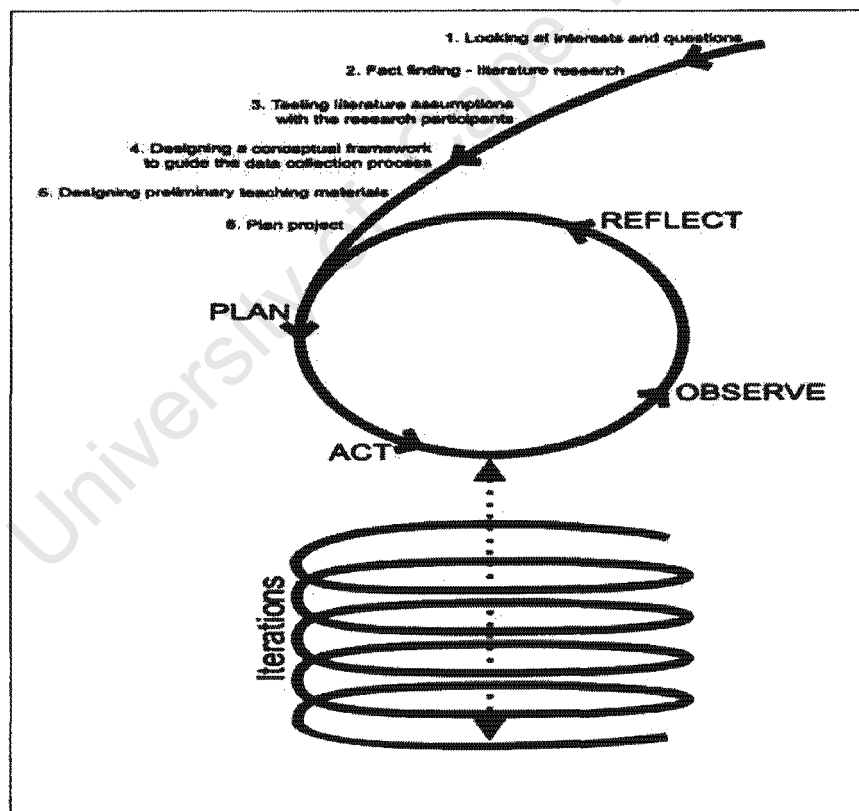


Figure 5.2 The Research Framework. Source: Adapted from McKay and Marshall (2001)

This process began in 1999 following the implementation of an ICT initiative, the RWA telecentre. Step two, fact finding and literature research, started in 2000 and step three, testing literature assumptions with the research participants, occurred in the 2001 scoping study *Methodology*

(section 3.4). Although this process is depicted sequentially and linearly, in reality life is a lot messier and the steps happen in parallel, out of sequence, simultaneously and iteratively, which is suggested by the spiral feeding into the model. The remainder of the action research project followed steps 4 to 6 of the model. Step 4, the conceptual framework (Figure 5.2), focused on data capture in the specific problem area, guided the data collection process, formulated the intervention process and was used as the framework for reflection. As the intervention required a measure of learning facilitation some preplanned teaching materials were designed to introduce and expose participants to development marketing and E-commerce concepts (step 5). These materials were deliberately rudimentary, as the materials would develop organically throughout the course of the interventions. The final materials produced are in Appendix 1. The last and sixth step of the model, planning the project, combined all previous steps and further, included a research schedule (timing and duration) and a list of preliminary questions with which to start the research. After this stage, the project was initiated and iteratively followed the cycle of Plan, Act, Observe and Reflect (Figure 5.3) throughout the course of the data gathering.

#### 5.4.2 Data Collection

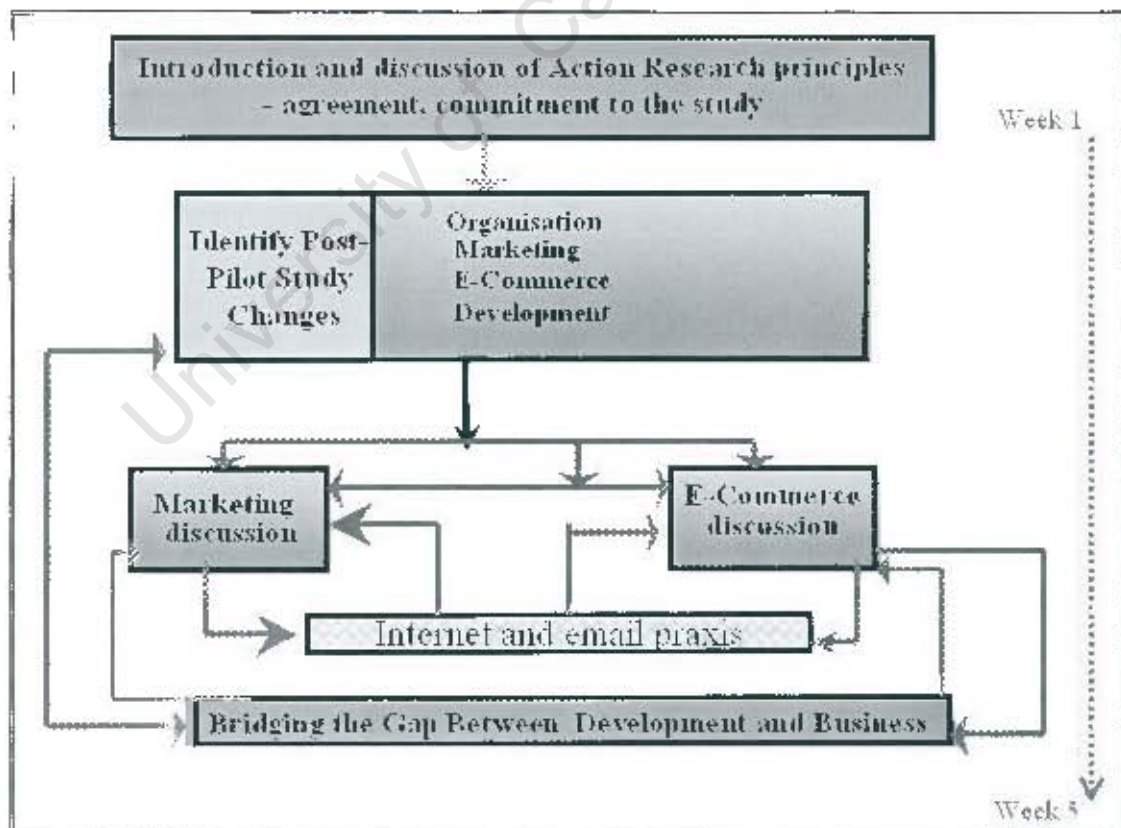


Figure 5.3 The Data Collection Process

Data was to have been captured using a combination of written notes, voice activated recording tapes and dragon speech recognition software. However, this proved impossible, as the recorder did not adequately respond to or capture 6 multidirectional voices and the voice recognition software corrupted. The data was collected in longhand writing and typed onto a laptop at least twice a day. Then the information was used to check accuracy and then to clarify meaning with participants. This was then used as the input to the next session. Figure 5.4 represents the data capture process followed in the project. The day sessions were generally spent in group discussions sessions and in the evening participants were instructed in how to use email and the Internet through practical and participative demonstrations.

### 5.4.3 The Research Setting

The research site, the RWA Nkwana Women's Resource Centre is in the village of Nkwana in the Lebowa region, a desolate, poverty-stricken wasteland of the old apartheid dumping grounds. On entering the area the roads are suddenly and immediately potholed and perilous from wandering cattle and goats, litter is strewn everywhere, like cultivated crops of plastic bags, sometimes referred to as the national flower of South Africa. The change from the old white area into the old black homeland area is as dramatic today, as it was seven years ago. Any newcomer would be capable of instantly recognizing they had entered a black homeland - new name, same poverty. Finally, one leaves the tarred road to bump along a partially graded dusty track to the village of Apel where the RWA headquarters is located, along with the RWA Maraketle Women's Resource centre, which is 6km from the village of Nkwana.

My first stop on arriving in the area was the Mareketle Women's Resource Center, the showcase building of the RWA. It had facilities to house the RWA management, a dozen businesses and projects, a conference room for a couple of hundred people and a meeting area that accommodated at least a 1000 people. The USA (Universal Service Agency) telecentre is housed in the centre. The place was quiet with a sad sullen neglected look compared to my previous visit 18 months ago. The Montessori center, for teaching Montessori crèche teachers, was abandoned; the restaurant had no customers; The chief's wife's crèche had only half the children it had previously. The continuous poultry houses were empty and the biggest sadness for me was to walk into the telecentre. Housed in a custom constructed building it was bereft of equipment. A room full of beautifully crafted empty cubicles, no computers, no printers, no photocopiers, and just some price lists on the wall advertising faxes for the extortionate price of R7 per page (compared to R2 in Polokwane). The children's computer classes had ceased

and fundraising had stopped. The situation in October 2002, less than 2 years after The RWA facilitator's departure showed a major deterioration.

I spent 5 continuous weeks, in September and October 2002, living in the grounds of the Nkwana resource centre in the old medical building, where one room was converted into a bedroom. There was no running water or sanitation; water was pumped up from a nearby manual borehole and a pit latrine 20 meters from the room provided toilet facilities. Electricity was available via a lead trailing out of the resource centre. The RWA was in 'exile' from their head office, passively awaiting the resolution to the prevailing conflict that had paralyzed RWA operations for the past 7 months. Because of this situation I was able to spend at least eight hours practically everyday interacting with the RWA management team. Two of the younger and unmarried RWA managers were assigned to stay with me for both security and social purposes and we cooked and ate together midday and in the evenings, after spending the days in group research sessions.

#### **5.4.4 Participation**

The initial requirement was to identify which key stakeholders to interview. That is, who had the information needed to define the situation? And were they equipped to be interpreters of the situation (to give meaning to it)? Who was in a position to implement plans? Were they motivated and committed to see the plan through? I had used the RWA management team to participate in the December 2000 scoping research, as they were the natural "reference group" who spoke on behalf of the RWA members. They were the only near-fluent English speakers and also the only members with extensive development experience. This group (4 participants) had been with the organisation in leadership roles since the RWA inception and had developed a significant relationship with the phenomenon being studied. Of the original 4 managers, only two remained in the new management team participating in the action research project, three others from the organisation (all of whom I had trained in a four week course in 1997) had been promoted into management positions.

##### **5.4.4.1 The Level of Participation**

Participation is not an 'all-or-none' event but a continuum, which ranges from the barest contact to a position where the research is conducted without any external input. Participation implies that all stakeholders are involved, or at least are given a chance to be involved. However, participants may be involved at many different levels ranging from information provision through to interpretation and setting the action agenda. A continuum of participation can range along a number of positions from non-involvement (generally applied

in positivist research design where the participants perform only in the role of informant), through to full participation (where all major decisions are made by bodies other than the researcher) (Dick 1997).

The decision as to how far to involve the RWA management in the research was shaped through the history of their previous involvement with the research along with the capabilities and experience that existed within the group, as well as the time constraints of the participants. The researcher (myself) needed to direct the content of the study and the processes used (the 'expert role'). For this reason the level of participation was limited to that of collaboration and reflection, where participants gave information, interpreted information, gave feedback into the group discussions and shaped the direction of the discussion.

The participation of the RWA management did not extend to the writing up of results. I concurred with Ramphela (1990:9) when she asserted that *'Whatever the ideals may be, it is difficult to conceive of an effective and meaningful way in which results of a research project can be written up on a co-operative basis'*. Authorship was my responsibility for a number of other reasons including the low level of participants' written literacy skills and their time constraints. However, feedback was provided to the participants continuously throughout the process in accordance with the cyclic nature of the process.

#### 5.4.4.2 Questioning Techniques

Spradleys' (1979) ethnographic interviewing principles were employed. Typical grand tour questions were used to encourage the participants to verbally 'show' the researcher around in the physical, temporal and abstract space of the research domain. In this way the participants answered questions in ways and with content that was important to them rather than to the researcher. These "what" questions served the purpose of collecting a large sample of the informant's speech and eliciting key terms used in the context of their use. This was followed by specific grand tour questions such as 'Can you tell me what has been happening to the RWA in the last couple of months? What kind of organisation is it now as compared to the past? What type of organisation do you want?' Information was further elicited using example questions such as 'can you tell me of an interesting experience related to what you have just mentioned'? These were accompanied by feelings questions (for example: How do you feel about reporting now to a board of directors?), probe questions (can you tell me more about what you just said?), and interpretation questions. Interpretation built on descriptions using the conceptual frameworks, definitions and frameworks of meaning developed in chapter

four, which enabled participants to make better sense of their experiences and use these concepts to untangle and clarify meanings and build collaboratively constructed descriptions and interpretations of events.

My experience concurred with the finding of Darlington and Scott (2002) that it was better to stay with the 'how' and 'what' questions wherever possible as 'why' questions seemed to be more threatening. They were seen to be deeper and more profound, leading at times to a participant's withdrawal. However, when I moved back into 'how' and 'what' I found that this encouraged the participants to describe their experiences more freely.

#### 5.4.4.3 Group Interviews

Like Wood (1999) I consider the terms group-interviews, group-discussions and focus-groups as interchangeable. Group in-depth interviewing is particularly useful in exploring questions that relate to the meaning of experiences, opinions and feelings associated with various phenomena and to deciphering the complexity of human behaviour. In-depth interviews attempt to understand the meaning people make of their lives from their own perspective and takes seriously the notion that people are experts on their own experience and therefore are best able to report how they experienced a particular event or phenomenon. In-depth group interviews allow all parties to explore the meaning of the questions and the answers involved, negotiate understanding, misunderstanding and check both of these continuously in real time. In this way one can instantly clarify what the other means, which is particularly useful because the phenomenon being studied here cannot be observed directly. Additionally group discussions have retrospective and anticipatory potential, important as a clarifying and elaborating device.

In-depth group interviews were chosen over in-depth individual interviews for a number of reasons. Firstly, the RWA culture of consensus decision-making discourages individual positions. Also, this technique takes the pressure off participants to answer all questions. Very little in this organisation is individual and there are particular advantages for group interaction as the more skilled and experienced members can and do explain concepts in the vernacular for other participants to better understand. When I interviewed the participants individually it seemed to cause nervous tension and fearful suspicion. This was a sensitive issue as the research took place during a time of organisational conflict precipitated by murder, theft, and accusations of witchcraft and power struggles between the differing sections of the RWA and

the community. Added to this were the tensions relating to gender issues and traditional authority in trying to resolve the conflict.

#### 5.4.4.4 Reflection

Reflection combines a review of what has happened so far and deliberate planning for what will happen next (that is, plan, act, observe, reflect). The purpose is to achieve both change (action) and understanding (research). Reflection is recognised as a strategy for personal emancipation from self-interested practice and from false beliefs. Kim and Myers (1999:1207) defines reflection as a process of consciously examining what has occurred in terms of thoughts, feelings and actions against underlying beliefs, assumptions and knowledge as well as against the backdrop in which the specific practice has occurred.

The cyclical nature of PAR aids economy of data collection as data are interpreted as they are collected. When agreement is found, every attempt is then made to challenge and test the agreement by searching for exceptions, as in disconfirming evidence. During data collection there are likely to be data that are in disagreement with each other. This can arise from a number of variables such as the use of different case studies, different data collection methods, different questions which look at the same information, different informants or the same informants at different times. But it is the apparent disagreements that drive the understanding. Increasing the number of disagreements can strengthen this process. Consequently, it is important to always look for exceptions, note each apparent disagreement and then look for explanations for each. An exception turns an apparent agreement into a disagreement. Encouraging reflection is a means to increase disagreements and this was achieved by examining what has happened previously. Participant agreements and disagreements were tested by asking for an explanation of each, using examples, and then checking what understanding had been achieved by asking participants to give back the information in their own words.

The questioning techniques to achieve reflection included the following: contradicting, that is, deliberately giving an opinion opposite to the participants to arouse further comments; linking up the participants' comments with the information that I wanted to find out; faking, acting puzzled, pretending to be confused and indicating that elaboration is needed; challenging by asking for more information to prove the validity of the participants' claims; showing understanding and allowing time for elaboration; encouraging, giving sincere compliments to encourage the participants to carry on and acknowledging by repeating the participants'

answers to show attention. As reflection needs periods of deconstruction and reconstruction (Reason 1992), I used the reflection process to begin each new group discussion session.

I used a reflective style of facilitation when introducing and explaining new concepts, using frequent clarification questions to check on understanding, building on previous comments and sometimes asking participants to state the obvious in order to get them to state what maybe I thought was implicit. Throughout the research I emphasised that this was a learning process for all (including myself) and that there are no experts, no right or wrong answers, only people willing to take a journey and learn from it through the critical processes of sharing of ideas, reflection, action and learning.

### 5.4.5 Ethical Considerations

Ethical concerns are generally neglected in the literature and many ethics committees have developed their criteria and procedures based on traditional forms of research, which emphasises consent and confidentiality. Generally the ethical concerns of equalising power differentials and feeding back the results to the participants are neglected (McNicoll 1999). The research conducted with the participants increased their knowledge and skill base and was in line with their stated development agendas.

The next section reviews the body of theory relating to Actor-Network Theory, as this is one of the selected lenses through which the action research data is viewed. It was selected because of its approach to treating technology and society symmetrically within a single collective when analysing technology implementation. In this way it avoids the reductionism that either humans or machines are ultimately determinate factors.

### 5.5 ACTOR-NETWORK THEORY

As this is a contextualist and interpretivist study it is appropriate to analyse the case using an interpretivist epistemology. Actor-Network Theory has been selected as *'a basic assumption in interpretive research is one of non-determinism, whereby neither human actions nor technologies are assumed to exert direct causal impacts. Rather, consequences are seen to result from the interplay of computing infrastructures, conflicting objectives and preferences of different social groups and the operation of chance'* (Markus and Robey 1988).

This section reviews the ideas related to actor-network theory (ANT). It begins by briefly placing ANT into its socio-technical philosophical context. An overview of what ANT is and

a description of the actor and network components follow. Next the sociology of translation, the key theme of ANT, is discussed in relation to its key concepts and associated elements. The section concludes by considering the constraints of ANT as a methodology to track technology implementation within hybrid socio-technical networks.

### 5.5.1 Socio-Technical Treatments

The field of technology is interdisciplinary, and the efforts to understand technologies in their movements, displacements and partial stabilities will, inevitably, leave big gaps. Understanding technologies in a fluid social context can only be a partial perspective, full of multiple and partial possibilities (Star 1991), with no single answer, no great narrative, only many possible narratives.

There are at least three ways to consider technology implementation. (1) Technological determinism, where technological development is viewed as separate from and outside of society. (2) Technological constructivism, where technology is shaped by social forces, implying that technology in itself, plays no role and (3) the socio-technical view which links social and technical systems together, but still treats them independently of each other. McMaster, Vidgen and Wastell (1998) suggest that none of these lenses offer adequate opportunities for a true socio-technical understanding, treating technology and society asymmetrically, as two single collectives, subject to different languages, meanings, beliefs, analysis and interpretative tools. This approach creates two unbridgeable collectives and the subsequent collapsing of these two single collectives into a socio-technical whole is artificial. A more valuable way of viewing technology implementation is through a symmetrical treatment of technology and society, within a single collective using (ANT).

ANT has its roots in French philosophy and semiotics and was developed in the 1980's by Callon, Latour and Law (Hassard and Law and Lee 1999, Callon 1999, Callon 1991, Latour 1987, Callon, Law and Rip 1986) as a way to describe the dynamics and internal structure of actor worlds.

Tatnall and Gilding (1999) describe a range of ANT studies investigating the success of a number of technological innovations and failures. These include the Luddite movement in England during the 19th century, the adoption of a particular approach to systems analysis by a local council in the UK, car parking systems, discussing the achievements of Louis Pasteur, the simultaneous invention of the Kodak camera and the mass market for amateur

photography, and the life and death of the revolutionary Parisian public transportation system known as Aramis. ANT began appearing, with increasing frequency, in the Information Systems literature during the last decade (Macome 2002) to track the formation of facts, also referred to as black boxes, within heterogeneous networks of aligned interests.

### 5.5.2 Foundational Assumptions

When examining the motivation and actions of actors linked by associations of heterogeneous networks of aligned interests, ANT regards technology and society as fundamentally equal entities subject to symmetrical treatment. It rejects the reductionism that either machines or human relations are determinate in the last instance. Law (1991) claims there is no reason to assume a priori that either objects or people determine social change or stability.

The methodological cornerstone of the ANT approach is to follow actors to see how they attempt to impose worlds upon one another and to describe the dynamics and internal structure of actor worlds. It tries to explain and trace the processes whereby stable networks of aligned interests are created and maintained or why they fail to establish themselves. ANT literally instructs us (Monteiro 2000:76) *'to map out the set of elements (the network) that influence, shape, or determine an action. But each of these elements is in turn part of another actor network and so forth'*. This makes ANT scaleable in that one actant of an actor-network may be expanded into a new, complete actor-network or a whole actor-network may be collapsed into a single actant.

Facts are socially constructed and established through the production of strong association networks. The stronger and more extensive a network becomes, the more solid the fact becomes. This is an active, critical process through which specific candidates for admission (technical and social) into the network are either accepted or rejected. ANT perceives facts or black boxes as being the result of the strengthening of claims and alliances through the enrolment of additional actors into a network. This perspective presumes that facts are constantly transformed (translated) as the network lengthens across time and space. *'A major focus of the theory when applied in particular contexts is to try to trace and explain the processes whereby relatively stable networks of aligned interests are created and maintained, or alternatively, to examine why such networks fail to establish themselves. Successful networks of aligned interests are created through the enrolment of a sufficient body of allies, and the translation of their interests so that they are willing to participate in particular ways of thinking and acting that maintain the network'* (Walsham 2001:46).

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Power is recursively woven into the intricate and changing interrelationships within the network, its effects are relational and the ordering of actors contestable. Changes in power create controversies and by tracing these it is possible to observe facts in the making. In ANT conflict and domination are widespread. Newton (2002) notes that any sense of order is always partial and temporary and it remains difficult for any individual or group to create a permanent order, with all the deviant elements rooted out. The emphasis in ANT is on examining controversies to see how particular struggles or controversies become resolved or not. Controversies are related as descriptions and no descriptions are innocent, describing every description is performative, that is, it has effects, it enacts realities, as it tends to bring into being what is described (*ibid*). We are interfering one way or another with what we are describing, we are bringing in some relations, whilst pushing others out - this is the collusive dimension of Machiavellianism ascribed to ANT.

ANT is an antipositivist epistemology as it observes differences in a network and not the concepts of right and wrong. The principle of generalized symmetry is an important ANT concept. Dualism implies actors are constantly making society, and actors are constantly being made by society. ANT cannot offer definitive and final answers; there are no last instances. Rather, it discerns emergent patterns of relationships. Furthermore it is semiotic in that it explores relations and relationality as all entities achieve their significance by being in relation to other entities. ANT is in the genre of system builders as it charts the differences between human, non-human, technical and social that exist due to relational effects upon them (Star 1991).

### **5.5.3 An Actor is a Network; A Network is an Actor**

An actor-network is a description of the way things are and is comprised of a series of heterogeneous animate and inanimate elements that have been linked to each other over time. According to Latour (1987), an actor-network is established through a series of translations of interests by the actors. The actor-network is not reducible to the actor (human or non-human) alone and such networks are unreliable as they can become unstable with the entry of new actors and the desertion of existing actors. An actor-network comes into being via what Callon (1991) terms a process of convergence. This may happen in situations where networks have not existed before or out of a complex ecology of existing networks. Convergence is the process of forming alliances between various human and non-human actors, the coming into

being of a human/machine hybrid. The two major components of actor and network are further explored below.

Actor is *'a semiotic term, and as such, an actor is not an entity to which human intentional behaviour can be attributed, but a more abstract term which can refer to either human or non-human entities. It is not a specific unitary entity, but rather, the product of a more or less stable relationship between various effects that together form an actor-network'*. (Fountain 1999:6). The term actor is interchangeable with actant, often the preferred term as it diminishes the 'human only' association. Callon (1991) notes that an actor/actant is an entity able to associate texts, humans, non-humans, and money to, more or less, successfully build a world filled by other entities with histories, identities and interrelationships of their own. Actants can be endowed with interests, projects, desires, strategies, reflexes, and afterthoughts and have the ability to enroll other relevant actors. The semiotic actors are hybrids, which create their own actor worlds, with some actors more important than others through their capacity for agency.

Agency is the ability to achieve effects in society, the capacity to make a difference. Connected to power, different actants have different levels of agency and an entity in an actor world only exists in context and in juxtaposition to other actants. When one of these elements is removed the whole structure shifts and changes because the actant juxtapositions dictate cohesion, consistency and structure of relations that exist between the components that go into making the whole.

A network is a description as the way things are - a presupposing set of assumptions about how relations are organized and networked. *'Networks rely on people, machines, (things) and codes (narrative, text). They are collective hybrids, that is their durability and length are conditioned by the capacities and practices of the actants, they combine people with other living and inanimate things. They are situated, they inhabit particular sites and nodes and they are partial in their embrace'* (Goodman and Watts 1997:301-302). The number of connections that an actant has with different networks determines what the actant is and what he, she or it can do.

A network is configured by the enrolment of actants by means of a series of negotiations. In a process of re-definition Actant A tries to impose definition of the situation on Actant B. Latour (1987) explains networks as a series of transformations and notes that networks are

unreliable as they can become unstable with the entry of new actants and the desertion of existing actants. Successful networks occur where aligned interests are created through the enrolment of a sufficient body of allies and the network is maintained through the translation of interests that bind all actants. Each modification in the network can be considered a displacement and affects not only other actants but also the networks of other actants. A relatively stable network is one embodied in and performed by a range of durable materials, but durable material forms may find other uses and their effects may change when they are located in new networks of relations. Materials in order of increasing durability strength include thoughts, talk, speeches, texts, and buildings. A good ordering strategy is to embody a set of relations in durable material.

The human environment (social context) requires constant cultivation and nurturing by a network of alliances to ensure the stability and irreversibility of a network. Failure in this results in increased risk of a 'leaking' network. The degree of irreversibility in a network depends on the extent to which it is possible to go back to a point where alternative possibilities exist, to do this causes destabilisation. Destabilized networks occur when they are adapting to a consequent redistribution of power relations. This may be precipitated by a change in the beliefs on which they were constructed, perhaps as the result of new information, policy shifts, change in actors, or certain actors backing out because they were not originally authentically enrolled. Often this can happen with networks that depend on the attitudes and actions of single individuals. Such a dominated network can result in weak cohesion at the node where the least number of lines occur linking the actants in the network. For example, this can be where relations revolve around a charismatic leader and only one path from each actor in the network is connected to other members in the network, through the leader. In this fragile network the desertion of the leader can destroy the network, as its structure is based on an all-to-one relational pattern and leaving the network vulnerable to attacks such as the re-establishment of old networks. Changes in the actor-network will often precipitate many others.

### **5.5.4 The Sociology of Translation**

Stability and social order are continually negotiated as a social process of aligning interests. Network alignment is achieved through the translation of interests and the enrolment of actors in the network, rendering translation the most important ANT concept. The sociology of translation (Latour 1987) is an alternative to technological determinism, where events occur only through the agency of other actants. In order to spread in space and time and become

long lasting, facts need the actions of others. This happens through translation - either people will take up the statement or they will not. By taking it up they will change it and transform it beyond recognition so the very act of involving other people will make it more difficult to control. *'Translating interests means at once offering new interpretations of interests and channelling people in different directions ...The results of such renderings are a slow movement from one place to another'* (Latour 1987:117).

The sociology of translation implies the principle of Machiavellianism and is a way of re-conceptualizing to explain how an innovation translates, spatially and temporally, from its origins to many other places and then is translated into the context so that it gains dominance. The translation of the interests of diverse actors and their enrolment into stable networks is not a simple or fast process. The non-human actors are viewed as translations made by the human actors. There are continual chains of translation. Groups and individuals have different value systems and translation among these actors is necessary for the network to succeed. To translate is to oblige an entity to consent to a detour (Callon, Law and Rip 1986).

Translation builds an actor world from entities attaching characteristics to them and establishing a more or less stable relationship between them. This is a multifaceted interaction in which actors construct common definitions and meanings, define representatives and co-opt others in the pursuit of individual and collective objectives.

Translating involves showing how actors' non-aligned interests may become aligned. Skills, practices, organizational arrangements and contracts may all be part of the process of alignment. Alignment is established in inscriptions, which give particular viewpoints precedence. For example, business processes are a basis for software which acts as an inscription of the organizational process. Translation cannot be taken for granted and the strategies used will depend on the particular circumstances in which they develop these can include negotiation persuasion and violence. Translation strategies can range from seduction and simple bargaining through to violence. The translator maps out a geography of necessary points of passage for those elements that wish to continue to exist and develop.

### 5.5.4.1 Translation Strategies

Translation is the strategy with which the actor-network renders itself indispensable - it cannot be taken for granted and the strategies used will depend on the particular

circumstances in which they develop. Whilst there are many translation strategies, all involve the entities by drawing them from one context into new roles in the actor-network. The translation process is dynamic and dialectical where different groups of actants compete in order to establish their self-interested problematisation. One entity will endeavour to enlist the support of others, and they may either submit or otherwise join or form alliances elsewhere.

Strategies produce and are produced by a variety of materials including procedures, paperwork, skills, computers, and constitution. Latour (1987) discusses a number of different translation strategies, the first of which is the '*I want what you want*' where a required outcome is achieved through tailoring the object in such a way that it caters for peoples' explicit needs. These he refers to as Inter-esse, interests that lie between actors and their goals. Causing a tension will lead actors to selecting from all possibilities those things that will help them reach their desired goals. Pushing actors' explicit interests will be the best way of pushing your own interests. The advantage of this piggyback strategy is that it does not require any other force to transform a claim into a fact but this is not a safe strategy as there is no control over what actors will do with the claims.

A second strategy is the '*I want it why don't you?*' Latour notes this is rarely achievable. A more attainable translation is the '*If you just make a short detour....*' Where one tells people that they cannot reach their goal right away but if they do it your way this would be a short cut. This is appealing if three conditions are fulfilled. One, the road is clearly cut off, making a detour necessary, two, the new detour is well sign posted and three, the detour appears short with a clearly visible return to the main road.

A fourth strategy is the reshuffling of interests and goals, inventing new goals, inventing new groups and rendering the detour invisible. To do this the translator needs to become indispensable so that whatever happens and wherever it happens, actants will need to adhere to the contender's position in order to attain their own. '*One version translates every other, acquiring a sort of hegemony: whatever you want, you want this as well*' (Latour 1987:121) which keeps the interested groups in line.

Latour notes that in any translation and particularly where one builds a long chain, the chain is only as strong as its weakest link. Network durability is premised on a series of decisions about alliances, who to collaborate with, who to write off. Every time an ally is abandoned a

new one needs to be recruited. Alliances are Machiavellian as '*dissenters who interrupt the spread of any fact or artefact proliferate*' (Latour 1987:12).

### 5.5.4.2 The Translator Spokesperson

As the network develops, certain actors become especially important as representative spokespersons, sometimes referred to as the macro-actor or the translator spokesperson (Callon, Law and Rip 1986). Representation is the process of delegation and in particular negotiation. The translator is the spokesperson of the entities he or she constitutes (e.g., land, equipment, people, processes, technology), expressing their desires, secret thoughts, interests and mechanisms of operation. The spokesperson provides an initial definition, a definition of roles, a distribution of roles, the delineation of a scenario and maps out a geography of necessary points of passage for those elements that wish to continue to exist and develop.

When an innovation or a change in a network is introduced the new meaning becomes fixed in the obligatory passage point (OPP). This OPP occurs in an actor-network as the solution to a problem in terms of resources available to the actant that proposes it. The achievement of an OPP then further affects alliances and control over the resources needed to achieve the actant's outcome.

Translation of an actor or actors into a network is achieved via a series of 'moments'. Callon (1991) identifies four 'moments of translation'. Fig 5.5 depicts the key translation concepts and their associated notions. It is not intended as a flow diagram but as a visual representation of ANT. The ANT literature reveals that these concepts are sometimes loosely interpreted and as such the following definitions form the understanding of the concepts as used in this study. The four main concepts in the sociology of translation as used in this research are as follows.

*Problematisation*: The first moment of translation, during which a macro-actor defines identities and interests of other actors that are consistent with its own interests. In this way it establishes an obligatory passage point (OPP), thus rendering itself indispensable. Other actors are then approached to join in solving the problem through forming an alliance with the macro-actor persuading, possibly cajoling, and even frightening others into believing that he/she has the solution. Problematisation is followed by *interessement*.

*Interessement*: A process by which the actors convene around an issue, strengthen their determination toward moving through the OPP whilst seeking to exclude voices of dissuasion

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from without or dissenting voices from within. It is a process of convincing actors to accept the definition of the macro-actor and uses devices by which actants detach otherwise from elsewhere in order to attach them to this point of view. It involves translating, strategic compromise and persuasion to lock allies into proposed roles.

*Enrolment:* Actor-networks grow by enrolling other entities. They do this by translating the purposes of entities and establishing themselves as the spokesperson to those who are being associated. Enrolment, a precarious process, involves solidification of intent within the network. It is a political process requiring the use of persuasion. Links and nodes in the network need constant maintenance work and support (from other links and nodes) in order to maintain stability and alignment. The strength of connections will influence enrolment strategies. Humans are instrumental in this process, but machines also enrol, for example, Internet technology, fax, telephones, TV and radio can be just as seductive as actant 'enrollers'. Enrolment is a successful outcome of the problematisation and intersement processes.

*Mobilisation:* This step includes maintaining commitment to the problematised cause of action and ensuring the continued position of the OPP. Of importance in this step is establishing the legitimacy of the spokesperson.

### 5.5.5.1 Four Moments of Translation - Associated Elements

The following concepts, associated with the sociology of translation and considered during this research are as defined below.

*Obligatory Point of Passage:* A situation that has to occur for all of the actors to be able to achieve their interests, as defined by the macro-actor.

*Stabilization:* a sequential process where new circumstances or changing membership lead to successive moments of agreement. The process is completed when the network is mobilized in pursuit of collective goals. Stability is vulnerable to new perspectives and to defectors and betrayals. Networks cannot destabilize if one faction becomes dissident and decides to support an opposing interest.

*Irreversibility:* The extent to which it is subsequently impossible to go back to a point where that translation was only one amongst others. Secondly, this is the extent to which it shapes

and determines subsequent translations. Irreversibility is a relational matter that is never fully resolved. Often it is related to the economics of cost.

*Convergence:* Measures the degree of accord resulting from a series of translations; the extent to which the process of translation leads to agreement.

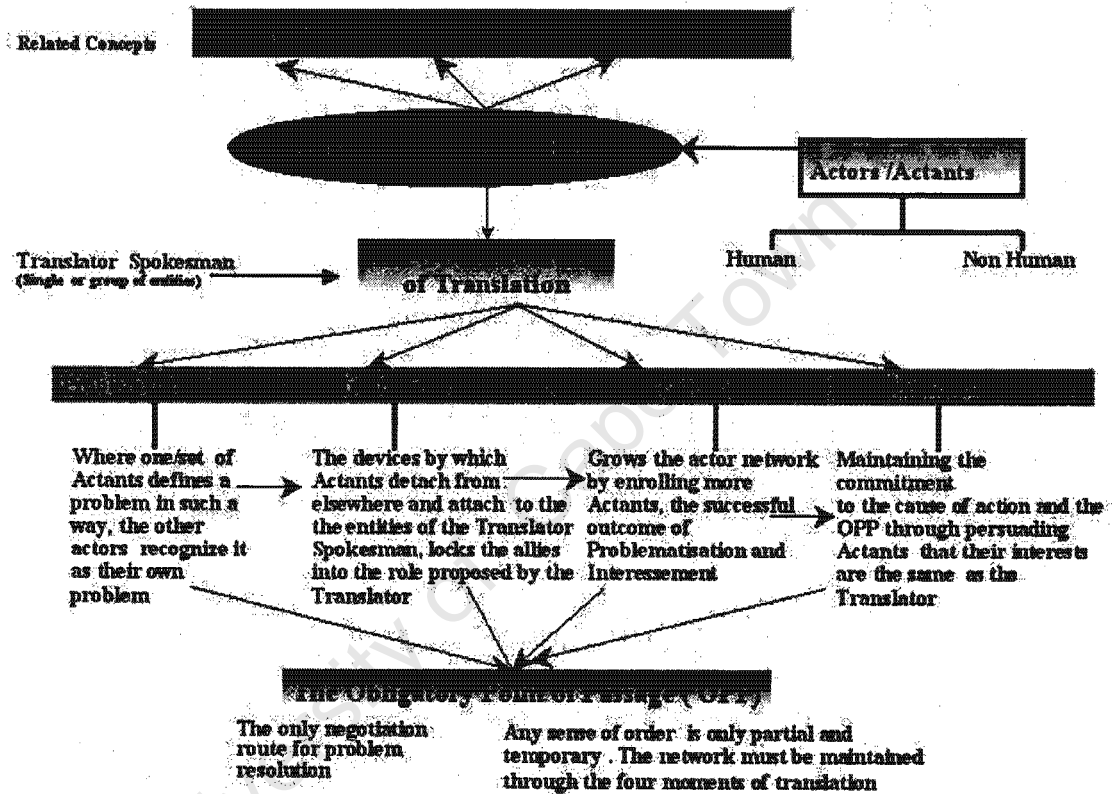


Figure 5.4 ANT Translation Key Concepts

*Black boxes:* This term is traditionally used when a piece of machinery or a set of commands is too complex, in its place a little box is drawn by cyberneticians, about which they need to know nothing but its input and output.

These are things that are taken for granted or not needing any explanations. A fact or artefact is transformed into a black box once the network of many actants has been stabilized. This is when beliefs, policies and practices, actions, organizations become normative, that is when they are taken as wisdom by all parties. Black boxing occurs when processes have become invisible, where the innovation has become a matter of fact.

Building black boxes means enrolling others and controlling them, across time and space. Often when a controversy is examined the black boxes start to open up and show the complex chains of Actor-networks, which are normally concealed by the black box effect. *'Controversies are what one gets when making a flashback from certain, cold, unproblematic black boxes to their recent past...the impossible task of opening the black box is made feasible (if not easy) by moving in time and space until one finds the controversial topic'* (Latour 1987:4). For example, culture is a black box, it can explain so much but it is largely unexamined.

*Intermediaries:* The network also contains intermediaries who induce stability and facilitate mediation. These can be maps, texts, policy documents, legal status and financial resources. Whilst these material objects may preserve social order, power, scale, etc., they may also be used or undermined through being ignored.

*Inscriptions:* Are results of the translation of interests into material form (Callon 1991:143). This results from a process of creating technical artifacts that ensure the protection of certain interests. The notion of inscription refers to the way technical artefacts embody patterns of use. Callon refers to them as the results of the translation of interests into material form (1991:143). Entities are converted into inscriptions such as reports, documents, text, graph and videos. These are sent out, received, acted upon, reacted to and sent back. *'When a program of action is inscribed into a piece of technology, the technology becomes an actor imposing its inscribed program of action on its users'*. (Monteiro 2000: 77). Of importance here is who inscribes them and how are they inscribed. Inscription power (that is, the extent to which they will be followed or ignored) is measured by how much effort it takes to oppose the inscription. The flexibility of inscriptions varies - some structure the pattern of use strongly, others quite weakly, and the power of the inscription depends on the irreversibility of the network they are inscribed into. Whilst it is never possible to know beforehand, the study of the sequence of inscriptions can reveal how and which inscriptions were needed to achieve a given aim.

*Betrayal:* A situation when actors do not abide by the agreements (translations) achieved by their representatives.

The final concept relating to the ANT approach, to be discussed in the next section, is Latour's Due Process model. Whereas ANT is generally applied to describe the formation of

aligned interests in a network, the Due Process model, grounded in ANT, is used to look at the specific problem of introducing a new actant (also known as a candidate for admission) into the network. Primarily, the Due Process model is a practical, valuable analytic device used to overcome the mammoth complexity involved in investigating both human and non human-network processes. In this study the Due Process model is specifically applied to the RWA telecentre implementation.

### 5.5.6 The Due Process Model

The Due Process model applied here follows the McMaster *et al.* (1998) approach. It is used retrospectively to make sense of the process of installing the telecentre using a women's development organisation (the RWA) as the embedding mechanism. The model has four parts as illustrated in Figure 5.6 and is discussed briefly below.

Whenever new candidates for existence (actors), which can be facts, claims, technologies, policies or people, are introduced into a network they increase the existing levels of uncertainty adding to the *perplexity* of the network. *Perplexity* revolves around the issues of confusion, grasping meaning and intent and thinking clearly and logically. If perplexity is insufficiently addressed a false sense of understanding predicates the next stage of the model, making *Perplexity* settlement crucial to the usefulness of all three following components of the model. Anecdotal evidence is plentiful in the interchange between rural, illiterate people and their sometimes magic bullet conception of ICT capability. Because these perplexities are often not logically addressed, unrealistic expectations can later create tensions that contribute to conflict. In some cases the self-interests (for example the donors' performance objectives set by government ministries) of the actor supplying the telecentre conflict with the timelines and debate necessary to achieve sufficient perplexity settlement.

*Consultation* is a deliberation between parties where advice and opinion is sought and given and is a requirement to confer legitimacy on the new candidate for admission (actor). *Consultation* involves assessing the suitability of the new actor's entry into the network. Different consulting styles and positions will impact significantly in this phase. The power relations between the supplying the telecentre and the community receiving it will often be asymmetrical, which biases the consultation, particularly in a remote and impoverished locale where any change is almost universally perceived as an improvement to existing conditions. Questions to be addressed in this phase include, who is represented on the negotiation team, is

there sufficient and authentic negotiation happening, and are the concepts adequately understood by all appropriate and necessary parties to ensure authentic negotiations.

Next, debate is encouraged on the relative importance of the candidate in the hierarchy of the network. An example of this is where will the telecentre be positioned in the organisation, what resources will be allocated to it, will other projects loose resources in the reallocation, does this require new alliance building, will the new configuration be supported across the organisation. However, hierarchy is not solely about ranking (as the name suggests), as all perplexities about a new candidate might have been cleared, and all consultation conducted but the network might decide that in the whole, this is not very important for them, and that therefore the entry is not accepted into the network, but rejected.

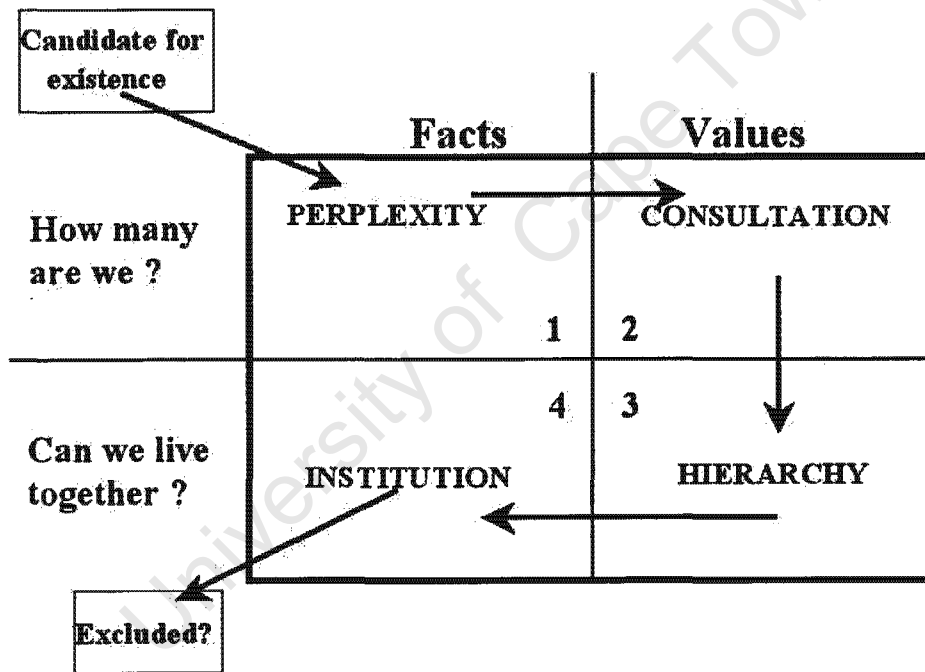


Figure 5.5. Due Process Model - After Latour Source: McMaster, Vidgen, Wastell, 1998.

This process of perplexity, consultation and hierarchy does not happen sequentially and linearly. For example, new hierarchical decisions will require further perplexity settlement and negotiation. These three parts of the model translate (or not) the candidate for admission into the network and imbue it with the values required for it to be accepted into the network. This increases the likelihood of the candidate proceeding into the fourth phase -

institutionalisation (accepted into the network). If it is not successful, the candidate is rejected from the network but this does not preclude it from returning at a later stage to attempt a readmission to the network.

The telecentre, as a candidate for admission in the RWA actor-network, introduced many new perplexities including but not limited to the following. What is a telecentre? What will it do? How will it do it? How is it used? Who will we use it? How many will use it? Who will pay for the services offered? How much will they pay? What will they pay for? What/who will be affected by its use? What equipment will it have? What type of change will it drive in the community? What skills will be required? Who will provide these skills? To whom will the skills be provided? Why will people use these services? What difference will it make to their lives? How will it reduce poverty? In section 6.3.6 the results of this Due Process model as applied to the RWA telecentre implementation are further discussed.

ANT like all interpretivist approaches has limitations and constraints. These will be discussed as the final subsection of this chapter

### 5.5.7 ANT Constraints

Walsham (1997) examines the significant criticisms of ANT, in relation to IS research, in some detail. He notes that any new social theory '*which receives significant attention tends also to attract criticism, and actor network theory is no exception to this*' (1997: 472), and addresses the criticisms under four broad strands as follows.

#### *Social Structures*

ANT is criticised for addressing the local but paying little attention to the broader social structures influencing the local (Law, 1994). Latour (1991) answers this with the statement that '*the macro structure of society is made of the same stuff as the micro structure*' (Latour 1991: 118) consequently this makes it possible to move between levels of analysis, negating the need for different tools to investigate the macro, meso and micro levels.

#### *Morality and politics*

The criticism that ANT ignores moral and political issues applies more widely to social constructivism. Winner (1993) accuses research in this area of an almost total disregard for the '*social consequences of technical choice*' and in particular the impact of elitism and political choices that that underlie choices. Latour (1991:130) responds to these accusations

#### ***Methodology***

by noting that '*refusing to explain the closure of controversy by its consequence does not mean that we are indifferent to the possibility of judgement, but only that we refuse to accept judgements that transcend the situation... to make a diagnosis ...about the absurdity, the danger of, the amorality, or the unrealism of an innovation, one must first describe the network*'. Walsham (1997) concludes that whilst ANT does not directly focus on moral issues a solid empirical base is an essential requirement when discussing politics and morality and that ANT can contribute to this base.

### *Generalised Symmetry*

Treating humans and non-human actors as equals has generated controversy with some authors declaring this to be an abdication of human responsibility (Walsham 1997: 469). This criticism has to some extent been addressed by referring to the network members as actants rather than actors but this debate is still active. Further this criticism can be countered by noting as does Walsham (1997) that ascribing intention and action to actants is not the same as a symmetric position for people and things and that the challenge ANT offers to the rigid separation of humans and non-humans is valuable in this age of hybrids and continually moving boundaries without accepting the extreme position of symmetry.

### *Description*

ANT produces a massive amount of detail and the response to this can be to produce a book length output, and a problem arising from this is how to select the material and data for inclusion into the research report. However, as Walsham (1997) points out, this problem is not limited to ANT but applies to all in-depth case study research. A further point is that ANT has been accused of describing and not explaining. Latour (1991) counters this by stating that explanation is the stabilisation (or not) of the network. Walsham (1997) concludes that none of the current criticisms prohibit the use of ANT in the IS field and that ANT has much to offer the researcher in this age of increasing proliferation of socio-technical hybrids.

## **5.6 CHAPTER SUMMARY**

This chapter covered the approach taken in deciding the 'best fit' research methodology to encapsulate the socio-political complexities of the research site. The selected methodology, Participative Action Research, was extensively discussed as a way to clarify the use of it in this case and to ensure that all methodological issues relating to its use were understood. The chapter discussed the relation of the conceptual framework, guiding and directing the research, to the PAR model used, the combination of which formed the basis of the research

### ***Methodology***

design. The chapter ended with a review of the interpretivist framework, Actor-Network Theory, and the Due Process Model. These concepts in conjunction with the conceptual framework guided the results interpretation as discussed in the next chapter.

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## CHAPTER SIX: RESULTS

## 6.0 INTRODUCTION

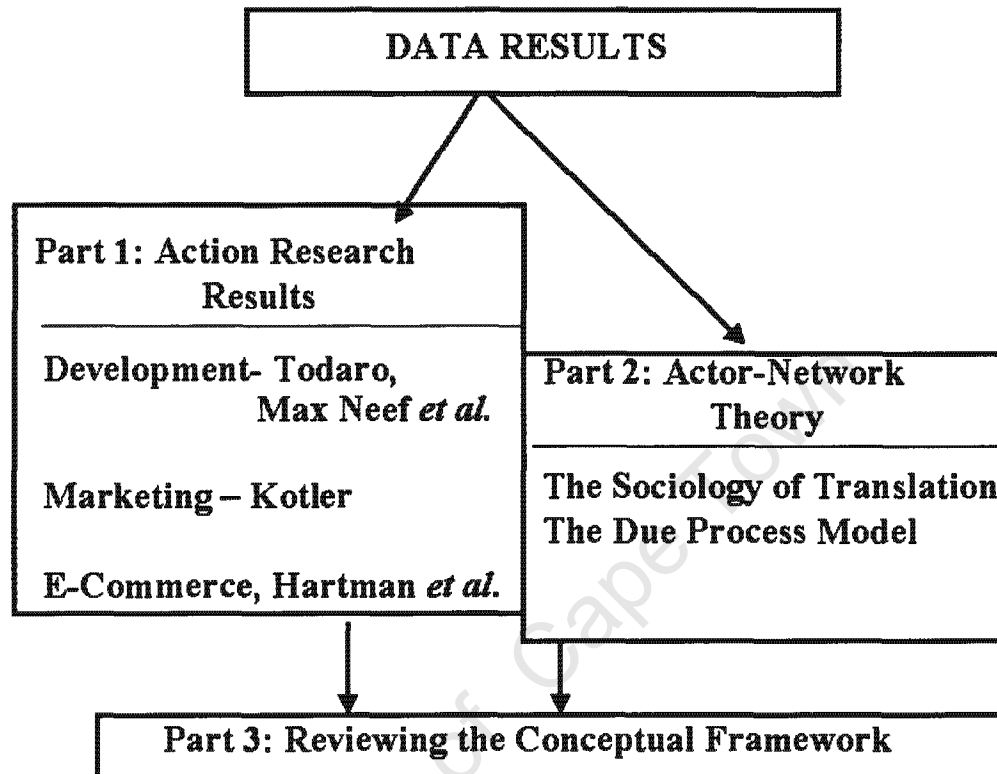


Figure 6.1 Research Results Format

Figure 6.1 outlines the format of the research results. This chapter, analysing and interpreting the research results, is divided into three parts. Part one (section 6.1) examines the results of the Action Research project and is divided into three sub-sections, development, marketing and E-commerce. The Development subsection (6.1.1) was analysed using Max-Neef's Human Scale Development (HSD) and Todaro's development principles (both of which are fully described in section 2.1.2). Marketing (section 6.1.2.) was examined through the Kotler marketing model (described in section 4.1.4) and E-commerce (section 6.1.3) was analysed using the infomediary model (described in section 4.1.1). Part two (6.2) takes a broader sociological perspective in examining the RWA ICT implementation, the telecentre, using Actor-Network Theory (ANT). ANT is used here retrospectively to trace the events contributing to the destabilization of the then successful RWA actor-network. Four major events, impacting on the network, are traced using the four moments of sociology as described in chapter five. This section ends with the analysis of the telecentre institutionalisation process using Latour's Due Process model.

The third and final section of this chapter, 6.3, seeks to apply the integrative insights derived from the research findings, to the initial conceptual framework .

## 6.1 THE ACTION RESEARCH PROJECT RESULTS

Using the research results from the Action Research (AR) project (as described in chapter 5), the interplay between development, marketing and E-commerce is investigated. The conceptual framework (Fig 4.5) was used to guide the data collection in the AR project. It functioned both to sensitise the RWA management team to the concepts of E-commerce and marketing and as a sense-making device to describe participants' mental maps of their perceptions of the situational interplay of development, marketing and E-commerce.

E-commerce was defined here as the combination of ICTs linked to a business process (marketing). ICTs were defined as technologies that could be used to interlink information technology devices such as personal computers with communication technologies such as telephones and their telecommunication networks. The PC and laptop with e-mail and Internet provide the best examples.

The Action Research project took place in a continuous 5-week period between September and October 2002. The research was grounded in a particular socio-economic context (rural South Africa) and within a particular organisation, the RWA (gendered development). The research data can be found in Appendices two, three and four.

### 6.1.1 Development

This subsection reviews the RWA development results in relation to alternative developmental perspectives discussed in chapter two, section 2.1.2. These perspectives, namely those of Todaro and Max-Neef, are mapped against the RWA developmental experiences in order to explore possible future changes to the conceptual model. This interpretation forms part of the input into section 6.3, which is the review of the initial conceptual framework.

Reviewing the RWA developmental results, in relation to Todaro's three core conditions essential to development, suggested the following:

*Life sustenance.* The RWA supplied its members and their families with life sustaining human needs of food security whilst increasing shelter and protection, consequently contributing to the alleviation of absolute underdevelopment. The self-help and income generation projects

increased members' capability to provide basic needs. There had been a lessening of absolute poverty and an improvement in the level and quality of education, health and social services (Rhodes 2000, 2002).

*Self Esteem.* This relates to being a person, which implies a sense of worth, of doing something for one's own benefit as opposed to being a tool used by others to achieve their ends. RWA managers described their perception of development as follows

*A: It unblocks the mind of people to do something for our own lives and for our communities, to give us a better standard of living. Development gets rid of poverty of the mind. Development is solving your problems such as hunger, education, jobs,*

*G: For me the development is planning we start at a grass roots place and then we grow this idea through thinking and planning, without planning we can do nothing we know there are many parts of development, we must start at grass roots, we must grow our ideas, we must think and plan.*

*B: That if a person is going to be developed they need a vision and a mission.*  
[RWA Managers. AR data appendix 4 2002 p.5]

The participants' definition of development suggests that whilst a limited level of self-esteem is evident, the participants were not equipped with the skills to raise their level of self-esteem further by expanding their development practices into profit-making activities. This is noted by one of the RWA managers as follows.

*A: 'We go to Polokwane many times, we go to the markets we see bad veg and bad chickens, we know we are better but we do not have the confidence to say, how can we sell here, how much will you pay us? How do we bring our vegetables here, we see our things are nicer and cheaper we say nothing. But in my mind I see it is not confidence alone is needed. The method we are using is not right, we didn't look at our products to tie up with those who need it. The gap is we did not follow all parts of the process (marketing) we just take part here and leave out the other'.*

[RWA Manager. AR data appendix 4 2002 p.45]

*Freedom.* This is about being able to choose, freedom from social servitude, from dogmatic beliefs, from ignorance. Although the RWA management team is aware of its legal rights as a legally incorporated organisation its members risk morbid conflict in choosing to enforce them. Rangan and Gilmartin (2002) concur with the difficulties experienced by the RWA management of explicitly defining the powers and responsibilities of elected leaders, where customary laws and practices take precedence over the constitution. The RWA management was forced to accept traditional and customary practices over their constitutional conflict resolution practices. It seems difficult, if not impossible, to separate out development activity from the existing social structure.

*A: I do not have the traditional medicine beliefs why must I have to accept this and other people's beliefs, but all must believe the same thing.*

[RWA Manager AR data appendix 4 2002 p.3]

*A: The board refused to sign out contracts they will not sign because they say there is no money to pay, we are never paid we know this but we need contracts*  
[RWA Manager AR data appendix 4 2002 p.3]

*A: The chiefs, they have no information and they try and take over our organisation, they want to make decisions for us, but they have no information*  
[RWA Manager. AR data appendix 4 2002 p.12]

*A: Things are frustrating me looking at the current information I cannot put all the things together it still looks a very long walk up the mountain, I cannot see the other side. How can I think of the current situation, what if it all goes wrong again, what if we start again and another chief takes our organisation like this one?*  
[RWA Manager. AR data appendix 4 2002 p.24]

*A: We are not leaders because we cannot decide for ourselves, the final decision needs to go to others, they can refuse and then we cannot proceed.*  
[RWA Manager AR data appendix 4 2002 p.51]

*A: We have this problem of not confronting people, they use the system of gossiping (witchcraft) and we become targets in the community, you frighten yourself thinking they can come to your house and you have the situation where people are killed. People will not say what they have seen even when they have seen wrongdoing they fear what will happen to them from other powerful people. In June we called a meeting with all members to explain the RWA, some of the board the secretary of the board opened and then handed over to the chief he says he will deal with every thing and then it ends.*  
[RWA Manager AR data appendix 4 2002 p.51]

*A: the way the communication is the exec and management have the responsibility only in writing, now we are very dependent on the board and they do not have time to attend to what we put together, they did not approve anything ( the job contracts) and they did not tell us why . They have different minds from the management*  
[RWA Manager AR data appendix 4 2002 p.42]

Todaro's three core measures used here to study the RWA development results reveals partial success. The RWA expanded on the community's previous range of choices, (e.g., the additional income generation projects in sewing, catering, poultry, food security gardens, business and vocational training) and in effect reduced its' members' external dependence (on donors) and internal servitude (customary law) without substituting one form of dependence with another. Particular attention has been paid to this point in the way donor money has been used.

*A: Self-reliance and development is one thing, we approach donors to set up our projects, to buy equipment, but we cannot ask them to pay us, we must make our own money. The donors they give the money to help us, so we can buy the seeds, buy the tractors, buy the fertilizer, but we cannot always go back to the donors, we must take the help and then we must be self-reliant, we must make our own money, we know donors will not give us salary, we must do that.*  
[RWA Manager AR data appendix 4 2002 p.5]

However, it seems some other elements are perhaps lacking in the RWA understanding of self-reliance concepts. The RWA managers acknowledge the limitations of their situation.

*A: Selling things in development is giving things away for nothing because people have no money. Our projects give us money to eat, we must cover our costs but we sell to poor people so we must charge little, as they have no money.*  
[RWA Managers. AR data appendix 4 2002 p.5]

*B: We have shown people how to start projects but they still go home with their heads bare. We have not known what to do and where to go from here we do not want to stay poor and fighting, we need new ideas.*

*A: We are in development and now we know there is no money in the development and something we must look at now to is a business, how the business operates and how we are loosing customers all the time'*

*A: We look at IGP (income generating projects) as it can give us money to survive, to cover the costs, to buy more material like cement for the bricks, or seeds for the garden, but we cannot make profits in these projects, because no one can afford to pay very much to buy the vegetable, to buy the bricks and all things. We know the business can charge more because they can sell to people who can pay more and they make profit.*

*C: Development is solving your problems like hunger, education, jobs, when we are selling things in development it is giving things away for nothing because people have no money.*  
[RWA Managers AR data appendix 4 2002 p.9]

The area in which the RWA operates (as discussed in chapter 3) is characterized by a history of maldevelopment. Todaro's view of development argues that underdevelopment experienced at a personal level leads to macro-underdevelopment and that often anti-poverty development notions result in maldevelopment where glimpses of what could be are shown and then the window of opportunity closes (the development project fails). The RWA is a small pocket of development, isolated from other levels such as local regional and national. Despite modelling the operations of the RWA on the concepts of self-sustainability, life sustenance, self-esteem and freedom it is still struggling with the issues of underdevelopment and maldevelopment.

The development process is perpetually constrained by dependency relations at many levels (such as international, regional, local, social and the individual domain). This situation indicates an inability by the RWA to secure self-reliance. The concepts of self-reliance within Max-Neef's framework of Human Scale Development (HSD), discussed in section 2.1.2.1, will be used here to examine this aspect.

The need for vertical and horizontal integration seems to be somewhat understood by the RWA management.

*B: Integrating means more information, connect to other organizations across the province and country and find out what they are doing and how they are doing it how do they sell, what is it they do with competition.*

[RWA Managers. AR data appendix 4 2002 p.14]

Despite understanding this, it is difficult to implement. The RWA attempted, unsuccessfully, to achieve self-reliance through social and economic interaction in a small physical space and found itself unable to connect to and complement the regional and national level. The following responses outline some of the difficulties the RWA experienced in attempting to integrate horizontally and vertically.

### ***Results***

*A: We look at IGP as it can give us money to survive, to cover the costs, to buy more material like cement for the bricks, or seeds for the garden, but we cannot make profits in these projects, because no one can afford to pay very much to buy the vegetable, to buy the bricks and all things. We know the business can charge more because they can sell to people who can pay more and they make profit.*

[RWA Managers AR data appendix 4 2002 p.9]

*A: No, we don't find out what people need and what they will pay for, we don't know how we must do this; we know it is important but how do we do this? We do not have the money to travel around to talk, it is difficult to talk to people, we are sometimes too afraid they do not want to talk to us.*

[RWA Managers. AR data appendix 4 2002 p.9]

*A: It is difficult to know how to communicate with people. We don't know how to communicate with people with money. We don't believe any one will come here and buy from us. We go to Pietersburg so often and we do not go and talk to any one and get info because we are scared. We do not know how to cost our things. I went to town and found the price of school tunics was R65 in a shop, and we are selling it in the village for R85, we cannot sell for R65 because the cost of our material is so high.*

*A: We do not have an integrated plan of production because we are working alone as individuals we cannot see markets out of Sekhukhuneland.*

*G: We never thought of selling outside we just aimed at feeding ourselves*

*C: We see that we stay only in the market in Apel; we do not know how to go to the other markets*

*B: Will people want to talk to us, will they want to buy any of our things, How do we talk to people we do not know?*

[RWA Managers. AR data appendix 4 2002 p.15]

RWA self-reliance notions exhibited isolationist tendencies rather than horizontal interdependence. Max-Neef notes that relationships of self-reliance have greater synergistic and multiplying effects when they flow upwards and that local self-reliance stimulates regional self-reliance and this nurtures national self-reliance. But this is a difficult concept to apply to a rural development organisation, such as the RWA, in the aftermath of the Bantustan system. The concept of self-reliance and vertical and horizontal integration in HSD is impacted on by Government local economic development policies. Whilst the RWA built and operated a micro-industrial structure for producing goods and products it found it difficult to market its output. Its experiences show the challenge of a small community organisation in forming wider horizontal and vertical relationships, essential for launching and sustaining effective local economic development.

Government local economic development policies were not sufficiently modified for local conditions, or flexible enough to accommodate the different circumstances of organisations such as the RWA, operating in small, under-resourced localities. This created a profound challenge to peripheral, marginalized localities attempting to be part of vertical integration.

### **Results**

Political conflicts and inequalities like the ones experienced by the RWA created formidable developmental barriers for this independent rural development organisation. This situation prevented RWA managers being the major protagonists of their future in creating solid pillars of development.

If, as Max-Neef suggests, the complementary relationships between the macro and the micro facilitate the mutual empowering of economic self-reliance, then the RWA developmental model was doomed from the start as evidenced by its failure to sustain itself in the wake of the problems it experienced. The difficulty of applying HSD notions to the RWA situation is that whilst suggesting that the move to self-reliance can break the dismal cycle of dependence, a different set of circumstances than those experienced in post-apartheid rural South Africa, are assumed.

### **ICT As a Satisfier**

Development can be likened to the interweaving of a self-supporting network, out of random parts, in an attempt to launch a co-evolutionary path for assembling complexity (that is acquiring new components, levels and variables within a process such as development). The ICTs were a further level of complexity introduced into the RWA developmental model. The objective of introducing ICT into the RWA was to assist and enhance sustainable local economic development through the provision of a sustainable telecentre and socio-economic information services to disadvantaged communities.

The introduction of ICT into the model can be viewed as an economic good with the potential to empower certain satisfiers to meet their articulated needs, but if the economic good is not institutionalised then this potential would not be realised which could stall the development process.

The telecentre implementation process (discussed in section 3.3.3) failed to assess and articulate deprivations and potentialities within the community. It may be that applying the HSD Needs and Satisfiers grid would not have resulted in a request for a telecentre. It had not been established whether the economic activity that would be expected to result from a telecentre was the most appropriate and powerful satisfier for the most pressing identified deprivations. It was simply seen as an opportunity to benefit from a government initiative. It is evident that the government invested substantial political capital into its remote telecentre

programme, but it did not solve any developmental problems. On the contrary it created new problems and seemed to be an answer in search of a problem.

The next section discusses the research results related to the introduction of marketing into the RWA.

### 6.1.2 Marketing

This section presents the analysis relating to the RWA managements' perceptions of marketing and its relationship to development, the perceived benefits of marketing to the RWA operations and the identification of the particular barriers to implementation.

#### *The Understanding and Importance of marketing to the RWA Management*

The term marketing for many people means a set of business activities and tasks including but not limited to product development, pricing, distribution and communication. These tasks have the objective of stimulating the customer to consume the firm's output. Additionally marketing encompasses the notions of exchange, value and management. This description concurs, in part, with the RWA understanding of marketing as shown by the following

*A: it is a 'process' to look for new products to supply and to look for new buyers and suppliers*

[Interview, RWA Manager AR Data Appendix 4 p: 9 2000]

*H: It's about advertising and selling. Where a person can find out needs they can satisfy these needs.*

[Interview, RWA Manager AR Data Appendix 4 p: 9 2000]

*B: We need to understand people's cultures and experience how they live. We can only know the things to sell to people when we know what the people want.*

[Interview, RWA Manager AR Data Appendix 4p: 9 2000]

However, the philosophy of development is implicit in the understanding of marketing as it relates to the RWA.

*B: marketing is serving the community*

[Interview, RWA Manager AR Data Appendix 4 p: 36 2000]

The research participants described their distinction between marketing and development as the attainment of profit. Otherwise marketing and development appeared to be intertwined and at times this ambiguity caused problems in that the RWA accepted projects outside of their developmental mission statement, without having the necessary skills to sustain them. Straddling the philosophical differences between development and marketing caused problems within the RWA as noted below.

## **Results**

*A: We now understand the difference between income generation projects and marketing, this is a profit motive that we have not had before because we are a community service and how can we charge more than the shops do if we are to help our community and help our members.*  
[Interview, RWA Manager AR Data Appendix 4 p: 13 2000]

*A: I don't know how I can explain the difference there is difference there is similarity, if you want to answer need you must have the information that this something will come and solve the problem. In the RWA we have some projects where we are not asking the people if they need the project, it is just that so and so comes and asks us can she give help here and we say yes, we do not ask if this can solve the problem, sometimes it is creating a problem because we did not know how to maintain it, secure it we can't keep it and we start to feel ashamed we can't take care, then we spend all our time sorting out the problems.*

*We must start with the needs of the community so we can have a good result of solving the problem. Development we are dealing with social problems and if we make the market research if we don't make the market research people need it, like, water and sanitation.*  
[Interview, RWA Manager AR Data Appendix 4 p: 36 2000]

### *The Perceived benefits of Implementing Marketing*

The expectation of benefits by the RWA management coalesced around integration. The concept of integration was introduced to the management team as part of marketing in the following definition 'a social and managerial process by which individuals and groups get what they need and want by exchanging products and values with others. It involves but is not limited to customer orientation, integrated organisational direction and profit' (McGee and Spiro 1988). The concept of integration was identified by management as being a central issue to the success of marketing and one that was missing from the RWA.

*B: integrating means more information, connect to other organizations across the province and country and find out what they are doing and how they are doing it how do they sell, what is it they do with competition?*  
[Interview, RWA Manager AR Data Appendix 4 p: 14 2000]

*D: when our projects are integrated we will have better information and can tell each other about opportunities we have heard about.*  
[Interview, RWA Manager AR Data Appendix 4 p: 13 2000]

*A: I see now where we have not been right, we must be an integrated organization, we must work together, we must collect all our project information. How we work now is each one buys what he needs, and because of this we are paying too high prices and we are paying lots of taxis to go and buy our things. How can we sell here and make a profit like this*  
[Interview, Manager AR Data RWA Appendix 4 p: 13 2000]

Participants acknowledged that the concept of integration was problematic to use, as the organisation had not been structured for this. Rather, IGP groups were autonomous within the RWA structure and made their own decisions relating to marketing, often from an uninformed base. To retrospectively change the way the organisation functions would be difficult to achieve as noted below.

*A: it will not be an easy way to do marketing, first we did not have an integrated direction, each committee and project is doing its own thing and it needs one direction. From myself I am looking at the structure, all these people do not have any say it is just like dead people.*

*The church problem is affecting some RWA projects it will divide the organisation into pieces some will follow the church and disturb the marketing process.*

[Interview, RWA Manager AR Data Appendix 4 p: 42 2000]

Whilst acknowledging the difficulty of taking an integrative marketing approach, management agreed that this was a desired position to take.

*B: I see from what you are showing us that we were not wrong in what we were doing in development but I see that adding in marketing will integrate our organization. At the moment we are split in many different places making decisions that do not benefit others or us because we are making decisions without information. Now we are questioning what we are doing and we need to find out what people want and provide it. This marketing is a way to bring the organization together.*

[Interview, RWA Manager AR Data Appendix 4 p: 14 2000]

The problems that the organization was experiencing were perceived as the result of the lack of integration and it was acknowledged that the structure and functioning of the organisation impacted on the management's ability to introduce marketing. For example:

*If before we were integrated and had started marketing we may not be having the problems we have now because we have more strength. I realize the projects are too far away from us at the RWA management we should have had a lot of workshops to talk about these things ' we are like different children from the same mother but different fathers.*

[Interview, RWA Manager AR Data Appendix 4 p: 16 2000]

### *Implementation Barriers*

Whilst understanding the basic concept of marketing and recognising the potential benefits to the organisation, a number of barriers preventing management from operationalising marketing were identified. These barriers are discussed below under the following headings:

- Leadership
- Organisational structure
- Self confidence
- Organisational culture
- Competitor knowledge
- Customer orientation
- Quality
- Pricing

### *Leadership*

A leader needs to have power in order to influence others' decisions and to control the use of resources. Dubrin and Dalglish (2003) note that power and the use of it is a multidimensional, complex process bounded by context, personality and expertise and which cannot depend solely on authority of position. Under the previous RWA facilitator the leadership style was unpredictable, charismatic and results oriented, rather than democratic and process driven. A manager's view of her style is given below

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*A: She was the boss mostly, she was not democratic, but she was mixed, as sometimes she would tell you to do what you thought should be done and make your own decisions.*  
[Interview, RWA Manager AR Data Appendix 4 p: 3 2000]

Sister Lydia achieved results by using her personal power, which can be further subdivided into expert power (this contributed to her charisma through the ability to influence others using specialist knowledge of development and extensive fundraising skills), referent power (where she was able to influence others through making people feel valued, accepted, approved of and important) and prestige power (which stemmed from her status within the church, her international embassy contacts and her reputation for achieving results).

The Management team acknowledged that although they would be the key leaders after the facilitator left they would not be able to use her leadership style as their base of authority (that is their expert power, referent power and prestige power) was different to that of the previous facilitator. They realised that the organisation needed to move to a more democratic and more participative style and in attempting to make this happen found a number of hurdles to climb.

*A: I can say we were frustrated it was the first time we were taking great responsibility because Sister Lydia was leaving, we tried to change the method of operating and after changing all things now we are at the level of undermining what we have learned because we have this thing of staff development, lots of courses we attended again and again, then we say let us just work on this task.*

[Interview, RWA Manager AR Data Appendix 4 p: 35 2000]

Specifically with reference to marketing the leadership tried but did not succeed in operationalising it.

*A...and with marketing after we spent that time with you (2000) we have tried but we are not implementing how we have understood it, we are implementing it in a different way, we want to start in the middle, not the beginning, we just grow beetroot and then get someone in the world to buy. We did not ask ourselves all the questions, how do we price, cost, who will want it and everyday people are not buying from us, we did not know marketing is a process – ask me and I can tell you it is a process and I can tell you this and this but we did not understand but lets implement. We did not know where to start.*

[Interview, RWA Manager AR Data Appendix 4 p: 35 2000]

The RWA management recognised the importance of providing leadership, particularly in terms of marketing, to the rest of the organisation. However, they realised that their mistake was in not sharing the skills they acquired as leaders of the organisation, which in itself created one of the major barriers to applying marketing concepts within the RWA member groups.

*B: Our skill is just stopped in one place we did not share our skills enough with the project members. They do not know things. I see how difficult the Internet is for people like me who can read and write a little and it is difficult, we need to spend much time with people teaching them right and wrong before they can change. The management team as we are above the project members we have to be confident we need to talk to people about buying things we want the women to sell their things but how where, if we can encourage ourselves we can also*

*encourage the women. We have to communicate to tell the women about bulk buying, that it can help sewing, catering*

[Interview, RWA Manager AR Data Appendix 4 p: 48 2000]

*C :...we have attended several courses on marketing but according to my understanding we have learned some things but our problem is that we do not share these skills with other project members and I see now that they must know marketing if we can do it because they are our customers as well , the other project members we have to train them in what we have learned and then maybe we can implement what we have learned.*

[Interview, RWA Manager AR Data Appendix 4 p: 46 2000]

*B: As the RWA management we need to play a leadership role, because we have not had good information we have not been learning. Maybe marketing can help in the leadership role. We have been working with no interest in profit, we do not know how much it costs to produce and do not do analysis costs before we price.*

[Interview, RWA Manager AR Data Appendix 4 p: 16 2000]

*B: We must not work for a loss we must cover our costs and work with others to get information and provide what the community wants not what we want to grow.*

[Interview, RWA Manager AR Data Appendix 4 p: 16 2000]

However, management discovered the chasm between theory and practice in relation to marketing and other skills development areas. Their role was affected by the change in their power base, as their original power stemming from being close to power was no longer applicable. It is self-evident that the closer to power one is, the more power one can 'borrow', and a common example is the personal assistant to say a Chief Executive Officer. This was demonstrated in the reduction in power the RWA management experienced once the RWA facilitator left. The following illustrated this leadership difficulty in trying to move the organisation to a more focused marketing orientation.

*A: we have talked to the garden ladies (food security project members) about these things and we have told them to stop giving things away, but here it is so hard, when people see all the vegetables and ask for them, family comes and it wants free vegetables, it does not want to pay.*

[Interview, RWA Manager AR Data Appendix 4 p: 8 2000]

*A: ... people are not used to buying the spinach here they say I am going to get it free so it is a difficult market here ...*

[Interview, RWA Manager AR Data Appendix 4 p: 44 2000]

*B: ...we explain to the garden ladies they must plant different crops, but they will not listen, they all want to grow the things they need, the beetroot, the cabbage, but they always cry to us, they have no money for seed, we must find them money each year and ask the donor for more money.*

[Interview, RWA Manager AR Data Appendix 4 p: 8 2000]

*C: People want different things; they want 5 roses (tea) and the Iwiza (mealie pap) ..... It is difficult to change behaviour some people want only 5 roses they do not want Joko (a different brand of tea) even if it is cheaper it takes so long to explain all these things and get people to change their minds.*

[Interview, RWA Manager AR Data Appendix 4 p: 352000]

### *Organisation and Structure*

The strategic planning workshop conducted in January 2001 extended democratic participative decision-making power to a wider section of both the RWA members and the community in which they operated. However, this transition from central decision making to a decentralised style was not accompanied by an integrated business plan, which resulted in operational difficulties.

*B: ... if we can look at the structures of the organization, are we taking too long, maybe our structure is not good for sharing for our member projects? We must look at this with the other eye and have more competition. After winning, loosing it can improve us and show our quality*  
[Interview, RWA Manager AR Data Appendix 4 p: 45 2000]

*A: We have no budgets for marketing and communication and we do not have an integrated plan of production because we are working alone as individuals we cannot see markets out of Sekhukhuneland.*  
[Interview, RWA Manager AR Data Appendix 4 p: 8 2000]

*Self-confidence.* The importance of self-confidence has been well established by Todaro (1989) and covered in section 6.2.1. The RWA noted both technical and social lack of confidence as a barrier, which prevented them from successfully implementing marketing into the RWA organisation.

*A: It is difficult to know how to communicate with people .We don't know how to communicate with people with money. We don't believe any one will come here and buy from us. We go to Pietersburg (Polokwane) so often and we do not go and talk to any one and get info because we are scared.*  
[Interview, RWA Manager AR Data Appendix 4 p: 12 2000]

*B: will people want to talk to us, will they want to buy any of our things, How do we talk to people we do not know?*  
[Interview, RWA Manager AR Data Appendix 4 p: 15 2000]

*B: we are talking about doing research what. How do we do it? What is this thing of research where do we do it we don't have confidence of doing things we afraid of taking responsibility. There must be some one to say did you do this, what happened, we do not like being shown our mistakes, told we are wrong, not free to say things, always worried , was I wrong?*  
[Interview, Manager AR Data RWA Appendix 4 p: 35 2000]

### *Organisational Culture*

Organisational culture is the common perception of shared meaning held by the organisation's members. Schein (1985:9) defined organisational culture as: "... A pattern of basic assumptions – invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration – that has worked well enough to be considered valuable and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to these problems". The important point about Schein's definition is that organisational culture needs time to develop and may not be created or

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changed in a short time. The RWA in introducing marketing and in changing organisational structure and decision-making did not succeed in the short term in changing the culture to accept marketing principles alongside the established development ethos.

*G: How can we make people think differently we see marketing now, but how can we make them see marketing as we do? The garden ladies want to keep planting the same vegetables, they want money, but they do not want to change what they do, we have not integrated our organization, the projects are too alone in their work and they cannot buy at good prices*  
[Interview, RWA Manager AR Data Appendix 4 p: 14 2000]

### *Customer Orientation*

The RWA acknowledged the lack of customer orientation towards both their RWA members and towards the consumers of RWA products and services. In regards to internal customers the RWA explained that

*A: After sales service, many people ignore it, our projects are our first customers and they have complaints “ you don’t visit us, no one is helping us. They do not understand that we have no budget. Now I have seen we have to look seriously if they feel ignored they will not want to work with us and listen to new things, because of these things we cannot solve our problems with them in the workshop, we assume too much, we do not communicate well.*  
[Interview, RWA Manager AR Data Appendix 4 p: 16 2000]

When applying service to customers, this was referred to as “treatment “ of people and explained by research participants with the following illustrations.

*A: when you can feel that you are at home whether you have money. Whether the customer is wrong, she is not classifying people, everyone is treated the same*  
[Interview, RWA Manager AR Data Appendix 4 p: 34 2000]

*B: they will not refuse you if you have no money they will still give you, treating people nicely every day, others they do this (roll eyes) and ask “what do you want (said with hard, rude expression) the ones that say they will deliver to your house even if they only have 1 kg of mealie (maize), and you want 6 and they will bring the rest tomorrow, they give good treatment*  
[Interview, RWA Manager AR Data Appendix 4 p: 34 2000]

Whilst participants agreed that customer service was a necessary component of marketing it was acknowledged that this was not part of the RWA culture.

*G: Participating with the client that is good service doing things the way they need them.*  
[Interview, RWA Manager AR Data Appendix 4 p: 34 2000]

*B: I feel guilty about all the mistakes I made when I was running the restaurant, such as having only one option, a R10 plate of food and not giving other options that customers asked for they wanted just a pap and gravy plate for R4 and I would not do this. I wanted only to give full plates of food it looked good to have a full plate not a half plate. I could make more profit if I gave this to people, but I made a mistake and said it is only this way. I see that the price was too much for many people and I did not sell a lot, now I will not be able to keep buying more things for the food and I will not make a profit*  
[Interview, RWA Manager AR Data Appendix 4 p: 16 2000]

The lack of customer service was noted particularly in the telecentre where high prices and inflexibility resulted in lost revenue and lost customers.

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*A: no they (the telecentre) do not give good service, they leave the place early, they close in the evening and weekend when people can come and use it, they close early on Friday they are not running like a business, the women are not business orientated, if he has his own business he thinks differently they say if I don't own it why should I suffer alone while others are at home?*

[Interview, RWA Manager AR Data Appendix 4 p: 46 2000]

*B: If you want people to stop going to Pietersburg (Polokwane) you will have to give them value, people are trying to make money fast by overcharging the poorest of the poor so much business is going to town, funerals services, exams (typing up assignments for distance learning programs), photocopying.*

[Interview, RWA Manager AR Data Appendix 4 p: 17 2000]

### *Quality*

Marketing products outside of the immediate locality raised the issue of quality control, especially as products are produced by a number of IGP groups, which are scattered geographically. Firstly, there was the concern of understanding quality and price in terms of customer needs.

*A: ... How do I know I have a quality product that other people would want to buy, Is there a good road so I can go and pick up the goods, are we planting crops at the right times so we can sell to the right people, what if we have a contract, how can we know if the quality is right? How do we know how to price products.*

[Interview, RWA Manager AR Data Appendix 4 p: 12 2000]

Secondly, there was an understanding that quality standards for customers outside of their geographic location (that is outside of the 'homelands') were perhaps different and that managing IGP groups to meet these requirements would be problematic.

*A: If we go to markets that are not in Apel we must have quality. People do not produce to the time and there is a big problem, they do not harvest at the right time and there is a problem. Some times the chickens are not the same and the people complain this one is smaller than before, there is difficulty making a good supply that is in the quality, we have no chickens in winter because they (the IGP project groups) do not want to pay for the heating.*

[Interview, RWA Manager AR Data Appendix 4 p: 18 2000]

Thirdly, there was the issue of pricing higher quality products (which have higher input costs) and the acceptance of this higher price by the community.

*C : with our name people know they have quality because we see things happen if we keep them ( chickens) when they are grown up we loose money, we have to keep feeding them, the problem with people is they want cheapness so they will buy the cheaper chickens and not the quality ones.*

[Interview, RWA Manager AR Data Appendix 4 p: 43 2000]

### *Pricing*

The discussions relating to pricing highlighted some of the most serious misunderstanding of marketing within the RWA and its membership base. As IGP projects were set up initially along developmental lines, where donors provided seed money to fund the raw materials (albeit with the intention of the sale of the production output providing financing for the next

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round of inputs), pricing and costing were not then important concepts for the RWA to grapple with. The research participants acknowledged that pricing was also a major difficulty for them in terms of the community they were serving.

*A: The pricing is a problem, how do we know how to cost*  
[Interview, RWA Manager AR Data Appendix 4 p: 18 2000]

*B: On the costing and pricing the management team has not been working I do not know why I call this price is R50 I do not ask myself why I have not done pricing in anything just selling chickens at R20 because I think that is a price. I do not know the income, the budget, maybe we have been working for nothing up to now I never know what the profit is I just know I have good quality chickens. And the carpentry they do not deliver their goods, the customers are waiting for their wardrobes and they want the RWA to deliver for free, why can't they take the income from the work and pay now for the transport and make their customers happy, now I ask why do they wait, they have money, we do not see it.*  
[Interview, RWA Manager AR Data Appendix 4 p: 48 2000]

*B: The way we charge is for living not business, people think it is better to go to Puloqwane and there they will get better quality and they do not add in the cost of their transport to what they are buying.*  
[Interview, RWA Manager AR Data Appendix 4 p: 34 2000]

*B: With the vegetable gardens we do not understand costing and pricing to sell outside this area is where we can price correctly and have income from what we do, here, people are not working we have only the pensions so they cannot afford to buy*  
[Interview, RWA Manager AR Data Appendix 4 p: 34 2000]

Rationally and defensibility of pricing was an issue. As the project leaders and or members autonomously decided on prices there was often little internal consistency and understanding as to why and how prices were determined.

*A: we don't know the pricing, but we look at the projects and sometimes we know it is not good pricing, it is too much, we fight with Luke (carpentry project) he wants people to pay too much, we ask him why you do like this Luke we think he looks at peoples prices and then he charges more, what can we do?*  
[Interview, RWA Manager AR Data Appendix 4 p: 20 2000]

RWA managers acknowledged that the cost of project production input impacted on their pricing problems. As inputs were high the project members set high and uncompetitive prices for their products to compensate. This resulted in prices that were higher than those of alternative suppliers.

*A: The ingredients are too expensive to make a profit and our vegetables must be planned, harvested in a planned way so we can get contracts and sell in bulk....*  
[Interview, RWA Manager AR Data Appendix 4 p: 14 2000]

*We do not know how to cost our things. I went to town and found the price of school tunics was R65 in a shop, and we are selling it in the village for R85, we cannot sell for R65 because the cost of our material is so high*  
[Interview, RWA Manager AR Data Appendix 4 p: 12 2000]

Member groups persisted with this uncompetitive pricing despite evidence that customers chose to use other suppliers even if it meant a long and expensive taxi ride. Additionally the

inconsistency of pricing for poverty and pricing to 'make a living' was prevalent in some of the projects, in particular the telecentre.

*B: We tell them they must make a living and then they decide how they cost the service for people. All the telecentre managers, they have training but they have problems. They charge too much for the services and people are too poor to pay, we know many people will go to Pietersburg to send their fax because it is cheaper, the typing is cheaper in Pietersburg... we tell the telecentre managers, but they say they need to make the money and must charge this price*

[Interview, RWA Manager AR Data Appendix 4 p: 17 2000]

Whilst managers understood that pricing was related to marketing and in particular to market research (information) it was difficult to influence IGP project members to think this way and price accordingly.

*A : no we do not do pricing we just think of a price and use it , we must use market research to look at prices and competitors and understand we have working expenditures even if we have sold nothing there will still be things we have to pay like the rent, telephone , we must look at the costs of the product , put a profit on and then we have the price*

[Interview, RWA Manager AR Data Appendix 4 p: 41 2000]

### *Summary and Conclusions*

The research results suggest that the RWA management were uncomfortably enmeshed between developmental concepts and marketing concepts. As much as they understood the importance of marketing they struggled to fit this with cultural constraints within the area that they were working. It seems that the differences in developmental levels of the RWA management and the project members was a major barrier to introducing marketing.

Whilst changing the organisational structure, decision-making power and increasing the focus on profit-maximisation in order to become more marketing oriented, this was implemented across a diverse range of interests, skills, expertise and culture within the RWA. Although marketing was introduced in a locally meaningful way, and not merely as a transfer of organisational practices, the changes resulted in a level of non-acceptance and resistance.

The analysis highlights that whilst at one level the overall philosophy of marketing seemed to be understood by the RWA management, operationalising these concepts proved to be difficult and not particularly successful. The RWA was a diverse group of interests, culture and skills and expertise, predominantly centred in production mode (that is the more we make the more profit there is, so we will make the customers buy what we produce). Making the transition to a marketing philosophy (where the main task is to determine what customers'

needs are and adapting the organisation to delivering the desired satisfaction) whilst operating from a developmental philosophy required new areas of knowledge and competencies.

The literature suggests (Houston and Gassenheimer 1987) that the marketing concept is a managerial prescription relating to the entity's goals in that it achieves its own goals when it understands the cost associated with satisfying those needs and wants and then designs products and offering. One of marketing's most significant contribution as a business function is to enable the firm to process information into knowledge which extends marketing into strategic marketing where market opportunities are analysed in order to choose the most optimal market positions (Kotler and Andreasen 1991).

This position then raises questions as to how, if at all, E-Commerce and ICTs can empower the marketing function through the application of their massive, powerful, low cost, communication, information finding, storing, retrieval and processing capabilities. The next section discusses the participant's perceptions relating to how and where E-commerce (ICTs) could empower the marketing process through alleviating (some of) the problems outlined above and how the use of E-commerce could contribute to the development of appropriate marketing knowledge and competencies.

### **6.1.3 E-commerce**

The concept of E-commerce was introduced to the research participants as the use of the Internet and e-mail together with computers and software packages (Microsoft office) to transact with other parties. The examples given of transacting activities included sending and receiving information electronically, for example, paying bills, searching for suppliers, customers, raw material prices, and communicating with government, donors and other NGOs through multimedia formats such as text reports, photos and video. This concept was presented as, at times, having certain advantages over other electronic means, such as the telephone and faxes, these advantages being that E-commerce could be faster and cheaper and that information was easier to retrieve, store and access. However, it was emphasised that doing business and marketing electronically still required the use of traditional business principles.

The usefulness and benefits of E-commerce as perceived by the RWA management were grouped in the following areas, each of which will be discussed in this section.

- Organisational efficiency and Integration
- Reduced Transactional Costs
- Reduced Coordination Costs – Agency costs
- Supporting Richness and Reach
- Marketing

The section closes with a review of the difficulties and constraints mentioned by the participants.

### *Organisational Efficiency and Integration*

As the advent of modernity increasingly removes space from time through the capacity to foster relations between 'absent' others, modern relationships are often characterised by locational distance and the absence of face-to face interaction (Giddens 1990). The level of time-space distanciation is much higher in the modern era than at any other time. The RWA had some distant relationships, due to the spatial dislocation from the community locale of some of its stakeholders such as its board of directors, its donors and its members in the satellite offices. The concept of E-commerce was seen to be beneficial to servicing some of these distant relationships.

Firstly in terms of project members and project groups E-commerce concepts were considered as a possible remedy to some of the organisational communication problems discussed in the previous section on marketing where the IGP groups were autonomous and made their own decisions, often from an uninformed base.

*A: we can send out to the Project groups, to send them out progress reports, invitations and occasions, information on what other people are doing, who is sewing what and what is their price so all project groups can have more information to make decisions, what is the price of the product in the local area where they operate, from them we want progress reports, what are they achieving, what are their problems, what are they charging for their products, then we can see if they understand what we are telling them about costing, they can inform others of what they are selling*

[Interview, RWA Manager AR Data Appendix 4 p: 33 2000]

With the board of directors, the communicative capability of E-commerce was considered to be a trust building tool for regular, timely, reporting, monitoring and communication purposes.

*A: progress reports, financial reports and they can see and we can see that thing are implemented they way we agree. Get from them, reports on projects in their areas, they can monitor us the RWA and our programmes to see we are doing right things*

[Interview, RWA Manager AR Data Appendix 4 p: 33 2000]

And with board members up-to-date information accompanied with an explanation of problems were seen to be important communication needs.

*G: we can send meeting schedule and minutes*  
[Interview, RWA Manager AR Data Appendix 4 p: 33 2000]

*A: quarterly donor reports. Quarterly board report with our problems.*  
[Interview, RWA Manager AR Data Appendix 4 p: 33 2000]

The scattered geographical location of the board members meant that board minutes were handed out only at the beginning of the next board meeting and this severely hampered progress in dealing with issues and problems in that the board members had often taken little action between meetings and attributed this to not having the minutes in good time.

The RWA management required board approval to implement new strategies and as some strategies impacted directly on the efficacy of marketing, such as bulk buying co-operatives to reduce production costs and improve competitive pricing, the late reporting impeded progress. The cost of phone communication (usually by cell phone) inhibited the use of this communication channel.

One perceived advantage of E-commerce over other forms of communication, for enabling organisation integration, was its storing, manipulating, aggregation and retrieval capability of information from disparate sources (for example, board reports, donor reports and government department tenders). This is described by one of the RWA managers.

*A: the email can help us; it can give us a record we can look at a history that we can refer to it can save time by not doing the same thing again because the record will show us what we have done. We can store our information and add it together. The fax phone and being in a meeting with a person is too expensive.*  
Data Appendix 4 p: 33 2000]

The integrative and storage capabilities of E-commerce were seen to be an aid to operational efficiency through the capability of speed and accuracy as well as providing useful documentary evidence which was not provided as easily using other methods of communication.

*B: the email is better than fax as you can combine everything in the computer and then send it out, with the fax it comes in we type it we send it out, it comes in with more things we type it again and print it out, with the email we can do things at the same time, people can reply immediately and here we do not need, ink, paper printers, workers, we cannot have excuses on the phone, 'I did not understand', 'I did not', 'I cannot'. With email we all know what we said. Some times there is too much information on the phone.*  
[Interview, RWA Manager AR Data Appendix 4 p: 32 2000]

*C: on the phone you can't tell everything, takes too long, if we have it written it is important because on the telephone, later people will say, oh I did not understand, I did not mean that, I forget, but with email we can have a record of everything, this solves problems, even yourself*

*you have something you can refer to and you do not forget important things, it makes a difference, you start fixing and updating your own work, then you do not have to keep phoning people again.*

[Interview, RWA Manager AR Data Appendix 4 p: 30 2000]

*A: we can talk to overseas people and dial directly, we do not have to wait for the operator all the morning we can go and do other things, we can get approval fast, we can get feedback fast and continue with the project.*

[Interview, RWA Manager AR Data Appendix 4 p: 44 2000]

This view was supported by another participant who mentioned the combination of efficiency, transactional cost reduction and the avoidance of time wasting activities as clear business advantages that can reduce time wasting activities such as queuing.

*G: before it seemed like only like messages to send (email) and I did not understand now I see it is a faster way of sending messages, it's not like the telephone where we have to talk a lot and spend a lot of money, I do not need to spend a long time going to the post office and queuing to buy stamps, its good because it's instant.*

[Interview, RWA Manager AR Data Appendix 4 p: 32 2000]

The potential opportunity to enhance operational efficiency and service levels, both to internal and external customers (such as donors and members), through increased consistency was expanded on by the following participants.

*A: we can use excel to work out all the costs to record all activities, to do this manually it is too much work, we need all the information in one place to be recorded and to calculate*

[Interview, RWA Manager AR Data Appendix 4 p: 41 2000]

*H: we can give good service by giving information and email can be simpler, we know that we can give the right information to many people and not a different story each time*

[Interview, RWA Manager AR Data Appendix 4 p: 41 2000]

*C: things go faster (with email), it saves time we know things from far away we can save our information and find it tomorrow*

[Interview, RWA Manager AR Data Appendix 4 p: 44 2000]

Additionally, saving time taken to complete business activities was seen as beneficial for the following reason.

*B: more time we can achieve more, people do not get angry quickly because things are not taking too long, we can overcome poverty by moving faster not taking too much time*

[Interview, RWA Manager AR Data Appendix 4 p: 45 2000]

### *Reduced Transactional Costs*

A simple costing exercise with the participants summarised the total amount spent on donor communication using the phone, fax and the post service as around R900 per month. This vital activity of regular donor reporting, nurturing, updating and seeking permission to change original terms of reference, increased the likelihood of repeat and or expanded funding. The cost of an Internet connection and the telephone costs required to accomplish the same result

through E-commerce was calculated as around R 250 per month. Although the managers had some idea of the use of E-commerce, this particular information was new to them.

*A : we can save a lot of money with the internet, we never knew this before , when we had the help from the university of the north no one told us about these costs and how we could save the money so much.*

[Interview, RWA Manager AR Data Appendix 4 p: 31 2000]

The high cost of connecting telephonically with international donors outside of South Africa was a major cost to the RWA. Additionally it was seen as less effective as well as more expensive than conducting the same communication through E-commerce.

*A: If I want to call donors I can spend R1000 doing this, if you have email we receive, send immediately fast like the phone I need a reply now and I can get what I want and save money. The more we try to generate the money and reduce costs it can take us some where and not just spend it on the telephone*

[Interview, RWA Manager AR Data Appendix 4 p: 50 2000]

E-commerce was perceived as a potential way to reduce these high costs as well as spreading the reach and richness of internal marketing (to donors) communication.

*G : It cuts out the use of phones we can send lots of info that is written, it keeps costs down and for development... we can communicate with lots of other donors and other people to what is right , what can we do can they help us and we know we can send more than words, like photos very cheaply*

[Interview, RWA Manager AR Data Appendix 4 p: 29 2000]

### *Reduced Agency costs*

The RWA management was aware of the high agency cost related to the inefficient use of human resources. Agency costs related to costs of people and management. Economic theory stated that an increase in business activity would lead to an increase in agency costs but E-commerce has turned this rational around and enabled more business activities across a wider spectrum of customers and markets at lower or equal costs to the previous level of business activities. This however, is a limited benefit in an organisation where people are mostly volunteers. The following example indicates one way that E-commerce could reduce agency costs.

*C: I hope we can start a little using it to help us buy in bulk using it (E-commerce) to ask for information.*

[Interview, RWA Manager AR Data Appendix 4 p: 27 2000]

Reducing costs through E-commerce to assist with the agency costs of bulk-buying production inputs for members were also viewed as a service to members in an acknowledgment of their importance as the RWA's internal customers.

*A: The most important changes are improvements in communication and understanding the project members are our customers and we must treat them, then this bulk buying can be some of the solution of problems for us to get money to pay the RWA phones and the technology of email will reduce our costs.*

[Interview, RWA Manager AR Data Appendix 4 p: 50 2000]

*G: we wanted email as we knew we could send messages fast, not walk to the post office (I hr each way) and queue and then spend a lot of money, we want to save money and save time, we can write a report and send it to the donor with email, we can save time, save money, sometimes the mail is sent back to us a long time after we post it, this gives problems as we miss things that have now happened without us. I think with the email this can be better*  
[Interview, RWA Manager AR Data Appendix 4 p: 30 2000]

### *Supporting Richness and Reach*

Traditionally, firms had to choose between richness and reach. Richness refers to the quality of information, as defined by the user and covers accuracy, customization, interactivity, and relevance. Reach is measured by the number of people who participate in the sharing of that information (Evans and Wurster 2000). E-commerce can provide for “mass customization” without compromising “mass production” (Hartman *et al.* 2000) and allows businesses to reach a large number of people with rich information. As a result E-commerce benefits can accrue from greater access to new markets and improved customer relationships. The following are some examples relating to the RWA perceptions of increased reach and richness and at reduced transactional cost through the use of E-commerce.

*C : Internet is making marketing simpler to get information and to communicate with people to get information from. Maybe you want to find out about a product and see what others have done, now when we do market research with the dept of agriculture it takes 30 minutes on the phone to Schoonert, all our questions he keeps coming back and going because he does not understand or does not know we can spend R200 on the telephone, its too long and too expensive.*

[Interview, RWA Manager AR Data Appendix 4 p: 30 2000]

*A: we can send Govt. reports to, send them to the agriculture (department) that we are involved with and find out what other depts. are going to help us, we want information on the role of different departments what is happening in our region .*

[Interview, RWA Manager AR Data Appendix 4 p: 22 2000]

*C: we could get a list of our best customers email addresses so we can tell them about when our chickens are ready and when we have special offers*

[Interview, RWA Manager AR Data Appendix 4 p: 22 2000]

### *Marketing*

Although transactional cost reduction, operational efficiency and richness and reach as reported on above are all marketing related factors, other more specific instances of where E-commerce could improve the marketing function where mentioned by participants. It was seen as an aid to marketing as it simplified events and lowered costs.

*A: It makes the process simpler and cheaper, getting information from people we want involved in the process, getting info we need today and tomorrow, comparing prices before we go and buy so we save money on transport and time in going to the places, it will be the cheapest communication, it gives us access for information more than before and we can deal with a certain issue and problem.*

[Interview, RWA Manager AR Data Appendix 4 p: 30 2000]

It was seen as an aid to addressing some information gaps and blockages as explained by the following manager

*C: if I can have access to technology I think the email and internet will give me more information I can know what others are doing we can market our product, if I have my own business I need other people to know I have this product and I can supply, more importantly I need to find out what people need before I can sell it*

[Interview, RWA Manager AR Data Appendix 4 p: 48 2000]

The reality of finding information conflicted with this impression of ease of use as shown by the following statement, articulated after an attempt had been made by the participants to find this type of information on the Internet.

*A: I now know internet it needs a person to understand it clearly, the way we have searched yesterday I find a lot of information and it is not what I want and I loose courage, now I see using key words. At the end you maybe do not get the information you need and want. I am confused*

[Interview, RWA Manager AR Data Appendix 4 p: 51 2000]

### *Difficulties and Constraints*

The participants raised a number of reservations of using E-commerce, such as lack of support, confidence levels and problems arising from unrealistic expectations, each of which is noted below.

Lack of support was a common theme relating to ICT implementation in rural areas as evidenced by the USA telecentre program. The problems of distance and limited resources meant that often people were barely introduced to E-commerce concepts and then expected to be able to use the technology. This was the case as explained by the following participant.

*A: I remember you telling us about the Internet and computers, it can help people with market research. You can use the Internet to find out information about suppliers and customers. We went back to our place when we left you and we bought the internet, we asked the university of the North to help us, they sent a student to help us for a morning, he showed us how to use email, when he left we could not make it work, we spent many nights working all night to help ourselves know email but we could not, we felt stupid, we stopped.*

[Interview, RWA Manager AR Data Appendix 4 p: 4 2000]

This situation can lower confidence levels and lead to a loss of self-esteem which can damage the developmental effort overall.

*A: Is it possible for us to use it, can we have the skills to use it, we had it before and it lay there we did not use it because we could not understand it how can we use it now, why now will it be a solution to our problems*

[Interview, RWA Manager AR Data Appendix 4 p: 27 2000]

## **Results**

Additionally, accountability can be a barrier to acceptance as people are scared to be the one who will be blamed for anything that goes wrong

*B: who's going to be accountable? 'I ask myself are we going to look after it who will be accountable if you get the internet who will we be responsible if I know this glass is mine , I will know I must put it away not leave it where it could be broken and stolen, I can blame myself, it must be this way with the internet .*

[Interview, RWA Manager AR Data Appendix 4 p: 27 2000]

Accountability is linked to ownership and often authentic ownership only shows up in a crisis, which destabilises the network. This was the case of the telecentre implementation briefly section 6.3.6. The introduction of the telecentre destabilised and disintegrated the RWA actor-network and in this way contributed to trust dissolving between the actants, which then affected the role of the RWA as an infomediary in the area.

The introduction and implementation of E-commerce as an 'island' with little support with other similar experiences and interventions in the locale can fail. There is a need to build on existing network and convergence activities in the area as this can promote information exchange and capacity building around the new E-commerce experiences and aid institutionalisation through strengthening the perplexity, consultation and hierarchy processes. Using E-commerce concepts that converge with other local communication processes and channels (such as local radio, other development projects and social organisations) can strengthen the network into which E commerce is introduced.

As many rural organisations rely on word of mouth for information they may develop unrealistic expectations of what technology is supposed to accomplish and use this unrealistic yardstick to judge their involvement with technology

*B: we tried, and everywhere we went, at meetings and conferences people told us how good the Internet is, how we can find customers, we felt very stupid because we know people are using the Internet to help them with business, but we could not do it. We know we can do market research with the Internet but how can we do this, we cannot understand how.*

[Interview, RWA Manager AR Data Appendix 4 p: 4 2000]

As the E-commerce model attempts to change the RWA model from a supply led model into a market demand model these unrealistic expectation limited its potential to succeed.

### 6.1.4 Summary

The previous section reported on the action research project results as they related to the three areas of the conceptual framework, namely, development, marketing and E-commerce. The framework assumed that it was the interaction of ICT applied to a particular business process, marketing, within a particular organisation and socio-economic context that could reveal the relevant and appropriate interconnections between all three components of the model, to the RWA's operations.

The next section examines the RWA and its telecentre implementation, using Actor-Network Theory (ANT) as described in section 5.5. ANT is used here, retrospectively, to trace events contributing to the destabilization of the RWA actor-network. The integration of results from the action research project and the actor-network analysis will shape the final part of this chapter, section 6.3 in which the conceptual framework is reviewed.

## 6.2 THE ACTOR-NETWORK PERSPECTIVE

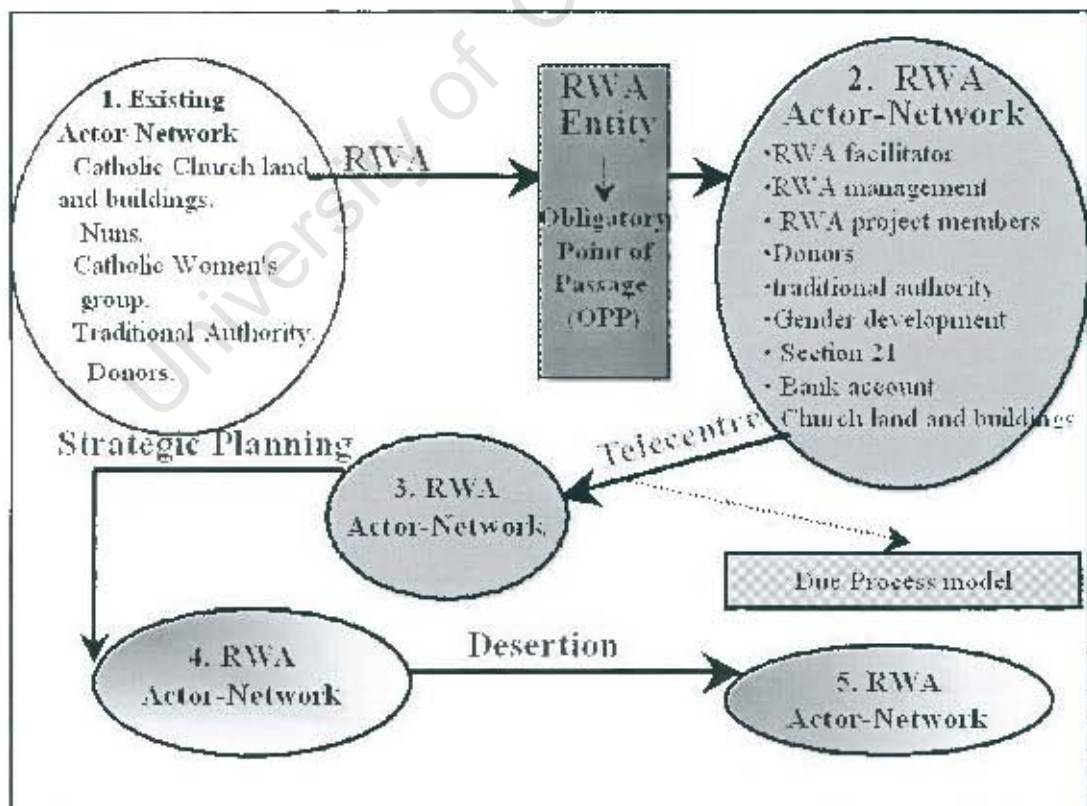


Figure 6.2 The RWA Actor-Network Events

This section traces four significant events that occurred in the network (interpreted using the concepts of translation described in section 5.5.5), and schematically depicted in Figure 6.2. This shows how the RWA actor-network grew, contracted, changed and stabilised and then, how this stable network was destabilised by the introduction and adoption of a new actant, the telecentre, into the network. The four events that are considered in this analysis took place as follows: The then existing development actor-network became the RWA actor-network in 1992, the telecentre was introduced in 1998, the strategic planning took place in 1999 and the desertion of the main RWA protagonist took place in June 2000.

### **6.2.1 The RWA Formation Event**

The ANT analysis begins with the RWA initiator's problematisation, the first moment of translation, which resulted in the RWA entity becoming the obligatory point of passage (OPP). Acquiring this indispensable position armed the initiator to impose her definition of the problem on others and then to create the necessary alliances to control resources needed to achieve particular outcomes. The event here will be examined through considering the roles and interests of the key actors, the *problematization* (where one set of actants defines a problem in such a way that other actants recognize it as their own problem), *interessement* (detaching actants from other networks and locking them into the problematisation), *enrolment* (growing the actor-network) and *mobilisation* (maintaining commitment).

*The role and interests of the key actants in the RWA actor-network:*

The RWA facilitator: The role of this actor was to implement successful, transformational development projects for women and children living in poverty. The actant's interest was served by fulfilling religious commitments to eradicate poverty and promote social justice.

The RWA management/leadership: The RWA facilitator identified a core of 4 women representing all RWA geographic, tribal and religious interests. Their role was to provide authentic local leadership and co-ordinate projects, which served their personal interests of community upliftment, increased self-esteem and the opportunity to secure an income.

Project members: These actants were the donor beneficiaries and were important actants necessary for the RWA to secure project donor funding. The members benefited from the donor resources that were channelled through the RWA bank account to provide seed funding

## **Results**

for food security gardens, to train members in vocational and business skills and to provide seed funding for starting self-help and sustainable income generating projects.

Donors: The donors provided the resources to the RWA (influenced by the legitimacy, reputation and track record of the RWA facilitator) to develop self-help projects to eradicate hunger and relieve poverty whilst promoting gender sensitive economic development through self-help projects. The donor recipients served donor interests through the efficient, honest and successful use of their funds.

Traditional authority: As the rural areas (the old apartheid homelands) in South Africa were in transition from traditional authority to democracy, the chiefs wielded immense power over land issues. No development could take place unless they sanctioned land usage and ownership. Their interests were, in the face of increasing democratic pressure, to retain some measure of power within their geographic areas, as this is where they generated their personal funding. People who saw the chiefs involved in and supporting successful development would be more amenable to the taxes imposed by the chiefs.

*Non-human actants:*

Gender development: In a patriarchal and racist society, the role of gendered development was to address these social iniquities as a route to tackling poverty and violence.

Section 21 legal status: This actant's purpose was to protect gendered development from unscrupulous outside, unwelcome interference and ensure a legal conflict resolution procedure to be available.

Bank account: The bank account ensures that development funds were channelled through the RWA. This implied accurate and ethical accounting of funds to donors and that the section 21 legal financial responsibility requirements were enacted. Secondly it secured the RWA entity as the OPP (obligatory point of passage) for local poverty alleviation and development.

Church land and buildings: These entities provided the RWA space to develop projects. The Church petitioned the land from the Chief for this use and this circumvented the land problem for development projects. Being on Church land, both protected gendered development from the chief's interference and gave the church considerable control over the RWA operations.

### *Problematization*

The RWA initiator (Sister Lydia), who is referred to here as the RWA facilitator, was the major *problematization* protagonist. She entered an existing poverty alleviation network (actor-network 1 in Figure 6.2). The actors comprised the Catholic Church, Saint Francis of Assisi nuns, the Catholic women's welfare group, traditional tribal authority (the chiefs), Catholic Church land and buildings, and donors. The RWA initiator on entering the network proceeded to re-problematize poverty alleviation and development promoting what at the time was, to the Catholic Church, heterodox development concepts.

*'Church development is institutional it is attaching things to church and church management. With the RWA it is the opposite, the members own the assets they own the land and the people show the developers what they want, where they want it and how they want it to happen. Here the church owns nothing, stays in the back ground it is the back seat driver. Institutional development is slower to respond to changing needs you have to give the people the steering wheel to shake people out of apathy and skill build and make them drive even though they do not know how to.'*

*The church development is by the missionaries and they want to bring poverty relief, but now the community takes on the identity of being poor. For the church, when they have poor people they have dependent people who need the church. The church gives welfare. For development we need to tell people they are not poor, they can earn money, welfare and development they are deadly enemies, the church wants to give everything for free and this welfare keeps the mind in poverty.*

[Interview, RWA Facilitator Appendix 3 p: 4,5 2000]

Her many years of Catholic Church based women's development work in Africa influenced her to consider an alternative ownership and self-help model to place control of projects and organisations in the hands of the beneficiaries, the women.

*'Self-help is more successful, flexible, responsive, it gives full responsibility includes a maintenance culture, faster. Volunteers can expand human resources without the need for new budgets, more authentic solutions, no rescue from failure, successful in creating responsibility.'*

*'Institutional development, failure is the institution failure. Self-help gets far more investment from the members, the failure is their failure, they feel shame and guilt and sorrow, they cannot just go home and leave the failure to the church.'*

[Interview, RWA Facilitator Appendix 3 p: 4,5 2000]

The initiator persuaded actants that to solve their poverty and hunger problems they needed an RWA development plan that would marshal particular skills and resources (donor support, infrastructure, and assets and people development). At this point the RWA facilitator was indispensable to addressing the development needs of the village, as she raised considerable finances, provided training, equipment and resources to an impoverished village, with the highest infant mortality rate in South Africa.

### **Results**

Men (the church priests, the chief, and his councillors) dominated the initial actor-network and part of the problematisation was to gender the development process through positioning the RWA as a regional gender development organisation in opposition to the existing tribally demarcated, religion-specific, restricted, male dominated actor-network. This resulted in widening participation and extending participation to women community leaders and others interested in self-help from both inside and outside of the Catholic Church and inside and outside of the Apel chief's jurisdiction.

In the course of this translation some of the original actants in the network, in particular the Catholic women's welfare and development program, were displaced. The existing board, which was overseeing the then development plan and the building plans for the first community resource centre, were also displaced by the re-problematisation.

### *Interessement*

This phase, which followed *problematisation*, saw the actants convening around an issue to strengthen the move towards the RWA becoming the OPP, whilst seeking to exclude dissenting voices. The initiator convinced actants to accept her definition and detach from the old actor-network to join the new one or to enrol directly into the new one. The coalescing issues were gender development and empowerment, self-help and independence from hunger, malnutrition and illiteracy. The RWA facilitator used the issue of ownership of the projects with their attendant assets and infrastructure as a successful interessement device.

*'What does it mean to people when they are in development but all is owned by the church, I saw 36 years of development owned by the church, they were not happy, I saw them criticise the church, they saw the church building a kingdom for itself, it possessed all the things in development, all the buildings, the equipment. So I said I must put development in for people, not for the church, for the people, mostly for the women, it is the women who get rid of the poverty. I did not want to expand the church property, I wanted to identify the real needs from the mouths of the women, to prioritise the needs with them and ask them and myself, how can we authentically give a solution and make the women own it?'*

[Interview, RWA Facilitator Appendix 3 p: 2 2000]

The RWA facilitator persuaded the chiefs to detach from the existing network and support gender development. Whilst this was not a natural choice for them, it was preferable to the loss of resources in their village, which would be transferred to other communities under different tribal authorities who supported gendered development projects.

### *Results*

### *Enrolment*

Enrolment is a political process and requires firstly the use of persuasion and then a maintenance strategy to maintain stability and alignment. The initiator proved adept at maintaining the network to ensure network stability. The area here was littered with development failures with a history of over 100 years of morbid conflict, which assumed an importunate importance to the future success of any development initiative.

The initiator persuaded actors from the existing actor-network to change networks (namely traditional authority) and to realign their support to the RWA entity as the OPP and form the RWA actor-network (actor-network 2 in Figure 6.2). This was secured through becoming indispensable to local development. Without the RWA entity the chiefs were restricted in the volume of successful projects they could politically leverage within their constituencies.

To increase enrolment effectiveness the RWA facilitator spent 7 months identifying authentic local women leaders and discussing and prioritising authentic development needs with them.

*'I did nothing for 6 months, I started no activities .The first task was to identify where the power and authority of the area was. To analyse the environment where the development is to be .To identity what available resources there are here, like human ability, land, soils, water and climate, raw materials, and what is the possibility to keep animals. I needed to find out what are the authentic needs. I asked myself how could development for women be implemented in a patriarchal African rural environment. What would work the best for the women and what would be long lasting? All development has been based on the concept of needs'*

*I have been in development in Africa for 36 years and now I see that nothing sustainable can be developed until the right leadership is in place, you must find the support, nurture it and make sure it will buy into what you do. I wanted to find the authentic leadership, so I looked for the women in the area who were already doing volunteer work. I found 43 women and we talked and we talked.*

[Interview, RWA facilitator Appendix 3 p: 2 2000]

### *Mobilisation*

Of importance in this moment was the establishment of the spokesperson's legitimacy (here it was the initiator that took this role). The RWA facilitator's approach quickly developed her legitimacy.

*I was lucky I told my parish these things and they gave me a free mandate. But always I know I am a temporary part in all of this, I know always that I will leave and so always I must first consider how can I remove myself and make sure the development is sustainable? Before you deliver the baby you must know who is going to look after it"). How will I use the funds responsibly? How will I justify the use of donor money to see that it is a long lasting project and will benefit the beneficiaries?*

[Interview, RWA facilitator Appendix 3 p: 2 2000]

### *Results*

*Mobilisation* was made possible through the emergence of 'spokespersons' and these agencies considerably strengthened the RWA actor-network by linking other agencies not linked before (for example, government departments, large service NGOs and national donors). The RWA facilitator mobilised a number of influential spokespersons such as the provincial premier and his wife. Many international visitors from donor agencies, embassies and church frequently visited the project sites witnessing the speedily achieved successful track record of project implementation. Traditional authority was given a high profile as an important component in this success.

The stability of both the actor-network and the OPP depended on the strength of the relationship between the spokespersons and other actants. In this translation there were actants from the previous actor-network who were excluded which eventually affected network development and a weakening of the spokesperson /agency dynamic.

The network continued to expand and stabilise around the traditional activities of rural development until 6 years later when the telecentre was inserted into the RWA developmental activities.

### **6.2.2 The Telecentre Event**

The new actant involved in this event was the Universal Service Agency (USA). The RWA telecentre was awarded by the South African government through the USA, a statutory body responsible for ensuring universal access to all telecommunications services for disadvantaged communities in South Africa.

#### *Roles and interests:*

The USA is a South African statutory body responsible for ensuring universal access to all telecommunications services, providing remote rural telecentres and socio-economic information services for disadvantaged communities in South Africa. Its interests were highly political, as it reported to the Department of Communications, and had specific targets of its own to achieve in order to satisfy performance targets.

*Problematization*

The legitimacy of the RWA candidature as the telecentre owner was not examined in relation to other possible contenders, nor were the potential vulnerabilities relating to gender owned ICT initiatives in the local traditional authority hierarchy debated. This was particularly remiss in light of the current and new changes to the political landscape (the new South African post-apartheid constitution) that legislated for gender equality whilst expediently maintaining gender-opposed traditional authority in the locality.

The USA was unclear as to how ICTs in disadvantaged areas could be used for development purposes, and so did not promote a shared aim beyond the rhetoric of universal access to ICTs.

*Interessement*

The choice of the RWA as the telecentre beneficiary seemed, superficially, a simple and workable option for the USA, with its impressive track record of traditional development successes and its existing building to physically house the telecentre in. The USA, in its race to achieve the objectives of its own actor-network (the Department of Communications) to implement 64 telecentres by a particular date and report back to the minister of Communications, neglected to adequately consider the particular RWA socio-political factors. Minimal effort was required to insert the new candidate for admission into the RWA actor-network. The pervasive poverty of these rural communities meant they welcomed anything free regardless of understanding, or not. The USA traversed the OPP effortlessly.

*Mobilisation*

The USA had little need of mobilisation strategies as it worked with a pre-determined plan dictating how the telecentre program would function and who and how the actants would relate to the telecentre program (Benjamin 2001b).

The USA, using a “one size fits all” approach unilaterally decided on equipment needs, on how the telecentre would be managed and who would own it. It was painted in the distinctive USA colours and called the USA telecentre. A contract was drawn up declaring the RWA the legal owner of the telecentre; this, however, proved to be a false claim as the USA unilaterally removed all of the telecentre equipment four years later, effectively destroying the telecentre operation and in complete contravention of the existing legal contract.

*Results*

The Due Process model as applied to the telecentre implementation (see section 5.5.6) shows that many questions were left unanswered including the following: Is the telecentre a development initiative? How will it enhance development? Is it a business? Is it both? How will we blend business and development into a meaningful hybrid? Where are the limits to blending business and development? What is the importance of the telecentre to the RWA? Does it fit into our strategic vision? Where does it fit? How does it fit? How can it improve our work? How can it help us access more profitable markets? Who will show us how to use it? Little discussion occurred regarding these perplexities and limited consultation happened as to how the telecentre would operate and how it would fit into the wider community. The central role of the telecentre became MS Word software training.

The next major event in the network was the strategic planning workshop, which is discussed in the next sub-section.

### 6.2.3 The Strategic Planning Event

In preparation for the departure of a macro-actant (the RWA facilitator) the RWA ran a strategic planning workshop, facilitated by outside, professional planners. The process objective was to produce an exit strategy that would soften the blow to the network of the loss of the major protagonist.

*'We did the strategic planning process and after we started the board to help us. We decided to re engineer the organisation, we cannot be like Lydia, and we knew we could not be Lydia. What she said was obeyed, she chased all the problems away with the Catholic Church and the chief and the women's complaints and got on with work.*

[RWA Manager A. AR data appendix 4 2002 p.1]

*Lydia's way of leading was good, she kept people away so that work could be done and she was able to develop women. But we cannot be like her, we need to put democracy in, but it brings us many problems, we cannot do work like Lydia.*

[RWA Manager C. AR data appendix 4 2002 p.3]

#### *Roles and interests:*

The RWA interim board: To guide, ethically and legally, the direction and operations of the RWA within the existing legislative framework and to secure the long-term sustainability of the organisation. All positions were voluntary and unpaid; it is assumed that board members are fulfilling interests relating to philanthropy and affiliation.

The strategic planning facilitators: to provide and guide the strategic planning workshop and produce documented recommendations. The interests of the facilitators were predominately financial. They charged a market related fee.

## **Results**

RWA Management: to provide the operational information required to formulate strategic objectives. Their interest was to restructure the organisation to allow for responsibility to be further distributed amongst the RWA membership.

At the time of the strategic planning workshop a number of inscriptions were in place to serve the needs of the RWA:

- Assets registers for all RWA owned resources.
- Land agreements relating to the donated land from the chiefs to the RWA
- Provision for solving possible disputes arising from RWA property (buildings, offices and poultry houses) located on church land
- Letters of ownership for the gifts given to volunteers by Sister Lydia in lieu of salary payments
- Section 21 legal incorporation including a constitution and conflict resolution procedures.
- Annual audited financial reports
- Donor funding project agreements
- Telecentre ownership agreement

The new inscriptions generated by the strategic planning facilitation were

- Vehicle maintenance and replacement account (charging R3 per km for vehicle use)
- Management systems
- Organisational structure
- RWA management job contracts and position descriptions
- Telecentre agreement and equipment description

These inscriptions were intended to ensure the protection of the RWA interests. The power of the inscription depended on the irreversibility of the network they are inscribed into. However, they proved to be weak as many were ignored following the loss of the major protagonist, Sister Lydia. This is discussed in the following desertion event.

#### **6.2.4 The Desertion Event**

Stability and social order, according to ANT, are continually negotiated as a social process of aligning interests and the departure of a major actant provides fertile opportunity for renegotiation of an actor-network. The RWA facilitator (Sister Lydia), the major RWA actor-network actant, left in June 2001 and shortly thereafter the RWA management team began to implement some of the strategic planning inscriptions. This, however, resulted in a betrayal from one of the actants (the garden ladies). A betrayal is a situation when actants do not abide by the agreements (translations) previously achieved by their representatives through the moments of *problematization*, *interessement*, *enrolment* and *mobilization*. The following incidents are examples of the effects of betrayal as network interests began to realign:

### ***Results***

- In March 2002 the Church representatives, refusing to accept the inscriptions relating to RWA property rights on Church land, requested the RWA to move, as they now wanted the property for church development projects. The inscriber's power (Sister Lydia) seemed weakened in her absence. The church required very little effort to ignore the RWA policy and asset register inscriptions in place.
- In April 2002 the telecentre guard was murdered and the telecentre ownership inscription also proved weak as the next day the USA representative removed all of the telecentre equipment. This was contrary to the inscribed agreements and was followed by new, unilaterally imposed conditions for the return of the equipment, namely the installation of a R40, 000 alarm system, wired to the local police station.
- The murder coupled with the theft of RWA agricultural equipment prompted the garden ladies project members to make witchcraft accusations and betrayed the RWA actor-network by calling on the traditional authority network to intervene and in doing so it refused to accept the inscriptions relating to the RWA board of director's power and the RWA management powers. The Traditional authority actor-network transcended all of the RWA inscriptions. The RWA was paralysed and rendered inoperable through the non-performance of its inscriptions.

In terms of ANT analysis these incidents suggest that the actor-network, once considered irreversible, began to destabilize and the RWA, once considered a black box, began to leak. Building black boxes occurs through enrolling allies and controlling them across time and space. The initial stabilisation of the RWA actor-network conferred black box status on the RWA rendering its beliefs, practices and actions normative to the other actants and taken as wisdom. But the controversies resulting from the RWA events and incidents, described above, contributed to betraying and questioning the RWA black-box status. As power is recursively woven into the intricate and changing interrelationships within the network, its effects are relational. The desertion of the major RWA actor-network actants weakened the links in the network. This resulted in a group of deviant network elements (those who had been displaced from the previous, original network) attempting to impose their world order on the RWA actor-network using the power they raised from the traditional tribal authority actor-network to destabilise the RWA actor-network.

This analysis began by tracing a number of pivotal events in the RWA actor-network, which highlighted that the RWA telecentre was inserted into a complex socio-political context amongst a myriad of actors and actor-networks. When these actors clashed, the telecentre was an unwitting victim of the resulting conflict. In this way the ICT implementation contributed to transforming a successful actor-network into a turbulent destabilised network reeling from the aftershocks of controversies and betrayal and the subsequent unravelling of the RWA

black-box status. The following sub-section discusses some of the factors contributing to the RWA actor-network instability.

### 6.2.5 Network Instability

A number of network conditions and influences contributed to the RWA actor-network instability and each of the following will be covered in this section.

- Network Domination
- Transitory Mobilisation
- Implementing Strategic Planning Outcomes
- Fair Process
- Asymmetrical Organisational Culture

#### *Network Domination*

The RWA actor-network was (necessarily so) a dominated network depending on one major actant/spokesperson (the RWA facilitator) for the ordering of its power relations with other major actants. As the spokesperson is a translator who maps out the geography of necessary points of passage for those elements that wish to continue and exist, it follows that her departure could radically alter the dynamics of the network.

Whilst the RWA facilitator remained in the network, opposition to the implemented changes in RWA management authority and the inclusion of a board of directors was weak and inconsequential.

*'She was the boss mostly, she was not democratic, but she was mixed as sometimes she would tell you to what you thought should be done and make your own decisions. When Lydia left it was dangerous for us, we needed democracy so all the women must take responsibility, we cannot be responsible for the things, all the things, we wanted the women to have accountabilities, but many women saw this freedom to give themselves things, we did not want blame for people where we could not do anything, Lydia could be strong and tell the chief and tell the father, we cannot be this. Lydia did not need a board, she knew a board is difficult and she worked by telling people what can do.'*

[RWA Manager A. AR data appendix 4 2002 p.2]

When the RWA facilitator left the network it was at the time when new actants (the board of directors) were admitted and when old actants (RWA members) were repositioned into more powerful roles in the RWA decision-making process. Durable networks are derived from durability between the actants and the departure of the RWA facilitator weakened the network cohesion. Each actant can belong to other actor-networks and changes in the durability of one network ricocheted off the existing power relations and hence the durability of other actor-networks, detrimentally affecting the RWA network. This was evidenced by the action of the

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members of the RWA garden ladies project in mobilising the power of traditional authority against the RWA legitimate authority. The difficulties experienced by the RWA management's ability to operate, after these changes, highlighted that the RWA actor-network predominantly relied on the attitude and action of a single charismatic actant to maintain its durability.

### *Transitory mobilisation*

A chain is only as strong as its weakest link. Network strength is all about a series of decisions about alliances, who to collaborate with and who to write off. Every time an ally is abandoned a new one needs to be recruited. Alliances are Machiavellian as illustrated by the comment below.

*Lydia bulldozed the chief from the start and said anything she did in Apel was not only for the people of Apel, she told him then she would move her resources to another village, maybe Nkwana and then he changed his mind and said the projects in Apel were for the other villages too....*

[Church official X, appendix 3.p 6 2002]

Each modification to the network affects both the actants in the network as well as the actants in the actant's networks. An entity, in an actor world, only exists in context and in juxtaposition to other actants. When one of these elements is removed the whole structure shifts and changes. It is the actor juxtapositions that give the cohesion, consistency and structure of relations that exist between the network components. Initially the events related above (namely the RWA formation and the introduction of the telecentre), appeared to increase network convergence and network irreversibility. However, subsequent events, particularly the desertion of the major actant, showed that many weaknesses existed, including the existence of key, but weak and ultimately unenforceable inscriptions. The resulting controversies caused the RWA actor-network to leak, providing the opportunity for some of the previously displaced actants (namely the leader of the catholic welfare and development women's group) to engineer betrayal strategies within the RWA actor-network. As there is never a fully resolved relationship in the network, each actant who takes the project or action further can do so in a different direction than intended by the previous actor. The, until then, good communications between the actors involved in the network of alliances were altered by the desertion of the RWA facilitator.

*Before, the chief was helping, but he changed, now Lillian (an RWA manager) must stay away from us, her husband is the chiefs brother, why must she stay away, we have not sorted the problem, how can she stay away, the car is in her name, she must come and help solve it , the chief sees Lilian staying home, why does he not ask her, how can the chief let women walk*

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*away before the problem is sorted. It is useless the ones who continue to work will be the ones who will be put in the fire, the municipality it does not help us, it says it cannot do anything.*

*No one wants to take responsibility they blame dirty things on us, we are suffering because Lydia gave us things as a reward. No one is attending to the crime and killing. The board refused to sign our contracts they will not sign because they say there is no money to pay, we are never paid we know this but we need contracts.*

[RWA Manager B. AR data appendix 4 2002 p.4]

Certain actants (traditional authority and church officials) backed out of the RWA actor-network- perhaps because they were not originally authentically enrolled. It could be that these actants falsely agreed to enrolment knowing that at a later stage (when huge resources had been secured) they could, in true machiavellian style, destabilise the network for their own benefit (inheriting resources).

*'One problem is the chiefs look at their village needs and they do not work together in a united way to uplift the area, they want to do things for their village only, now we have a big problem because the RWA is for all women, not just the women in Apel'.*

[RWA Manager B. AR data appendix 4 2002 p.3]

Each actor is embedded in a socio-cultural and institutional environment and can be characterised by his or her thinking and behavioural habits as part of a number of different roles (for example the members of the RWA garden ladies project were also mothers and the chief's subjects). The members of the RWA garden ladies project were historically satisfied to abide by the RWA translations until the strategic planning translation inscribed a detrimental (to them) change in use of RWA assets (they were now required to pay substantially increased usage fees for use of the RWA vehicle).

Changes in network relationships need to be constantly reviewed and maintained through the devices of *interressement* but this seemed to have been neglected here. The changes in the relationship between the RWA management and the traditional leaders were not sufficiently reviewed in the light of the RWA facilitator's desertion and the attendant organisational changes. Unable to now satisfy their needs as members of the RWA actor-network, they switched allegiance back into the traditional authority actor-network.

Disturbances in rural African social life are sometimes interpreted as witchcraft and the tragic murder of the telecentre guard became the fulcrum for witchcraft accusations used to exploit old jealousies, old grudges and grievances. Witchcraft is a theory of evil, and RWA members were living in a world where witchcraft was pervasive and accusations were often an inherently political act.

*'We have this problem of not confronting people, they use the system of gossiping (witchcraft accusations) and we become targets in the community, you frighten yourself thinking they can come to your house and you have the situation where people are killed. People will not say what they have seen even when they have seen wrongdoing they fear what will happen to them from other powerful people.*

[RWA Manager A. AR data appendix 4 2002 p.1]

Predominately used against older and more successful or powerful women, the RWA garden ladies (the older illiterate members and most vulnerable members) now used this political weapon against the RWA management.

*'Now the Board wants to resign, no one wants to disobey the chief, we always have the meeting cancelled, people are gossiping people are scared, we are having a finger pointed at us, they accuse us of stealing from them we have asked for 2 years to have job contracts to have job descriptions and still we have none, how can we protect ourselves when we have no documents about our work and what our job is? The garden ladies accuse us they say (the garden ladies) " we will never trust the management, Lydia she is creating jobs for our children and you are in their office. We need our children in the office as Lydia promised'*

[RWA Manager A. AR data appendix 4 2002 p.2]

Witchcraft accusations can only be dealt with by the chief's appointment of a sangoma. Making these accusations effectively castrated the RWA actor-network. Once the chief was involved, the garden ladies disingenuously exploited the situation to make accusations of theft, misappropriation of funds and assets against the RWA management in an attempt to wrest the considerable assets away from the RWA and into their hands.

### *Implementing Strategic Planning Outcomes*

As strategic planning is a process in which a particular strategy, a particular mode of ordering, is delegated into non-human materials the obduracy of the organisation can be affected by the strength of the inscription. The purpose of the strategic planning was to provide solutions to the anticipated problems caused by the desertion of the RWA facilitator. Whilst these solutions were intended as final fixes they generated a new set of problems. These new problems seemed to be bigger, worse and more complicated than the original problem, creating a situation described by the German word, "verschlimmbessern", which translated literally means, to fix something more broken.

The strategic planning output contributed to 'fixing something more broken'. This situation was largely a function of the limited scope in strategy formulation where the ripple or spin-off effects of a particular action were not considered. In the case of the RWA management, their attempts to democratise and render the organisation financially sustainable were jeopardised through the advice given to them by the strategic planning facilitators, 'outsiders', with

limited understanding of the complex socio-political context into which their simplistic recommendations would be catastrophically inserted.

Organisational processes (of which strategic planning is one) consist of multiple events. In every organisation there are multiple events, chains of events and parallel events. Individuals have unique interpretations of the phenomena, unique attributions of causality to events surrounding them and unique interpretations and sense-making of others' behaviours that they observe. Often information is ambiguous, the ambiguity stemming from the absence of mental models necessary to interpret the information one has and from the incongruent interpretations of this information (Eylon and Allison 2002). The more ambiguous the information, the more likely people will seek out others with whom to resolve the ambiguity. It seems the RWA management (under the direction of the board-appointed strategic planning facilitators) did not adequately convey an understanding of what they were doing and did not make the strategic planning inscription meaningful to its recipients.

*We went to the women and we had meetings with them for three weeks, we had workshops to tell them about the new policies. We told them we must run like this now, we have an account for the vehicles, they must be paid for, but we did not have the money to travel and see the women to discuss all these things*

*The communication is a problem we talk to the centre executive and then they must talk to the members in their centres, but we know they do not do this and the women complain we do not tell them things*

[RWA Manager A. AR data appendix 4 2002 p.2/3]

### *Fair Process*

Fair process (Kim and Mauborgne 1997) is linked to concepts of justice, and has its roots in England where in the 1970's researchers studied legal settings to understand what makes people trust a system to the extent that they will obey it without the need for coercion. Findings suggest that the individuals affected by decisions made, need to be included in the decision making process as people do not solely focus on outcomes but on the processes that produce outcomes. Fair process does not advocate consensual decision making, it does not seek harmony or to win support through compromises that accommodates everyone's opinions, needs and interest. People need to know that they have had their say and that their point of view was considered, even if it was rejected. Fair process profoundly influences attitudes and builds trust. The relevancy of this concept across a range of cultures and social settings has been demonstrated and shown to be particularly relevant to strategic decision-making.

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One of the network actants (The garden ladies) were not included in the strategic planning, nor consulted about the process or its outcomes and were presented with a 'done deal'. Angered by what they perceived as the violation of fair process, more than the restoration of fair process, they wanted what Kim and Mauborgne (1997) describe as retributive justice. Positioning themselves as victims they wanted to both punish and have vengeance on the RWA management as compensation for the perceived violation and disrespect the unfair process signalled to them.

### *Asymmetrical Organisational Culture*

The RWA organisation operated within a particular social culture. Organisational culture is the common perception held by the organisation's members as a system of shared meaning. Schein (1985:9) defines organisational culture as '*...a pattern of basic assumptions – invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration - that has worked well enough to be considered valuable, and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to these problems*'. When a major problem arose the RWA management and the other members of the actor-network were no longer sharing the same beliefs, nor working from the same cultural understanding in terms of solving the problem.

*The Apel Catholic Church women consider the RWA (management team) arrogant, aggressive and autocratic...*

[Church official X, appendix 3 p 6 2002]

This was further evidenced through the one actant consulting the chief and requesting a sangoma to solve the problems. The RWA management did not accept that the role of a sangoma was applicable to the RWA's constituted conflict resolution process.

*I do not have the traditional medicine beliefs why must I have to accept this and other peoples beliefs, but all must believe the same thing . The board knows all the problems, I will never go back to Apel, never ever, when the women pushed us out they thought it would be small, just go, now they know the problem is big. No one wants to take responsibility they blame dirty things on us , we are suffering because J gave us things as reward*

[RWA Manager A. AR data appendix 4 2002 p.3]

The following subsection discusses the telecentre institutionalisation using Latour's Due Process model. This is an ANT tool, which can be used to look at the specific problem of introducing a new actant (also known as a candidate for admission) into the network. This model, grounded in ANT, is a practical, valuable analytic device used to overcome the

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mammoth complexity involved in investigating both human and non human-network processes.

### **6.2.6 The Telecentre Institutionalisation**

Successful ICT introduction is multidimensional. The socio-political context, changes in organisational structures, in work processes and in products, services and markets can all be determinants of ICT acceptance. The RWA telecentre implementation is analysed briefly in section 5.5.6 using Latour's Due Process model as a sense-making device to view why the telecentre failed to institutionalise. The main findings of the Due Process analysis are discussed below.

The RWA telecentre was inserted into a complex socio-political context amongst a myriad of actors and actor-networks. When these actors clashed, the telecentre was an unwitting victim of the resulting conflict. The implementation of the telecentre barely paid lip service to the social components of the development process, such as gender, traditional authority and the implications of witchcraft accusations within a community that historically has been traumatized and destabilized by this phenomenon. The USA deterministically drove the RWA telecentre implementation, with little authentic consultation with the wider community. (Rhodes 2004)

The lack of debate and consultation around many of the telecentre issues resulted in situating the telecentre with little reference to the local habitat. Additionally, no vision of the position of the telecentre in the RWA actor-network hierarchy was formulated. As it was a requirement from the USA that the telecentre operate as an autonomous self-sustaining business, under strong USA branding, it was, in reality, detached from the RWA organisational strengths and influences. Little attempt to integrate and align the telecentre with the RWA development and business objectives was visible. Consequently, insignificant guidance on such issues as pricing, the provision of services, customer care, opening hours, etc., was given. Ominously, in its first RWA strategic planning workshop, in 2002, the telecentre was not on the agenda.

#### *Integration of Strategy and Socio-Political Context*

The RWA telecentre implementation exposes the vulnerability of failing to cohesively integrate technology implementation both with the social context and with the dynamics of the *in situ* actor-network. McMaster *et al.* (1998:354) found that '*...in IS development, the*

*tradition has been to separate social and technical issues and to apply different treatments. This means that the due process is not enacted and the likelihood of the network becoming aligned is reduced....'* Applying the Due Process model retrospectively uncovers the fact-making trajectory and shows that effectively the RWA telecentre, as a candidate for admission into the RWA actor-network, was hurled from the moment of entrance practically into the fourth moment, institutionalisation, leaping across the processes of perplexity, consultation and hierarchy.

If the innovation is expected to be institutionalised into the network without first passing through consultation, the innovation may be rejected or excluded from the network. The processes of perplexity, consultation and hierarchy are important stabilisers and valuable in order to saturate the candidate for inclusion with the values and norms required for the candidate to become institutionalised within the actor-network.

Whilst not a prerequisite for success, the Due Process model offers a framework that, when followed, may increase the likelihood of the local institutionalisation of ICTs. Attempts made by a government body (the USA) to institutionalise ICTs before submitting them to the Due Process of perplexity, consultation and hierarchy proved a failure. The concomitant failed human expectations, loss of self-esteem and diminished social cohesiveness proved detrimental to the socio-political development process and contributed to the partial destruction of the until then successful women's development organisation.

This analysis highlights the dangers related to the separation of strategy and implementation. Roode (2002), in his analysis of the South African ICT Sector Development Framework, observes a notable flaw in the strategy development processes as the separation of strategy formulation and implementation. He notes that *'While the separation of strategy formulation and implementation does not have to lead to failure, it all too often does – even to default failure when implementation never starts, as if the implementers were almost scared by the sheer complexity of the blueprints provided by the strategists'*.

The implementation of the telecentre barely paid lip service to the social components of the development process, such as gender, traditional authority and the implications of witchcraft accusations within a community that historically had been traumatized and destabilized by this phenomenon. The USA deterministically drove the RWA telecentre implementation, with little authentic consultation with the wider community.

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### *Multiple Actor-Network Membership*

The USA belonged to another actor-network that was driving the process and as such was merely an implementer of government strategy. The strategy was formulated outside of the recipient actor-network and aligned, primarily, with government strategy (the need to be seen to be alleviating poverty speedily and effectively), and not with consensual negotiated community based development objectives. A consequence of this was that the telecentre suffered from a trajectory failure. '*...Where the trajectory was visible after the fact, but subject to a considerable degree of happenstance. Our concern with projectory means we move beyond such passive chronicling to exert influence and steer the direction in which a project moves.*' (McMaster *et al.* 1998: 353). Following the Due Process model can increase the probability of a successful projectory outcome, as it can integrate and align technology implementation with organisational strategy to exert influence and steer the direction in which the implementation trajects. In effect, the lack of attention to due process reduced the RWA role to that of telecentre custodian and lacking a purposefully directed trajectory, it became inoperable and unsupported.

The USA operated in a business process mode to implement technology into a development context. Business process mode tends to be linear, formal, with logical criteria to achieve the optimal outcome. Development, however, is a complex, constrained, informal process with objectives that encompass social-political and economic factors. This situation provides a vivid example of western rationalisation and linear determinism meeting the chaos of development, where one actor's (generally the more powerful) planning objectives are pushed through at the expense of the others.

### **6.2.7 Summary**

Sustainability implies long-term stability and depends on the actors in the network continuing to share the same goals and approaches, philosophy and terminology.

The ANT analysis encapsulates the concepts of power, position, organisation, arena and agenda as all being part of the dynamics of an actor-network. All with the ability to either increase or decrease network convergence. Each actor is embedded in a socio-cultural institutional environment. An actant who fails to solve a problem relating to the actor-network from within the network may, as the RWA project members did, go out of one network and into another and in so doing create destabilising disturbances. The RWA's vacillating allies

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inflicted highly damaging changes to their political fortunes, posing vexing problems to the continuance of the RWA as the OPP for development in the region. The success of integrating ICTs as a development tool along with dismantling stifling controls on gender development seemed to evaporate during the grinding collision with traditional authority.

### **6.3 REVIEWING THE CONCEPTUAL FRAMEWORK**

The first part of this chapter focused on the analysis of the action research project results, framed within the areas of development, marketing and E-commerce, as a means of mapping the RWA managers' marketing and E-commerce mental maps in relation to the particular development context. The second part used ANT analysis to show how the RWA actor-network grew, contracted, changed and stabilised and then, how this stable network was destabilised by the introduction and adoption of a new actant, the telecentre, into the network.

The aim of this section is to draw conclusions relating to the initial conceptual framework. Starting with development, the ANT analysis revealed that an established and stable network (the RWA actor-network) unravelled resulting in the partial destruction of a successful women's rural development organisation. This analysis pointed to the weak durability of the RWA ownership noted through the challenge to its authority from some of the other actor-network members such as the church and tribal authority. Whilst ownership had originally been secured through a process of participation, the displacement of some of the original actants resulted in a betrayal that destabilised the RWA actor-network. The analysis shows the perils for an actor-network when a major protagonist departed from it. In this case the actants (the RWA managers) that assumed the vacated leadership mantle suffered from an inability to use the interessement resources necessary to maintain network relationships. Some of the actants proved to be transitory as shown by the removal of their support from the RWA actor-network. This opened up some network weaknesses to scrutiny and exploitation and the RWA, assumed until this point to be black boxed, leaked as a result of controversies led by previously displaced network actants. A consideration of the social impacts of witchcraft cannot be divorced from the importance of building sustainable development in a fledgling democracy new to gender equality. Historically and universally used as a violent gender oppression strategy gender inequality is still a factor that can be used by displaced actor-network actants to perpetuate betrayal as a means to destabilising the network.

*The ICT Implementation*

A successful outcome for an ICT implementation is irreversible black-boxing (in other words its adoption and diffusion) and this requires that new candidates for inclusion into a network (such as the telecentre) are considered as part of a process that includes the existing collective of actants in the Due Process model. Applying the Due Process model retrospectively showed that the ICT implementation (the RWA telecentre) circumvented the due process and jumped from perplexity to institutionalization, neglecting the intermediate steps of consultation and hierarchy. This then contributed to the emergence of an unstable network, which ultimately stalled the development process. Where the ICT fails to assess and articulate deprivations and potentialities within a community it is unlikely to become empowered as an economic satisfier of an articulated need.

*Co-ordination and alignment of efforts undertaken by all actors involved at local, national and global levels*

The RWA development model incorporated some people-centred development concepts such as life-sustenance, self-esteem and freedom. However, expanding the previous range of choices, reducing external dependence and internal servitude proved to be less than adequate as the RWA was perpetually constrained by its dependency relations at regional and national levels. This was the result of the RWA attempting to achieve self-reliance through limited social and economic interaction in a small physical space, which constrained development. The RWA self-reliance isolationist notions were restrictive to the marketing of outputs of a supply-led production model within a peripheral and marginalised microenvironment. The success of external marketing is impacted on by wider horizontal and vertical relationships. Sustainable development is achieved through self-reliant human scale development, which flows from the individual level, upward to the regional and national levels. These levels are both horizontally interdependent and vertically complementary (Roode 2002).

The role of the state in securing self-reliance is fundamental, as the spontaneous activity of local groups can never have any real impact if not nurtured and empowered through the action of planners and politicians. Global processes and self-reliant micro-organizations and processes need to support each other effectively. Both vertical and horizontal complementarity between the micro organizations are required for self-reliance to succeed. This approach was not the observable reality in rural underdevelopment in a South African ex-Bantustan area, crippled by infrastructural deficiencies. The apartheid spatial divisions

were a costly legacy, isolating many communities geographically, socially and economically and rendering the poor dependent on the central economy.

The area of marketing, which was understood as an extension of the development context, was seen to be both connected to and different from development and this epistemological ambiguity caused problems in applying the marketing concept. Additionally, the structure and functioning of the RWA added barriers to the effective implementation of marketing within the organisation. The concepts of marketing clashed with the cultural behaviour of the RWA members who produced the RWA goods and services. This situation was exacerbated in that marketing skills were not diffused to the members. This lack of understanding coupled with the cultural resistance to change their way of producing was a deterrent to the use of marketing. ICTs increase market efficiency through addressing information gaps and informing and strengthening decision-making. However, this is only realisable if those participating in the process understand the principles of marketing and that they can be applied in the particular context.

### *E-commerce as an enabler*

Marketing was considered by the participants to be an organisational enabler through the directing of a unified integrated approach to conducting business. E-commerce was seen to enable this process through its perceived advantages over existing communication channels such as the telephone, mail and fax. These advantages included the ability to store, retrieve, manipulate, aggregate and disseminate data and information in a cost-effective and efficient way. Further, these advantages were considered as a means to counteract some of the existing organisational difficulties that inhibited the successful uptake of a marketing approach through the substantial increase of marketing communication ability which could change the supply led model into a market demand model. Additionally, it was seen as an approach to building, enhancing and maintaining interactive relationships electronically. In this way it mirrored the functions of the infomediary model.

Although it was intended in this research to view E-commerce as a marketing process enabler, the research showed that the research participants saw the use of E-commerce in a wider context than this. They viewed the combination of ICTs (E-commerce) and marketing as a way to support organisational change. This finding supports Avgerou's (1998) research where she found that IT systems deliver sizeable benefits when they are part of an effort to introduce wider changes in the organisation. This implies that the focus should first be on adequate

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planning for the necessary organisational change in order to adapt to and take advantage of ICTs.

This research supported the notion that successful ICT adoption must be in conjunction with changes in organisational structure, culture and work processes in a contextually appropriate way including a sufficient assessment of the local socio-political risks. Initiatives should be driven by user demands, identified and realized through direct participation and ownership.

Although development, marketing and E-commerce interact with and impact on each other, it is the difficulties at the developmental level that will inhibit the successful uptake of both marketing and E-commerce. As this research shows, the research participants perceived the marketing business process, powered by E-commerce, as a means to removing the developmental blockages to securing a marketing approach.

The next, and last, chapter concludes the research by summarising the contribution of each chapter towards addressing the research questions, a discussion of the research contributions and the limitations of this work along with the implications drawn for future research work.

## **CHAPTER SEVEN: CONCLUSIONS**

### **7.0 INTRODUCTION**

The emergence of new ICTs has affected theoretical and practical assumptions about the role of technology in socio-economic development. Arguments abound as to whether these new technologies can shape development, are appropriate to local culture and fit with the development approach used. The link between technological growth and socio-economic development is generally based on historical facts found in western industrialized world experiences. Whilst popular development dialectical reasoning points to the promise of significant economic and social transformations, little effort, so far, has been made to understand the changes enabled by the new technologies and how they could be usefully applied to an African rural environment.

The aim of this research has been to examine how ICTs can be integrated within a particular rural development organisation, and to uncover new ways and models that could further the local appropriation of technology for improving the effectiveness of trading activities at the local economic level. To this end decision-makers' perception on the use of ICTs to address information gaps and blockages and to inform and strengthen marketing planning decision-making capacities were studied using an action research approach.

This chapter looks at how each chapter in the thesis individually contributed towards the research questions, how the research questions were addressed, what the theoretical, methodological and practical contributions of the research were and finally it discusses the research limitations and further research opportunities.

### **7.1 OVERVIEW OF THE RESEARCH**

Chapter one investigated the nature of the research area addressed in this thesis. Whilst popular development discourse suggested the possibility of significant economic and social transformations resulting from ICTs, little focus has been directed to understand the changes enabled by the new technologies, and how they can be usefully applied to an African rural development environment. Although there have been a number of attempts using different ICT models to improve economic development in rural Africa, many projects have failed or resulted in limited economic success (Duncombe and Heeks 2001, Rogerson 2000, Sharma *et al.* 1990).

The latter perspective was relevant to the case of an African rural women's development organisation, the RWA, who despite the presence of a wide portfolio of organizational assets, including ICTs in the form of a telecentre, were unable to substantially impact on local economic development. Whilst literature search revealed few examples, and little empirical research, of ICT use within an African, gendered, rural, socio-economic development context it did suggest the lack of integration of marketing information and leadership skills as a missing factor in local socio-economic development (Mchombu 2000, Miller and Levin, 1993).

Chapter one introduced a number of major viewpoints, which formed the basis of this research, these being marketing, as a business process, and the role of ICTs to empower this business process. Research findings (World Bank Group Development Report on Poverty 2001) suggested that the most effective anti-poverty policies were those that enhanced the efficiency of trading markets. Marketing weakness was also identified (Phororo and Prasad 1996, Sotshongaye and Moller 2000) as a constraint to expanding economic activity. However, the existing research did not provide insights into how to usefully integrate ICT linked marketing activities within the development context.

Additionally, to optimize success, organizational change, such as the introduction of marketing, must be locally meaningful, not merely a transfer of organizational practices. Organizational innovation must be appropriated within the local socio-economic context. This study inquired into the appropriation of ICTs, relating them to a specific organizational process - marketing - within a rural, gender development organization.

It was noted that often the substantive issues relating to the process of developing and implementing ICTs in regard to work processes were ignored and that there was a need for better fieldwork to analyse the dynamic interplay between the social and the organisational setting in which the ICT is embedded (Monteleagre and Ramiro 1999). The nature of the problem, as defined in this chapter, suggested the importance of exploring, within a particular local context and organization, the conceptual links between development, marketing and ICTs.

Chapter two, the literature survey, focused on the three components that shaped the research, these being development, marketing and ICTs. ICTs were considered within the framework of E-commerce. These areas were studied in order to justify the selection of factors to be investigated. This chapter highlighted the plethora of development theories, suggesting that

development has no accepted doctrine or paradigm. It was demonstrated that for the last forty odd years development had been a catastrophic exercise in third world underdevelopment, attributed in part to the predominantly economic nature of mainstream development approaches and in part to the exclusion of the local. Furthermore these theories did not easily advance the understanding of development at the micro-level and so an alternative developmental approach, encapsulating a people-centred focus, anchored in local social systems, was discussed here. The Human Scale Development approach, viewed as an open option, rather than a model, that is understood and practiced as a process in constant motion, rather than as a final solution, was adopted as the guiding principle of development in this research.

Information technology has been accepted as being one of the most significant forces of modernisation in the last 20 years with technological advancement introduced in a linear, rules-bound development programme approach. These programmes failed in that the anticipated economic trickle-down effect did little to alleviate poverty or to establish a platform on which sustained economic growth could occur (Rondinelli 1994). Modernisation failed in part because of the erroneous assumption that scientific and technological economic growth equalled development. Using technology as a development tool with a predominantly technical focus often resulted in failure as the multifaceted and multi-disciplinary considerations that related to people, such as organizational structure and behavioural change, were lamentably neglected.

The prevailing application of E-commerce in the literature is (unsurprisingly) Northern Hemisphere, business-to-business and, to a lesser extent, business to consumer related. The review of E-commerce literature highlighted considerable gaps between the potential and actual benefits derived from E-commerce. Of critical importance was the understanding that the mapping of benefits attributed to firms in first world environments was not automatically transferable into a development environment. The case exploring these potential benefits to transitional development projects, traversing both development and business, where activities were directed towards profit generation, was shown to be possible. However, a strong understanding of the bottom-up benefits incorporating the particular contextual barriers was considered an essential framework within which to study this phenomenon.

Although the analysis of the literature in this chapter suggested that benefits could accrue from the use of ICTs in development, this needed to be planned as a socio-technical approach. ICTs cannot be used as a technical tool for development but must be used contextually and

within a framework including appropriate organizational processes, such as marketing. The literature stressed the importance of local appropriation as vital to the successful adoption of ICTs and marketing.

The issues relating to development, ICTs and marketing discussed in chapter two contributed to the development of a conceptual framework that viewed ICT within a local context and in relation to socio-organizational change. Sensitivity to context, which is especially important where meaning is derived from context, is essential in order to understand the boundaries to the generalizability of the research results. As this research was contextualist and interpretivist, the historical, socio-political and national context in which the organization was embedded were extensively documented in chapter three.

The 'local' in this case was embedded in complex relationships with other actors in a long, complex history of unequal power relationships and economic marginalization in which local community development processes were embedded. Chapter three contributed to a sufficient understanding of the situation through an analysis of the influences of local history, which shaped local development agendas and moulded the progress of the RWA. This chapter showed how the RWA was affected by the continuing effects of historical and current conflict with traditional authority, dubious access to legally owned land, witchcraft disturbances and the effects of an ambiguous national constitution on gender equality.

Included in chapter three was the scoping research conducted prior to the main study, both as a means of testing some of the propositions formed through the work in chapters one and two and also as input into further secondary research, namely the integration of development, marketing and E-commerce which formed the basis of the conceptual framework discussed in chapter four.

Chapters one, two and three contributed to the development of the conceptual framework as discussed in chapter four. The propositions identified in the preceding chapters were used to conceptualize a framework used to guide and direct the research process, the data collection and to aid the interpretation of what was observed.

Chapter four, the conceptual framework, encapsulated a number of requirements. The first was the integration of marketing principles with the RWA development model, as a means to focus on revenue maximisation. The conceptual framework assumed that it was the interaction of ICT, applied to a particular business process (marketing), within the extant

socio-political development context that could reveal the relevant and appropriate interconnections and meanings of ICT to the organisation. Hence part of this framework was a marketing model (Kotler 1980), as it was established that marketing was a deficient skill in the RWA and that without marketing it would be difficult to trade meaningfully.

An E-commerce model was included in the framework as a way to view and discuss marketing principles electronically within a specific organisational structure. A particular E-commerce model, the infomediary model (Hartman *et al.* 2000), was selected for two major reasons. The first, because it was conceptually a logical fit with the community role of the RWA, which was well positioned to fulfil the role of infomediary by providing its members with information, knowledge and experiences that could add value to a particular business transaction. Second, the infomediary model supported the marketing function in its capacity to provide extensive processing and communication power thereby increasing transactional efficiency by reducing the total number of transactions required to meet a given volume of exchange. In this way the model could, conceptually, assess the potential power of information and communication technologies (ICTs), which could be used by the RWA to enhance business activities.

This conceptual framework acknowledged that all three components (development, marketing and E-commerce) perpetually acted on each other to evolve a pattern that reflected the interplay between them within a particular context. None of the three different aspects of the conceptual framework could be considered separately.

The area of enquiry of this research was complex (it involved people and systems) and little was known about the use of ICTs to develop local rural economies. Further, E-commerce and ICTs (a significant part of the enquiry) were emergent, highly unstable, immature and not yet fully diffused. This suggested the need for an interpretivist, exploratory, interventionist research approach to develop a new body of empirical knowledge from which theories might be postulated at a later stage. Chapter 5 is a discussion of the philosophical assumptions underpinning the research and provided details of the research techniques (methodology and analysis), strategy and design applied in the study. It justified the epistemological factors involved in the selection of an interventionist research methodology.

This research was situated in a particular third world socio-political-economic development space. It involved deliberate external intervention in an underdeveloped and gender oppressed context. Such a situation ethically demands that care be taken not to damage anyone and that

emancipation is a desired outcome of the intervention. Research alone, unaccompanied by capacity building, may be considered ethically questionable in this context. An interpretative field study using PAR was selected for this study as the most appropriate technique and methodology capable of satisfying the requirements outlined above. PAR, as an approach to research, considered people's history, culture, interactional practices and emotional lives and actively involved members of the community in which the research was being carried out. In this way it explained a particular social world by working with the people who lived in it in order to construct, explore and improve theories about it (Elden and Lewin 1991). This then results in the development of a shared local theory, which combines the different expertise, and frames of reference of the parties. It is considered an ethical research approach as it enables people to systematically examine their own problems and issues and formulate powerful and sophisticated accounts of their situations.

The chapter also reviewed the body of theory relating to Actor-Network Theory, the interpretivist lens through which the action research data was viewed. It was selected for its approach to treating technology and society symmetrically within a single collective when analysing technology implementation. In this way it avoided the reductionism that either humans or machines were ultimately determinate factors. Actor-Network Theory in conjunction with the integrated community business model guided the interpretation of the results.

In chapter six the findings of the action research project were analysed using the three models in the conceptual framework, those of development, marketing and E-commerce. Furthermore this chapter uses Actor-Network theory as an interpretivist lens to view the disintegration of a stable network that introduced an ICT implementation, the telecentre, into it.

The Human Scale development model used to analyse the RWA developmental results highlighted that they attempted, unsuccessfully, to achieve self-reliance through social and economic interaction in a small physical (isolated) space. Their development process was perpetually constrained by dependency relations and they were unable to connect to and complement the regional and national level. Their relationships did not significantly flow upward to the regional and national levels and were constrained by the infrastructural legacy of apartheid. In this way they failed to secure self-reliance. This experience highlights the challenges of small community organisations in forming wider horizontal and vertical relationships, essential for launching and sustaining effective local economic development.

The progress of the RWA could have been greater if its activities had been conceived as part of a national strategy to enable the creation of synergies that standalone initiatives cannot achieve by themselves.

Applying the marketing model to the trading activities of the RWA within its development context revealed that many issues needed to be addressed before marketing could be applied effectively. Culturally there were barriers to accepting and applying the marketing principles and this resulted in irrational uncompetitive pricing and product mix practices. Other factors such as organizational structure, decision-making and leadership impacted on the application of marketing within the RWA. The behaviours inculcated in a development context seemed incompatible with the required behaviours to effectively apply marketing principles. It seemed to be a perpetual struggle to rationally map marketing practices onto the extant cultural practices and suggested the need to incorporate change management practises into the organization.

The analysis relating to E-commerce as a marketing process enabler and supporter showed a recognition, by the RWA management, of the capability of E-commerce to increase marketing richness and reach and operational efficiency whilst concomitantly reducing agency and transactional costs. Additionally E-commerce was revealed as a marketing process improver as it simplified the organisational processes required to enact it, through such functionality as its integrative and storage capabilities, which promote speed and accuracy as well as providing useful archived documentary transactional evidence. The analysis also suggested the need to converge E-commerce and marketing with other local communication processes and channels and to incessantly build onto and strengthen existing networks.

In the next part of this chapter Actor-Network Theory was applied, retrospectively, to trace events contributing to the destabilization of the RWA actor-network. The integration of results from the action research project with the actor-network analysis was used to review the original conceptual framework.

The ANT analysis encapsulated the concepts of power, position, organisation, and agenda as all being part of the dynamics of an actor-network all with the ability to either increase or decrease network convergence. It demonstrated the precariousness of networks where the major actant 'deserts' and where the remaining key actants lack the position, power status and skills to effectively apply the necessary intersement resources to maintain the network integrity. As power is recursively woven into the intricate and changing interrelationships

within the network, its effects are relational. In this case it resulted in a group of deviant network elements (those who had previously been displaced from the original network) switching networks (back to the previous traditional authority and church-based network) and betraying the problematisation effected by the previous major actant.

The analysis points to the dangers of transitory mobilisation and enrolment of key network actants as a chain is only as strong as its weakest link and when an ally is abandoned a new one needs to be recruited to avoid Machiavellian outcomes. The changes in the network were not constantly reviewed and maintained using the resources of interessement resulting in controversies such as the telecentre implementation, which caused the RWA actor-network as a black box, to leak.

The network was further weakened through the inclusion of the RWA telecentre. It was inserted into a complex socio-political context amongst a myriad of actors and actor-networks with little attention to the Due Process model. This resulted in neglecting some of the essential steps required to promote institutionalization and contributed to the partial disintegration of, until then, a successful gender development organisation.

### 7.1.1 Addressing the Research Questions

Chapter one mapped out a number of research questions to be addressed in this thesis. These questions are revisited in the next subsection in relation to the thesis results.

*What are the barriers to implementing marketing? How and to what extent, can business and development principles be blended in a rural women's development organisation, using ICT concepts?*

Whilst this question was covered throughout the thesis it was particularly addressed through the action research project results where all components were discussed and the relationship between development and marketing and marketing and E-Commerce was explored in chapter six. The conceptual framework developed in chapter four was a means to understanding the perceived interplay between business and development concepts within a development context.

*How can E-commerce, with marketing impact on marketing planning opportunities in a South African rural community based organisation?*

The sub-section on development and on marketing within chapter six addresses this question by explicitly identifying the cultural, structural, systemic and organisational constraints to implementing marketing planning.

*What marketing applications and activities are appropriate to the context?*

Chapter three is an important part of the answer to this question as it comprehensively documents the context in which the RWA operates and this in turn places boundaries around relevant marketing activities.

### 7.2 CONTRIBUTION OF THIS STUDY

This section reviews the contribution of this research in three areas, the theoretical, the methodological and the practical contributions.

#### 7.2.1 Theoretical Contributions

The findings contribute to the alignment of technology and organisational practices within a particular social context and the lessons inferred can be used in other South African rural development organisations.

The conceptual framework in this thesis contributed to an extension of the current economic development thinking related to rural South Africa. The Infomediary model (Hartman *et al.* 2000) offered only a technological approach to create markets. It excluded issues such as political power, culture, history, social status, literacy, local involvement and ownership, financial planning and accountability, marketing, logistics and e-business development. Over the past 40 years many development models have been used in rural Africa with limited success. The majority of these models failed to focus or integrate the relative importance of ICT and marketing know-how in order to promote value generation.

The application of the conceptual framework using a participative action research approach revealed marketing to be a dynamic concept that requires the understanding of basic principles and an entrepreneurial spirit to capture its hidden value. Training and education, through action learning, are needed to prepare rural participants to optimise ICT infrastructures to further the course of rural economic development. The marketing model (Kotler 1980) on its own could not be of significant value. Hence, this proposed framework builds on previous theories and models, but with additional principles and thinking to integrate the different forces, resulting in a business model that can create new and sustainable economic value for the rural African communities.

Based on the assumptions and the building blocks of this proposed framework, practitioners can see the comprehensiveness of local economic development using ICTs and begin to

structure their priorities and to integrate the essential factors to enhance local economic success in rural development. With reference to past experiences and literature review, this theoretical framework can act as a guide for implementation. However, continuous improvement through feedback and modifications to the initial framework need to be undertaken through action learning.

### 7.2.2 Methodological Contributions

The main methodological contribution of this research is through the application of the action research project. Whilst action research is particularly useful in the examination of complex relationships between people and events that revolve around innovation and change for local needs, it is a mode of inquiry that in practice is known to be difficult to manage successfully and there is little guidance in the literature on how to practically conduct PAR in the research field (McKay and Marshall 2001). Often PAR is attacked as having insufficient rigour. The literature review suggests that it is the combination of an appropriate theoretical framework with cyclical participant feedback model that provides rigour in PAR. This thesis has contributed methodologically through the provision of such a framework that combines all of the above elements

The action research project approach followed in this research is premised on the McKay and Marshall (2001) paradigm. They assert that action research is more than just a problem solving method, and for it to work best it should be used from within a firm conceptual framework. In this way actions to improve a situation are then part of an integrative strategy within which to test and refine theories about aspects of a specific problem. This study is situated within a conceptual framework of marketing, E-commerce and development and the research design has been clearly documented. Additionally, the research design incorporates the Klein and Myers (1999) interpretivist research principles to both improve and evaluate the quality of the research.

It is possible for other researchers in similar circumstances to adopt this methodology as it is designed as a best-fit research methodology to encapsulate the socio-political complexities of the research site and may be useful for other studies examining the role of ICTs in local development in rural South Africa.

Another methodological contribution is in applying concepts and theories developed in other contexts such as marketing and E-commerce concepts. The application of marketing

principles in a development context can provide a replicable methodology to other researchers.

### 7.2.3 Practical Contributions

The conceptual framework has expanded the thinking and development of the relative importance of integration. Simply using donor money to build an ICT infrastructure without considering the wider influences is insufficient. A new and expanded network of customers and suppliers is more likely to materialise using this systematic approach to exploring the multiple issues of integrating the various models.

Another practical contribution is the provision of insights from experienced community development practitioners as to the practical challenges and barriers to implementing marketing within the strictures of the prevailing organisational structure and how the implementation of marketing can be used as an integrative tool to appropriately adapt the organization structure. The action research approach allows for continual iterations of experience with new knowledge. This could promote the introduction of marketing and organizational change in a locally meaningful evolutionary way rather than as direct transfer of organisational practices through a training medium.

Furthermore, the experience gained by the RWA managers during the action research project study can assist them to reach more profitable customers, which can lead to greater sustainable economic development. This can be realised through the provision of new E-commerce and marketing knowledge, skills and understanding that the RWA acquired throughout the duration of the study. Additionally, the study can result in improved networks of trading partners through which more businesses can be generated.

The practical experience of working through the many components within the conceptual framework reveals that the managers in a rural development organisation need to acquire new skills with which to stabilize and strengthen the actor-network within which they work. Without these skills potential disruption within the network can restrict and even destroy current progress.

Lastly, the analysis of the telecentre implementation reveals that the Due Process model can be applied in the future as a practical tool with which to increase the probability of

institutionalization of new candidates for admission within the network, which is likely to impact on the success of marketing initiatives.

### 7.2.4 Assessing the Contribution

Whetten (1989) suggested important areas to consider in assessing what contributes a legitimate value-added contribution to theory development. Each of these will be applied to the theoretical contribution made in this thesis.

Firstly the contribution should ensure sufficiency of understanding relating to the investigative journey being undertaken. This involves the inclusion of all relevant factors but also requires parsimony in that those factors with little role in improving understanding are excluded. This is covered in this study through chapter three which charts the socio-economic scenario surrounding the study.

The study is expected to make a significant contribution to current thinking. In this study this has been accomplished through the development of a conceptual framework using development, marketing and E-commerce models, which contributed to an extension of the current economic development thinking relating to rural South Africa trading activities. The framework covers the “what” and the “how” by providing a framework that can be used for interpreting empirically observed patterns and discrepancies. Secondly, the contribution lies in the empirically rich insights gained from the research participants in the action research project who were in an appropriate position to implement change.

#### *Generalisability of the research results*

The theoretical model used to generate the research results in this study is explicitly focused on defined boundary constraints and in this way other researchers can justify the use of this framework within similar temporal and contextual circumstances. Whetten (*ibid*) considers research to be a valuable contribution if it is likely that the theory will change the way the phenomenon, in this case ICT related initiatives is regarded. This study has focussed on a bottom-up approach to develop ways of implementing ICT-related marketing that will increase the likelihood of their institutionalization. In this way the action research project provided invaluable insights, which can be practically integrated with other studies of a similar nature.

Whetten (*ibid*) notes that the underlying logic and supporting evidence of the research should be compelling. In chapter one the problem was conceptualised using scoping research and the problem was viewed along a number of dimensions highlighted by research published by world anti-poverty organisations as well as seminal writers on the use of ICT in organisations and in development. The results of the literature review and the chapter on the research situation informed the development of the framework used to investigate this phenomenon. Interpretivist lenses relating to socio-technical situations were employed in the analysis alongside the theory relating to the conceptual model. This was further supported through the use of action research to collect and analyse data. Viewing the research problem from different perspectives promoted seasoned thinking, completeness and thoroughness.

The final issue that Whetten (*ibid*) considers paramount in ensuring that the theoretical contribution is valuable hinges on the interest of the research to contemporary scholars and practitioners in the area. The lack of research relating to the developmental impact of ICTs generally, and more specifically relating to African rural development has been noted by a number of sources. Recently South Africa, through NEPAD (the New Partnership for African Development), targeted ICT as a priority sector for the achievement of sustainable development in the 21<sup>st</sup> century with the objective of achieving E-readiness for all countries in Africa. This intention is paralleled by The Southern African Development Community (SADC) ICT Policy and Regulatory Support Program (SIPRS), which aims to advance policy harmonization by producing model policies in key areas, including human resource development. As there is little empirical research that focuses on the economic impact of the integration of ICTs with micro-entrepreneurial and revenue-generating activities, research is vital to clarify the role and impact of ICTs in rural economic development and to move this vital debate and its concomitant resource allocation away from speculative arguments. Furthermore, it is noted that as fieldwork that analyses the dynamic interplay between the social and the organizational setting (and processes) in which the ICT is embedded is limited, this research will be of interest to academics considering how to move local socio-economic development away from an *ad hoc* model towards a sounder theoretical framework.

### **7.2.5 Limitations and Future research**

There are four major limitations to this study that have implications for further research work. The first limitation is related to the fact that although the proposed framework focused on rural economic development in Africa it has yet to be implemented. Whilst this study has provided a conceptual integrated framework to further local economic development in a rural environment, it requires further research in order to implement.

Secondly there are limitations relating to the transferability of the results into other contexts. As the research took place in South Africa, within a set of particular developmental issues, the methodology and the lessons learned might not be transferable. Since this study was conducted in a rural African setting, the application of the proposed integrative framework may need various levels of modifications in different environments. For example, its application to the developing countries in South-East Asia may need to consider a different set of cultural/social and political factors. Further research in other organizations and community contexts both in South Africa and in other countries would add to the research usability. Future studies can include the detailed planning and implementation of the proposed framework and assess and monitor its outcomes. Furthermore, future studies can focus on the comparative differences between these countries and appropriately adapt the proposed model to obtain a better fit. This may help to expand knowledge on the dynamics of the process of adoption and change management.

A third limitation of this research was that the ANT concepts and the Due Process model were applied retrospectively. It would be useful to work with other agencies such as government, NGOs and donors who were planning to introduce ICT into a community and apply the concepts from the outset. The development component of the conceptual framework could be expanded to include the Human Scale Development Needs and Satisfiers Grid in order to consider ICT as part of an interrelated, dynamic and interactive system. In this way the research could link social practices, forms of organization, political models and values to the ICT implementation within an integrative community business model and furthermore link this proposed methodology with the effects and potentialities of increasing network stability. Use of the Due Process model could result in clearly delineated organizational plans for such things as marketing and managing change.

A final limitation, perhaps applicable to most studies that involve organisational change, is the fact that the change itself is an ongoing process. The presentation of the ICT, marketing and e-commerce initiatives in the RWA case does not suggest that the actors involved have stopped changing. There will continue to be turnover of staff, organizational changes, network changes and re-ordering of power structures within the community. During the process of writing up this thesis, different initiatives and new obstacles may have taken place in the RWA. Continuous development of the model and possibly minor adjustment to the integrated framework may be necessary to ensure its success. There is an opportunity to consider this research as a longitudinal study, particularly as the integration of ICT, marketing

and development models to improve economic development have been derived from an understanding of the RWA over the past 5 years. In this way continuous data can track how and where the integrated community business model is being adopted, how it is being adapted and how it is impacting on the marketing and hence trading activities of the organization over time.

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### REFERENCES

AFRE- FEM (1998), <http://clients.tdg.ca/worldbank>, Access date: 17 Sep. 2001

Aljifri, H.A., Pons, A., and Collins, M. (2003), Global e-commerce: a framework for understanding and overcoming the trust barrier, *Information Management and Computer Security*, 11, (3): 130-138

AMA (American Marketing Association) (1985), AMA board approves the marketing definition, *Marketing News*, 5, (1): 1

Annan, K., (2003), *In Africa- AIDS Has a Woman's Face*, <http://www.comminit.com/st2003/sld-7384.html>, Access date: 25 April 2003

Arce, A. (2001), *Marketing expert notions of local life : development as if people really matter. Development Studies Association Conference 2001*, <http://www.man.ac.uk/idpm>, Access date: 5 Oct., 2001

Argyris, C. (1985), *Action Science*, Jossey-Bass, San Francisco

Argyris, C. and Schon, D.A. (1991), Participatory Action Research and Action Research Compared, In Whyte, W. (ed) (1991), *Participatory Action Research*: Chapter 6, Sage, London

Argyris, C., Putnam, R. and Smith, D. (1987), *Action Science: Concepts, Methods, and Skills for Research and Intervention*, San Francisco: Jossey-Bass

Ashforth, A. (2001), *AIDS - witchcraft and the problem of power in post apartheid South Africa*, Princeton: Institute of Advanced study, School of Social Science, Occasional Paper Nr. 10

Avgerou, C. (2001), The significance of context in information systems and organisational change, *Information Systems Journal*, 11, 43-63

Avgerou, C. (2000), IT and organizational change: an institutionalist perspective, *Information Technology and People*, 13, (4): 234-262

Avgerou, C. (2000a), Recognising alternative rationalisation in the deployment of Information Systems, *EJISDC*, 3, (7): 1-15

Avgerou, C. (1998), How can IT enable economic growth in developing countries, *Information Technology for Development*, 8, (1): 112-118

Baark, E. and Heeks, R. (1998), *Evaluation of Donor-Funded Information Technology Transfer Projects in China: A Lifecycle Approach*, Development Informatics working paper, Institute for Development Policy and Management, University of Manchester, <http://idpm.man.ac.uk/publications/wp/di/index.shtml>, Access date: 3 May 2001

Bambury, P. (1998), A taxonomy of Internet Commerce, *First Monday*, 3, (10): 2, [http://www.firstmonday.dk/issues/issue3\\_10/bambury](http://www.firstmonday.dk/issues/issue3_10/bambury), Access date: 2 June, 2002

Bagozzi, R. (1975), Marketing as exchange, *Journal of Marketing*, 39, 32-39

- Beard, J. (2003), Management of technology: a three-dimensional framework with propositions for future research, *Knowledge, Technology and Policy*, 15, (2): 45-58
- Benjamin, P. (2000), *African Experiences with Telecentres on the Internet*, <http://www.isoc.org/oti>, Access date: 10 June 2003
- Benjamin P. (2001a), *Telecentres and Universal Capability: A study of the Telecentre Programme of the Universal Service Agency in South Africa, 1996 – 2000*. Unpublished PhD thesis, Aalborg University.
- Benjamin, P. (2001b), *Telecentres - the key to wider Internet access*, <http://www.balancingact-africa.com/news/back/balancing-act.html>, Access date: 10 August 2001
- Benjamin, R. and Wigand, R. (1995), Electronic markets and virtual value chains on the information superhighway, *Sloan Management Review*, Winter: 62- 72
- Bennet, R. and Oliver, J. (1992), The essentials of action research and what are the pitfall/dangers in action research, *Leadership and Organisational Development Journal* , (9): 8-20 and 21-30
- Biehn, G. (2001), Yes, you can profit from e-commerce, *Financial Executive*, 17, (3): 26-27
- Bloch, M., Pigneur, Y., and Segev, A. (1996), *On the road of electronic commerce – a business value framework, gaining competitive advantage and some research issues*, Proceedings of the Ninth International conference on EDI-IOS; June 1996, p. 22-25
- Bonoma. T. (1985), Case Research in Marketing: Opportunities, Problems, and a Process, *Journal of Marketing Research*, 22,199-208
- Boulding, W., Morgan, R.M., and Staelin, R. (1997), Knowing When to Say When: Improving the Stop/No Stop New Product Decision, *Journal of Marketing Research*, February, 164-176
- Brinton Lykes, M. (1997), Activist Participatory Research among the Maya of Guatemala: Constructing meanings from situated knowledge, *Journal of Social Issues*, 53, (4): 725- 746
- Bundy, C. (1972), The emergence and decline of a South African peasantry, *African Affairs*, 71, (285):369- 88. In Coetzee, J. et al. (eds). (2001), *Theory, Policy and Practice in Development*: 537-552, Oxford University Press, Southern Africa, Cape Town
- Callon, M. (1999), The Market Test in Actor Network Theory and After. In J. Law and J. Hassard (eds), *Actor Network Theory and After*, Blackwell, Oxford, p.132-161
- Callon, M. (1991), Techno-economic networks and irreversibility, In Law, J. (Ed.), (1991), *A sociology of monsters - essays on power, technology and domination*, *Sociological Review Monograph*, 38:132-161, Routledge, London
- Callon, M., Law, J. and Rip, A. (1986), *Mapping the dynamics of science and technology*, Macmillian, London
- Cameron, G. et al. (2000), Using reflective process in community based participatory action research, *Reflective Practice*, 1, (2): 216- 229
- Castells, M. (1998a), *Information Technology, Globalization and Social Development*, Paper prepared for the UNRISD Conference on Information Technologies and Social Development,

## REFERENCES

- Palais des Nations, Geneva, 22-24 June 1998,  
<http://www.unrisd.org/infotech/conferen/castelp1.htm>. Access date: 26 June 2001
- Castells, M. (1998b), The Rise of the Network Society: The Information Age, *Economy, Society and Culture*, 1, (3): 22-28
- Castells, M. (1999), *The social implications of information and communications technologies*. Report prepared for UNESCO's World Social Science Report,  
<http://www.unrisd.org/infotech/conferen/castelp1.htm>. Access date: 2 July 2001
- Castelloe, P., Watson, T., & White, C. (2002), Participatory change: An innovative approach to community practice, *Journal of Community Practice*, 10 (4):7-32
- Chambers, R. (1994), Participatory rural appraisal: challenges, potentials and paradigm, *World Development*, 22, (10):1437-1353
- Chapman, R. and Slaymaker, T. (2002), *ICTs and Rural Development: Review of the Literature*, Current Interventions and Opportunities for Action. Overseas Development Institute, Working Paper 19, 2 November 2002
- Checkland, C. (1992). In B. Dick, (1993), *You want to do an action research thesis?*  
<http://www.scu.edu.au/schools/sawd/arr/arth/arthesis.html>, Access date: 1 Nov. 2001
- Chen, S., Leteney, F. (2000), Get Real! Managing the next stage of Internet retail, *European Management Journal*, 18, (5): 519-527
- Chen, Y., Ingraham, L., and Jenkins, G. (2001), Creating value through e-commerce, *Strategic Finance*, 82, (7): 44-49
- Chisholm, L. (1990), Action research: some methodological and political considerations, *British Educational Research Journal*, 16, (3): 249-258
- CIA The World Fact Book, <http://www.cia.gov/cia/publications/factbook/geos/sf.html>. Access date: 12 June 2004
- Claassens, S. (2000), Land rights and local decision making processes: proposals for tenure reform. In Cousins, B. (ed), *At the cross roads: land and agricultural reform in South Africa into the 21 century*, p.129-142, Programme for Land and Agrarian Studies, Cape Town
- Cloete, N. (2001), Is it possible to have a progressive discourse on globalisation in higher education? <http://www.chet.org.za/oldsite/debates/SanLameer/cloete.html>. Access date: 5 July 2001
- Coetzee, J. (2001), The participatory research paradigm. In Coetzee, J. et al. (ed), *Development, Theory, Policy and Practice*, p. 537-552, Oxford University Press, Cape Town
- Commission of Inquiry into Witchcraft Violence and Ritual Murders, (1996), *Report of the Commission of Inquiry into Witchcraft Violence and Ritual Murders in the Northern Province of the Republic of South Africa (Ralushai Commission)*, Northern Province, Ministry of Safety and Security, Northern Province, South Africa
- Commission of Gender Equality (CGE), (1999), The National Conference on Witchcraft Violence, Braamfontain, Conference Report, In Dirk Kohnert, J., *Modern African Studies*, 41, (2): 1-29

Commission on Gender Equality, (1998), *The Thohoyandou Declaration on Ending Witchcraft Violence*, Unenacted Bill/Resolution, 10 September, 1998.

Communication and Natural Resource Management,(2003)  
<http://www.comminit.com/pdf/communication-and-natural-resource-management.pdf>, Access date: 6 Sept 2003

Compte, A. (1974), *The positivist philosophy*, AM Press, New York

Corea, S. (2000), Technological capacitating in customer service work: a socio-technical approach, *Proceedings of the twenty first international conference on Information systems*, Brisbane, Queensland, Australia, p45 - 57

Cousins, T. and Hornsby, D. (2000), *Leaping the fissures: bridging the gap between paper and real practice in setting up common property institutions in land reform in South Africa*, in *The Legal Aspects of Governance of CBNRM.CASS/PLAASCBNRM program*, 2<sup>nd</sup> Annual Regional meeting, 16-17 Oct., 2000

Cunningham, J. B. (1993), *Action Research and Organizational Development*, Praeger, Westport, CT

Cunningham, M. (2000), *Smart things to know about E- Commerce*, Capstone, Oxford

Cypher, M. (1997), *The process of economic development*, Routledge, London

D'Allesandro, D. and Dosa, N. (2001), Empowering Children and Families with Information Technology, *Archives of Pediatric & Adolescent Medicine*, 155, (10): 1131-1136

Dalsgaard, S. (2001), Digital discourses: an essay on ICT in development, <http://www.comminit.com/st2003/sld-7425.html>, Access date: 6 March 2003

Darlington, Y. and Scott, D. (2002), *Qualitative Research in Practise - stories from the field*, Allen and Unwin, Sydney.

Decker, L.E. and Decker, V.A. (2003), *Home, School & Community Partnerships*, Scarecrow Press Inc., Lanham, Maryland

Dedrick, J., Gurbaxani, V. and Kraemer, K. L. (2003), *Information Technology and Economic Performance: A Critical Review and Empirical Evidence*, Working paper: Center for Research on Information Technology and Organizations, University of California, Irvine

Deeter-Schmelz, D. R. and Kennedy, K.N. (2004), Buyer-seller relationships and information sources in an e-commerce world, *The Journal of Business and Industrial Marketing*, 19, (2): 188-196

Delius, P. (1996), *A lion amongst the cattle – reconstruction and resistance in the Northern Transvaal*, Ravan Press, Johannesburg

Dick B. (1999a), The Validity Chain, <http://www.scu.edu.au/schools/gcm/ar/arp/validchain.html>, Access date: 24 May 2001

Dick, B. (1999b), Stakeholders and participation - Session 4 of Areol - action research and evaluation online, <http://www.scu.edu.au/schools/sawd/areol/areol-session04.html>, Access date: 21 April, 2001

- Dick, B. (1997), Participative processes, <http://www.scu.edu.au/schools/gcm/ar/arp/partprov.html>, Access date: 12 May 2002
- Dick, B. (1993), You want to do an action research thesis? <http://www.scu.edu.au/schools/sawd/arr/arth/arthesis.html>, Access date: 4 Nov. 2001
- Dickens, A. and Watkins, K. (1999), Action research: rethinking Lewin, *Management Learning*, 30, (2): 127- 140
- Dillman (1998), In Grimes, S. (1999), Exploiting information and communication Technologies for Rural Development, *Journal of Rural Studies*, 8, (3): 269-278
- Dimitrakopoulou, D. (2002), Reflections on the time online: the decisive impact on journalistic practice, *23 rd IAMCR Conference, Barcelona*, 21 – 26
- Drucker, P.F. (1973), *Management: Tasks, Responsibilities and Practices*, Harper & Row, New York
- Duncombe, R. and Heeks, R. (2001), *Information and communication technologies and small enterprise in Africa: Lessons from Botswana*. (Results of a research project), <http://www.man.ac.uk/idpm>, Access date: 5 Oct 2001
- DuBrin, A.J., and Dalglish, C. (2003), *Leadership: An Australasian Focus*, John Wiley and Sons, Brisbane
- Dubosson-Tornay, M., Osterwalder, A., and Pigneur, Y. (2002), e-business model design classification and measurement, *Thunderbird International Business Review*, 44, (1): 5-23.
- Duffy, D.L. (2004), Using on-line retailing as a springboard for catalog marketing, *Journal of Consumer Marketing*, 21, (3): 221-225
- Elden, C. and Lewin, K. (1991), Cogenerative learning (Sweden): In Whyte, W. (ed), *Participatory Action research*: Chapter 6, Sage, London
- Elliott, J. (1990), Teachers as researchers: implications for supervision and for teacher education, *Teaching and Teacher Education*, 6:1-26
- Enis, B. (1973), Deepening the concept of marketing. *Journal of Marketing*, 37: 57-62
- Escobar, A. (1995), *Encountering Development: the Making and Unmaking of the Third World*, Princeton University Press, New Jersey.
- Estevan, C. (1992), Development, In *The Development Dictionary*, Penguin, London.
- European Commission, (2000), *Electronic Commerce – an application, Electronic Commerce and the European Union*, <http://www.ispo.cec.be/ecommerce/answers/introduction.html>, Access date: 8 April 2001
- Evans, P. and Wurster, T. (2000), *Blown to Bits*, Harvard Business School Press, Boston
- Eylon, D., and Allison, S. T. (2002), The paradox of ambiguity in cooperative and competitive organizational settings, *Group and Organization Management*, 27: 172-208

- Fillis, I., Johansson, U. and Wagner, B., (2003), A conceptualisation of the opportunities and barriers to e-business development in the smaller firm, *Journal of Small Business and Enterprise Development*, 12, (3): 336-344
- Forrester Research Inc. (1998), Survey: E-Commerce to Double by End of 1998, <http://www.internetnews.com/ec-news/article.php/26701>, Access date: 2 May 2002
- IDC and the World Information Technology Services Alliance, <http://www.forbes.com/columnists/best/2003/1002/002.html>, Access date: June 19 2004
- Forrester Report, (1999), Anatomy of New Market Models, <http://www.forrester.com/ER/Research/Report/0,1338,5729,FF.html>, Access date: 21 May 2002
- Foxall, G. (1989), Marketing's domain, *European Journal of Marketing*, 23, (8): 7-22
- Fountain, Renee-Marie, (1999), Knowledge: theory of science, *Journal of Curriculum Studies*, 31, (3): 339-359.
- Frank, A. (1996), *The world system: five hundred years or five thousand?* Routledge, London.
- GEAR SA Country report watch, <http://www.networkideas.org/feathm/may2002/sacountryrep>, Access date: 3 May 2003
- Giddens, A. (1990), *The Consequences of Modernity*, Stanford University Press, San Francisco
- Goldsmith, A. and Brinkerhoff, D. (1990), *Institutional Sustainability in Agricultural and Rural Development: A Global Perspective*, Praeger, New York.
- Goldstein, A. and O'Connor, D., (2000), E-Commerce for Development: Prospects and Policy Issues. Organization for Economic Cooperation and Development, September 2000. <http://www.cid.harvard.edu/cidtrade/issues/ecommercepaper.html>, Access date: 6 May 2002.
- Gomang Seratwa, (1999), Witchcraft, <http://www.rrz.uni-hamburg.de/IAK/witchcraft.pdf>, Access date: 24 July 2001.
- Goodman, D. and Watts, M. (eds.) (1997), Globalising Food: Agrarian Questions and Global Restructuring, In Kayatekin, Serap Ayse, (1998). *Observations on some theories of current agrarian change*, *Review of African Political Economy*, 25, (76): 22-30
- Gorman, M. and Heslop, A. (2002), Poverty, Policy, Reciprocity And Older People In The South, *Journal of International Development*, 14: 1143-1151
- Graaf, J, (2001), Theorising Development, In Coetzee, J. et al. (ed). (2001), *Theory, Policy and Practice in Development: 537-552*, Oxford University Press, Southern Africa, Cape Town
- Groonos, C. (1990), *Service Management and Marketing: Managing the moments of truth in service competition*, Macmillan International, Singapore
- Grimes, S. (1992), Exploiting information and communication technologies for Rural Development, *Journal of Rural Studies*, 8 (3): 269-278

- Grover, V. and Teng, J.T.C. (2001), E-commerce and the information market, *Communication of the ACM*, 44, (3): 79-86
- Grunbaum, A. (1990), *Research methods for research consumers*, McGraw-Hill, New York
- Grundy, S. (1982), Three Modes of Action Research. In Kemmis, S. and McTaggart, R. (eds) (1988), *The Action Research Reader* (3rd ed), Deakin University Press, Geelong
- Gumucio-Dagron, A. (2003), What can ICTs do for the rural poor? *Proceedings of the World Summit for the Information Society (WSIS)*, 23 Sep 2003, Geneva
- Gurstein, M. (1999), Flexible networking, information and communications technology and local economic development, *First Monday*, 4, (2): 14-20
- Gurstein, M. (2000), *Community Informatics: Enabling Community Uses of Information and Communications Technology*, Idea Group Publishing, Boston
- Hafkin, N. and Taggart, N. (2001), *Gender, information technology, and developing countries: An analytic study*, Academy for educational development for the office of Women in development, Bureau for Global programs, Field Support and Research, United States Agency for International Development, Washington
- Hargreaves, S. and Meer, S. (2000), Out of the margins and into the center: gender and institutional change, In Cousins, B. (ed) (2002), *At the cross roads: land and agricultural reform in South Africa into the 21 century*: 129-142, Programme for Land and Agrarian Studies, Cape Town
- Hartman, A., Sifonis, J. and Kador, J. (2000), *Net Ready: Strategies for success in the Economy*, McGraw-Hill, New York
- Hassard, J., Law, J. and Lee, N. (1999), Themed section : Actor-Network Theory and managerialism, *Organisational Studies*, 6, (3):385-390
- Habermas, J. (1974), Theory and Practice, In S. Grundy, S. (1982), Three Modes of Action Research, In Kemmis, S. and McTaggart, R. (eds) (1988), *The Action Research Reader*, Deakin University Press, Geelong
- Habermas, J. (1972), *Knowledge and human interests*, Heinemann, London
- Heeks, R. (1999a), *Information and Communication Technologies, Poverty and Development*, Working paper No.5, Institute for Development Policy and Management. Manchester University, Manchester
- Heeks, R. (1999b), *Information ICTs and small enterprises*, Working paper No.7, Institute for Development Policy and Management, Manchester University, Manchester
- Heeks, R. (1999c). *The tyranny of participation in information systems: Learning from development projects*, Development informatics working paper series, Working paper no. 4. Institute for development Policy and Management, Manchester University, Manchester
- Heller, F. (1986), In Dick, B. (1993), You want to do an action research thesis? <http://www.scu.edu.au/schools/sawd/arr/arth/arthesis.html>, Access date: 4 Nov. 2001
- Hellemans, F. (1998), Napoleon and Internet: A historical and anthropological view on the culture of punctuality and instantaneity, *Telematics and Informatics*, 15:127-133, In

- Dimitrakopoulou, D. (2002), Reflections on the time online: the decisive impact on journalistic practice. 23 rd IAMCR Conference, Barcelona, 21 – 26 July 2002
- Heron, J. (1998), Validity in co-operative enquiry, In Reason P. (ed) (1998), *Human Inquiry in Action*: Chapter 2, Sage, London
- Hoffman, D. and Novak, T. (1996), Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations, *Journal of Marketing*, 60, 50-68
- Hoque, F. (2000), *E-enterprise, business models and architecture and components*, Cambridge University Press, Cambridge
- House, E. R. (1990), An ethics of qualitative field studies, In E. G. Guba, (ed.), *The Paradigm Dial*, Sage, Newbury Park, California
- Houston, F. S. (1986), The marketing concept: What it is and what it is not, *Journal of Marketing*, (50) : 81-87
- Houston, F. S., and Gassenheimer J. B., (1987), Marketing and exchange, *Journal of Marketing*, (51): 3-18.
- Hughes, T. J., (2002), Marketing principles in the application of e-commerce, *Qualitative Market Research*, 5, (4): 252-260
- Hult, M. and Lennung, S. (2001), Towards a definition of action research: note and a bibliography, *Journal of Management Studies*, (7): 241-250.
- Humphrey, J., Mansell, R., Par, È. D. and Schmitz, H. (2003), The Reality of E-Commerce with Developing Countries: A report prepared for the Department for International Development's Globalisation and Poverty Programme, The London School of Economics and the Institute of Development Studies, Sussex,  
<http://www.gapresearch.org/production/ecommerce.html>, Access date: 18 June 2004
- Huyer, S. and Sikoska, T., (2003), *Overcoming the gender digital divide: Understanding ICTs and their potential for the empowerment of Women*, Synthesis paper- Virtual seminar on Gender and ICTs, United nations International Research and training Institute for the Advancement of Women ( INSTRAW), New York
- International Social Work, (1996), Special Issue: *Social Work and Economic Development*, (39), Jan: 5-95
- International Water Management Institute, (1999), *Rural Women's Association: An assessment of the success factors and sustainability*, South Africa working paper No 1, <http://www.cgiar.org/iwmi/safrica/SAworking1.pdf>, Access date: 2 March 2003
- ITU, International Telecommunications Union.<http://www.itu.int/home/>. Access date: March 2001
- Kalakota, R., Robinson, M. and Tapscott, D. (1999), *E-Business: Roadmap for Success*, Addison-Wesley, London
- Kayatekin Serap Ayse, (1998), Observations on some theories of current agrarian change, *Review of African Political Economy*, 25, (76): 12-18

## REFERENCES

---

- Keeney, R. L. (1999), The Value of Internet Commerce to the Customer, *Management Science*, 45, (4): 533-542
- Kemmis, S. and McTaggart, R. (1990), *The Action Research Planner*, Deakin University Press, Geelong.
- Kemmis, S. and McTaggart, R. (1998), *Participatory Action Research: Getting the job done*. In Hughes, I, Seymour –Rolls, K. (2000), Action research E- reports, 4, <http://www.cchs.usyd.edu.au/arow/arer/004.htm>, Access date: 5 Dec. 2002
- Kim, H and Myers, M. (1999), Critical reflective enquiry for knowledge development in nursing practice, *Journal of Advanced Nursing*, 29, 5: 1205-1212, In G. Cameron, G. et al (2000), Using reflective process in community based participatory action research, *Reflective Practice*, 1, (2): 216- 229
- Kim, W.C., and Mauborgne, R. (1997), Fair process: managing in the knowledge economy, *Harvard Business Review*, 75, (4): 65-76.
- Klein, H. K., and Myers, M., (1999), Evaluating Interpretive field studies, *MIS Quarterly*, 23, (1): 67-94.
- Kohnert, D. (2003), Witchcraft and Transnational Social Spaces: Witchcraft Violence, Reconciliation and Development In South Africa's Transition Process, *Journal of Modern African Studies*, 41, (2): 1-29
- Kotler, P. (1980). *Principles of Marketing*, Prentice-Hall, New York: 10-17.
- Kotler, P. (1991), *Marketing Management—analysis, planning, implementation and control*, Prentice Hall, London
- Kotler, P. (1972), A generic concept of marketing, *Journal of Marketing*, 36, 46-54
- Kotler, P. and Levy, S. J. (1969), Broadening the concept of marketing, *Journal of Marketing*, 33: 10-15
- Kotler, P. and Andreasen, A. (1991), *Strategic marketing for nonprofit organizations*, Prentice Hall, New Jersey
- Kotter, J. (2002), Leading change: why transformation efforts fail, *Harvard Business Review*, 73, 2: 59-67
- Krimerman, L. (2001), Participatory Action Research - Should Social Inquiry be conducted Democratically?, *Philosophy of the Social Sciences*, (31), March: 60-82
- Latour, B., (1991). Technology is society made durable, in *A sociology of monsters, essays on power, technology and domination*: 103-131, Edited by J. Law, Routledge, London and New York
- Latour, B. (1987), *Science in Action*, Harvard University Press, Boston
- Laudeman, G. (2003), Digital Development white paper: A Framework for Applying Information Technology to Community Socioeconomic Development, [http://greg.laudeman.com/digi-dev/dd\\_wp/DD\\_wp.htm](http://greg.laudeman.com/digi-dev/dd_wp/DD_wp.htm), Access date: 26 April 2003
- Law, J., Hassard, J. (1999), *Actor-Network Theory and After*, Blackwell, Oxford

- Law, J. and Urry, J. (2002), *Enacting the Social*. Centre for Science Studies and Sociology Department, Lancaster University, <http://www.comp.lancs.ac.uk/sociology/soc099jlju.html>. Access date: 6 March 2003
- Law, J. (1991), Introduction: Monsters, machines and socio-technical relations, In J. Law, (ed.), (1992), *A Sociology of Monsters: Essays on Power, Technology and Domination*. Routledge, London
- Law, J. (1994), *Organizing Modernity*, Blackwell, Oxford
- Law, J. (2000), Networks, Relations, Cyborgs: On the social study of Cyborgs, <http://www.comp.lancs.ac.uk/sociology/soc042jl.html>, Access date: 14 April, 2003
- Levy, P. (1967), In So, A., (1990), *Social Change and Development*; 17-37, Sage, London
- Lewin, K. (1946), Action research and minority problems, *Journal of Social Issues*, 4: 34-46
- Lindblom, C., and Woodhouse, E. J., (1993), *The Policy-Making Process*, Prentice Hall, Englewood Cliffs, NJ
- Lowe, T. (1999), In Grimes, S. (1992), Exploiting information and communication Technologies for Rural Development, *Journal of Rural Studies*, 8, (3): 269-278
- Macome, E. (2002), *The Dynamics of the Adoption and Use of ICT-Based Initiatives for Development: Results of A Field Study in Mozambique*, Ph.D. dissertation, Faculty of Engineering, Built Environment and Information Technology, University of Pretoria, South Africa
- Madon, S. (2000), The Internet and Socio-economic development: exploring the interaction, *Information Technology and People*, 13, (2): 85-101
- Magretta, J., (2002), Why business models matter, *HBR Onpoint*, Harvard Business School Publishing, Boston
- Mandela, N. (1994), *Long walk to Freedom*, Abacus, London
- Marcelle, G (2002), *Information and communication technologies (ICT) and their impact on and use as an instrument for the advancement and empowerment of women*, Report from the online conference conducted by the Division for the Advancement of Women, <http://www.un.org/womenwatch/daw/egm/ict2002/reports/Report-online.PDF>, Access date: 20 June 2002
- Marcus, L. and Robey, D. (1988), Information and technology and organizational change: causal structure in theory and research. *Management Science*, 34, (5): 583-599
- Mardle, E. (2003), How Can ICT Help Alleviate Poverty? *Journal of Southern African Study*, 28, (3): 21-28  
<http://www.developmentgateway.org/node/133831/sdm/blob?pid=4374>, Access date: 30 Sep. 2003
- Marshall, K., (2001), Development and Religion: A different lens on development debates, *Peabody Journal of Education*, 76, (3): 18-26

## REFERENCES

- Masters, J. (2000), *The History of Action Research*, Action Research E-Reports, 3, <http://www.cchs.usyd.edu.au/arow/arer/003.htm>, Access date: 10 June 2002
- May, P., (2000), *The Business of e-commerce*, Cambridge University Press, Cambridge
- Max-Neef, M. (2003), [http://www.max-neef.cl/publicaciones/libros/humanscale/first/manfred\\_max\\_neef\\_HSD](http://www.max-neef.cl/publicaciones/libros/humanscale/first/manfred_max_neef_HSD), Access date: 25 July 2003
- Max-Neef, M., Elizalde, A., Hopenhayn, M., Herrera, F., Zelman, H., Jataba, J. and Weinstein, L. (1989), Development Dialogue: Human Scale Development, *Journal of International Development Co-operation*, Gag Hammarskjold Foundation, Upsala, Sweden.
- McCrohan, K.F., (2003), Facing the threats to electronic commerce, *The Journal of Business and Industrial Marketing*, 18, (2): 133-145
- McFadden, G. (2000), *Mindwars*, Allen and Unwin, Sydney
- McGeary, J. and Michaels, M. (1998), Africa Rising: A new spirit of self-reliance is taking root among many Africans as they seize control of their destiny-What are they doing right? *Time*, March 30, (151), 12:34
- McGee, L. and Spiro, R. (1988), The marketing concept in perspective, *Business Horizons*, 31, (3): 40-45
- Mchombu, C., (2000), Information needs of Women in Small Businesses in Botswana, *The International Information and Library Review*, 32, (1): 39-67
- McKay, J. and Marshall, P. (2001), The dual imperatives of action research, *Information Technology and People*, 14, (1): 46-59
- McKay, J. and Marshall P., (2004), *Strategic management of e-Business*, John Wiley and Sons, Brisbane
- McLure, R., Bassey, M., (1991), Participatory Action research, In W. F. Whyte, (ed), (2001), *Participatory Action research*, Chpt 14, Sage, London
- McMaster, T., Vidgen, R.T. and Wastell, D.G. (1998), *Networks of Association and Due Process in IS Development*, IFIP WG 8.2 and 8.6 Joint Working Conference on IS: Current and future changes, Helsinki, Finland, December 10-13/1998.
- McNicoll, P. (1999), Participant observation: Action research in education, *Journal of social work education*, 35, (1): 51-62
- McTaggart, R. (1992), Action Research: Issues in Theory and Practice Keynote address to the *Methodological Issues in Qualitative Health Research Conference*, Friday November 27th, 1992, Deakin University, Geelong.
- McTaggart, R. (1998), Is validity really an issue for participatory action research? *Studies in Cultures, Organisations and Societies*, 4, (2): 211- 237
- Monteiro, E. (2000), Actor-network theory. In C. Ciborra, (ed.), (2000), *From control to drift-The dynamics of corporate information infrastructure*: 71-83, Oxford Univ. Press, Oxford

- Meier, G. M., and Rauch, J., (2000), *Leading Issues in Economic Development*, Oxford University press, Oxford
- Meyer, J., Pope, C, and Mays, N. (2000), Using qualitative methods in health related action research, *British Medical Journal*, 72, (28): 178-182
- Miller, H., and Levin, C., (1993), Micro-enterprise development: An Analysis of Kabwe and Lusaka enterprises in Zambia, *Journal of small business management*, 31, (1): 99-105
- Miriam Webster on line dictionary, <http://www.m-w.com/home.htm>, Access date: 18 Sept 2003
- Mitter, S. (2001) Beyond the politics of difference, <http://www.unu.edu/unupress/unupbooks/uu37we/uu37we03.htm>, Access date: 26 June, 2001
- Molla, A. (2002), *e-Readiness and e-Commerce success: developing and exploring an antecedent model in developing countries context*, Ph. D thesis: University of Cape Town
- Montealegre, R., and Ramiro, R., (1999), A case for more case study research in the implementation of information technology in less-developed countries, *Information Technology for Development*, 8, (4):18-26
- Monteiro, E.( 2000), Actor-network theory. In: C. Ciborra (ed.), *From control to drift. The dynamics of corporate information infrastructure*, Oxford Univ. Press, 2000, pp. 71 - 83.
- Morales-Gomez, D. and Melesse, M. (1998), Utilising information and communication technologies for development: the social dimensions, *Information Technology for Development*, 8, (1): 31-39
- Mouton, T. (2001), Theory, meta-theory and methodology in Development, In Coetzee et al. (eds) (2001) *Theory, Policy and Practice in Development*: 11-26, Oxford University Press Southern Africa, Cape Town
- Mumford, E. (2001), Advice for an action researcher. *Information Technology & People*, ( 14 , (1), 12-27.
- Narayan, D., et al. (2000), *Voices of the poor: Can Anyone hear us?* Oxford University Press, New York
- National Telephone Co-operative Association (NTCA), (2000), *Initial lessons learned about private sector participation in telecentre development- a guide for policy makers in developing appropriate regulatory frameworks*, NTCA, South Africa.
- Newton, T. (2002), Creating the new ecological order? Ellias and actor-network theory, *Academy of Management Review*, 27, (4): 21-31
- Niehaus, I. (2002), Witchcraft in the new South Africa: from colonial superstition to postcolonial reality, In Moore, H. & Sanders, T. (eds) (2002), *Magical Interpretations, Material Realities: modernity, witchcraft and the occult in postcolonial Africa*: 184-205, Routledge, London
- Niehaus, I, (2002a), Perversions of power: witchcraft and the sexuality of evil in the South African lowveld, *Journal of Religion in Africa*, 32: 3-12.

- Norrish, P. (2001), New technology and rural communities, In World Bank Rural Access Inventory. <http://clients.tdg.ca/worldbank/>, Access date: 5 August 2001
- Ntloedibe-Kuswani, Bongaka, (2003), Women And Witchcraft, [http://www.skk.uit.no/WW99/papers/Ntloedibe\\_Kuswan\\_Gomang\\_Seratwa.pdf](http://www.skk.uit.no/WW99/papers/Ntloedibe_Kuswan_Gomang_Seratwa.pdf), Access date: 3 May 2003
- Ntsebeza, L. (2001), Traditional Authorities and Rural Development. In Coetzee et al. (eds). (2001) *Theory, Policy and practice in Development*: 155-174, Oxford University Press Southern Africa, Cape Town
- Nyden, P. (2003), Partnerships for Collaborative Action Research. In B. Jacoby & Associates, *Building Partnerships for Service Learning*, San Francisco, Jossey Bass, p. 192-212
- Odedra-Straub, M. (2001), *Women and information technology in sub Sahara Africa*, <http://www.unu.edu/unupress/unupbooks/uu37we/uu37we00.htm#Contents>, Access date: 17 August 2001
- Oxley, J. and Yeung, B. (2001), E-Commerce Readiness: Institutional Environment and International Competitiveness, *Journal of International Business Studies*, 32, (4), 705-723
- Parsons, T. (1951), *The Social System*, Free Press, Glencoe, IL
- Paua, F., (2003), *Global Diffusion of ICT: A Progress Report*, World Economic Forum, In Chapter 2, *Global Information Technology Report, 2003-2004*, [http://www.weforum.org/pdf/Gcr/GITR\\_2003\\_2004/Progress\\_Chapter.pdf](http://www.weforum.org/pdf/Gcr/GITR_2003_2004/Progress_Chapter.pdf), Access date: 13 June 2004
- Phororo, H. and Prasad, G. (1996), *Vegetable Marketing Study for Semokong Rural Development Project*, Working paper number 7. Roma: Institute of Southern African studies, National University of Lesotho, South Africa
- Porter, M. (1985), *Competitive Advantages of Nations*, McGraw Hill, New York.
- Prah, K. (1990), The notion of cultural blockage and some issues of technology adoption concerning the African peasantry, *Culture, Gender, Science and Technology in Africa*: 49-65, Windhoek, Namibia
- Rahman, M.A., (1993), The theoretical standpoint of PAR, In O. Fals-Borda and M.A. Rahman (Eds.), *Action Research: Breaking the monopoly with participatory action research*: 13-23. Intermediate Technology Publications, London
- Ramphela, M. (1990), Participatory Research-Myths and Realities, *Social Dynamics*, 16, (2): 1-15
- Rangan, H. and Gilmartin, M. (2002), Gender, Traditional Authority and the Politics of Rural Reform in South Africa, *Development and Change*, 33, (4): 633-658
- Rappa, M. (2000), *Business models on the web*, [http://Ecommerce/business\\_models.html.htm](http://Ecommerce/business_models.html.htm), Access date: 27 March, 2001
- Raymond, M.A., Barksdale, H.C., (1989), Corporate strategic planning and corporate marketing: towards an interface, *Business Horizons*, 32, (5): 41-8

- Rayport, J. (2000), *The truth about Internet business models*, <http://www.strategy-business.com/briefs>, Access date: 15 Jan 2001
- Reason, P. (1992), Three approaches to participative inquiry, In N. Denzin, and Y. Lincoln, (eds), *Handbook of Qualitative Research*, Sage, Thousand Oaks
- Reason, P. and Rowan, J. (1981), *Human enquiry*, Wiley, Chichester.
- Rhodes, J., (2004), South African, Gender-ICT Implementation: A Critical Retrospective Application of Latour's Due Process Model. *Australian Journal of Information Systems*, (11), 2: 46-56.
- Rhodes, J. (2002). Can E-Commerce Build Community Assets to Empower the Trading Activities of Rural Women? *Perspectives on Global Development and Technology*, (1), 3-4:269-293.
- Rhodes, J. H. (2001a), Can E-commerce enable marketing in an African rural women's community based development organisation? Informing Science Conference, June 19-22, 2001, Poland, Krakow University of Economics, Krakow, Poland.
- Rhodes, J. H. (2001b), *Can E-commerce build community assets to empower the trading activities of rural women?* College of Engineering and the Centre for African Studies, University of Illinois at Urbana-Champaign 2001 Symposium: Technology and Development in Africa, April 25-28, 2001, University of Illinois.
- Rhodes, J. H. (2000), An Internet based model for building a local Commodity/trade exchange for a rural women's organization. In the Second International Get Smart Conference: Using Community Informatics for regional transformation, Rockhampton, Central Queensland University, Australia.
- Roode, J.D., (2002) *A Framework for Achieving Sustainable Development Through ICT Interventions*. SSIT Workshop, London School of Economics.
- Rondinelli, D. (1994), *Development Projects as Policy Experiments an Adaptive*, Longman, London.
- Richardson, C., (2000), *Initial lessons learned about private sector participation in telecentre development, guide for policy makers in developing appropriate regulatory frameworks*, National Telephone co-operative association (NTCA), South Africa
- Rogers, E. and Palmer-Erbs, V. (1994), Participatory action research: Implications for research and evaluation in psychiatric, *Psychosocial Rehabilitation Journal*, 18, (2): 3-10
- Rogerson, C. (2000), Emerging from apartheid's shadow: South Africa's informal economy, *Journal of International Affairs*, 53, (2): 673-695
- Rolf, G. (1996), Going to extremes: action research, grounded practice and the theory-practice gap in nursing, *Journal of Advanced Nursing*, 24, (6): 1315-1320
- Romm, C. and Taylor, W. (2000), *The role of SME's in Promoting the diffusion of internet technologies in communitie*, In the Second International Get Smart Conference: Using Community Informatics for regional transformation, Sep 2001, Rockhampton, Central Queensland University, Australia

- SA Government rural development framework (1997),  
<http://www.polity.org.za/html/govdocs/rdp/rdevframe.html>, Access date: 3 May 2003
- Schein, E.H. (1985), *Organizational Culture and Leadership*, Jossey Bass, San Francisco
- Schilderman, T. (2002) *Strengthening the knowledge and information systems of the urban poor*. ITDG [http://www.itdg.org/html/shelter/docs/kis\\_urban\\_poor\\_report\\_march2002.doc](http://www.itdg.org/html/shelter/docs/kis_urban_poor_report_march2002.doc), Access date: 12 Jan. 2003
- Schumacher, D. (2002), UK Human Scale Sustainable Development,  
<http://www.schumacher.org.uk>, Access date: 5 May 2002
- Sen, A. (1993), Capability and Well-Being, In M. Nussbaum and A. Sen, *Quality of Life: 30-553*, Clarendon Press, Oxford
- Serote, P., Mager, A., and Budlender, D. (2001). Gender and Development. In J. Coetzee et al. (ed). (2001). *Theory, Policy and practice in Development: 155-174*, Oxford University Press Southern Africa, Cape Town.
- Sharma, et al. (1990), Micro-enterprise growth: operational models and implementation, *Journal of Small Business Management*, 28, (4): 9-13
- Sheng-Tun Li and Li-Yen Shue, (2003), A study of logistics infomediary in air cargo tracking, *Industrial Management and Data Systems*, 103, (1): 5-13
- Simon, D. (1999), Development revisited: thinking about practising and teaching development after the cold war, In D. Simon and A. Narman, (eds), (1999), *Development as theory and practice: a reappraisal*, Paul Chapman, London
- Simon, D. (2000), *Contextualising South African local economic development in current development debates: The international setting*, Proceeding in the Conference on local economic development in post apartheid South Africa, University of Sussex, Brighton, 28-29 April 2000,  
<http://www.Gg.rhbnc.ac.ul/cedar/cedar-papers/paper32.pdf>, Access date: 22 September, 2001
- Simonson, J. and Bushaw, V. (1993), Participatory Action Research: easier said then done, *American Sociologist*, 93, (24): 27- 38
- Small, S. (1995), Action Oriented Research: Models and methods, *Journal of Marriage and the Family*, 57, (4): 941-956
- So, A. (1990), *Social Change and Development*, Sage, London.
- Slywotzky, A.J., Morrison, D.J. and Andelman, B. (1997), *The Profit Zone: How Strategic Business Design Will Lead You to Tomorrow's Profits*, Crown Publishing Group, New York
- Sorensen, J., Reardon, K.M. and Klump, C. (2003), Empowering Residents and Students to Rebuild Neighborhoods: A Case Study. In B. Jacoby & Associates, *Building Partnerships for Service Learning*, San Francisco, Jossey Bass, p.212-233
- Sotshongaye, A. and Moller, V. (2000), We want to live a better life like other people: self assessed development needs of rural women in Ndwedwe, KwaZulu-Natal, *Development Southern Africa*, 17, (1): 117-134
- Spradley, J (1979), *The Ethnographic Interview*, Holt, New York

- Star, L. (1991), Power, technologies and the phenomenology of conventions: of being allergic to onions. In Law, J. (Ed.), *A Sociology of Monsters: Essays on Power, Technology and Domination*, Routledge, London
- Stavrou, A. and Benjamin, P. (2000), Telecentre 2000 Project, <http://www.sn.apc.org/community/docs>, Access date: May 2001
- Stringer, E. (1996), *Action research a handbook for practitioners*, Sage, London
- Statistics South Africa. <http://www.statssa.gov.za/> Access date May 5 2002
- Svensson, G. (2002), Beyond global marketing and the globalization of marketing activities, *Management Decision*, 40, (6): 574-583
- Swepson, P. (1998), Separating the ideals of research from the methodology of research, either action research or science, can lead to better research, Action Research International, Paper 1, <http://www.scu.edu.au/schools/sawd/ari/ari-swepson.html>, Access date: 21 Oct. 2001
- Tandon, R. (1996), The historical roots and contemporary tendencies in participatory research-implications for healthcare, In K. de Koning & M. Martins, (Eds), *Participatory research in health: issues and experiences: 19-26*, Zed Books, London., In T. McNicolle and M. Paule (1999), Issues in teaching participatory action research, *Journal of social work education*, 35, (1):51-63
- Tatnall, A. and Gilding, A. (1999), *Actor-Network Theory and Information Systems Research*, Proceedings of the 10th Australasian Conference on Information Systems, University of Southern Queensland, Rockhampton
- The Economist, (2003), The new geography of the IT industry, *The Economist*, 19 July 2003, p. 19-22
- The Economist, (1999), Survey: business and the Internet: the rise of the infomediary, *The Economist*, 18 June 1999, B21-B24
- The Internet Index*, <http://www.openmarket.com/intindex/index.cfm>, Access date: 14 July 2002
- The Telecoms Development Group (2000), *Rural Access to information and communication technologies (ICTs): The challenge to Africa, 2000*, The Telecoms development group, Toronto, Canada.
- Thompson, M. (2003), ICT, power, and developmental discourse: a critical analysis, In E. H. Wynn, E. A. Whitley, M. D. Myers and J. I. DeGross, (eds.), *Global and organizational discourse about information technology: IFIP TC8 WG8.2 Working Conference: 347-373, 12-14 December 2002, Barcelona, Spain*, Kluwer Academic, Boston
- Thompson, et al. (1997), Potential effects of Information technologies on the economic performance of agricultural and food market, *American Journal of Agricultural Economics*, 79, (2): 657-663
- Thorngate, W. (1995), *Measuring the effects of information on development in making a difference: measuring the impact of information on development*, Proceedings of a workshop held in Ottawa, Canada, 10-12 July 1995, edited by Paul McConnell, IDRC

## REFERENCES

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- Timmers, P. (2000), *Electronic Commerce, Strategies and models for business to business trading*. John Wiley and Sons, New York.
- Todaro, M. (1994), *Economic Development*, Longman, White Plains
- Todaro, M. (1989), *Economic development in the third world*, Longman, London
- Trauth, E. (2001), *Qualitative research in IS: Issues and Trends*, Idea group publishing, London.
- TRC (2003), The Truth and Reconciliation Commission Report, <http://www.info.gov.za/reports/2003/trc/>, Access date: 4 Sept 2003
- Turban, E. et al. (2003), *Electronic Commerce a Managerial Perspective*, Prentice Hall, New Jersey
- Turner, S. and Ibsen, H. (2000), Land and agrarian reform in South Africa, A status report funded by the Government of Norway through the Norwegian Institute of human rights, In H. Rangan and M. Gilmartin, (2002), Gender, Traditional Authority, and the Politics of rural reform in South Africa, *Development and Change*, 33, (4): 633-658
- UNDP Human Development Report (2001), *Today's Technological Transformations-Creating the Network Age*, Oxford University Press, Oxford
- United Nations Conference on Trade and Development (UNCTAD), E-commerce and development report, 2002, UNCTAD secretariat, [http://r0.unctad.org/e-commerce/docs/edr02\\_en/ecdr02\\_fas.pdf](http://r0.unctad.org/e-commerce/docs/edr02_en/ecdr02_fas.pdf), Access date: 10 Feb. 2003
- United Nations Conference on Trade and Development (UNCTAD), E-commerce and development report, 2003, UNCTAD secretariat, [http://r0.unctad.org/e-commerce/docs/edr03\\_en/ecdr03.pdf](http://r0.unctad.org/e-commerce/docs/edr03_en/ecdr03.pdf), Access Date: 15 June 2004
- Van Binsbergen, W. (1997), *Virtuality as a Key Concept in the Study of Globalisation: Aspects of the Symbolic Transformation of Contemporary Africa*, The Hague: WOTRO, Working Papers on Globalisation and the Construction of Communal Identity, (1997), no. 3
- Wadsworth, Y. (1998), What is Participatory Action research? *Action research International*, Paper 2, <http://www.scu.edu.au/schools/gcm/ar/ari/p-ywadsworth98.html>, Access date: 12 May, 2002
- Wallerstein, I. (1981), Dependence in an interdependent world: the limited possibilities of transformation within the capitalist world economy, In C. Munoz (ed) (1981), *From dependency to development: Strategies to overcome under-development and inequality*: 30-58, Boulder, Westview
- Walsham, G. (2001), *Making a World of Difference: IT in a global Context*, John Wiley and Sons, London
- Walsham, G. (1997). Actor-Network Theory and IS research: Current status and future prospects, In A. Lee, J. Liebenau and J. DeGross, (eds), *Information systems and qualitative research*, Chapman and Hill, London: 466-480
- Walsham, G. (1993), *Interpreting Information Systems in Organisations*, Wiley & Sons, New York

- Whetten, D. A., (1989). What constitutes a theoretical contribution? *Academy of Management Review*, (12), 4: 490-495
- Whyte, W. F., Greenwood, D. J. and Lazes, P. (1991), Participatory Action Research: Through Practice to Science in Social Research, In W. F. Whyte, (ed.), *Participatory Action Research*, Sage, London: 19-55
- Whyte, W. F. (ed.) (1991), *Participatory Action Research*, Sage, London.
- Whyte, A. (1998), Telecentre Research Framework for Acacia, <http://www.idrc.ca/acacia/04066/index.html>, Access date: 15 July 2002
- Wigand, R.T. (1997), Electronic Commerce: definition, theory and context, *The information Society*, 13:11-16
- Winner L. (1993), Upon opening the Black box and Finding it empty: Social Constructivism and the Philosophy of Technology, *Science Technology and Human Values*, 18, (3): 362-378
- Wood, P. (1999), *Successful writing for qualitative researchers*, Routledge, London.
- World Bank Group (2004), Telecommunications challenges in developing countries: Asymmetric interconnection charges for rural areas, Vol. 1 of 1 Document Type: Working Paper (Numbered Series), [http://www-wds.worldbank.org/servlet/WDS\\_IBank\\_Servlet?pcont=details&eid=000090341\\_200404061\\_41239](http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000090341_200404061_41239), Access date: 22 April 2004
- World Bank Group (2003), ICT and MDGs - A World Bank Group Perspective, Global ICT Department, [http://info.worldbank.org/ict/assets/docs/mdg\\_Complete.pdf](http://info.worldbank.org/ict/assets/docs/mdg_Complete.pdf). Access date: 12 March 2004
- World Bank Group (2000), World Bank Development Report on Poverty, <http://www.worldbank.org/poverty/wdrpoverty/report/>, Access date: 20 May 2001
- World Bank Group (2001), World Bank Human Development, Report on Poverty, <http://www.worldbank.org/poverty>, Access date: 15 August 2001
- World Economic Forum (2003), NEPAD E-Readiness Policy Programme, Stage one report, 7 January 2003, [http://www.bridges.org/e-policy/nepad\\_wef/wef-nepad\\_ereadiness\\_prog\\_rpt\\_final\\_7%20Jan\\_2003.pdf](http://www.bridges.org/e-policy/nepad_wef/wef-nepad_ereadiness_prog_rpt_final_7%20Jan_2003.pdf), Access date: 11 May 2004
- Zott, C., Amit., R. and Levy, J. (2000), Strategies for value creation in e-commerce, *European Management Journal*, 18, (5): 21-27
- Zuber-Skerritt, Ortrun, (ed.) (1991), *Action research for change and development*, Gower, Aldershot

**APPENDICES**

**APPENDIX 1: ACTION RESEARCH FACILITATION MATERIALS**

**APPENDIX 2: THE CONFLICT-SEQUENCE OF EVENTS DATA, 2002**

**APPENDIX 3: RWA FACILITATOR INTERVIEW, 2000**

**APPENDIX 4: ACTION RESEARCH PROJECT DATA, 2002**

**APPENDIX 5: THE SCOPING STUDY QUESTIONNAIRE, 2000**

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## 5.4 RESEARCH DESIGN

This section introduced the research design and implementation. Firstly, the referent conceptual framework directing the action research project is discussed. This is followed by a review of the data collection process and a description of the research setting. The section ends with a review of some pertinent participation issues and with some ethical points.

### 5.4.1 The Research Framework

Figure 5.2 represents the six-step research framework used to operationalise the research study. It is based on the action research model used by McKay and Marshall (2001) and incorporates the conceptual framework (chapter four, Fig 4.5), which underpins the action research project and emerges from the first three steps of the research framework as shown in Fig. 5.2. The starting point, step one, was to explore interests and questions relating to the research area.

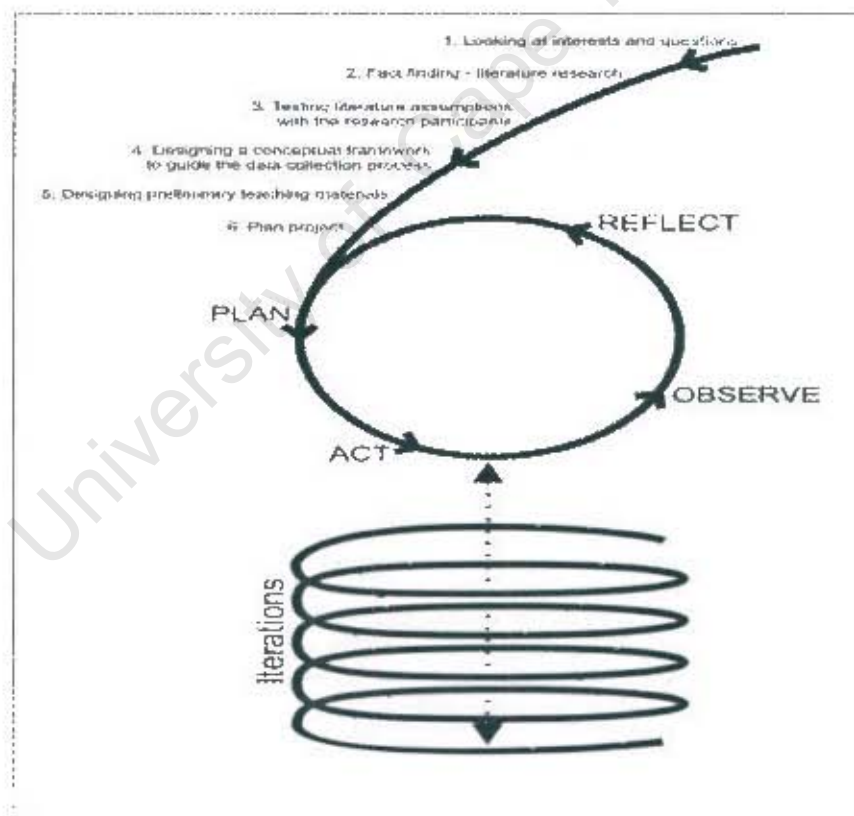


Figure 5.2 The Research Framework. Source: Adapted from McKay and Marshall (2001)

This process began in 1999 following the implementation of an ICT initiative, the RWA telecentre. Step two, fact finding and literature research, started in 2000 and step three, testing literature assumptions with the research participants, occurred in the 2001 scoping study

*Methodology*

Additionally, accountability can be a barrier to acceptance as people are scared to be the one who will be blamed for anything that goes wrong

*B: who's going to be accountable? I ask myself are we going to look after it who will be accountable if you get the internet who will we be responsible if I know this glass is mine , I will know I must put it away not leave it where it could be broken and stolen, I can blame myself, it must be this way with the internet .*

[Interview, RWA Manager AR Data Appendix 4 p: 27 2000]

Accountability is linked to ownership and often authentic ownership only shows up in a crisis, which destabilises the network. This was the case of the telecentre implementation briefly section 6.3.6. The introduction of the telecentre destabilised and disintegrated the RWA actor-network and in this way contributed to trust dissolving between the actants, which then affected the role of the RWA as an infomediary in the area.

The introduction and implementation of E-commerce as an 'island' with little support with other similar experiences and interventions in the locale can fail. There is a need to build on existing network and convergence activities in the area as this can promote information exchange and capacity building around the new E-commerce experiences and aid institutionalisation through strengthening the perplexity, consultation and hierarchy processes. Using E-commerce concepts that converge with other local communication processes and channels (such as local radio, other development projects and social organisations) can strengthen the network into which E commerce is introduced.

As many rural organisations rely on word of mouth for information they may develop unrealistic expectations of what technology is supposed to accomplish and use this unrealistic yardstick to judge their involvement with technology

*B: we tried, and everywhere we went, at meetings and conferences people told us how good the Internet is, how we can find customers, we felt very stupid because we know people are using the Internet to help them with business, but we could not do it. We know we can do market research with the Internet but how can we do this, we cannot understand how.*

[Interview, RWA Manager AR Data Appendix 4 p: 4 2000]

As the E-commerce model attempts to change the RWA model from a supply led model into a market demand model these unrealistic expectation limited its potential to succeed.