

**AN ASSESSMENT OF THE STATE OF E-GOVERNMENT IN SOUTH AFRICA -
THE CASE OF THE GOVERNMENT EMPLOYEES PENSION FUND**

By

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DEDICATION

To my late father, Henry Stanley Fisher and my mother Beatrice Fisher. Thanks dad and mom, I have never forgotten your unwavering support.

To my wife, Sylvia, and my son, Darren. Thanks for your support and patience. I would not have been able to achieve this without you serving as my inspiration.

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Hilton Fisher

August 2005

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ABSTRACT

E-government, electronic Public Administration, has led to streamlined work processes within and between government departments. As theories of administration and management seek to improve processes, electronic administration seeks to improve electronic processes in an effort to provide efficient services. The unique contribution of this study on Public Administration and the related e-government initiatives of the Government Employees Pension Fund is that none of this research has been documented before.

Whilst e-government is not new, its application to the Government Employees Pension Fund is novel. E-government espouses integrated partnerships between governments and e-citizens by creating an understanding of electronic

relationships between and within organisations. The thesis considers electronic Public Administrative service delivery in the Government Employees Pension Fund as it relates to civil pensions administration.

Successful e-government needs a critical mass of users that is central to ensuring its sustainable and successful utilisation. If a critical mass of users is not ensured then e-government initiatives will not be successful. Attempts by the Government Employees Pension Fund to develop a customer relationship management approach are assessed. Sustainable and successful e-service delivery is about providing multi-nodal access to clients. An interactive web site, amongst others, will allow clients to access services remotely.

Seamless government is developed around customers' needs and is outward looking since it provides a single access point for all services offered by government. Gaining access to information and communications technologies is a challenge that many face, hence the digital divide is a stymieing factor in providing seamless, successful e-government services.

Not all e-government initiatives are successful. Information and communications technology initiatives are not always implemented according to planned timelines and budgets. The case of the Government Employees Pension Fund proved to be no different given that not all the e-government initiatives embarked upon were successful.

KEY CONCEPTS

e-government

e-governance

e-administration

digital divide

workflow (document management)

information security and risk

paperless

seamless

systems integration

interoperability

e-citizens

customer relationship management

information and communications technology

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CHAPTER ONE

INTRODUCTION

A new civilization is emerging in our lives, and blind men everywhere are trying to suppress it. This new civilization brings with it new family styles; changed ways of working, loving, and living; a new economy; new political conflicts; and beyond all this, an altered consciousness as well (Toffler, 1981:23).

1.1 INTRODUCTION

The universal public service has traditionally been viewed as being bureaucratic, unresponsive, cumbersome and inefficient. For this negative image to be dispelled, the universal public service needs to embark on radical change. Change is one of the inevitabilities of the modern age. Change is evident in the way individuals interact, in the manner in which business is conducted (e-business, for example), in the way new virtual communities evolve and indeed, in the way in which governments transact, the most notable example being e-government. E-government can simplistically be viewed as the delivery of public services and information by employing electronic means.

Various metaphors have been used to describe the phenomenon of change. These range from network to global village to information super highway to systems.

What, however, is important is that these fore-going metaphors relate to the development and maintenance of systems of communication to enhance the flow of information. Governments consume large volumes of information on which to base policy and strategic decisions. Because of the vast extent of existing information, much of it needs to be filtered and presented in a manner that can easily be assimilated by the end user. Herein lies the role of e-government. Backus (2001:59) notes that e-government refers to the processes and structures needed to deliver electronic services and to conduct electronic transactions. Backus (2001:59) further notes that the external strategic objective of e-government is to fulfil the public's needs on the front-office side by providing electronic touch points. The internal strategic objective of e-government is to improve back-office operations so as to facilitate speedy, transparent, accountable and efficient processes in performing government administrative operations.

In South African organisations change manifests itself in various transformative initiatives. Transformative initiatives in South Africa, in their turn, manifest themselves in the various policy initiatives that the South African Government has embarked upon. These policy initiatives revolve around e-government, human resources development, organisational development, financial reform, client-centredness and sustainability, all of which need to integrate in order to establish a successful e-government environment.

The succeeding sections of the chapter provide some general background to the irreversible demands and challenges that the advent of information and communications technologies makes. The consideration of information and communications technologies from a global to an African to a national level will provide some valuable insight into the current positioning of South Africa's attempt to achieve successful e-government. The challenges highlight how governments should harness the power of information and communications technologies to improve service delivery offerings to their clients.

1.2 CONTEXT OF THE STUDY

Whilst the concept of e-government is not new, its application within the context of the Government Employees Pension Fund of South Africa is indeed novel. The concept and practice of e-government is in a continuous state of flux, hence researchers and practitioners are constantly generating new ideas and resources. These resources, whilst they may not be included in the literature survey, will be used to enhance the discourse contained in the thesis. The literature survey concentrates on written material - dissertations, books, policy documents - and electronic options. A survey of the literature reveals that e-government is a much discussed and researched concept. The idea of e-government as a tool for service delivery is also a concept that has been developed and refined in many countries around the world. E-government can therefore be seen to be in a constant state of flux.

Several of the readings that were conducted on e-government for the purposes of this thesis have indicated that e-government will enhance service delivery. E-government provides easy, remote, extensive and convenient access to government services. It is in this afore-mentioned context that e-government provides convenient – no queues, anytime, anywhere – access to government services, provided that there is a critical mass of users that can make the maintenance of the system viable.

Given that the Government Employees Pension Fund is a services department, and given that no research (thesis or dissertation) relating to service delivery in this context had been conducted, it was thought prudent that a contribution would be made to the already existing body of knowledge. A dissertation or a thesis that has been written specifically on electronic service delivery relating to pension fund administration in South Africa, has yet to be found. In the light of the afore-mentioned, it was determined to identify, discuss, research and survey the principles of e-government and then to provide practical, applied scenarios within the context of the Government Employees Pension Fund of South Africa.

To further contextualise the thesis, Korsten's (2001) dissertation on strategies for online dissemination of information, service delivery and business operations for government, is of particular interest. Korsten's (2001) research indicates that an e-government strategy presupposes a radical re-engineering of the way in which government provides services. Korsten (2001) notes that e-services should be

customer-centric, in their focus. Korsten (2001) argues that building both internal and external partnerships is vital to delivering e-services to clients. Korsten (2001) notes that whilst South Africa has done much to build an e-government strategy, much more still needs to happen in the field of e-government systems development. Current policies in South Africa provide a stable foundation from which to launch a comprehensive and effective model for e-government services. Korsten (2001) deduces that the South African Government has sent a clear message about the seriousness of its e-government strategy. Korsten (2001) concludes that a regulatory framework needs to be developed in terms of which e-government strategies are to be regulated. The digital divide is also cause for concern and needs to be addressed as far as is possible.

1.3 CONCEPTUALISATION

Having contextualised e-government and further having linked it to the case of the Government Employees Pension Fund, it is necessary to provide a conceptual framework of the more pertinent terms to be used in the thesis. Providing the conceptual framework will ensure a better understanding of the important concepts that are used in the course of the thesis.

1.3.1 E-governance

McLennan (1995:118) defines governance as the exercise of political power to manage a nation's affairs. Governance is therefore an all-encompassing concept that sets the broad parameters in terms of which public service delivery should take place. It therefore follows that if e-governance is the all-encompassing concept, that e-government and e-administration, for example, are pillars on which e-governance is built.

The International Trade Centre Executive Forum web site (2000) reinforces the idea that there is a distinction between the concepts of e-governance and e-government. The International Trade Centre Executive Forum web site (2000) proffers that e-government includes definitions such as digital information, online transaction services to citizens and Internet applications, amongst others. The International Trade Centre Executive Forum web site (2000) views e-governance as a much broader concept in that it does not simply refer to the transferring of existing procedures to an electronic medium, it instead implies a new definition of and approach to public governance. E-governance consequently represents a paradigm shift to the new information age (International Trade Centre Executive Forum, 2000). The paradigm shift could be said to include:

- the promotion of information and communications technologies; and

- the adoption of these technologies to promote the business of government on the one hand, and development on the other (International Trade Centre Executive Forum, 2000).

E-governance is more than simply a computerisation of certain office functions, it is instead a fundamental shift from how government operates and it requires new roles and responsibilities for the service delivery agency as well as the client who is receiving the service. E-governance should bring about a social catharsis which needs to be orchestrated in a comprehensive, co-ordinated manner (What is E-governance?, 2003).

The Inter-American Development Bank (2001) notes that e-governance goes beyond the scope of e-government. Whilst e-government relates to the delivery of services and information to citizens by using electronic means, e-governance allows direct participation of constituents in government activities. The Inter-American Development Bank (2001) notes that e-governance is just not about web sites and e-mail, it is not about service delivery over the Internet and it is not about digital access to government information and electronic payments. E-governance will, however, fundamentally alter how citizens relate to government as much as it changes the way in which citizens relate to each other. E-governance allows citizens to participate in governments' decision-making and policy-making processes. The idea of citizen participation in government is particularly important in the South African context. Citizen participation is taken a step further in an e-

governance environment in that electronic means are used to acquire citizen input into policy-related matters.

1.3.2 E-government

Various authors define e-government differently and in accordance with their specific applications. West (2000) defines e-government in terms of the delivery of information and services online through the Internet or through other digital means. West (2000) further asserts that e-government offers the potential to reshape the public sector and remake the relationship between citizens and government. The Cisco Systems web site (2001) asserts that e-government is the use of Internet technology to enhance the access to and delivery of government services to the benefit of citizens, business partners and employees. The further assertion is that an e-government system would fundamentally change the way that citizens view government. The Intracen web site (2000) views e-government as the application of information and communications technology to the processes of government, that is, the extension of digital information and online transaction services to citizens.

Deloitte Research (2000:4) proffers that e-government is not just another way of conducting business; instead, it is a transformation on a scale that will fundamentally alter the manner in which public services are delivered and managed. The adoption of e-government is evolutionary and it has the potential to

create a no gap relationship where public organisations deliver modernised, seamless services to their citizens. E-government is therefore about building integrated partnerships between governments, citizens (clients) and other entities.

Worthington-Smith (ed.)(2001:215) asserts that e-government is to the state what e-business is to the private sector. E-government has led to streamlined work processes both within (internal to) organisations and between (external to) government departments and other organisations. Further internal uses of e-government should extend to procurement and even recruitment. E-government leads to the building of systems that provide for and service the needs of citizens and business partners alike (Worthington-Smith (ed.) 2001:215). E-government is not merely a website with a collection of pages (i.e. static), it is indeed an integral (interactive) set of service components which provides information and a full array of services to citizens and business partners when and where such services may be needed. E-government is furthermore about providing direct (electronic) links between clients (citizens) and service providers (government departments).

Steins (2002:18) asserts that there are 4 different and often overlapping types of e-government. They are:

- G2C – Government to Citizen: this is the best known and fastest growing type of e-government;
- G2B – Government to Business: this is to facilitate the interaction of business with Government;

- G2G – Government to Government: this aims to improve the interaction between the various spheres of government; and
- IEE – Internal Efficiency and Effectiveness: government adopting technology best practices from the private sector.

From the fore-going definitions of e-government, it seems clear that it has the potential to transform the way in which government provides services and information to people. E-government is about efficiencies – time, accuracy, convenience of access, interactive, responsive and transformative. All these are so provided that clients have access to and are able to make use of the technologies that facilitate e-government. This thesis will show that there are challenges that need to be met in order to provide ideal e-government services to all in South Africa.

1.3.3 E-Administration

The United Nations Division for Public Economics and Public Administration (2002) identifies a framework for e-governance that consists of three pillars. These pillars are (a) e-government – inter-organisational relationships, (b) e-administration – intra-organisational relationships and (c) e-governance – electronic interaction between citizens, government organisations, public and elected officials. Heese (2003) notes that e-administration is the transaction of user-oriented services offered by public institutions that are based on information and communications

technologies. Priya (2004:101) concurs by noting that e-administration deals particularly with improving the internal workings of the public sector. Priya (2004:101) identifies three areas of e-administration that are extremely important. They are, cutting process costs, managing process performance and making strategic connections within government. Just as the traditional theories of administration and management sought to improve processes, electronic administration seeks to improve electronic processes in an effort to provide services quickly and more efficiently. The challenge for electronic processes to succeed is to ensure that electronic systems can communicate with each other across various barriers.

1.3.4 Interoperability

As has been intimated, one of the pillars of e-administration is making strategic connections within government (The United Nations Division for Public Economics and Public Administration (2002)). The principle of interoperability seeks to ensure that the electronic systems of public entities are compatible. Without such compatibility the ability for institutions to cooperate, interact and share information is severely compromised. Within an e-government process it would be necessary for clients to access different archives through a single portal for common data services.

Interoperability is consequently about being able to communicate. Successful communication relies on three principles. They are (a) a common syntax - structure of the message, (b) common mechanisms and (c) a common meaning (Dodd, **et al**, 2003:205). Interoperable systems for government work in a way that is coherent across public sector departments in order to provide uninterrupted services to clients. Worthington-Smith (ed) (2001) mentions that integrating the internal processes of the various departments or islands of expertise could prove to be a daunting task. Apart from the technical changes that are required for the integration of technological and administrative systems, public officials need to display the necessary willingness and commitment to the process.

John Locke, in his 1689 *Essay Concerning Human Understanding* (Dunn, 1984:1) argued that there are three elements to understanding humans and their behaviours. The first and second of these elements pertain to the physicality (nature) and practicality (rationale) of human activity. The third element relates to communication (semiology). Semiology is the doctrine of signs, the most common thereof being words. Words convey ideas. The assumption is that the more extensive a person's vocabulary, the more extensive the ideas that can be conveyed. The more extensive the integration of technological and social systems (socio-technological systems), that incorporate the special needs of societies, the greater likelihood of successful e-government (Dunn, 1984:1).

Habermas (Goodin and Pettit, 1995:49) interprets communications in respect of consensual norms. This approach assumes that communications corresponds to interaction in the context of interpersonal relations, that is, between two subjects seeking mutual understanding. Habermas (Goodin and Pettit, 1995:552) further suggests that communications is what creates communities and communications is what keeps them together. In this regard one could argue that new communities such as the Internet and web communities, amongst others, have been created. These communities come with their own set of socio-cultural and socio-economic values. The establishment of new communities is corroborated by the **Green Paper on E-Commerce** (2000:9), which asserts that technological innovations such as the Internet and other telecommunications-based activities have altered the manner in which business is conducted thereby contributing to the creation of what is often referred to as the 'borderless world'.

Roux, **et al**, (1997:86) assert that communications should be integral to any organisation, since it can be regarded as the factor that binds various separate tasks together in such a manner that contributes to success within the organisation. Roux, **et al**, (1997:86) also proffer that a proverbial golden thread links communications to information processing to decision-making. Good communications, good information processing and good decision-making are, however, arbitrary concepts and they consequently have to be assessed within the context of a particular environment.

Electronic administration systems are interoperable when they can communicate effectively at the technical, procedural and institutional levels. At a technical level, the ability of the equipment to communicate is critical. The hardware and software need to be able to send and receive messages in a manner that is decipherable by the systems involved. 'Procedure' refers to the exchange of meaningful information, that is, interpreting and understanding the information. 'Institutional' relates to the kind of information that is being transmitted as well as the kinds of transactions that are being performed (UK Online, 2003). The Office of the E-Envoy (UK Online, 2003) defines interoperability as joined-up government with joined-up systems working in a seamless and coherent way across the public sector.

Roux, **et al** (1997:87), identify a number of factors that negatively affect the communications process. The first of these is humankind's intransigence toward the process of communications. This really stems from the perception that people will automatically know or discover the facts. The second of the reasons that affects good communications is the semantic or terminological questions. Given that new sciences and disciplines are constantly evolving by means of research, communicating these to others is not evolving concomitantly. The third of the possible impediments to good communications, is technical. This relates to having insufficient or defective means of communicating. The fourth impediment relates to the heterogeneous nature of a particular society. In this case many, if not most South Africans, have to communicate in English which could be their second or

even third language. In an electronic service delivery environment the idea of e-citizen is central. If e-government in South Africa were to be successful, it would be necessary to take cognisance of the establishment of a critical mass of e-citizens – those citizens who are going to make the e-government system viable.

Further examples that may negatively affect the communications process could be lack of access to communications media for numerous reasons ranging from affordability to infrastructure. According to a World Bank report (2000:156), Africa's greatest challenge is not access to the Internet it is rather a lack of African content. Africa generates approximately 0,4% of global content on the Internet. If South Africa is excluded then Africa generates 0,02%.

The Handbook on Minimum Information Interoperability Standards for South Africa (Department of Public Service and Administration, undated) proffers that information systems have the potential to transform government and, by implication, the nature of the services government provides to the public. However, without consistent policies and standards to underpin those systems it would not be possible to work together to deliver collaborative services. The policy document on interoperability standards puts forward the minimum technical standards and policies that will act as the foundation of South Africa's e-government strategy. The minimum standards espoused in the handbook envisages the free flow of information across the public sector, that is, between national, provincial and local spheres, and will provide stakeholders – for example, civil society – unfettered access to government services.

A secondary aim of the document on interoperability standards is to provide uniform tools for government departments to be able to interact, by means of technology, regionally and beyond, hence its thrust to adopt the Internet and World Wide Web standards for all government systems. This afore-mentioned initiative is in line with international best practice. The Minimum Interoperability Standards document (undated) also envisages that South Africans become innovators of systems and not merely purchasers thereof. The Interoperability Standards document can be viewed as being the nexus of South Africa's e-government strategy, only second to security issues. The standards include the use of e-business principles by using new and appropriate technologies in order to foster good government.

The success of e-government in South Africa will depend on the success of the various spheres of Governments' distinctiveness, interdependency and interrelatedness as delineated in the **Constitution of the Republic of South Africa**, 1996. Section 41(1)(h)(i), (ii), (iii) and (iv) of the **Constitution**, 1996, sets the parameters for co-operative, supportive, consultative and co-ordinated action by the various spheres of government. The ideal of co-operative government in South Africa, as far as e-government is concerned, needs to be translated into tangible synergies of technological systems and administrative approaches across national, provincial and local departments.

Seamless government is a concept that is often used in relation to interoperability since it is descriptive of the kind of services that an e-government system sets out to achieve. Seamless government is developed around the needs of the customer. Seamless government is therefore outward looking since it is geared to providing a single point of entry to all the services offered by government. Gaining access to information and communications technologies is a challenge that many face.

1.3.5 Digital Divide

The 'digital divide' refers to the gap between technology haves and have-nots. Narrow definitions of the digital divide focus on access to computers and the Internet, but access alone does not bridge the technology gap (Worthington-Smith (ed) (2002, 2003). There has always been a gap between those people and communities who can make effective use of information and communications technology and those who cannot. Now, more than ever, unequal adoption of technology excludes many from reaping the rewards of the convenience that it has to offer.

While consensus does not exist on the extent of the digital divide (and whether the digital divide is growing or narrowing), there is unanimity in acknowledging that some kind of divide exists. The digital divide is evident within and between continents, within and between regions, within and between countries and within and between organisations and individuals. Worthington-Smith (ed) (2002, 2003)

corroborates the fore-going assertion by noting that there are two divides. The first is the divide between countries and the second divide is the one within countries. Other forms of the digital divide manifest themselves in the extent of the bandwidth, the costs associated with access to computers and access to reliable telephony. Worthington-Smith (ed) (2002, 2003) notes that while connected users grapple with the quality of connectivity, there are multitudes that do not have access at all. Herein lies the digital divide since it does not seem imminent that the poor and illiterate will have access to the tools necessary to catapult them into the 21st century.

There seems to be a high level of incongruence in technological and administrative systems of the three spheres - national, provincial and local – of Government in South Africa. This incongruence in electronic systems – including access to information and communications technologies - and in administrative systems is patently observable at regional (the southern African context) and at continental (African) levels. The concept of the digital divide is as rampant in the sub-continent of Africa as it is in the rest of Africa.

1.3.6 Sustainable Development

Sustainable development in a broad sense refers to people's basic needs being met whilst conserving the resource base in a situation where the population level is sustained and all aspects (not only economic), including human resources

development, are incorporated into the decision-making process (Munslow, Fitzgerald, 1995:3). A further definition of sustainable development describes it as being the development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Munslow, Fitzgerald, 1995:3).

Byron and Gagliardi (1998:8) make the important link between information and communications technology and their sustainability, or rather their sustainable use. To this end the United Nations Development Programme (UNDP) initiated the Sustainable Development Networking Programme (SDNP) with the main aim of providing adequate information services for policy and decision-makers in developing countries. Sustainable development in this regard employs the following principles:

- participation by all sectors of society, government, non-government, business and the academia;
- complementarity, which identifies national partners with similar goals thereby striving to avoid duplication of efforts;
- catalytic funding which strives to limit funding in order to encourage self-sustainability;
- national ownership to ensure that the national interests of the project receive priority;
- round table which provides a meeting place for stakeholders to discuss relevant issues; and

- capacity building which aims to create the necessary skills to ensure continuity (Byron and Gagliardi, 1998:8).

The elements of the Sustainable Development Networking Programme (SDNP) of the United Nations Development Programme seem to embrace an inclusive approach to sustainability. The inclusive or integrated approach essentially identifies the key elements that need to be available in order for sustainability to thrive. The key elements for sustainable e-government include funding, human resources capacity, government ownership, building partnerships and accessibility (Byron and Gagliardi, 1998:8). Sustainable e-government in the context of this thesis therefore refers to providing services electronically while building the capacity of the service provider and the user. Sustainability further depends on systems that are compatible nationally, regionally and further afield, with national ownership being prioritised.

The sustainability of e-government is critical when considering the amorphous state of information and communications technologies. It was provisionally determined that the Government Employees Pension Fund, in its quest to implement its initial e-government programme, has not taken cognisance of the sustainability of the system. The crux of sustainability in the drive to implement e-systems is to ensure that there is a critical mass of potential users of such e-systems. Without such a critical mass the e-systems would not generate the positive spin-offs – improved service delivery - which they were expected to.

In the global scheme of things, the emergence of the concept of e-government (as a branch of e-governance) and how a system of e-government can be implemented and maintained in order to enhance service delivery is central to this study. If e-government is about improving service delivery, one could argue that in the South African context various paradoxes are evident in providing electronic services, the most noticeable of which is that the human face of government will fade. Given South Africa's political history, it could be argued that political personalities' promises (at election time) need to be given real faces and tangible delivery. Another paradox in delivering services electronically is that it would only benefit those who have access to and who can operate such electronic devices. The poor, who are invariably in most need of the services, do not have access to information and communications technology, let alone the ability to use such technology given especially the prevalence of high levels of illiteracy and computer illiteracy.

Having considered elements of both the contextual and conceptual nature of the thesis, the next chapter identifies the problem and related questions to be researched. The delineation of the problem relates directly to the literature survey that was conducted for the purpose of this thesis. The literature survey provided the parameters of the problem and the potential outcomes of the research. Chapter Two also presents discussions on the methodology pursued in the thesis. The chapter on the methodology is important since it presents the reasons as to why the research on e-government is deemed to be important.

CHAPTER TWO

RESEARCH METHODOLOGY

2.1 INTRODUCTION

The impact of information and communications technologies in the global environment is ever increasing and pervasive. Nowhere is this impact more profound than in the government sector. Governments are striving to become more customer-centric in their approach to the delivery of services. The ideal of a seamless relationship between governments and their clients (the voting public, staff, other government departments and stakeholders) has become fundamental in the manner in which services are being rendered.

The Government Employees Pension Fund is an indispensable component of the civil service in South Africa since it administers pension receipts and payments on behalf of civil servants. Given that public service delivery is often perceived to be inherently unresponsive, inaccessible and inefficient, it is necessary to change this perception by, amongst other initiatives, implementing the principle of Batho Pele (People First)(Department of Public Service and Administration, 2003). A cursory examination of public service delivery in South Africa reveals shortcomings ranging from skills shortages to blatant incompetence, nonchalance and even indifference.

Government service delivery, despite the many initiatives to improve, continues to display significant shortcomings.

2.2 OVERVIEW OF THE PROPOSED RESEARCH

Given that e-government forms the basis of the thesis, with the Government Employees Pension Fund being the case, Chapter Two presents the methodology that is to be followed in the effort to answer the pressing question of whether the implementation of e-government can improve service delivery in the South African context. This chapter will consider the various methodological approaches to the study on e-government as they relate to the case of the Government Employees Pension Fund.

2.2.1 The Case of the Government Employees Pension Fund of South Africa

The theme of the proposed research is e-government. As has been intimated, e-government around the world and in South Africa is in a continuous state of evolution. New technologies are constantly being developed, whilst other technologies are becoming or are already obsolete. Research should make a difference. Research should be about answering questions, concerns and making relevant contributions to the body of knowledge. Research is about attracting attention to points of view pertaining to a particular theme or themes.

This research will consider how information and communications technologies can be used to enhance electronic service delivery from a public sector point of view. Effective, sustainable, efficient, successful and prompt service delivery has been the ideal espoused by the South African Government. This afore-mentioned ideal of efficient service delivery has found fruition (whether effective or not) in the South African Government's policy of Batho Pele (People First) (Department of Public Service and Administration, 2003). Delivering services electronically will seemingly benefit those who are literate, computer literate and who have access to information and communications technologies related, for example, to voice applications. This research aims to consider whether the electronic delivery of services enhances the quality, speed, accuracy and success rate of services provided by the Government Employees Pension Fund.

It is in the context of enhanced service delivery that the Government Employees Pension Fund will serve as a case study for this thesis. The Government Employees Pension Fund administers civil pensions in South Africa. There exists a distinct difference between the Government Employees Pension Fund, which administers civil pensions, as opposed to the Department of Social Development, which administers welfare/social pensions and grants. Given that the Government Employees Pension Fund is a department of government, makes the case especially relevant. Furthermore, the Government Employees Pension Fund is currently installing new pension administration software with a view to improving service delivery. The Government Employees Pension Fund is consequently an

appropriate case study when considering the migration from one pension administration software system (CivPen) to another, the Comprehensive Pension Administration Application Software (COMPASS) and the resultant implementation of e-service delivery mechanisms. An analysis of the old (legacy) versus the new Comprehensive Pension Administration Application Software (COMPASS) forms the basis for the study.

Another important aspect of the study is the electronic link between the Government Employees Pension Fund and the employer (government) departments. It is envisaged that the link between the departments will be electronic, thereby increasing the speed, security and accuracy with which services are provided to the client.

The thesis will consider electronic Public Administrative service delivery in the Government Employees Pension Fund and related government departments as they relate to civil pensions administration. The use of information and communications technologies in Public Administration service delivery, specifically with regard to pension administration, will be analysed. Information and communications technologies are increasingly being employed in a bid to improve services. It is within the context of the increased use of information and communications technologies that the effectiveness of electronic service delivery in South Africa will be analysed. The analysis would not be complete without an analysis of the historical forms of service delivery and indeed without considering

whether the Comprehensive Pension Administration Application Software (COMPASS) pension administration software package has been implemented successfully elsewhere.

The contribution of the research will therefore be concentrated on electronic service delivery (e-government), using the case of the Government Employees Pension Fund. The research will have as one of its outcomes, whether e-government improves service delivery. Furthermore, given that the Government Employees Pension Fund is a services department, and given that no research (thesis or dissertation) relating to service delivery in this context had been conducted, it was deemed prudent that an original contribution would be made to the implementation of e-government in South Africa. The research is therefore important in that it is an attempt to document current e-government initiatives and it aims to provide analysis of the successes and failures of the process that the Government Employees Pension Fund of South Africa had initiated.

This study would further make a contribution to the understanding of electronic relationships between and within organisations. It is envisaged that a better understanding of electronic relationships would contribute to the improvement of service delivery to clients. Such an improvement in electronic service delivery mechanisms should find fruition in the levels of morale amongst employers and productivity in the organisation.

2.3 RESEARCH DESIGN

Given global demands, with large information flows and the extensive use of information and communications technologies, it is important that governments, religious groups, green groups, civil society (in general) and individuals are e-enabled. For services to be delivered electronically, there needs to be e-citizens, e-clients, an e-administration and e-ability (where e-ability refers to computer literacy, access to computers and/or e-centrism).

2.3.1 Context of the Study

South Africa presents an apposite case for e-government. The e-government regime in South Africa is still in its infant stages. Since e-government in South Africa is in its infancy, an opportunity to document its development exists. Various e-government initiatives are currently afoot in South Africa. Many of these e-government initiatives are taking place under the auspices of the Department of Public Service and Administration. The Department of Communications also plays a significant role in the development of a sustainable e-government policy regime in South Africa. This research is important in that it is an attempt to document the current initiatives and it aims to provide analysis of the successes and/or failures of e-government initiatives undertaken. The methods to be followed when gleaning for data are to be elucidated in the succeeding section.

2.3.2 The Objectives of the Study

The objective of the study is to test whether the causal relationship between e-government and service delivery will lead to an improvement in the levels of services provided by the government to its clients, the citizens. The Government Employees Pension Fund will serve as a case in point.

This study on e-government intends to build on the work that has already been done on the concept and practice of e-government and the efforts around defining its role in South African government departments. It is important to note that the study intends to apply the principles of e-government to the Government Employees Pension Fund in an effort to determine whether e-government - that is, electronic service delivery - can improve the efficiency, accuracy and accessibility of government services. It is therefore important to ensure that clients have access to the mechanisms that enhance e-government. The reasons for any improvement in service levels subsequent to the implementation of e-government would be analysed and presented as the basis of the research. The study will therefore determine whether, given a confluence of the causal relationships between e-government and the levels of service delivery, the implementation of e-government structures will improve the levels, accuracy and accessibility of services offered by the Government Employees Pension Fund to its clients.

Given that it is the objective of the study is to test whether the causal relationship between the implementation of e-government and service delivery, improves the levels of service to clients, it would be necessary to develop, ascertain and assess information to prove or disprove the thesis. The research design will take into consideration the location in which most of the primary material is to be collected. Most of the material for the purpose of this study will be collected on the site housing the Government Employees Pension Fund. When it comes to assessing e-government across government departments, information will be sourced from a cross-section of departments.

The purpose of the study is to test whether the causal relationship between the implementation of e-government and service delivery on the one hand, improves the levels of services being provided to clients, on the other. Tellis (1997) notes that there are at least four applications for the case study. The application of the case study that is of particular interest for this thesis is the proposition that case studies explain complex causal links in real-life interventions. The causal links between the implementation of an e-government system at the Government Employees Pension Fund and the (improved) levels of service delivery, has particular significance.

2.4 DELINEATION OF THE PROBLEM

Any research document has boundaries or parameters in terms of which the outcomes will be assessed. The section on identifying the problem presents such boundaries and extent to which the research will be limited. The delineation of the problem relates directly to the literature survey that was conducted for the purpose of this thesis. The literature survey provided the parameters of the problem and the potential outcomes of the research.

2.4.1 The Statement of the Problem

The perception that service delivery in the South African public sector is inherently unresponsive, inaccessible and inefficient, can be dispelled by the implementation of a fully functional e-government system. The Government Employees Pension Fund will serve as a case in point. The questions for consideration are:

- what is e-government?
- can e-government improve public service delivery?
- can an effective customer relationship management system add value to electronic public service delivery? and
- how can e-government be made accessible?

Against the afore-mentioned back-drop the thesis proposes to investigate the implementation of e-government in South Africa by considering, evaluating and

critiquing the initiatives that have been taken by the Government Employees Pension Fund in this regard.

2.4.2 Significance of the Research

The contribution of the research will be concentrated on electronic service delivery (e-government), using the case of the Government Employees Pension Fund and its links to other government departments and stakeholders. The research will have as one of its outcomes, whether e-government improves service delivery. Since e-government in South Africa is in its infancy, this serves as an opportunity to document its development and indeed to add value to how the Government Employees Pension Fund delivers services to its clients.

This research is important in that it is an attempt to document current e-government initiatives and it aims to provide analysis of the successes and/or failures of e-government initiatives undertaken. An applied approach will be followed as per the case of the Government Employees Pension Fund. Once the analysis has been done, conclusions will be drawn on how to roll an e-government strategy out so that all South Africans can benefit.

In attempting to conduct targeted research it is important to present the results in a logical, coherent order. The delineation of the chapters for the thesis provides valuable insight into the direction that the thesis will go.

2.5 CHAPTER DELINEATION

In addition to the introductory chapter, the thesis is organised into five chapters. An outline of the parameters of the research will be provided during the first chapter. Introductory statements, definitions, intentions and processes are explained briefly in this introductory chapter. Chapter One will also serve as the platform in which to introduce the precepts of the proposal in line with a synoptic view of the literature search. Brief explanations of the important concepts to be used will be included in the introductory chapter.

Chapter Two presents the methodology that is to be followed in the effort to answer the pressing question of whether the implementation of e-government can improve service delivery in the South African context. This chapter will consider the various methodological approaches to the study on e-government as they relate to the case of the Government Employees Pension Fund. The research methodology includes presenting the nature of the study, the typical sources and the possible shortcomings.

Chapter Three provides an overview of the literature pertaining to the development of e-government in South Africa since the early 1990s. Brief statistical data on the proliferation of telecommunications in South Africa will provide a basis from which the discussion on e-government accessibility is based. Successful e-government initiatives by the Government Employees Pension Fund of South Africa will depend

on whether there is a critical mass of clients who have access to information and communications technology. The extent of the historical disparities in access to information and communications technologies in South Africa and the impact that these disparities may have on the delivery of services by electronic means, will be traced.

Chapter Three also provides a review of the theoretical aspects of the traditional public administrative models in order to determine whether e-administrative models can be more effective. An analysis of any Public Administration system would be inadequate without considering some of the theories of Public Administration. The main theories pertaining to Public Administrative and electronic systems, specifically how these interact to provide services to clients, are to be introduced. The applied analysis pertaining to the theories follows in Chapter Five.

The relevant theories of Public Administration, identified during the course of Chapter Four, will be applied to the Government Employees Pension Fund of South Africa. The current link between the Government Employees Pension Fund and its clients will consequently be assessed. The concept and principle of seamless government are integral in the development of a system that will enhance effective and efficient service delivery. The assumption is that e-government is a form of e-administration, hence theoretical aspects such as interoperability, seamlessness and digital divide.

Chapter Four furthermore pursues the principle of a paperless workplace as key to the submission of electronic documents. The principle of the paperless workplace also applies to procurement, invoicing and payment processes. The paperless workplace is also relevant to basic human resources administrative applications such as the submission of leave forms, housing subsidy forms, staff assessment documentation, inter alia. Seamless government, which includes electronic links with the Department of Home Affairs for verifying identity documents and for verifying the life status of pensioners, amongst others, is important. The concept of seamless government is linked to the idea of a portal for government departments so that clients could access government information and services irrespective of the department involved.

The web site of the Government Employees Pension Fund is currently static since it provides information to clients, without an interactive capability (Interview, Manager: Government Employees Pension Fund Call Centre, 3 September 2004). The information relates to the rules of the Government Employees Pension Fund, the Government Employees Pension Law, Members' Booklet, newsletters, frequently asked questions and answers to these, inter alia. An interactive web site would allow clients of the Government Employees Pension Fund to access more service offerings. Amongst these could be change of address details, banking details, general member and pensioner details update. The government departments, as clients of the Government Employees Pension Fund, can also access the web site to request quotations and admit new members.

Chapter Four also serves as the platform on which comparative lessons are drawn from a systems perspective. Drawing comparative lessons for the Government Employees Pension Fund is very difficult given that there is no other government pension fund in South Africa. Given that the thesis is about e-government and government service delivery, private pension funds in South Africa will not necessarily provide for adequate comparison.

Furthermore, comparing a private pension fund like Old Mutual with a government pension fund like the Government Employees Pension Fund, is not necessarily a fair comparison. Chapter Four will, therefore, have to compare whether the administration and service delivery of the private fund had improved after the implementation/partial implementation of the Comprehensive Pension Administration Application Software (COMPASS) pension administration software.

As Chapter Four had introduced the theories of Public Administration, Chapter Five analyses the said theories of Public Administration in an applied form using the case of the Government Employees Pension Fund of South Africa. Chapter Five will therefore assess the current link between the Government Employees Pension Fund and its clients. The concept and principle of seamless government are integral to the development of a system that will enhance effective and efficient electronic service delivery.

The contribution on customer relationship management explores the Government Employees Pension Fund's attempts to deliver effective, efficient, proficient and successful electronic services. The drive to deliver services brings to the fore the additional access points that the Government Employees Pension Fund has provided to its clients as part of the e-government initiative to offer a high quality of service. Chapter Five will analyse the value that customer relationship management (CRM) solutions could add to an organisation. Customer relationship management systems, be they operational (manual), electronic and/or mobile, provide significant opportunity to enhance service delivery. The Government Employees Pension Fund of South Africa will provide a good case for the implementation of an electronic customer relationship management model. The model for a customer relationship management system will, whilst considering the integration of the front and back office systems, be employed as a tool to provide new service offerings, such as investment advice, to its clients. Furthermore, given that the Government Employees Pension Fund is implementing new technologies in an effort to deliver improved service, electronic customer relationship management is vital. This chapter will consider the relationship between the implementation of the new technologies at the Government Employees Pension Fund and a customer relationship management model. The concept of mobile customer relationship management, given especially that workers (clients) have become more mobile, is an important initiative that needs to be implemented by the Government Employees Pension Fund. The idea and concept of mobile

customer relationship within the Government Employees Pension Fund will be pursued and assessed.

The Government Employees Pension Fund has a human element in that the human resources represent the face of the organisation. In this respect the Government Employees Pension Fund has had to train and retrain its staff to enable them to use the new information and communications technology system so as to ensure optimal service delivery. No thesis on government service delivery would be complete without considering the human resources element that is to provide the service. Human resources in the employ of government are often said to be inefficient, devoid of skills and nonchalant. Human resources needs within the context of the Government Employees Pension Fund and e-government initiatives demand special attention in this, the fifth chapter of the thesis (Interview, Assistant Manager: Human Resources, Government Employees Pension Fund, 3 September 2004).

The idea that clients need to be empowered to use information and communications technologies is an important one that will be explored in this chapter. The clients of the Government Employees Pension Fund should not be alienated by the implementation of technological advancements. Training is needed in this regard. Chapter Five will explore the initiatives taken by the Government Employees Pension Fund in order to enhance human resources capacity. The research will concentrate on the success of initiatives around

training, change management, focus groups and conditions of service, amongst others.

Chapter Six of the thesis will act as the dénouement where the loose ends will be drawn together in the form of conclusions and the identification of further opportunities for research. It is during the course of this chapter that the final analysis and conclusions will be drawn. Chapter Six of the thesis will deal with issues that could, in the future, improve electronic service delivery to the clients of the Government Employees Pension Fund. Given that this study is based on the case study methodology, it is prudent to provide some theoretical background as to what makes the case study effective and what does not.

2.6 RESEARCH METHODS

A whole range of research methods extending from empirical research to literature studies to case studies, are available. Babbie (1998:36) and Bailey (1987:60) proffer that in its simplest form, the distinction between qualitative and quantitative data in social research is the distinction between non-numerical and numerical data. Hussey and Hussey (1997:55) prefer to use the term positivistic rather than quantitative and phenomenological rather than qualitative. The reason for this distinction is that it is possible for a positivistic paradigm to produce qualitative data and vice versa (Hussey and Hussey, 1997:55; Neuman, 1997:14).

Neuman (1997:294) notes that a quantitative researcher would most likely use quantitative data such as charts, graphs and tables. These charts and tables allow others to see the evidence collected by the researcher enabling them to make their own deductions from the data collected. Quantitative research relies mainly on assumptions from the positivistic approach to science. The positivistic paradigm is based on the approach used in the natural sciences, such as biology, botany and physical science. Positivism is premised on the belief that the study of human behaviour should be conducted in the same way as studies conducted in the natural sciences. Logical reasoning is therefore applied to the research so that precision, objectivity and rigour replace intuition and experience as the means of investigating research problems (Hussey and Hussey, 1997:52).

According to positivists, laws provide the basis for explanation, permit the explanation of phenomena, predict their occurrence and therefore allow them to be controlled (Hussey and Hussey, 1997:52). Explanation therefore consists of the establishment of causal relationships between variables by establishing causal laws and linking them to a deductive or integrative theory (Hussey and Hussey, 1997:52).

The difference between qualitative and quantitative research is the nature of the data and what researchers take to be data (Neuman, 1997:327). Researchers have used different research strategies when data is captured in the form of words, sentences and paragraphs, as opposed to numbers, graphs, charts and tables.

Neuman (1997:328) asserts that qualitative data is empirical since it involves documenting real events, recording what people say, observing specific behaviours, studying written documents and/or examining visual images. For qualitative researchers the central issues are not how to convert qualitative data into reliable, objective numbers; they rather concern the accessibility of other cultures, the relativity of people's accounts of their social worlds and the relation between sociological descriptions and people's conceptions of their actions (Neuman, 1997:328). Qualitative social research relies largely on the interpretive and critical approaches to social science. The qualitative paradigm is concerned with an understanding of human behaviour from the participant's own frame of reference. The qualitative approach stresses the subjective aspects of human activity by focussing on the meaning rather than the measurement of social phenomena (Hussey and Hussey, 1997:53). The research methods used under this approach seek to describe, translate and come to terms with the meaning and not the frequency of certain more or less naturally occurring phenomena in the social world.

Irrespective of the style of social research adopted, researchers try to avoid the pitfalls in the process by systematically gathering data and by comparing, analysing and interpreting that data. If a researcher understands both styles, i.e. the quantitative (positivistic) paradigm and the qualitative (phenomenological) paradigm, it can only enhance the range of the research since the two paradigms

can complement each other. Given, however, that people conduct research for various reasons, researchers may want to favour one approach over the other.

The study on e-government, the case of the Government Employees Pension Fund, will mainly adopt a qualitative approach. The qualitative approach will be of relevance in the assessment of the reasons why e-government may or may not improve the levels of service delivery. Important to note is that the quantitative aspect would not be ignored in this study.

2.6.1 The Case Study

Soy (1997) defines the case study as the research that brings people to an understanding of a complex issue or object. The case study approach to research can corroborate experiential knowledge by further adding to what is already known. The case of the Government Employees Pension Fund falls squarely into this definition in that it will provide experiential knowledge of the inner operations of the Fund, whilst at the same time providing additional analysis of the advent of e-government in South Africa.

The case study is a qualitative approach which examines real-life situations to provide additional knowledge to the context that is being researched. Case studies by their very nature adopt multi-pronged approaches to analysis. In this regard, the researcher considers the views of various actors and groups of actors in an effort

to corroborate data (Tellis, 1997). Tellis (1997) identifies six possible sources for the case study, each requiring a different skill on the part of the researcher. The six sources are documentation, archival records, interviews, direct observation, participant observation and physical artefacts. No single source takes preference over another.

a. Documents

In the case of the Government Employees Pension Fund, the documents that are to be used are letters, internal memoranda, agendas and minutes, reports and planning documentation.

Documents and archival records tend to be stable, unobtrusive, exact and they cover a broad array of subjects. Some of the weaknesses that documents could display are that they may be difficult to retrieve, they display author bias and access may be blocked or limited, thus a skewed picture may emerge (Trellis, 1997).

b. Interviews

Interviews are one of the most important, significant and telling sources of the case study. The interview could adopt a number of different approaches, depending on the context. They could be open-ended, structured or focussed (Watson, 1989). In

the open-ended interview the researcher basically elicits the interviewee's opinion on events and facts. This approach could serve to confirm previously gathered information. The focussed interview is limited to a particular event or action. The focussed interview is normally short and goal-directed. The structured interview, an example of which is the survey, is particularly important in the case study.

The survey is a positivistic method in terms of which a sample of subjects is drawn from a population and inferences are made on the whole population. It is necessary to determine the manner in which the survey questions are to be asked. The alternatives are face-to-face, telephonic interviews or questionnaires. The participants will, as far as possible, be asked the same questions in the same circumstances. The descriptive method of surveying is best suited to determine the attitudes of the people on the subject of e-government, whilst the analytical survey would determine whether there is a relationship between the variables (Watson, 1989). The study on e-government, the case of the Government Employees Pension Fund will therefore use a multi-pronged approach in this regard.

c. Direct and Participant Observation

The prevalence of direct observation in a case study is evident when the researcher visits the actual site of the case in question to gather data. The data collection process could be formal or informal. The important issue, however, is that the reliability of the data which could be corroborated by employing a number

of observers. Participant observation is where the researcher actually participates in the events that are being researched. Participant observation is often used when studying organisations. Participant observation will be used extensively in the study on e-government as it relates to the case of the Government Employees Pension Fund. The main flaw with participant observation is the researcher's close proximity to the subject, hence the distinct possibility of bias. The information being sought on the case of the Government Employees Pension Fund will, however, not necessarily be available without such participant observation.

d. Physical Artefacts

Physical artefacts could be any piece of physical evidence that can be used by the researcher to corroborate facts and present arguments. In the case study on the Government Employees Pension Fund as it relates to e-government, physical artefacts refer to obsolete computers and computer programmes, the old note (recording) books, obsolete calculators and telephone systems.

Soy (1997) notes that case studies are likely to be far more reliable if several different sources are used. Soy (1997) argues that multiple sources allow for a cross-checking functionality that includes checking, verification, testing, probing and confirmation. This principle of cross-checking is probably the key strength of the case study approach. An additional component of the research methodology is

to determine the sample sizes for the interviews and direct observation so as to ensure optimal verification of the source material.

2.6.2 Target Population and Sample Sizes

The target population and sample size for the research, for it to be representative, will include a cross-section of individuals ranging from the management component of the Government Employees Pension Fund, to the drivers of the e-government project, to the clients. A skewed picture may emerge if an all-inclusive approach is not pursued.

When it comes to assessing e-government, e-service delivery and customer relationship management, there are a number of role-players to consider. The first of the role-players is the client, the generic term for pensioners, contributing members, government (employer) departments, trade unions and service providers (suppliers of goods and services). There are internal clients, that is the staff and processes that need to complement each other in a manner that is beneficial to the external client, the pensioner and member of the Government Employees Pension Fund.

Sample sizes for assessments within (internal to) the Government Employees Pension Fund would necessarily range from 30 to 150, depending on the number of staff working in a particular area that is being assessed and depending on the

need to corroborate the information. The sample for members of the Government Employees Pension Fund – all permanently employed civil servants – could be very extensive, given that there are approximately 1,2 million members. The sample for members of the Fund need to be limited in order to make the numbers practical to work with.

The research would not be complete without having assessed the needs of the pensioners as far as e-service delivery is concerned. This component will be of particular interest given that pensioners would not necessarily have access to or have the inclination to access services by electronic means. This assertion would have to be tested during the course of the research. There are two ways in which this can be achieved. The first is to include a questionnaire with the quarterly newsletters that are sent to pensioners. A similar exercise can be conducted when members' newsletters are sent. The members and the pensioners would be requested to return the survey forms in a reply envelope. The sample would include persons selected randomly from all the provinces in South Africa, taking into consideration the possible levels of literacy, an adequate rural sample and an adequate urban sample and age. Pensioners and members who visit the Government Employees Pension Fund's Walk-in Centre will be asked to fill out a questionnaire as to the desired services that they require.

As far as employers – government departments – are concerned, the researcher believes that a distinction needs to be made between provincial departments and

national departments. The emphasis would have to be determining whether there are disparities between the levels of e-government at national and provincial levels of government. One also needs to consider local government, especially as far as interoperability of systems between the various spheres of the South African Government is concerned.

Having decided on the target population and the sample sizes, it is necessary to determine the manner in which the data that is to be analysed and presented in a logical manner. This is also the reason why the results of the exit interviews conducted by these departments would be a valuable source of information.

2.6.3 Data Analysis

After the data has been collected the next step in the research process is to interpret such information in congruence with the parameters delineated by the research proposal and the related research questions. Data analysis comprises scrutiny, classification, tabulation and integration of information in such a way that it addresses the initial propositions of the study. The researcher, therefore, relies on a combination of literature, statistics, information garnered from interviews, information from direct and participant observation on which to base conclusions, interpretations and deductions.

Brynard and Hanekom (1997) suggest that the researcher has to analyse the available data during the collection process in order to determine its relevance to the proposed direction of the research. Brynard and Hanekom (1997) appropriately refer to the discarding of irrelevant data as filtration. What is left after the filtration process is what would be used during the analysis and argumentation.

Soy (1997) points out that the researcher uses the raw data, coupled with interpretation, evaluation and deductive thinking, to determine associations with reference to the original set of research questions. Importantly, Soy (1997) notes that the researcher should throughout remain open to the possibility of new opportunities and insights. The cross checking of data allows for corroboration of data. To this end, it may be necessary to conduct short, focussed, follow-up interviews to gather additional information. Soy (1997) notes that it is not uncommon for case study researchers to use reliable quantitative data to support qualitative data.

In the research relating to the case of the Government Employees Pension Fund, participant observation plays a prominent role, hence there is a risk of the data being common knowledge, as it were. The risk of bias is very real. The way in which to mitigate the afore-mentioned risk, is to ensure that multiple sources are corroborated by multiple role-players. Interviews will form a vital part of the verification process. Much of the primary written data are planning documents and these need to be verified.

2.7 CONCLUSION

Chapter Two has provided some insight into the methodological approach that is to be followed in pursuit of the finalisation of the objectives of the thesis. To this end, the chapter has entrenched the concept of e-administration as it relates to e-government. The global nature of the study is predicated upon the global reach of information and communications technologies. The chapter briefly expounds on the approach to the research on e-government in South Africa by exploring the case of the Government Employees Pension Fund.

Research methods, most notably that of the case study, are analysed during the course of Chapter Two. The typical sources employed during the course of the case study methodology are explored in terms of their effectiveness. The chapter finally presents how the data are to be assimilated and presented.

The succeeding Chapter Three provides a review of selected readings on e-government. The readings serve to further present and delineate the parameters of e-government and its progress in the South African context.

CHAPTER THREE

REVIEW OF SELECTED READINGS ON E-GOVERNMENT

Society not only continues to exist ...by communication, but it may be fairly said to exist in...communication. There is more than a verbal tie between the words common, community and communication. Men (sic) live in a community by virtue of the things which they have in common; and communication is the way in which they come to possess things in common (Dewey, in Goodin and Pettit, 1995:555).

3.1 INTRODUCTION

The literature review that was conducted for the purposes of the thesis is not exhaustive in extent and analysis. The literature review has, however, precipitated a flow of ideas that has resulted in the delineation of the problem to be investigated. Nowhere in the literature that was reviewed was there any reference to electronic service delivery within the ambit of the Government Employees Pension Fund of South Africa.

Emanating from the literature review are concepts that are central to a clear understanding of the analysis that is to be presented during the course of the thesis. The following section presents discussions on the theoretical understanding of the pertinent concepts so as to underpin their importance in the thesis.

Chapter Three traces the development of e-government in South Africa. In so doing Chapter Three will present some statistical data on the proliferation of

telecommunications in South Africa. The purpose of this analysis would be to determine the levels of access to information and communications technologies hence to determine the viability of e-government initiatives in South Africa.

As the World becomes increasingly interconnected it is necessary for governments and their related institutions to follow suit to be able to provide better levels of public services. Therefore there exists a synergy between the rollout of electronic systems for government, ever-increasing interconnectedness (locally and internationally) and service delivery. Despite the thrust toward interconnectedness several South African government departments possess systems that do not correspond with the specifications of yet other government departments. The systems are said to be incompatible if they cannot communicate with each other. The incompatibility of electronic systems between government departments has a negative impact on clients who may wish to have electronic access to the services offered by government.

An analysis of any Public Administrative system would be inadequate without considering some of the theories of Public Administration. This chapter will briefly analyse some of the main theories pertaining to Public Administrative and electronic systems, specifically how these interact to provide services to clients. Disjointed administrative systems, be they hard file-based or electronic, lend themselves to disjointed service delivery. Disjointed systems often lead to duplication, time and money wasting, hence inefficiencies. An analysis of the

traditional theories of Public Administration will provide impetus to the discussion on the disposition of the Government Employees Pension Fund.

The chapter starts by considering the global picture as far as interconnectedness is concerned. The chapter proceeds to consider the African disposition after which a review of the South African landscape pertaining to e-government, will be considered. The work of the Presidential Review Commission is but one example of the South African Government's resolve to pursue the adoption of information and communications technologies in the public sector environment.

3.2 GLOBALISATION AND ITS CHALLENGES FOR GOVERNMENTS

As global forces increasingly determine the future, the roles of governments, government agencies and business have become clouded in many respects. Globalisation, with its concomitant effects has permeated every vestige of society, from government to business to the individual in the most remote reaches. As globalisation presents new challenges to the business of business, it also presents new challenges and opportunities for governments across the world. The sovereignty of the state and the state's right to make decisions are being challenged to the very foundation as globalisation spreads its influence. The interaction between states, as self-sufficient entities with exclusive power, is what dominated global politics (Washington, 1995:2). The advent of globalisation has, however, cast aspersions on the very foundations of the state as an independent entity.

Globalisation is changing the context in which governments, institutions and individuals operate. The globalisation of financial markets is but one example of the change. Other aspects of globalisation include the internationalisation of crime, information and communications technologies, population movements and product and service markets (Washington, 1995:1). Even traditional domestic issues are increasingly being influenced by global trends. Globalisation of world economies is limiting the independence of action of the nation state (Fraser, 1999:33). Many traditional government activities have been privatised and economies have become increasingly liberalised in order for the market forces to determine economic outcomes thereby limiting government intervention.

Whilst nation states are losing independence, the market is gaining prominence in determining future trends. Multinational corporations are increasingly wielding extensive economic power. Globalisation and its concomitant spin-offs means that borders - of all sorts - are becoming increasingly difficult for governments to define, and maintain. National governments are being forced to redefine their roles and responsibilities.

Globalisation is an irreversible process and governments, institutions and individuals have to develop strategies to deal with its effects. Globalisation is not a policy option, an ideology or a theory written by rich men. Grawitzky (Business Day, 30 March 2000) asserts that the integration of the world economy is inevitable. An isolationist approach by governments, institutions and individuals will

be tantamount to self-destruction. By the same token, monetary and fiscal decisions can no longer be divorced from the international context. According to Washington (1995:3), there remain few purely domestic issues.

South Africa has warmed to the task of globalisation by liberalising many of its state-owned enterprises such as Telkom, Spoornet, Denel and Iscor. The Growth, Employment and Redistribution Strategy (Gear) was seen as the manifestation of a neo-liberal, capitalist shift in South African economic policy after 1994. The South African Government was merely responding to the prescriptive power of globalisation (Daily Mail and Guardian, 27 July 1999). Grawitzky (Business Day, 30 March 2000) asserts that the integration of the world economy is inevitable. An isolationist approach by governments in this regard is therefore not an option.

There are some areas of global interaction over which leaders within governments have little or no control. Information and communications technology, one example of interaction over which governments has little or no control, has effectively negated the capacity of countries to adopt an isolationist stance. Information and communications technology has progressed so significantly that access to information by individuals and groups is virtually limitless. In this context, it is evident that governments cannot control information flows. The manner in which entities respond to the forces of the information flows will determine how effective they are in the global arena. Having sketched the features of a global environment,

it is necessary to identify how these features impact on the development of information and communications technologies in Africa.

3.3 INFORMATION AND COMMUNICATIONS TECHNOLOGIES FOR AFRICAN DEVELOPMENT

Heeks (2002:98) notes that African countries have been using information technologies for more than 40 years. Heeks (2002:98), however, draws a distinction between an old model – that is, information technology automating the internal workings of government - and a new model – that is, information and communications technologies supporting and transforming the internal workings of government. E-government encompasses all information and communications technologies and pervades all public sector activities (Heeks, 2002:99). New communities are being formed, new innovations result and new forms of information gathering and dissemination are being developed. Heeks (2002:99-101) suggests three areas or domains where e-government is most influential. These domains relate to improving processes (e-administration), connecting citizens (e-citizens and e-services) and building external interactions (e-society). The discussions on these afore-mentioned domains will form the basis for the discussion on service delivery by the Government Employees Pension Fund.

Soltane and Adam (1999:331) point out that industrial and economic development cannot be achieved without the successful application of science and information

technology and communications technology. Soltane and Adam (1999:331) further assert that scientific and technological advances the world over are transcending national and regional boundaries and that these developments are undermining social, political and economic institutions.

Though several African countries have implemented information and communications technologies to fluctuating levels of success, access is still limited to a select group. Access to information and communications technologies seems to be easier in certain focal areas in Africa where a telephony infrastructure exists. It has been suggested that Southern African Development Community (SADC) countries establish a regional information network to promote optimal development and use of information resources, for example (Ngubane, Naspers, 1 November 2000).

The establishment of regional nodes of information and communications technologies throughout Africa would be beneficial to all Africans given that information can be accessed and disseminated with relative ease. Kgaphola and Magau (1999:344) point out that the underdevelopment of science, information and communications technology in Africa has historical roots, hence the assertion that African leaders have not as yet embraced the critical role that science, information and communications technology could play in development. Having considered information and communications technologies at a global and at an African level, the national, South African, level will be considered.

3.4 E-GOVERNMENT IN SOUTH AFRICA: AN OVERVIEW

As a prelude to assessing e-government in South Africa, it is necessary to trace the historical roots of the levels of accessibility to information and communications technologies. South Africa, as compared to other African countries, seems to have achieved much more with regards to infrastructural development and accessibility to information and communications technologies. The assessment on South Africa considers the historical disparities and comparative realities of accessibility to information and communications technologies.

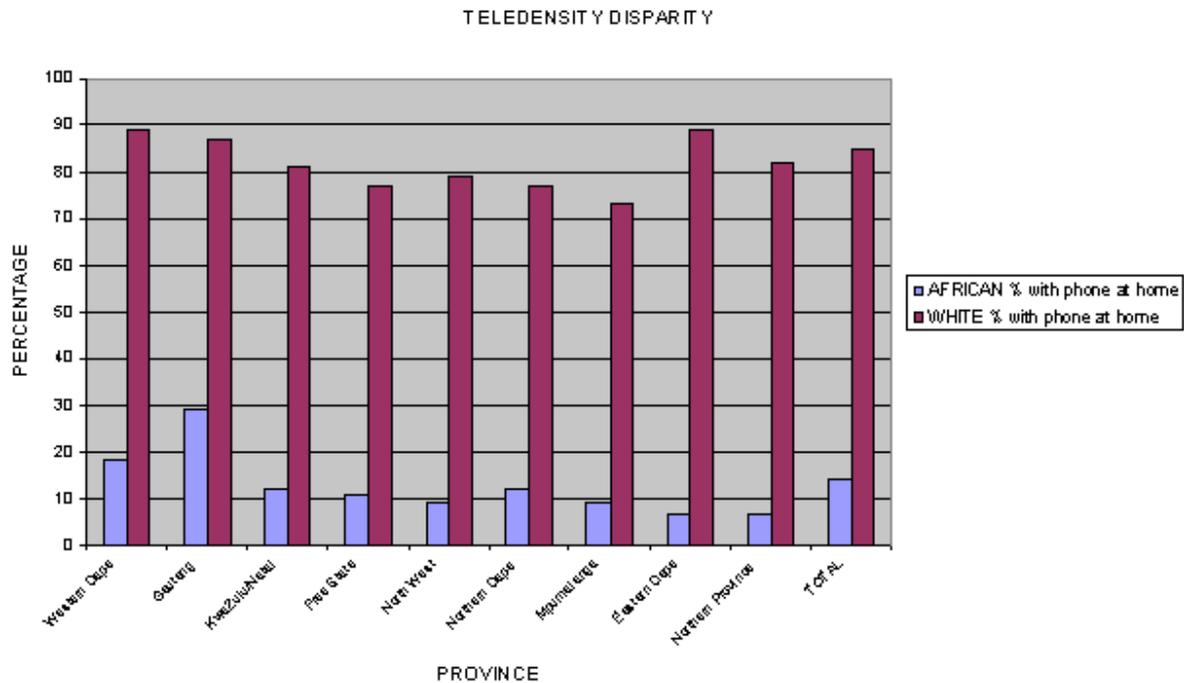
3.4.1 Historical Overview of the Telecommunications Infrastructure in South Africa

Whilst South Africa has the most advanced telecommunications infrastructure in Africa and whilst South Africa has the highest tele-density in Africa, such access to telecommunications is extremely skewed. A brief historical picture reveals the extent of the disparities in access to information and telecommunications in South Africa. Horwitz (1997:3) notes that the historical disparities in access to telecommunications are as a result of the policy of separate development (Apartheid) in South Africa. The 1989 telecommunications penetration figures indicate that 2,4 out of every 100 blacks, while 25 out of every 100 whites had access to telecommunications (Horwitz, 1997:4). Horwitz (1997:4) also notes that reliable data on telephone penetration by race are difficult to obtain since such

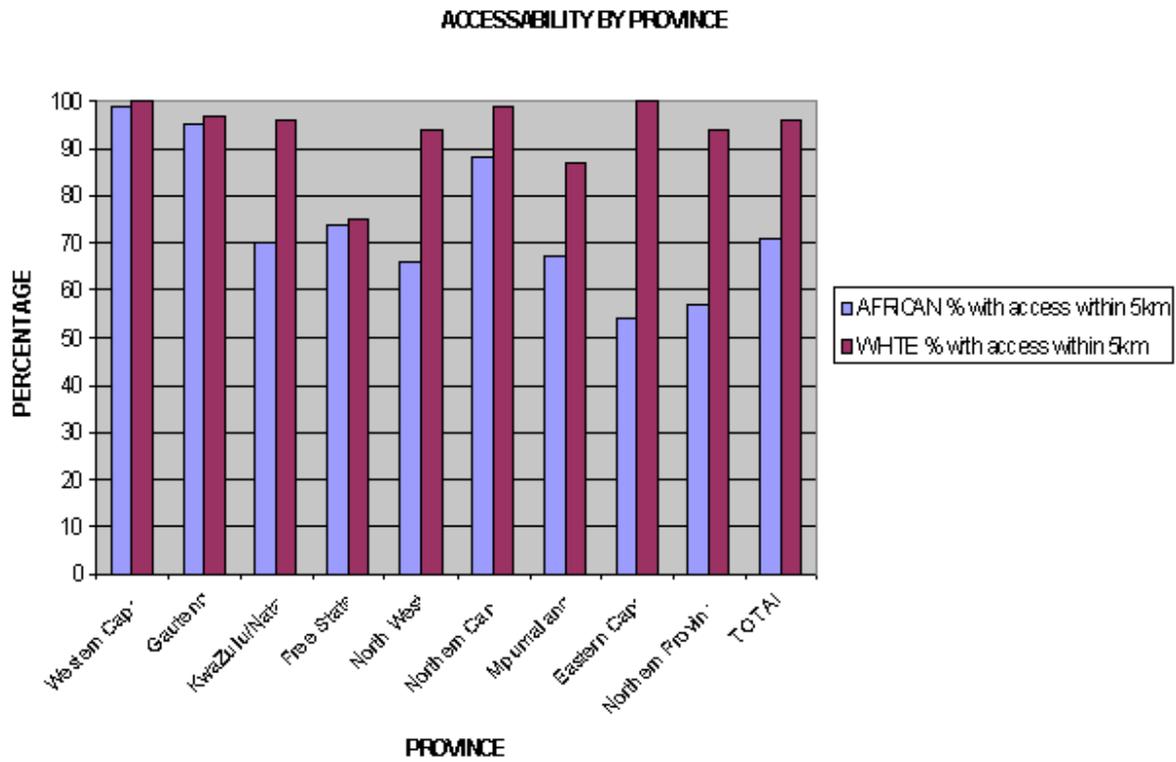
data are no longer collected. South Africa, as the telecommunications leader in Africa, had 5,3 million installed telephones which represents 39% of the total lines installed in Africa and further represents almost 90 lines for every 1000 citizens (Klimpacher, 1998).

There were 8,7 million households in South Africa according to 1998 figures, 2,8 million of which had a fixed-line telephone (The Discussion Paper on Definition of Universal Service and Universal Access in Telecommunications in South Africa, October 1998). The 1998 tele-density figures confirm that huge disparities in access to telephony existed between the various population groups in South Africa (The Discussion Paper on Definition of Universal Service and Universal Access in Telecommunications in South Africa, October 1998). In 1998 whites had an accessibility rate that exceeded 85%, Asians had an accessibility rate of approximately 74%, coloureds 34% and blacks 14%. Figures 3.1 and 3.2 below reflect the huge disparities in accessibility to telecommunications between whites and blacks. By 2000 the disparity between white and black access to telecommunications in their homes seem to have exacerbated in that virtually 90% of whites had access, while 12% of blacks had access (Feyt and Edelmuller, 2000).

FIGURE 3.1: Tele-density Disparity in South Africa



Source: The Discussion Paper on Definition of Universal Service and Universal Access in Telecommunications in South Africa, October 1998

FIGURE 3.2: Accessibility to Telephone Lines by Province

Source: The Discussion Paper on Definition of Universal Service and Universal Access in Telecommunications in South Africa, October 1998

Hodge and Miller (1997) note that the quality of telecommunications services in South Africa is significantly better than those in the rest of Africa, yet it still lacks the quality of service associated with telecommunications in industrial countries. Hodge and Miller (1997) suggest that whilst the disparities in access to telecommunications continue to exist, there are also disparities in the levels of service provision in maintaining existing telecommunications networks. If Hodge and Miller's assertion that there are disparate levels of service provision is correct,

then it can be deduced that access to Internet services will be concomitantly disparate.

The national Census results as conducted by Statistics South Africa in 1996 and 2001 reveal rather stark contrasts in terms of telephone connectivity. There were approximately 9,06 and 11,2 million households in South Africa in 1996 and 2001, respectively. Of the 9,06 million households approximately 1,6 million black households, 42 000 coloured households, 3200 Asian households and 12 200 white households had no access to telephones (whether fixed-line or cellular). The 2001 Census figures reveal that there were almost double (2,02 million) the number of cellular phones as what there were landlines (1,1 million). Significantly, 1,65 million black households had only cellular phones, while 560 000 black households had fixed-line telephones. From the afore-mentioned statistics it can be deduced that fixed-line connectivity in black, coloured and Asian areas are not as common proportionately and that cellular technology seems to be more popular. If it is assumed that cellular phone technology is predominantly acquired on the pay-per-use system, then accessibility to the Internet via this means will most likely be unaffordable to many people. Tables 3.3 and 3.4 below (Statistics South Africa, 1996 and 2001) reflect a more detailed picture of the nature of access to telephony in South Africa.

TABLE 3.3: Telephone facilities by population group, in 1996

| | African/Black | Coloured | Asian/Asian | White | Unspecified/Other | Total |
|---------------------------------------|------------------|----------------|----------------|------------------|-------------------|------------------|
| Telephone in dwelling/cellular phone | 740 783 | 321 849 | 187 433 | 1 312 267 | 28 917 | 2 591 249 |
| Telephone at a neighbour nearby | 342 015 | 109 544 | 21 792 | 18 851 | 3 460 | 495 662 |
| A public telephone nearby | 291 622 | 194 306 | 24 753 | 96 622 | 13 526 | 3 245 433 |
| At another location nearby, e.g. work | 390 616 | 57 987 | 4 398 | 31 434 | 2 303 | 486 736 |
| At another location not nearby | 511 573 | 12 128 | 1 194 | 3 142 | 1 748 | 529 785 |
| No access to a telephone | 1 592 049 | 42 220 | 3 269 | 12 211 | 5 993 | 1 655 743 |
| Not stated | 40 736 | 3 171 | 801 | 7 965 | 2 290 | 54 963 |
| Total | 6 533 998 | 741 206 | 243 639 | 1 482 492 | 58 237 | 9 059 571 |

* Excluding institutions and hostels

Source: Statistics South Africa, 1996

TABLE 3.4: Telephone facilities by population group, in 2001

| Telephone Facilities | Black African | Coloured | Asian or Asian | White | Total |
|--------------------------------------|------------------|----------------|----------------|------------------|-------------------|
| Telephone in dwelling and cell-phone | 469 966 | 175 993 | 131 671 | 617 555 | 1 595 187 |
| Telephone in dwelling only | 561 674 | 207 981 | 79 891 | 290 103 | 1 139 649 |
| Cell-phone only | 1 651 309 | 99 561 | 34 893 | 234 291 | 2 020 054 |
| At a neighbour nearby | 620 164 | 93 540 | 9 552 | 12 665 | 735 920 |
| At a public telephone nearby | 3 985 483 | 254 506 | 24 538 | 45 959 | 4 310 485 |
| At another location nearby | 329 189 | 22 897 | 783 | 3 126 | 355 995 |
| At another location, not nearby | 364 122 | 12 604 | 412 | 1 911 | 379 048 |
| No access to a telephone | 643 143 | 20 954 | 1 191 | 4 079 | 669 367 |
| Total | 8 625 050 | 888 036 | 282 930 | 1 409 689 | 11 205 705 |

Source: Statistics South Africa, 2001

In 1997 the prevalence of personal computers in South African households was 2,4%, whilst the country-wide Internet connectivity was at an approximate 420 000 users (Hodge and Miller, 1997). Whilst Limb (2001:7) reiterates that South Africa has the highest levels of connectivity in Africa, he further notes that in mid-2001 there were an estimated 2,5 million Internet users in South Africa. Limb (2001:7) notes that there were an estimated 3.8 computers per 100 inhabitants in South Africa and 83 Internet subscribers per 1000 inhabitants in 1998. Feyt and Edelmuller (2000) note that Africa is home to 12% of the world's population and has only 2% of the world's telephone lines. South Africa has approximately 10 fixed-telephone lines per 100 people. This afore-mentioned statistic represents a tele-density figure of approximately 20 times higher than the rest of sub-Saharan Africa (Feyt and Edelmuller, 2000). Feyt and Edelmuller (2000) further point out that Internet usage in South Africa has grown at a steady rate. Between 1997 and 1998 there were 266 000 Internet users in South Africa. By August 1999 there were 1,62 million Internet users and trends indicated that 1,8 million people would have been connected by 2000 (Feyt and Edelmuller, 2000). Feyt and Edelmuller (2000) note that there are essentially three categories of Internet users in South Africa. They are the academics, dial-up users accessing the Internet through modems, and corporate users. Worthington-Smith (ed.) (2001) asserts that whilst Internet usage in South Africa has grown sharply, there was still a huge lag in comparison to the rest of the world. Worthington-Smith (ed.) (2001) confirms average Internet connectivity figures in South Africa of around 2 million in 2001.

Table 3.5 (below) indicates the findings of three different attempts to determine the levels of Internet connectivity in South Africa. The various surveys indicate that there was an Internet connectivity rate of between 1 million and 1,5 million for home users and a similar number for corporate users between 2000 and 2001 (Worthington-Smith (ed.), 2001). There, however, seems to be a discrepancy in determining the overlap between home users, corporate users and students who may have dual (or even multiple) Internet access points.

TABLE 3.5: Internet Connectivity In South Africa

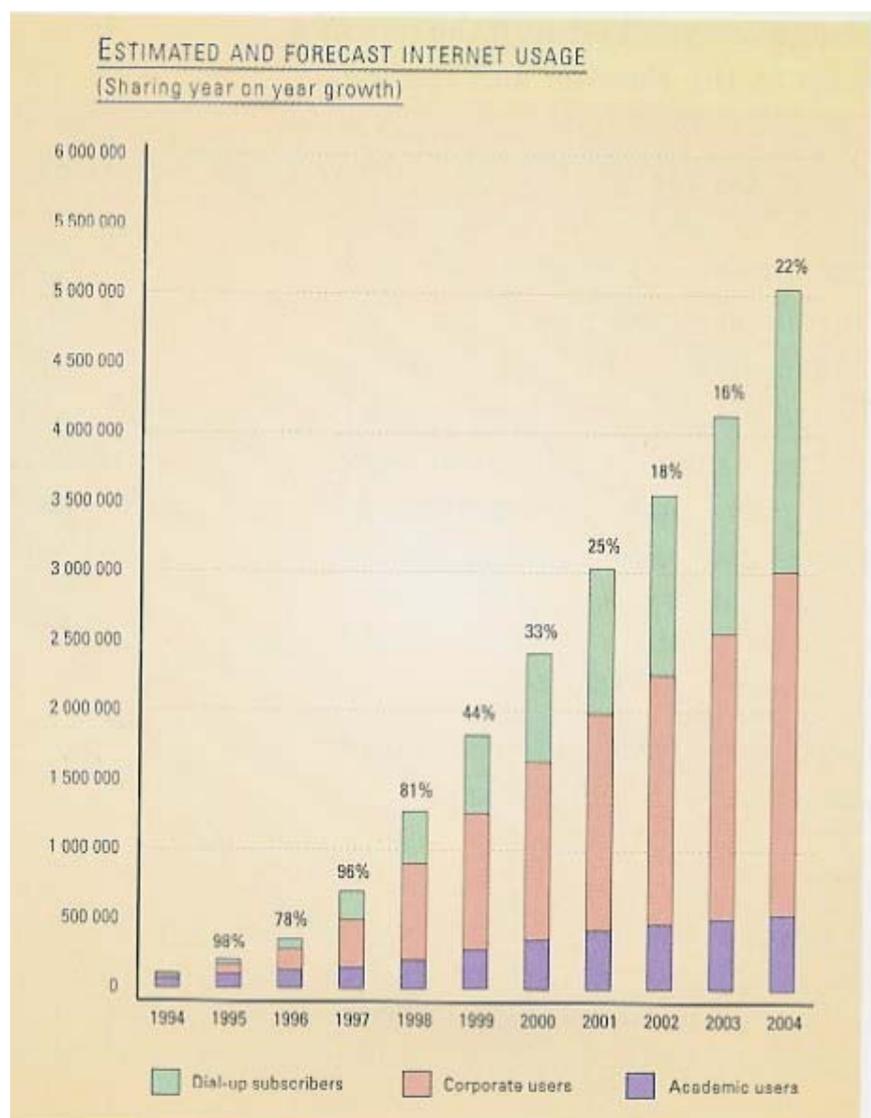
| Source | Date | Key findings | Comment/ Assumption |
|--|--|---|---|
| Nielsen/NetRatings | June 2001 | Home 1,5 million Work 1 million | Overlap not specified |
| The 4th South African Internet Services Survey | Undertaken in 2000, Forecast for 2001 | Dial-up 1 million Corporate 1, 5 million Academic 425 000 | Home / work overlap balanced by multiple home access |
| Webchek | 2000 | 1,205 million | Home/work overlap of 27% and only age 18+ in major metropolitan areas |

Source: Worthington-Smith (ed.) 2001

Figure 3.6 (below) projects that there would be an approximate 5 million Internet users in South Africa by 2004. Worthington-Smith (2002:2), however, points out that whilst Internet connectivity in South Africa is growing, the growth seems to be slowing. One of the problems with connectivity is that the local telephony environment is not conducive. First, more telephone lines need to be installed and

telephone services need to be made less expensive, amongst others, for people, especially for those who previously had no or limited access. Figure 3.5 comprises home, corporate and student Internet connectivity in South Africa. It does, however, not indicate whether the survey includes rural as opposed to urban connectivity figures, which would most likely show vast disparities.

FIGURE 3.6: Estimated and Forecast Internet Usage in South Africa



Source: Worthington-Smith (ed.) 2001

Disparities in access to telephony and the Internet are not limited to private households. There are disparities between the use of information and communications technologies in the various sectors – business and government – in South Africa. Hodge and Miller (1999:22) note that the manufacturing sector had upped its investment in information technology drastically to levels of 17 personal computers to every 100 employees. The financial services sector, according to Hodge and Miller (1999:22), has the most significant investment in resources relating to information and communications technologies. The financial services sector has a personal computer accessibility rate in excess of 74 per 100 employees. The wholesaling and retailing sectors display personal computer accessibility figures that vary greatly between the top end and the bottom end of the market. The leading top end retailers have, for example, established direct links with banks, whilst the smaller retailing enterprises have generally not migrated to such electronic connectivity. The wholesaling and retailing sector displays accessibility figures of 24 personal computers per 100 employees.

Compared to the private sector, the public sector displays accessibility figures of 7 personal computers per 100 employees. Hodge and Miller (1999:37) further note that governments continue to rely on antiquated mainframes and time-consuming administrative systems that complement the personal computers. The antiquated systems is a clear example of what Heeks (2002:98) refers to as the old model – that is, information technology automating the internal workings of government, as opposed to the new model of information and communications technologies that

support and transform the internal workings of government. There are extensive disparities between information technology systems of government hence electronic compatibility between departments is virtually non-existent. Whilst there may be a high degree of disparity between government departments as far as information technology systems are concerned, the South African Government has initiated a number of e-government projects in an effort to make information and communications technologies accessible to as many citizens as possible (Department of Communications, Online, 4 February 2005).

3.4.2 Access To Communications Technology In South Africa

The success of any information and communications system requires that access to such systems be assured. Given the historically disparate levels of access to the various technologies required to access government services, it was imperative to redress the situation. A brief analysis of the development of telecommunications policy in South Africa will reveal the extent of the historical disparities. Matsepe-Casaburri (2001) opined that the telecommunications sector is a major driver of the economy. Whilst telecommunications are important to South Africa, there has been a convergence between information and communications technologies that have realised new challenges. Klimpacher (1998) intimates that the extent of the political changes in South Africa precipitated a concomitant change in the communications sector. Various initiatives, including an overhaul of the telecommunications industry

in South Africa, have been initiated in an attempt to make telecommunications more accessible.

The final report of the task group on communications, *Communications 2000: A Vision for Government Communications in South Africa (2000)*, is an overview of the effectiveness of communications with respect to a vision for Government communications in South Africa. The task group consulted various role-players in professional bodies and within government institutions. The findings of the task group were contextualised within the new Constitutional parameters, taking cognisance of the political imperatives of social and economic development in South Africa. The task group sought to contextualise its findings in terms of the pre-eminent practices in developed and developing democracies. Many South African citizens were excluded from communications systems and there was a resultant need to open channels of communications to all so as to facilitate, amongst others, the link between government and the citizenry. A new communications system is an economic and political imperative for South Africa to play its part in the global marketplace (*The Communications 2000 Report, 2000*). Communications must provide a network through which every citizen can access the requisite government information and services. Providing access to more people, especially those who were previously excluded from access to information and communications technology is a daunting task that is going to demand commitment from a diverse set of role-players.

The new South African Government information and communications technology system needs to be coordinated both internally and in the manner in which it addresses citizens from all walks of life. Effective communications can strengthen the hand of government in its ability to disseminate policies and to expound on the reasons why particular policy options are necessary. Furthermore, an effective and accessible information and communications technology regime, will give citizens access to basic services ceaselessly. Sustainable e-government in South Africa should be viewed as an integrated effort, since information and communications technologies require innovative, progressive thinkers (Risana, February 2001). A vision of e-government should realise a seamless operation of the organs of state, with services being offered in a more effective and efficient manner (*Risana*, February 2001). A sustainable e-government strategy will require a sustained government-wide effort in collaboration with provinces, municipalities and other stakeholders. Government departments would have to re-engineer programmes and processes while maintaining all the deliverables.

Worthington-Smith (ed) (2001:217) asserts that the electronic process will break down without a common platform across the South African Government. Worthington-Smith (ed) (2001:217) further points out that there exist few compatible technological solutions across national, provincial and local government departments in South Africa. This incompatibility stems from various departments having built islands of technology to serve their specific needs (Worthington-Smith (ed) 2001:216-217; Hodge and Miller, 1997:5). The 'islands of

expertise' scenario is in direct contradiction to e-government initiatives since it engenders individualism, isolation, separation and duplication.

The drive to effective information and communications technologies should emanate from the very highest levels of government and should in turn be cascaded to all other levels of government and civil society (The Communications 2000 Report, 2000). This afore-mentioned point is emphasised in a discussion on the key factors on the development of effective e-government infrastructures (The United Nations Division for Public Economics and Public Administration, 2002). These key elements are good telecommunications, human capital, the political will and commitment of leaders (The United Nations Division for Public Economics and Public Administration, 2002). In their efforts to achieve good telecommunications, governments need to engage more effectively with civil society. Government engaging with civil society should include opening multiple communications channels thereby creating the opportunity for interactive dialogue with civil society. To this end, the President noted the South African Government's intention to apply modern information and communications technology in the fields of education, health and commerce (Mbeki, 2001). Mbeki (2001) also identified the digital divide as an area of development and that government would be initiating programmes to bridge the gap, including the establishment of task forces and the initiation of public-private partnerships in an attempt to improve the quality of service delivery.

Significantly, the lead in determining a strategic framework for information and communications technologies has been taken up by the Presidency of the Republic of South Africa. The responsibility for drafting various framework documents on e-government in South Africa has been taken up by the Department of Public Service and Administration. The documents drafted by the Department of Public Service and Administration include the framework for interoperability, a government-wide inventory on information and communications technology and various other white papers and policies. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) country profile on South Africa (Online, 2 February 2004) identifies four South African government departments that are intimately involved with the development of information and communications technology policy. It is reflected that the Department of Communications deals with infrastructure, access and connectivity, and the Department of Public Service and Administration deals with accessibility and efficient and equitable service delivery. Language-related issues are dealt with by the Department of Arts, Culture, Science and Technology, in its attempts to foster access to the Internet in the language of choice of the individual user. Access to information and communications technology through research and development initiatives in the information and communications technology sector is being spear-headed by the Department of Arts, Culture Science and Technology. International trade and commerce are the domain of the Department of Trade and Industry. It is also expected that the implementation of information and communications technologies be decentralised

to ministries, departments, provincial and local government (United Nations Educational, Scientific and Cultural Organisation, Online, 2 February 2004).

If information and communications technology initiatives are to be successful, a more professional cadre of communicators is required. The South African Government has identified and initiated several programmes to deal with skills development and access to information and communications technologies for its public servants. The Minister for Public Service and Administration (Fraser-Moleketi, 2002) noted that the level of computer literacy amongst public servants was rather low. The Minister also noted that access to such technology beyond the place of work needed to be increased in order to provide connectivity for public servants. At a comparative level, the number of households that had access to the Internet in the United Kingdom trebled between 1999 and 2002. The rate of access to the Internet in the United Kingdom was 94% for the 16 – 24 age group and 17% for the over 65 age group (National Audit Office, United Kingdom, 2003).

The critical constraints with regard to the implementation of a user-friendly, accessible information and communications technology system are highlighted in the Communications 2000 Report (2000). These constraints include the low status of government communicators, a tradition of inflexible and inward-looking bureaucracy, a high level of concentration of media ownership and the reality of severe resource constraints. The resource constraints need to be addressed if an e-government system is to be successful in South Africa. There are vast disparities

in communications standards between the various South African government departments (Communications Report, 2000). The disparities are also evident in the disparate levels of resources allocated to information and communications technologies in government departments.

It is critical for government communications to reach the majority of the population, especially since the majority had been deprived of any access to information and communications technologies (The Communications 2000 Report, 2000). Current infrastructure is inadequate to address accessibility. A closely coordinated strategy to extend this infrastructure is required. The formulation of such a strategy is not the sole preserve of government. Collaborative partnerships need to be fostered, hence the suggestion that existing public infrastructure such as post offices and libraries need to be used. The suggestion of multi-purpose information centres as a good way to facilitate access to information and communications technologies is also made in the Report (The Communications 2000 Report, 2000). The experiences of 19 countries - ten of which are developing countries – are drawn together in order to determine areas of strength and weakness and to draw valuable lessons (The Communications 2000 Report, 2000). Based on the comparative lessons, the Report advanced 83 recommendations, the most important of which are based on the premise that a modern, effective communications system will result in efficiency and savings to the benefit of the citizenry and government (The Communications 2000 Report, 2000).

The Constitutional principle of access to information is pivotal to providing access to information and communications technologies in South Africa. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) country profile on South Africa (Online, 2 February 2004) confirms that the South African Government's commitment to information and communications technologies is enshrined in its **Constitution**, 1996. Section 32 of the **Constitution**, 1996 makes reference to unfettered access to information held by the state or by others. The **Promotion of Access to Information Act**, 2000 (Act 2 of 2000), gives effect to the Constitutional right of access to information being held by the state or by any other entity. In so doing, the **Promotion of Access to Information Act**, 2000 (Act 2 of 2000), aims to promote transparency and accountability in public and private bodies.

Additional pieces of legislation that give fruition to the Constitutional principle of access to information are the **Independent Broadcasting Authority Act**, 1996 (Act 4 of 1996), which makes provision for the regulation of broadcasting activities in the public interest and the **Broadcasting Act**, 1999 (Act 4 of 1999), which delineates the levels of authority between the Independent Broadcasting Authority and the Minister of Communications. The **Independent Communications Authority of South Africa Act**, 2000 (Act 13 of 2000), whose duty it is to regulate broadcasting and telecommunications fairly and in the interests of all South Africans, also provides an important impetus to the transformation of the telecommunications industry in South Africa. The establishment of the Independent

Broadcasting Authority is a clear attempt by the South African Government to broaden access to telecommunications to those who were previously denied such access. Access to telecommunications would in its turn allow access to other dependent technologies such as the Internet. The intention of the **White Paper on Telecommunications Policy**, 1996 (Department of Communications), is to bring all South Africans into the loop so that there could be improved and sustained quality of life and participation in a competitive economy. Limb (2001:7) indicates that the incidence of democratisation efforts subsequent to 1994, by using information and communications technologies, has gained momentum in South Africa.

3.5 THE STAGES OF DEVELOPMENT OF E-GOVERNMENT

An exposition of the typical phases of the implementation of an e-government regime is central to an assessment of an e-government system for the Government Employees Pension Fund. Whilst the requirements for the successful implementation of an e-government system are different to the stages for the successful implementation of e-government, the discussion on the distinction between them serves as a useful point of departure. Lenk (2002:93) highlights that identifying and addressing the needs of the target group, ensuring multi-channel and single-window access, system security and reliability as being critical requirements for e-government. It is, therefore, important that the Government Employees Pension Fund identifies the needs of its target group, the pensioners

and contributing members, so as to ensure that e-services are delivered in congruence with such needs. These needs include access to information and communications technologies, the ability to use such technologies and a user-friendly environment to these service offerings. Single window access allows the client to use a single point of entry to access services to perform transactions that may cut across various government departments. The single point of entry allows easy access for clients. Multi-channel access allows the client to access services by means of a number of access points, any one of which is convenient to the client. Examples of multi-channel access points include a Call Centre and voice response systems, a web site, a Walk-in Centre and kiosks. Security and data integrity are perennial concerns that demand constant scrutiny so as to protect the client and the supplier of the electronic services from unsolicited access.

Heeks (2002) adds that a successful e-government requires a legal framework, an institutional infrastructure, skilled human resources and data systems. The legal framework that is needed to ensure effective e-government service delivery must take cognisance of the integrity of the transactions. No e-government provision will be successful without the necessary infrastructure and the necessary human and financial resources to facilitate delivery. In order to achieve e-government success, e-government initiatives have to be customer focussed, government agency borders must be permeable, government must address privacy issues, government agencies must be open to collaboration and governments must ensure that

communities have broadband access (Andersen Consulting, Online, 6 November 2001).

Carrow (2001) identifies 5 keys to e-government. The first of the keys to e-government implementation is strong, visionary leadership. Without such leadership e-government success would be difficult to achieve. The second key to successful e-government implementation is enterprise vision. Without full enterprise buy-in, an e-government initiative will have scant success, if at all. The third key, the provision of adequate resources for implementation, is imperative. Financial and human resources need to be aligned to project plans to ensure that diversionary elements do not cloud the implementation process. E-government, Carrow (2001) emphasises, is about change. Processes change, habits change, organisation structures change and new learning has to happen. It is in anticipation of resistance to these afore-mentioned changes that the fourth key element to successful e-government implementation, support for the necessity for change, needs to be elicited. The execution or fulfilment of an e-government project needs to happen with purpose. Prolonging the implementation will invariably have a negative impact on the envisaged project outcomes.

Worthington-Smith (ed.) (2002) and Deloitte Research (2000) view e-government engineering as a six-phase process. Firstly, e-government engineering starts within a conceptual framework. This conceptual framework – or visionary – phase is where ideas evolve and where formal planning takes place. The information

publishing stage is a very individualistic phase. This phase is described as being individualistic in that each government department publishes information that is unique to its requirements at the time. The individualism extends to each government department developing its own web site around whatever information it needs to disseminate. This information could include the publishing of reports, tender documentation and policy issues. The web sites are normally static in nature, hence they provide no interactive capability. Given that the web sites are not interactive, they do not provide citizens with the opportunity to conduct electronic transactions. The third phase of a typical model of e-government implementation is when there is a distinct tendency toward the realisation of multi-purpose portals. This allows the client to use a single point of entry to access the services of all government and government-related entities. Often clients need to perform transactions that cut across various government departments and the single point of entry allows easy access. Two-way transactions mainly pertain to paying bills, facilitating information transfers and submitting forms. The fourth step in the implementation process is much more personalised in that it aims to build relationships around the needs of the client. Clients are profiled in categories with the express aim of minimising duplication, personalising offerings and predicting citizens' future needs. The fifth phase of implementation of e-government clusters is related to transactions so that the client has a packaged approach to services being offered by government departments. Packaged service offerings shift clients' focus from the fragmented yet related service to a more interrelated process which results in the blurring of departmental boundaries. The sixth and final phase of e-

government implementation is full integration. What starts as a static information sharing facility should finally offer a fully integrated, boundryless, interactive, personalised and electronic service. At its most mature level, e-government offers a full array of services at the click of a mouse from anywhere and at any time.

The development of e-government systems at the Government Employees Pension Fund will be assessed in line with the steps relating to the implementation of e-government processes as elucidated. A cursory assessment, however, reveals that much of what is being done at the Government Employees Pension Fund in terms of implementing an e-government system, is congruent to the stages of implementation as outlined.

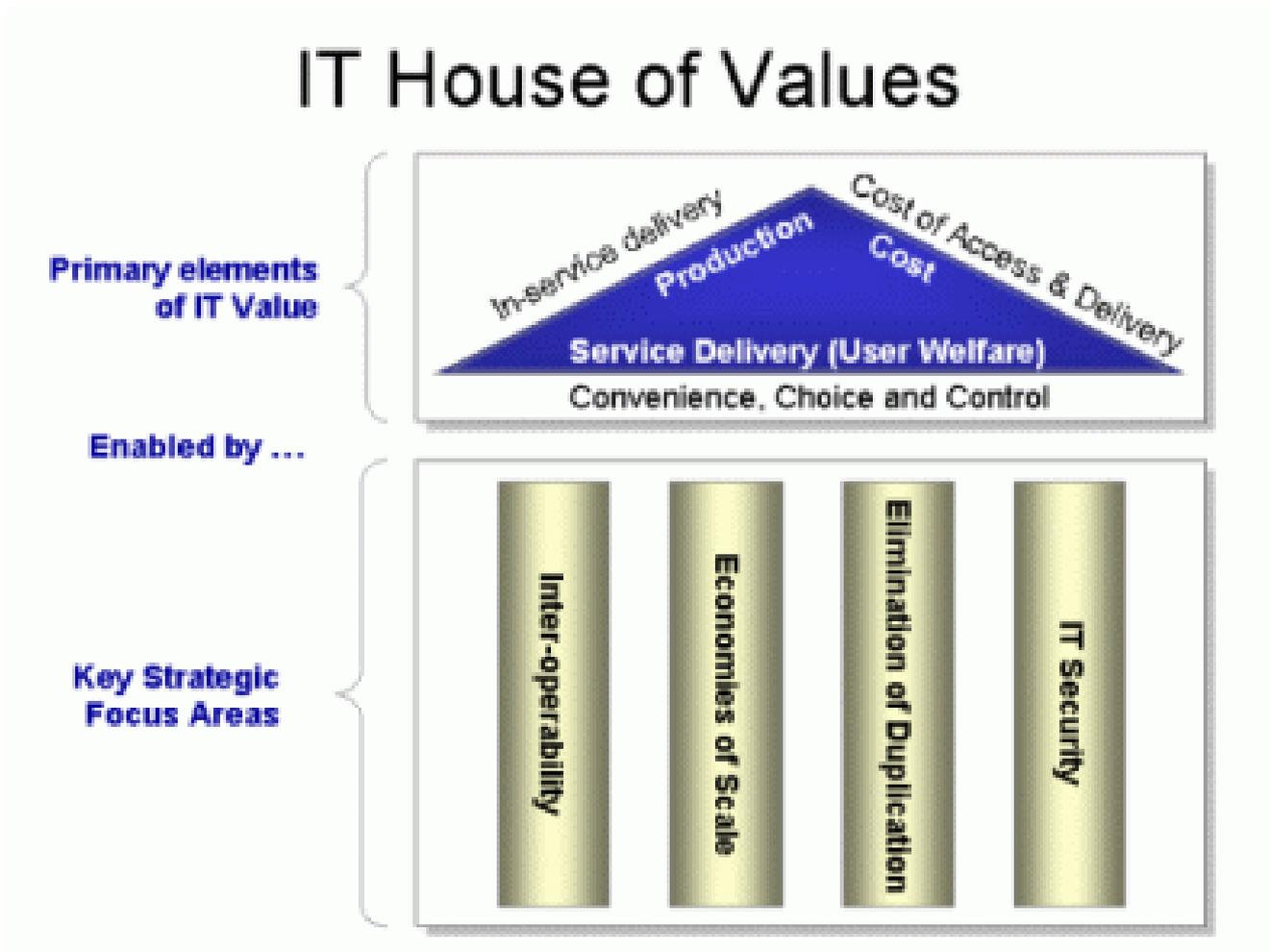
3.5.1 Four Pillars Of E-Government In South Africa

Worthington-Smith (ed.) (2001, 2002) observes that the e-government process in South Africa is encompassed in a project entitled Information Communication Year 2025. The project aims to ensure that all South African Government information will be online by 2025. There is therefore a clear vision as to the necessity for the implementation of e-government systems in order to expedite service delivery initiatives in South Africa.

The Department of Public Service and Administration was identified as being the custodian of the e-government process in South Africa. To this end, the State

Information Technology Agency (SITA) was established to ensure consistency in the South African Government's efforts to provide electronic services. The State Information Technology Agency was set up in April 2000 to implement an e-government policy that is based on four pillars (Worthington-Smith (ed.), 2001; 2002). The State Information Technology Agency's founding principles are based on offering the best products and services, maintaining the public's trust by means of the e-government House of Values to achieve increased productivity, whilst ensuring cost effectiveness (State Information Technology Agency, Online, 2 March 2004). Figure 3.7 is a graphic illustration of the Information Technology House of Values as envisaged for implementation across South African government departments.

FIGURE 3.7: Information Technology House of Values



Source: State Information Technology Agency - Online, 2 March 2004

At the pinnacle of the Information Technology House of Values are the triple principles of increased productivity, lowered costs and citizen convenience. If one were to place these fore-going principles within the context of the Government Employees Pension Fund one would argue that increased productivity, increased

accuracy (calculations and payments) at lower costs, should lead to increased convenience for clients. Whilst the pinnacle of the Information Technology House of Values is premised on lowering costs, improved customer satisfaction and increased productivity, its supporting pillars – information security, interoperability, economies of scale and the elimination of duplication – constitute the very foundations on which the South African e-government philosophy is built.

The first supporting pillar of the Information Technology House of Values, that of information security, is of vital importance to the Government Employees Pension Fund. Information security is about protecting the assets of the Fund as well as protecting the personal and financial interests of the clients, that is, the pensioners and the members of the Fund. The second pillar, that of interoperability, is crucial if information is to be accessible. Interoperability promotes seamless communications between compatible information and communications systems as well as promoting information-sharing channels between national, provincial and local governments. The Government Employees Pension Fund, in building its seamless links with government departments, will rely heavily on systems that are compatible across government. The third pillar, economies of scale, allows government departments to procure information technology equipment at more competitive rates. Competitive rates apply to the procurement of both software applications and hardware. The Government Employees Pension Fund has *de facto* not benefited from economies of scale since it is procuring software and hardware privately, that is, outside the framework offered by the State Information

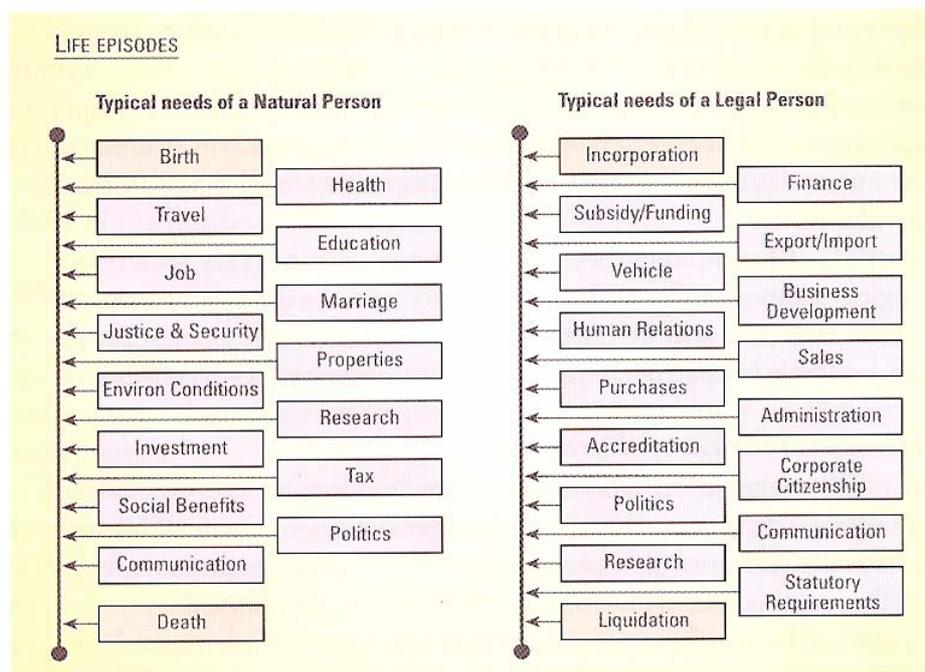
Technology Agency. Whilst the hardware and Microsoft software applications procured by the Government Employees Pension Fund are generally compatible with what government departments have migrated to or are intending to migrate to, the Government Employees Pension Fund, given the nature of its business, is the only public entity that has procured the Comprehensive Pension Administration Application Software (COMPASS) and Workflow Software, the compatibility of which will be assessed during the course of Chapter Five (Interview, Manager of the Project Support Office of the Government Employees Pension Fund, 3 November 2004). The fourth pillar, that of the elimination of duplication, is based on government developing a common platform across all government structures so as to ensure a cost effective, efficient, one-stop point of access for clients. The Government Employees Pension Fund is in the process of migrating its paper-based files into electronic ones, but the tendency is still to depend on hardcopies. This duplication, that is, of using the hardcopy and the electronic file, is time-consuming and cumbersome. The pillars of e-government as espoused by the Information Technology House of Values in South Africa are premised on the stages of development of a typical e-government process.

3.5.2 Provincial E-Government Initiatives In South Africa

For e-government to be successful (or even partially successful) such e-government initiatives should pervade all levels of government. Provincial government is an important cog in the public service delivery machinery in South

Africa. Provincial government, it could be argued, is closer to the clients than is national government, hence its strategic necessity to provide high levels of service quality. Worthington-Smith (ed.)(2003) notes that e-government services should be developed around significant life events or episodes such as birth, work, and death for natural persons and funding, sales/purchases and liquidation for legal persons. Figure 3.8 (below) provides further detail pertaining to significant life episodes/events.

FIGURE 3.8: Typical Life Episodes



Source: Worthington-Smith (ed.), 2003

The Western Cape and Gauteng Provinces are the two provinces that have taken the lead in developing e-government projects. The e-government project in the Western Cape - Cape Online - incorporates the Cape Gateway which enables citizens to access services at a single point and the Cape View which affords citizens the opportunity to provide feedback to the provincial government on performance-related matters (Online, 27 September 2004).

Whilst the Blue IQ Plan of the Gauteng Provincial Government is strictly speaking, not an e-government project, it incorporates elements of e-government in its drive to ensure economic infrastructure development. The Blue IQ Plan incorporates public and private initiatives in order to drive economic development in Gauteng (Online, 27 September 2004). The electronic link between the spheres of government is therefore of critical importance for service delivery. E-government systems can enhance the links between national, provincial and local government in South Africa.

3.5.3 Communications Between Government Departments In South Africa

Communications between government departments in South Africa is premised on a system of intergovernmental relations, as stipulated in Section 41 of the **Constitution**, 1996. Various sections of the **Constitution**, 1996, guarantee certain powers for the three respective spheres of government, national, provincial and local. Much of what is contained in the relevant sections of the **Constitution**, 1996,

relates to maintaining and regulating the relations between the three spheres, hence they have exclusive and concurrent powers.

Williams (2001) asserts that the co-operative relations between the spheres are intended to co-ordinate activities to avoid competition and wasteful duplication of resources, to resolve disputes amicably, to define the roles and responsibilities of the spheres, to utilise human and other resources effectively and to construct a cohesive multi-sectoral perspective to enhance national goals. It is therefore clear that the concept of intergovernmental relations entails partnerships as realised in multiple formal and informal processes, channels, structures and institutional arrangements for bilateral and multilateral interaction within and between spheres of government in South Africa. A system of intergovernmental relations should observe the promotion and facilitation of co-operative decision-making, the co-ordination and alignment of priorities, budgets, policies and activities across interrelated functions and sectors, the smooth flow of information within government and between government and communities with a view to enhancing the implementation of policies and programmes and the prevention and resolution of disputes (**White Paper on Local Government**, 1998).

Makhanya (1999) concurs that the central theme of intergovernmental relations is to create a basis for synergising a fragmented system of government administration. Whilst propagating a synergy of government administration, intergovernmental relations also propagate interdependence between the spheres.

This ultimately requires that the three spheres of government in South Africa must establish a working relationship that encourages consultation, debate and negotiation. The opposing view is that if such cooperative arrangements are not implemented, the various spheres (and government agencies and departments) will become increasingly isolated. There would be competition, duplication and the overall goals and policies of government would not necessarily come to fruition. Consequently to achieve the ideal of co-operation that the South African Government has embarked upon several e-government projects, examples of which are presented next.

3.5.4 Examples of E-government Projects in South Africa

Several e-government projects were launched in South Africa in an attempt by Government to give citizens access to information and communications technologies. This approach by Government was premised on the idea that if such information and communications technologies were not accessible to citizens, then providing services electronically would be futile. The historical disparities in access to information and communications technologies are apparent in the information gleaned under the heading “Access to Information And Communications Technology in South Africa”. The South African Government, in an attempt to bridge the gap between those who have access to information and communications technologies and those who do not have such access, initiated the following projects.

a. The Public Information Terminal Project (PIT)

The Public Information Terminal Project was initiated to provide Internet and e-mail access to people who would ordinarily not have such access. Given the vast geographical and rural areas in South Africa it is envisaged that rural and semi-rural areas would receive priority as far as installation is concerned.

In terms of the project it is envisaged that e-mail addresses would be made available to potential users in the form of an encoded card with a personal identification number (Department of Communications, Online, 4 February 2005). The final step is to develop an infrastructure of public information terminals which will be menu-driven and which will allow the user to send and retrieve electronic messages.

Since the South African Post Office already has an established network, it is envisaged that at least one public information terminal be installed at each post office, with further expansion to be investigated. To encourage the use of such facilities, it was envisaged that telecommunications, printing, paper and related costs would be borne by the funders and that card holders would be billed a nominal amount, not exceeding the cost of a local telephone call (Department of Communications, Online, 4 February 2005).

b. Internet 2000

The Department of Communications of South Africa initiated a project called Internet 2000 in order to provide electronic education to as broad a base as possible. Internet 2000 is further aimed at promoting a knowledge-based society in South Africa by using the Internet and other information and communications technologies (Department of Communications, Online, 4 February 2005). A further objective of the project is to provide 2000 Internet linkages to priority customers, with educational institutions such as schools being targeted. The project will run for a period of three to five years and it is envisaged that the programme would also be extended to kindergarten level.

c. Tele-democracy

The purpose of the project is to create access to the South African Parliamentary system. The tele-democracy initiative aims to promote e-mail contact with and between Members of Parliament. The tele-democracy initiative also has as its aim to create an opportunity for citizens to access daily Parliamentary information and in so doing, the programme closes the gap between citizens and their political representatives (Department of Communications, Online, 4 February 2005).

d. Community Information Centres

The project is aimed at developing community information centres in previously disadvantaged areas in order to increase the various communities' understanding of the knowledge-based society. These centres, whilst providing direct and instant access to the Internet, will provide access to government and private databases (Department of Communications, Online, 4 February 2005).

e. Government Information Technology Officers Council

The Government Information Technology Officers Council was formed with a view to ensuring that there is co-ordination and dissemination of information between the various sectors of government (e-Gov News, October/November 2002). Democracy can only be successful in South Africa if government-wide synergies are found, hence the Government Information Technology Officers Council proposes to find government-wide solutions for e-government strategies. The Government Information Technology Officers Council comprises of the individual, Departmental Information Technology Officers (Department of Communications, Online, 4 February 2005).

f. The Golaganang Project

The Golaganang Project was announced in Parliament by the Minister of Public Service and Administration, Geraldine Fraser-Moleketi, in her Budget Vote Speech (2002). Golaganang is a project that aims to make personal computers available to public servants at an affordable rate, thereby enabling and encouraging public servants to use information and communications technology beyond the confines of their offices. In so doing, it was hoped that computer literacy amongst public servants and their families would be enhanced. It was hoped that there would be a knock-on effect to public servants becoming more computer literate; hence the use of information and communications technologies in the workplace would be enhanced. The project was to be embarked upon on a public-private partnership basis between the Department for Public Service and Administration and Hewlett Packard (Fraser-Moleketi, 2002).

Given that e-government forms part of the broader concept and practice of e-administration, a thesis on e-government would not be complete without having traced some of the theoretical aspects of traditional Public Administration and management praxis.

3.6 A REVIEW OF THEORETICAL PERSPECTIVES ON ELECTRONIC ADMINISTRATION, PUBLIC ADMINISTRATION AND MANAGEMENT

The section on theoretical perspectives is particularly important given that it provides the basis of the analysis that is to follow. The theoretical perspectives in this section of the chapter provide significant insight into the convergence between the traditional theories and the emerging electronic theories. Initially, and more importantly, the review of the Presidential Commission Report provides significant theoretical basis on which the South African e-government perspectives are based.

3.6.1 The Presidential Review Commission

The idea of a presidential review commission was first mooted in the **White Paper on the Transformation of the Public Service**, 1995 (Government Gazette No. 16838). **The White Paper on the Transformation of the Public Service**, 1995 (Government Gazette No. 16838) outlines that a public service commission should review the structures, functions, systems objectives, procedures and levels of accountability of the South African public service.

The main findings and recommendations of the Presidential Review Commission (PRC) are contained in the Presidential Review Commission Report on the Reform of the Public Service in South Africa (1998). Chapter Six of the Presidential Review Commission Report (1998) deals specifically with information management,

systems and technology. It was identified that the South African Government has a significant role to play in developing and managing information systems as part of service delivery and that information is a fundamental resource of government, along with people, money and organisations (The Presidential Review Commission, 1998). At a macro level, the state has a major role to play in fostering the drive to an information society by determining how systems and technology could optimally be used to manage information in the public service (The Presidential Review Commission, 1998).

It was further noted that the utilisation of technology should support the business objectives of government and that, whilst technology would radically transform the manner in which the public service conducts business, the public service's operational and strategic requirements should take precedence (The Presidential Review Commission, 1998). In the absence of definitive, international examples on the implementation of an e-government model, two examples in particular were deemed to serve as precedents for e-government developments in South Africa (The Presidential Review Commission, 1998). The two examples - Australia and Malaysia - were assessed by the Presidential Review Commission in some detail.

The Australian approach to policy formulation has seen a progressive development of an overall information and communications framework over a period of three years. Central to the Australian approach is the establishment of a number of institutions and offices to ensure that the policy process is coordinated and ultimately integrated into a government-wide Information Management Strategy

(The Presidential Review Commission, 1998). The Report cites that the 1995 document, *Clients First: The Challenge for Government Information Technology* proposed an Office of Government Information Technology (OGIT), a Chief Government Information Officer (CGIO) and the creation of a Government Information Services Policy Board (GISPB) all tasked to contribute to the development of an overall information management strategy. During the course of the thesis it will become clear that the Client First approach adopted by Australia could be equated to the Batho Pele (People First) approach of the South African Government (The Presidential Review Commission, 1998).

The Malaysian strategy defines e-government as being a multi-media networked, paperless administration linking [central] government agencies with government centres around the country to facilitate a collaborative government environment and efficient service to businesses and citizens. The objectives of the Malaysian e-government strategy include offering efficient, high-quality administrative on-line services to citizens and business, streamlining government's internal processes to improve quality, reduce costs and increase productivity, strengthening data security and protecting privacy, increasing citizen participation in government and creating transparency through good documentation, effective communication and traceability (Presidential Review Commission Report, 1998).

The Australian and Malaysian strategies are similar in as far as the objectives that they seek to achieve (The Presidential Review Commission, 1998). The Report of

the Presidential Review Commission on e-government strategies is probably one of the first attempts in the post-democratic South Africa to document, amongst others, the pivotal role that information and communications technologies should play in service delivery initiatives. It is therefore congruent to the ideal of improved service delivery initiatives that the Presidential Review Commission Report (1998) reflects a number of shortcomings in e-government systems and made recommendations as to how to improve the electronic delivery of services in South Africa. The salient recommendations include centralised procurement, a national information technology plan, the appointment of a chief information officer for government and the implementation of a lead agency concept. The link between the traditional theories of Public Administration and e-government is elucidated next.

3.6.2 Theories of Public Administration and Management

The foundation of current theories of Public Administration can be traced back to the late 19th and the early 20th century – a period often referred to as the industrialisation period. During this period of industrialisation there was a significant move toward an elaborate division of labour. Whilst there were management theorists prior to and after, Frederick Taylor and Henry Ford, are deemed to be the main proponents of Scientific Management and mass production. Taylor's concept of Scientific Management was based on the minute sequencing of tasks into specialised components. Each of the specialised

components of labour contributed to the creation of additional layers of hierarchy in the factory, all which had to perform individual tasks in a sequenced and rote manner (Young, Online, 16 September 2003).

a. Taylorism and Fordism

Ford's theory of Management was based on the development of the assembly line and mass production principles. The division of labour in Ford's Management Theory is similar to that proposed by Taylor. Fordism determines that individuals on the assembly line should not have to move to the work, instead, the work moves (along an assembly line) to the worker. As the work moves along the assembly line to the worker, Ford hypothesised, the time taken to perform the task is reduced. Ford propounds that tasks be fragmented into specialised functions that ostensibly results in saving time and money and increasing productivity. Young (Online, 16 September 2003) notes that the need for strategising, thought and planning on the part of the worker is negated. These foregoing, coupled with the enforced reduction of workers' movements, ensure that maximum time is devoted to the production process. Young (Online, 16 September 2003) notes that the worker performs, as far as is possible, one task with as little movement as is necessary.

Linden (1994:28) notes that Fordism, given its tendency toward fragmented roles for individuals, had contributed to the de-skilling of the worker. When workers

become specialists as opposed to generalists, they tend to be limited to the function that they perform. At about the same time that Taylor and Ford were developing Scientific and Assembly Line Management principles in their efforts to increase productivity, Max Weber was developing his principles of Bureaucratic Management.

b. Bureaucratic Management

Breiner (1996:15), in an analysis of Weber's theory on Modern Politics, defines Bureaucratic Administration as the central phenomenon of modern society. As the central phenomenon of modern society, Bureaucratic Administration espouses principles of control and dominance.

Weber proffers that bureaucratic forms of organisation are the most efficient mode of organisation because they are technically superior in achieving collective goals. Weber points out that modern organisations are mass organisations which are inherently bureaucratic. The bureaucracy - whether public or private - is dominant, uniform, formal and rational (Breiner, 1996:138). The bureaucracy is the means to successful implementation of the goals of the organisation. McMillan (2002) defines the classical bureaucracy as being structured on principles of hierarchy, authority and control. McMillan (2002) also suggests that bureaucracies apply rational approaches and long-term planning processes. Bureaucracies furthermore display compartmentalised layers. Typical criteria such as power, power relations

and management styles are evident in bureaucracies. Weber's concept of the bureaucratic organisation includes that specialist roles be prevalent in the division of labour, that there is a clear hierarchical system and a strict regime of controlled behaviour to ensure order and supervision. These fore-going criteria bare a close resemblance to those of Taylor's Scientific and Ford's Assembly Line management principles.

Breiner (1996:132) asserts that by their very nature bureaucracies dominate, legitimate and command. The bureaucracy exercises control through formal rules and processes. Breiner (1996:132), however, also notes that bureaucrats have no control over the written rules and procedures that they implement. The rules and procedures are established at a different level of the hierarchy of the bureaucracy and the bureaucrat has to implement without questioning the principles governing the rules and procedures. Just as the bureaucrat has no control over the formulation of the rules and procedures, so the client has no control over the bureaucratic implementation of the applicable rules and procedures. The rules consequently become impersonal, deductible and devoid of personal judgement (Breiner, 1996:132).

Excessive bureaucratic control could lead to bureaucratic domination and to an abuse of bureaucratic power. In this respect bureaucratic dominance is based on the belief that order is being created. It is thus the belief of Max Weber that bureaucracy functions like an efficient machine that enforces the compliance of

both the bureaucrat and the client. It therefore seems clear that bureaucracy is based on a power relation, which is realised through various hierarchical levels and by means of a set of rigid rules and procedures.

State administration is an embodiment of the typical bureaucracy. The administrative state relies on typical bureaucratic structures, with its administrative machinery, its intricate command level and impersonal nature to exercise control and domination to ensure that order prevails. As Ford and Taylor's management principles espouse increased production through higher levels of control and the specialisation of tasks, Weber developed his ideas of bureaucracy based on a strict regime of rules and specialised roles. Breiner (1996:137) notes that:

“Once fully established, bureaucracy belongs among those social structures that are hardest to destroy. Bureaucracy is the specific means of transforming common action into rationally ordered social action. As an instrument for the societalisation of relations of domination bureaucracy was and is a means of power of the first rank for the one who controls the bureaucratic apparatus. For under otherwise equal conditions, systematically ordered and directed social action is superior to every resistance through mass action or communal action. Where bureaucratisation of administration has been completely introduced, there has been created practically an indestructible form of relations of domination”.

Classical bureaucracies are therefore structured on principles of hierarchy, authority and rigid notions of control. Classical bureaucracies are neatly structured into compartmentalised layers where the worker is expected to apply his skill in the optimisation of the job, leaving the supervising and managing to the supervisors and managers.

c. Weber's Ideal Type

An ideal type is an analytical construct that serves as a tool to an investigator to measure similarities and deviations in real cases. Ideal types enable one to construct hypotheses which could then be tested (Croser, 1977). An ideal type is therefore an abstract concept about an observable entity.

Gero (Online, 16 September 2003) identifies the following six characteristics of the ideal type of bureaucracy. The first of the characteristics in the ideal type of bureaucracy is a formal division of labour. The actions assigned to an individual in a bureaucracy become the official duties of that individual. The actions are separate but complementary and the actions are coordinated to accomplish the organisation's goals. Bureaucratic actions are specialised with each person being limited to knowing as much about his function as is possible. The second characteristic is hierarchy. Positions in a bureaucracy are organised in a hierarchical manner, something resembling a pyramid. The flow of command is from the top to the bottom. Abstract rules is the third characteristic that typifies a

bureaucracy. These rules exist in writing and they legitimate the procedures that are relevant to the achievement of the organisational goals. The written rules ensure uniformity of action and coordinate the input of each individual in the organisation. Consistency is ensured from one generation of public servant to another when rules are formalised into written form. Herein also lies their abstract form in that these rules exist beyond the presence of people. The fourth characteristic of an ideal type of organisation relates to impersonal conduct where the bureaucrat should act in a manner that is devoid of extremes such as hatred and affection. The bureaucrat is in charge at all times, exercising even-handedness and fairness. The ideal type of bureaucracy rewards employees purely on the basis of meritorious achievement, rather than on personal considerations. This, the fifth characteristic of an ideal type of organisation, rewards loyalty, best performances and competence. The achievement of the sixth goal, efficiency, is dependent on whether the others can consistently be achieved (Gero, Online, 16 September 2003).

The increasing use of e-government related systems has resulted in the erosion of the classical Weberian model. The Weberian model advocates a strong division of labour with individuals becoming specialists. The Weberian model further advocates a clear hierarchy, is rules-based, is impersonal and efficient. E-government presents a break from the classical Weberian model in that e-service delivery mechanisms such as e-mails, do not need to satisfy the characteristics of the Weberian model to be successful. E-mails do not need specialists to respond.

In many cases the client may even access information without having to interact with anyone. Hierarchies in an e-government system essentially become obsolete. Rules are built into the electronic system. It is therefore evident that elements of the Weberian model still remain. E-mails, as with the Weberian model, are impersonal, yet efficient in that they allow the client to interact with the service provider in a manner that is convenient.

d. The Evolution of the Discipline of Public Administration

Public Administration as a discipline began around the eighteenth century, but only received official university recognition after the First World War (Caiden, 1971). The discipline of Public Administration evolved as a result of the enlargement of government services. The discipline of Public Administration evolved differently in Britain as it did in the United States. The British model seemed to display a bias for a free, almost unstructured, interpretation of the discipline of Public Administration, while the American model seemed to display a more rigid, rules-based approach (Caiden, 1971).

Whilst there were discussions around the discipline of Public Administration before, Woodrow Wilson's writings seem to have been significant in establishing Public Administration as a discipline. After Wilson, it was Frank Goodnow who should be credited for establishing Public Administration as a discipline. Miewald (1978) notes that it is Wilson and Goodnow that developed the premise that politics and

administration are two separate elements of government. Miewald (1978) notes that it is the role of politics to decide and it is the role of administration to implement. The discipline of Public Administration seems to have had its challenges, most notably that of having to define its parameters. Even as late as the twentieth century, Public Administration failed to coherently define its scope and substance (Stillman, 1991).

Public Administration seemingly stands at the crossroads of another challenge, that of electronic service delivery – e-administration. The challenge for Public Administration is to transcend the traditional boundaries and create new infinite boundaries with the advent of information and communications technologies.

3.7 CONCLUSION

This third chapter has conducted an assessment of general accessibility to telecommunications in South Africa. Accessibility to telecommunications and, by implication, accessibility to information and communications technologies, is critical to the successful implementation of an e-government regime. This chapter has shown that there are vast disparities in access to information and communications technology in South Africa. These disparities are not only evident at individual, household levels, but also at sectoral levels.

An assessment of the accessibility to information and communications technologies at a sectoral level in South Africa, revealed that the financial sector has the highest personal computer accessibility rate of 74%, while the public sector displayed the lowest personal computer accessibility rate of 7%. The personal computer accessibility rate and the rate of access to the Internet in private households showed a steady increase. Research, however, revealed that there is retardation in the rate of access to the Internet in private households, corporate and academic entities in South Africa.

A cursory assessment of e-government initiatives in South Africa was conducted in order to indicate that there are concerted attempts to use information and communications technologies to advance public service delivery in South Africa. The Department of Public Service and Administration is the government department that is tasked to drive the process of e-government in South Africa. The Department of Public Service and Administration established a lead agency, the State Information Technology Agency, in order to drive the e-government process in South Africa. The State Information Technology Agency's approach to e-government in South Africa is based on what it refers to as the Information Technology House of Values. The Information Technology House of Values is premised on four pillars – interoperability, economies of scale, the elimination of duplication and information security.

The typical stages in the development and implementation of an e-government system were presented and briefly discussed. The stages of implementation typically range from the conceptual, complemented by an incremental process, to full integration, that is, once all systems are fully operational and clients can access and conduct business transactions electronically.

Public Administrative systems across government departments, whilst similar in many respects, adopt a culture of their own. These often disparate public administrative systems across government departments are invariably less compatible than what they are expected to be. The initial part of this chapter set out to review the levels of access to information and communications technologies in South Africa. The latter part of the chapter provides a brief review of the information and communications technology projects that have been embarked upon in South Africa.

A thesis on e-administration would not be complete without having provided a brief theoretical grounding of the classical theories of Public Administration, Public Management and Bureaucracy. To this end, a brief analysis of Taylor's Theory of Scientific Management and Ford's Assembly Line (mass production) theory ensued. The analysis reveals that Taylor and Ford's theories are geared towards increasing the levels of production of workers. The worker becomes a unit of production whose success is measured in terms of pre-determined levels of output.

Weber's Theory of Bureaucratic Management is based on hierarchy, authority and control. These fore-going dimensions relate the layers of a classical bureaucracy, which are in Weber's view, necessarily authoritative, compartmentalised and dominant. This chapter has further considered the analytical construct that Weber refers to as an Ideal Type. The characteristics of an ideal type are presented. These will be analysed in an applied form in Chapter Five of the thesis.

The succeeding chapter presents some theoretical perspectives pertaining to traditional Public Administrative systems. The aim of the theoretical analysis is to draw a thread from the traditional models of Public Administration through to the electronic models (e-government) and then to analyse the case of the Government Employees Pension Fund accordingly. Chapter Four provides a comprehensive introduction to the business of the Government Employees Pension Fund. Chapter Four furthermore introduces the electronic administrative system that is being implemented by the Government Employees Pension Fund.

CHAPTER FOUR

THE GOVERNMENT EMPLOYEES PENSION FUND OF SOUTH AFRICA AND ELECTRONIC SERVICE DELIVERY: A CASE STUDY

Governments are learning that transformation comes not from moving services online, but from redesigning the organisation to put the citizen at the centre
(Accenture, 2002)

4.1 INTRODUCTION

This chapter formally introduces the Government Employees Pension Fund and presents its core business activities. This chapter provides an account of the attempt by the Government Employees Pension Fund to implement an e-service delivery mechanism. An analysis of the situation prior to the implementation of e-government provides a sequential account of how the Government Employees Pension Fund had administered its business with the hard file and the limited use of electronic systems.

The link between the Government Employees Pension Fund and the employer departments is critical in determining the level of services provided to clients. Chapter Four proposes to analyse this link with specific reference to concepts such as paperlessness, seamlessness, interoperability and sustainability. The ideal of a

seamless relationship between governments and their clients (the voting public, staff, other government departments and stakeholders) has become fundamental in the manner in which services are rendered. Sustainable e-government in the context of this document refers to providing services electronically while building the capacity of the service provider and the user. Sustainability further depends on systems that are compatible nationally, regionally and further afield, with national ownership being prioritised.

Service delivery is about forging links, hence building government-to-citizen/client/consumer (G2C), government-to-business (G2B) and government-to-government (G2G) links is important. Government should also strive to exploit business-to-business (B2B) links in order to benefit itself and its clients. The analysis will happen in the context of the Government Employees Pension Fund replacing its current legacy-based electronic systems with a new pensions administration software programme, the Comprehensive Pension Fund Administration Support System (COMPASS), in an effort to improve service delivery.

The e-government process would not be complete without having attained a critical mass of users. Attaining a critical mass of users is probably the singular most important aspect of any successful e-government venture. The research would therefore not be complete without having assessed the needs of the clients - pensioners, members and employers - as far as e-service delivery is concerned.

Without such a needs assessment, the likelihood of a critical mass of users being reached is remote. Attaining a critical mass of users is of particular value given that clients would not necessarily have access to or have the inclination to access services electronically. Whilst testing the fore-going assertion relating to a critical mass of users, alternative methods of providing Government Employees Pension Fund clients with electronic access to services will be explored. The multiple points of access to electronic services at the Government Employees Pension Fund will be analysed and tested in terms of their effectiveness. Some of these points of access include the Call Centre, the Web Site and the Walk-in Centres, inter alia.

Given that the Government Employees Pension Fund is the custodian of sensitive information relating to personal and financial particulars of thousands of clients, it is incumbent upon the Fund to ensure the security of such particulars. It is therefore necessary that information security mechanisms be implemented to ensure that information on the systems of the Government Employees Pension Fund is safeguarded, on the one hand, and that the integrity of the information is maintained on the other. Security will be assessed in relation to the broader concept of risk management and how the Government Employees Pension Fund needs to innovate in order to insulate its electronic systems from any possible intrusion.

Every attempt was made during the course of the thesis to analyse service delivery to citizens as clients of government. The case of the Government Employees

Pension Fund is used as an example of how services can be delivered to a targeted segment of society – the contributing members and pensioners of the Fund. The Government Employees Pension Fund, as has been indicated, is the only pension fund in South Africa that administers pensions for civil servants. The Government Employees Pension Fund therefore occupies a unique position in South Africa. The Government Employees Pension Fund has, however, interacted with private pension funds to enable it to assess, on a comparative basis, the successes and failures of the implementation of electronic service delivery. International benchmarking between the levels of services offered by the Government Employees Pension Fund and the e-service delivery mechanisms for elderly people in the United Kingdom will take particular precedence during the course of this chapter.

Chapter Four will present a comparative examination of the achievements of the implementation of the e-government system. Drawing comparisons where the Government Employees Pension Fund is taken into account is very difficult given that there is no other government pension fund in South Africa. Given that the thesis is about e-government and government service delivery, private pension funds in South Africa will not necessarily provide for adequate comparison.

The highly differentiated nature of South African society is typified by huge chasms in the levels of access to basic services. The comparative analysis in Chapter Four will of necessity concentrate on two dimensions. The first of these is a comparison

between the implementation of the electronic systems of other financial institutions and the second is an emphasis on the efforts by the United Kingdom to provide e-services to elderly people, more commonly known as senior citizens. A brief African comparative analysis will also be conducted during the course of Chapter Four.

In short, Chapter Four is about the Government Employees Pension Fund, its attempt to improve its client service offerings through electronic means and its efforts to maintain effective service delivery in an e-government milieu.

4.2 THE GOVERNMENT EMPLOYEES PENSION FUND: A HISTORIC OVERVIEW

As part of the broader policy of Apartheid (separate development based on exclusionary principles) in South Africa, provision was made for areas of self-determination or homelands. The homelands were viewed to be independent entities with their own governing structures. In many cases these independent homelands had pension fund dispensations for their civil servants. When political negotiations took place prior to 1994 and transformatory initiatives that culminated in a new dispensation in South Africa gained momentum, many of the former homelands and their civil service pension dispensations were re-integrated (Government Employees Pension Fund: Annual Report, 2001-2002).

Whilst, at a political level, the disparate administrations had to be uniformalised, restructured and re-engineered into a well-oiled, modern, re-focussed administrative machinery geared towards service delivery, the disparate pension funds and pension fund benefit structures had to be similarly uniformalised. This had to happen in congruence with the provisions of Section 212 (6) of the **Interim Constitution of the Republic of South Africa**, 1993 (Act 200 of 1993), which stipulated that provision be made for government employees to be able to contribute to and benefit from a statutory pension fund or funds. Section 213 (1)(b) and (d) of the **Interim Constitution**, 1993 (Act 200 of 1993) stipulates the Public Service Commission be directed to advise on issues relating to the conditions of service of government employees and that the President and the Premiers (in the case of provincial service commissions) can assign special functions to it.

To give effect to Section 212 (6) of the **Interim Constitution**, 1993 (Act 200 of 1993), the Public Service Commission was tasked to launch an investigation into the amalgamation of the various government service pension funds, including those of the then Transkei, Ciskei, Bophuthatswana, Venda and South Africa. The Public Service Commission initiated draft legislation for the amalgamation of the various disparate pension funds and a pensions task team comprising the employer (that is, the government), security services, the education sector, employee organisations and an actuary took the process further (Government Employees Pension Fund: Annual Report, 2001-2002).

Once all the investigations had been completed and the reports had been submitted, Proclamation 21 (Government Gazette, 19 April 1996), formalising the **Government Employees Pension Law**, 1996 (Proclamation 21 of 1996) in terms of which the Government Employees Pension Fund was established as from 1 May 1996, was promulgated. With the amalgamation of the disparate pension funds, the benefit structure was standardised and all past discriminatory practices scrapped.

The **Government Employees Pension Law**, 1996 (Proclamation 21 of 1996) provides for the administration of the Fund - including extensive accounting, reporting and auditing arrangements - membership of and contributions to the Government Employees Pension Fund, benefits to members and all the rules relating to this, transitional arrangements and transfers between funds, funding and financial soundness of the Government Employees Pension Fund, withdrawal from the Government Employees Pension Fund and protection of the rights of members and pensioners (**Government Employees Pension Law**, 1996 (Proclamation 21 of 1996)). The Government Employees Pension Fund does not compete for business since all permanently appointed civil servants are obliged to contribute 7,5% of their annual salaries to the Fund (**Government Employees Pension Law**, 1996 (Proclamation 21 of 1996)).

As with the amalgamation of the various separate pension funds into the Government Employees Pension Fund, disparate systems had to be standardised.

The process of the standardisation of the administrative systems presented a huge challenge for the Government Employees Pension Fund (Government Employees Pension Fund: Annual Report, 2001-2002).

4.3 AN ASSESSMENT OF THE LEGACY-BASED ADMINISTRATIVE MODEL OF THE GOVERNMENT EMPLOYEES PENSION FUND

This assessment and brief historical account of the introduction of the legacy-based information systems is necessary in that it provides the foundation for the current and future administrative systems of the Government Employees Pension Fund. It is necessary to note the progress that the Government Employees Pension Fund has made in developing systems that are client-focussed and that are compatible with the best local and international standards.

The Government Employees Pension Fund first introduced personal computers in the early 1980s in order to enhance its administrative processes. These first personal computers were standalone entities that did not fundamentally change the manner in which the then pensions administration operated. This assertion is made in the context of no fundamental change in the manner in which administrative processes were being conducted in that the manual administrative processes – that is, verification, calculation and payment – prevailed (Interview, Senior Information Systems Service Provider to the Government Employees Pension Fund, 30 April 2004). The only difference is that payment information was

being captured on these standalone personal computers and batch reports were generated for reference purposes.

In the very early stages of the introduction of the personal computer into the Government Employees Pension Fund, it was primarily a tool on which to store information on payment particulars in the event of any future discrepancy. Not everyone within the Government Employees Pension Fund, however, had access to these personal computers since special data capturers were employed to capture the information. Given that not all the staff had access to personal computers, it ultimately meant that there could not be total buy-in, especially since the manual administrative processes were still predominant (Interview, Senior Information Systems Service Provider to the Government Employees Pension Fund, 30 April 2004). The resultant effect of the lack of access to the personal computers, together with the continued manual administrative processes, consequently meant that little reliance was placed on the ability of personal computers to change any aspect of the administrative processes significantly.

4.3.1 CivPen Pensions Administration Software Programme

The late 1980s witnessed the introduction of the first information technology service provider to the Government Employees Pension Fund and with it, the advent of the first software programme that was set to revolutionise the manner in which the Government Employees Pension Fund administered its pensions

processes (Interview, Senior Administrative Officer in the Walk-in Centre of the Government Employees Pension Fund, 30 April 2004). This first attempt to develop and introduce a software programme to assist the administration processes was, by all accounts, not simple. The resultant software programme, the development of which was initiated in 1987, came to fruition in mid 1992. The programme was written especially for the Government Service Pension Fund of South Africa, before the amalgamation of the many disparate funds into one homogenous fund, the Government Employees Pension Fund in 1996.

The software programme, which was written especially for the Government Service Pension Fund of South Africa and taken over by the Government Employees Pension Fund, was dubbed CivPen. This acronym seems to be an assimilation taken from the root words, Civil and Pension. The advent of the CivPen system in the Government Employees Pension Fund necessitated the roll-out of computers to most of the functionaries. CivPen is a code-based software programme with each code being linked to a specific functionality. A functionary is allocated a code or codes that has or have a bearing on his/her area of responsibility (Interview, Senior Information Systems Service Provider to the Government Employees Pension Fund, 30 April 2004).

The CivPen pensions administration software programme was introduced alongside the hardcopy file that was (and in many respects, still is) in common use in the Government Employees Pension Fund. Hardcopies of withdrawal from the

Fund and supporting documentation were still submitted to the Government Employees Pension Fund. Whilst CivPen still acted as an information saving device, it provided for the electronic generation of transactions – calculations, payments and system letters, inter alia – that would revolutionise the manner in which civil pensions were being administered. System letters are those letters that are generic to a particular administrative action. Once the administrative action is completed the system generates a pre-drafted letter, a copy of which is mailed to the client and one is stored on the hard file. As part of the bi-weekly electronic payment run, CivPen has an interface with the central bank, the Reserve Bank of South Africa. The electronic interface with the Reserve Bank allows the Government Employees Pension Fund to execute electronic fund transfers directly to the bank accounts of beneficiaries (Interview, Senior Manager of Operations: Government Employees Pension Fund, 31 May 2004). Bank transfers are commonly viewed as being a safer, quicker method of paying beneficiaries as opposed to payment by cheque.

As new and different requirements evolved, the CivPen software had to be adapted to meet these demands. Since the Government Employees Pension Fund owns the copyright to the CivPen programme, it is able to amend it as per the business requirement (Interview, Assistant Manager: Business Support Services of the Government Employees Pension Fund, 31 May 2004). The information technology service providers to the Government Employees Pension Fund, since the appointment of the first such provider in the late 1980s, were tasked to

upgrade, amend and rewrite specifications for the CivPen administration software as and when the need may have arisen. The fact that the CivPen pension administration software can be amended in the manner it is currently being done, shows how versatile and adaptable the software can be. A good example of its adaptability is evidenced with the amalgamation of the disparate funds as from 1996. In 1997, for example, the Transkeian Government Service Pension Fund and the Ciskeian Civil Service Pension Fund were assimilated onto the CivPen system with information that was sourced from the then administrators, Alexander Forbes and Sanlam, respectively (Interview, Assistant Manager: Business Support Services of the Government Employees Pension Fund, 31 May 2004).

As from 1996 the disparate government pension funds of the then South Africa and the homelands amalgamated and the Government Employees Pension Fund was created. Integrating the disparate administrative systems was a challenge that is to date still not fully realised. At the point of amalgamation of the various pension funds into the Government Employees Pension Fund, available information pertaining to pensioners and contributing members of the funds was provided on magnetic tape. This information was adapted and assimilated into a format that was compatible with the CivPen programme. In many cases the paucity of electronic and hard information pertaining to members and pensioners resulted in the Government Employees Pension Fund not being able to administer benefits effectively (Interview, Senior Information Systems Service Provider to the Government Employees Pension Fund, 30 April 2004). In several cases the

paucity of information also extended to the rules, financial transactions, disparate administrative regimes and communications channels, inter alia, of the disparate funds.

One of the major changes that came to fruition with the introduction of the CivPen pension administration software programme to the Government Employees Pension Fund was that most of the functionaries were allocated personal computers in order to perform their duties. The roll-out of personal computers meant that electronic information such as dates of withdrawal from the Fund, payment details, bank account details, inter alia, could be viewed without having to draw the hard file from the registry. It, however, needs to be noted that the hard file still remains the primary source of storing the relevant documentation required by the administrators. This ultimately means that individual documents could easily be misplaced, with whole files often going astray. Furthermore, only one person at a time can access a hard file to perform a particular function. Hard files are often cumbersome since they contain original copies of all documentation that was submitted to the Government Employees Pension Fund. The Government Employees Pension Fund currently has approximately 250 000 pensioners of which each pensioner has a hard file. The amount of storage space that 250 000 files requires is quite extensive (Government Employees Pension Fund: Executive Information System, October 2002 – March 2004).

Whilst the CivPen pension administration software provided the Government Employees Pension Fund with the capability of electronic administration, it did not provide concomitant interoperable capability. CivPen was not written with a view to compatibility with other systems in other government departments, it was instead written to provide additional administrative capability to the Government Employees Pension Fund. At the time that CivPen was introduced, the administrators of the Government Employees Pension Fund were probably more concerned with protecting the integrity of the Fund, hence its inward-looking nuance. Since Government Employees Pension Fund security is paramount, external access to Fund information, whether hard or electronic, is only permitted under certain conditions (Interview, Manager: Security Services, Government Employees Pension Fund, 20 May 2005).

Whilst CivPen drastically changed the manner in which the Government Employees Pension Fund administers the processes related to civil pensions in South Africa, it was realised that the CivPen pensions administration software had to be replaced in an attempt to improve the delivery of services to clients. It was decided to invite external inputs to this effect and a new pensions administration software programme, the Comprehensive Pension Fund Administration Support System (COMPASS) was procured, developed and fine-tuned to be able to provide improved service. The project to implement the new pensions administrative software programme was entitled Pekwa (Government Employees Pension Fund, Annual Report, 2001-2002).

4.4 PROJECT PEKWA: IMPROVING E-SERVICES WITHIN GOVERNMENT EMPLOYEES PENSION FUND

Given that the impact of information and communications technologies in the global environment is ever-increasing and pervasive and given that it has a profound impact on the government sector, governments are striving to become customer centric in their approach to such electronic delivery of services. The changing national and international environment within which governments operate have prompted the Government Employees Pension Fund of South Africa to embark on changes of its own in order for it to offer efficient employee and pension benefits and retirement fund services to its clients. A project was initiated to implement a system with the intention to modernise the manner in which the Government Employees Pension Fund administered its processes with a view to improving service delivery. The project initiated to implement such a system also provides for the implementation of an electronic workflow and document management system to support the Comprehensive Pension Fund Administration Support System (COMPASS). The Comprehensive Pension Fund Administration Support System (COMPASS) is acknowledged globally and is utilised in South Africa by private pensions administrators such as Sanlam, Liberty, Alexander Forbes and Old Mutual (Government Employees Pension Fund, Report On the Current Status of Pekwa, January 2004).

The implementation of the new Comprehensive Pension Fund Administration Support System (COMPASS) package should invariably lead to a re-engineering of the administrative functions of the Government Employees Pension Fund. The re-engineering of the administrative and electronic systems of the Government Employees Pension Fund is tantamount to a paradigm shift – that is, a paradigm shift in terms of systems and in terms of human resources development.

For the Government Employees Pension Fund to move from the CivPen pension administration software programme, which was specially written for purposes of administering the Fund to the new Comprehensive Pension Fund Administration Support System (COMPASS) package, is a daunting task that requires the commitment of all the stakeholders. The envisaged introduction of the new Comprehensive Pension Fund Administration Support System (COMPASS) to the Government Employees Pension Fund involves re-engineering the whole business – the business must align itself to the software system as opposed to the system having to be adjusted to suit the business.

The implementation of the new Comprehensive Pension Fund Administration Support System (COMPASS) software integrated system comprises three phases. The **first phase** of the implementation of the Comprehensive Pension Fund Administration Support System (COMPASS) was to initiate, scope and plan the project (Government Employees Pension Fund, Customisation and Implementation Plan, 2001). This phase addresses documenting business requirements so that the

new system could provide at least the same minimum level of functionality that is being offered by the Government Employees Pension Fund. In order to implement the new pensions administration programme, a comprehensive study on the functionalities of the legacy-based pension administration system was done. The success of the whole project depended on how comprehensively and accurately the specifications and requirements for the new system is drafted. The **second phase**, that of implementation, is also the stage during which users will be trained to use the software. The **third phase** of the project is that of maintaining and upgrading the system in order for it to provide an optimal level of service. In terms of phase three, the maintenance phase of the project, the Government Employees Pension Fund has realised the importance of updating even a state-of-the-art system. The rate at which technological advancements are happening compels the Government Employees Pension Fund to upgrade as and when the need arises (Government Employees Pension Fund, Customisation and Implementation Plan, 2001) (Government Employees Pension Fund, Customisation and Implementation Plan, 2001).

When the new Comprehensive Pension Fund Administration Support System (COMPASS) system is fully operational, it is envisaged that a cradle-to-the-grave service will be rendered to the client. The cradle-to-the-grave concept is based on the prospective member being admitted to the Government Employees Pension Fund electronically by means of an interface with the client departments, that is, all government departments. (Government Employees Pension Fund, Customisation

and Implementation Plan, 2001) All membership monies will be collected by the client departments and paid over to the Government Employees Pension Fund electronically. Electronic files will be opened for new members. The current paper-based file is prone to being misplaced, takes up excessive shelf space, is cumbersome and is often not up-to-date. Creating pensioner files electronically will save floor space, eradicate the possibility of the file being misplaced, will ensure easy electronic accessibility to more than one user simultaneously and they would be up-to-date because of the automatic update facility. It would be easier to track the progress of an electronic file than is currently the case with the hard file (Government Employees Pension Fund, Customisation and Implementation Plan, 2001) (Government Employees Pension Fund, Customisation and Implementation Plan, 2001).

4.4.1 Seamless Government

The concept of a seamless government is instrumental in an effort to foster co-operative partnerships between the spheres of government and the concomitant government departments. The concept of seamless government is linked to the idea of a portal for government departments so that clients could access government information and services irrespective of the department involved. The concept of inter-governmental relations entails seamless partnerships as realised in multiple formal and informal processes, channels, structures and institutional

arrangements for bilateral and multilateral interaction within and between spheres of government.

Gates (1999:397) notes that government is an intimidating knot of uncoordinated agencies to most regular citizens and businesses. In South Africa the intimidating knot of government services and processes extend to rural areas, to the illiterate and to those who do not have access to information and communications technology. Inherent in the intimidating knot are the complicated forms, administrative procedures and processes.

Both, the President of South Africa (Mbeki, 23 June 2004) and the Minister of Public Service and Administration (Fraser-Moleketi, 28 June 2004) refer to seamlessness in government. Fraser-Moleketi (28 June 2004) notes that the traditional divides between the spheres of government need to be integrated in order to facilitate learning, performance improvement and accountability. Mbeki (23 June 2004), in referring to seamless cooperation, highlights public-private and government-civil society partnerships as being central to fostering integration. The reference to fostering partnerships, accountability, performance improvement and learning is directly linked to improving service delivery by means of providing seamless interaction between government and its clients.

Similarly, the Government Employees Pension Fund needs to foster seamless relations with its partners. Fostering such seamless relations should be geared

toward improving service levels for the client. One can only consider the example of the current requirement of a certified copy of the bar-coded identity document having to be submitted with every annual submission of a life certificate. Despite the submission of certified copies of bar-coded identity documents, fraud still occurs (Interview, Senior Manager of Operations: Government Employees Pension Fund, 31 May 2004). In some cases the bar codes on copies are distorted and the scanner can consequently not read them, in which case the Government Employees Pension Fund rejects them and requests a further copy from the client (Interview, Manager of Operations Section of the Government Employees Pension Fund, 29 April 2004). This causes delays on the side of the client and on the side of the Fund. The Government Employees Pension Fund cannot resolve the case and the client does not get paid. An electronic link with the Department of Home Affairs to verify the authenticity of the identity of such clients has been instituted. It is, however, still not accessible to all Government Employees Pension Fund users, hence the paper-based process seems to predominate.

Such seamless links between employer (government) departments and the Government Employees Pension Fund can only enhance the manner in which services are delivered to clients. If forms and other documentation can be submitted electronically, it would expedite administrative processes and the turn-around time in processing applications. The accuracy with which benefit calculations are made would invariably improve, thereby minimising the request for

recalculations and the consequent additional administrative burden placed on the Government Employees Pension Fund.

Seamless government has an outward-looking nuance. Seamless government has the ability to provide the client with uninterrupted services. The client is in most cases not aware of the technical intricacies involved in seamless interaction across departments. The extension of seamless interaction with an inward-looking nuance, a good example of which is the electronic workflow system of the Government Employees Pension Fund, is vital to enhance complete electronic service delivery. Workflow can provide seamless interaction between the different operations environments within the Government Employees Pension Fund.

4.4.2 Workflow

Whereas the principle of seamlessness is more outward looking, workflow is the internal automation of a business process, in whole or part, during which documents, information or tasks are passed from one participant to another for action according to a set of pre-programmed procedural rules (The Workflow Portal, Online, 2 August 2004). The five key benefits of the introduction of workflow software are improved efficiency, better process control, improved customer service, flexibility and business process improvement (The Workflow Portal, Online, 2 August 2004).

When the Government Employees Pension Fund embarked on implementing the Comprehensive Pension Fund Administration Support System (COMPASS), it also embarked on sourcing a new workflow software programme, Oculus, in order to manage the excessive amounts of paper flowing through the administrative processes of the Government Employees Pension Fund (Government Employees Pension Fund, Customisation and Implementation Plan, 2001). All the business processes pertaining to paying pension benefits to clients will, in time, be configured and implemented in the workflow system. The workflow system will ensure tighter control and monitoring of business processes. Prior to the implementation of electronic workflow, there was no system in place to monitor the number of documents that were flowing into the Government Employees Pension Fund. Conventional mail coming into the Government Employees Pension Fund was centralised at the registry where it was opened, date-stamped and distributed to the relevant operations section. At the operations section, the hard file would be requested from the registry and the document (that was received by mail) would be placed on file, and the necessary administrative process would be initiated. The file would physically move from one person to another in order for the cyclical administrative process to be completed after which it would be returned to the registry for storage (Interview, Manager of Operations Section of the Government Employees Pension Fund, 29 April 2004). This process is flawed since there is no record of the Government Employees Pension Fund ever having received an item that was mailed. During the process of opening, distributing and filing the mail, documents could go astray. This would result in delays in payments. Furthermore,

documents could be misfiled and it would be virtually impossible to locate such a misfiled document. This fore-going situation is a classic case for the implementation of a workflow programme (Interview, Manager of Operations Section of the Government Employees Pension Fund, 29 April 2004).

When the Government Employees Pension Fund first considered installing the Oculus workflow software several types of paper were being processed. These include customer correspondence, photostat copies of identity documents, marriage certificates, death certificates, tax directives and several kinds of forms (Government Employees Pension Fund, User Manual: Introduction to Workflow, March 2004). Apart from the physical documents flowing into and through the Government Employees Pension Fund, facsimiles come into the building at various points. Clients have often complained that they have faxed documents to the Government Employees Pension Fund (Interview, Manager of Operations Section of the Government Employees Pension Fund, 29 April 2004). These documents are, in many cases, not traceable since they are faxed to facsimile machines that are not necessarily situated in the sections where they are to be processed. Furthermore, the facsimile machines are standalone entities which provide disjointed levels of service. The Government Employees Pension Fund has, however, implemented a Rightfax (facsimile to personal computer) facility for selected users. The Government Employees Pension Fund has set itself a goal to channel all incoming facsimiles into the workflow system. This initiative was seen as a manner to channel all facsimiles into the system without them having to be

transcribed into hard format thus reducing the risks that have been outlined (see Figure 4.1: page 143). Once the documents are in electronic format a workflow process is initiated and there is a record of the process that is accessible to the enquiries sections in the event that a client wants to determine the status of his or her application. The Oculus workflow software is able to direct, monitor, control and process claims progressively, systematically, accurately and speedily (Government Employees Pension Fund, Customisation and Implementation Plan, 2001).

A typical document flow would include the following steps:

Work is loaded into the system via one of three methods. Customer correspondence and documents that are hand-delivered are scanned so that electronic images are available on the system. When the facsimile utility is fully operational it is envisaged that documents received in this manner would automatically be entered into the workflow system as electronic data. Furthermore, when the optical character recognition software has been developed and the concomitant forms have been developed and standardised, it will assist the processing of forms through the system. Optical character recognition software translates written images into electronic images for the purposes of expediting administrative processes (Government Employees Pension Fund, User Manual: Introduction to Workflow, March 2004). Workflow requests can also be generated in the Call Centre. When a client calls, the Call Centre agent can electronically create a request. The Call Centre agents will have access to the workflow system

and they would be able to resolve the majority of queries from the members and pensioners without forwarding them to another user. The requests that require further attention will be logged and a workflow case will be created. Such a request is routed to an Action Group member who operates in a similar manner as the indexer in the scanning section. A workflow case will be initiated and forwarded to the relevant section for further attention. This means that the Action Group member will try to resolve the query or pass it on to the relevant section within the Government Employees Pension Fund where the matter can be resolved and reported on. Reporting is important so that the Action Group member can call the client to inform him/her about the resolution of the enquiry (Interview, Manager of the Call Centre of the Government Employees Pension Fund, 3 September 2004).

Before any correspondence is captured for electronic processing, a unique barcode is placed on it for record and tracing purposes. The captured image is forwarded to an indexer who checks in what section the request (correspondence) is most likely to reside (Government Employees Pension Fund, Scanner Proposal, May 2002). The Government Employees Pension Fund, for example, has four operations units each of which serves selected provincial and national departments. The electronic documents are routed to predefined queues based on several criteria. Once an electronic enquiry reaches the relevant administrative section, work is automatically distributed evenly amongst the human resources that are available for the purpose. The routing of work can be adapted by non-information system personnel to reflect the changing needs of the organisation.

These needs could include making provision for a human resource that is absent and for an additional resource, depending on the operational requirements at the time. Work is consequently routed through the succeeding steps until it is finalised and sent for quality control, deletion and/or filing.

From an e-government perspective, once workflow is fully operational, work can be routed in a manner that is conducive to e-service delivery. Whilst the client may and does not know the processes that are followed, it is important that the client has a positive experience when transacting with the Government Employees Pension Fund. Figure 4.1 (see page: 143) provides an illustration of the processes employed to deal with correspondence, hard and electronic, coming into the Government Employees Pension Fund.

Outgoing correspondence will comprise of follow-up telephone calls to clients, facsimiles, printed mail and e-mail. It is envisaged that all of these afore-mentioned forms of correspondence (except for the verbal) will be generated automatically by the system once a workflow administrative process has been completed in order to inform the client accordingly. In order to expedite the process the member or pensioner can select his/her preferred mail delivery mechanism, facsimile, conventional mail or e-mail. Templates for all of the standard correspondence and forms will be maintained and linked to an electronic administrative process on the system. The system will automatically populate the template with the relevant data. Upon finalisation of the said administrative processes, correspondence will

automatically be dispatched to the client (Government Employees Pension Fund, User Manual: Introduction to Workflow, March 2004).

Workflow can and should improve the efficiency with which the Government Employees Pension Fund provides services. Apart from the automated administrative processes, workflow provides managers with the ability to conduct automated quality reviews. The workflow system has a built-in reporting mechanism to alert managers should users not perform in accordance with the predefined performance criteria, such as the maximum time that it should take to perform a specific task and number of tasks that a specific type of user should complete within a day (Government Employees Pension Fund, User Manual: Introduction to Workflow, March 2004). The system will furthermore alert the manager should a specific task not be attended to within the predefined time period. Management and control are consequently more effective, since the automated quality review feature ensures that the work is being reviewed in accordance with statutory guidelines. Management control can also be improved through more accurate and real time ability of the system to provide improved management reporting tools. Such management reporting tools could be used to assess individual and collective staff training needs as well as overall sectional and organisational performance.

Intra-organisation silos will be eradicated when the electronic workflow programme is fully integrated into the range of other electronic administrative processes. This

is good in the sense that remote sites can then be included in the planning and execution phases of operations. Remote sites such as with the regional offices of the Government Employees Pension Fund can also generate workflow requests thereby reducing the time that is taken to assist a client. Once workflow is fully operational in the Government Employees Pension Fund, it can be employed as a tool that will deal with backlogs. When backlogs arise in one area of the business, as is often the case in the Government Employees Pension Fund, workers in another section who may be idle can immediately be co-opted by electronic means to assist with the processing (Humphreys, 2002). This is a benefit that is difficult to achieve if paper-based processes are being pursued. Such transcending of business barriers also affords the Government Employees Pension Fund the opportunity to multi-skill its staff by exposing them to more and varied aspects of the business. Multi-skilling is good in that it promotes business continuity in the absence of certain individual human resources. This kind of flexibility in the electronic systems of the organisation militates against the theory of specialisation of functions. In this sense the operations units (back office) of the Government Employees Pension Fund has an understanding for the requirements of the Call and Walk-in Centres (front offices), hence organisational synergies are created in the process of improving service offerings to clients. Electronic processes also improve efficiencies since there is less paper in the system. Less paper invariably means less opportunity for documents to get lost.

4.4.3 Paperless environment

A paperless environment is intended to provide faster access to individual and community or shared files. Any paperless system seeks to reduce the time and effort involved in handling excessive volumes of paper (Lancaster, 1978:31-33). The submission of electronic documents and the scanning of hard copies when they arrive at the Government Employees Pension Fund, is key to the principle of a paperless workplace. The principle of the paperless workplace should apply to all aspects of the business. This includes procurement, invoicing and payment processes. The paperless workplace is also applicable to basic human resources administrative applications such as the submission of leave forms, housing subsidy forms and staff assessment documentation.

A paperless environment is an environment where the flow of physical documentation is limited to the barest minimum. Strictly speaking, paper cannot be eradicated from an office environment completely, but it can be drastically limited. The case of the Government Employees Pension Fund displays an extreme affinity for paper. So many processes within the Government Employees Pension Fund cannot be initiated or completed until certain paper-based requirements are met. These requirements include the submission of forms, identity documents, marriage certificates, inter alia. These afore-mentioned documents are important to the business processes, hence they cannot be discarded (Interview, Manager in the Walk-in Centre of the Government Employees Pension Fund, 3 September 2004).

To move to a paperless environment, a document management system has been implemented within the Government Employees Pension Fund. All incoming documents are being scanned, that is, converted into electronic format, and stored on the system. The paperless environment is an integral part of the workflow process, since without an electronic image there can be no workflow process (Government Employees Pension Fund, User Manual: Introduction to Workflow, March 2004).

Once a document has been scanned and indexed, the paper copy will be archived at a remote location and the administrative staff will only have access to the electronic version of the document (see Figure 4.1: page 143). The electronic document will pass through the system via workflow and, in so doing, the administrative processes will progressively migrate to finalisation and the pension monies disbursed to the client. In the case of litigation, the paper copy can be retrieved from the archiving service provider (Government Employees Pension Fund, User Manual: Introduction to Workflow, March 2004). The paperless environment therefore contributes to a more efficient flow of the requisite information through the system. The risk of documents being misplaced is eradicated and consequent delays are dispelled from the system. The necessity for excessive storage for the files is reduced since the physical documents are moved to a remote site. Other risks such as fire hazards, insect infestation and moisture, which would have to be mitigated by the Government Employees Pension Fund, are now transferred to a specialised service provider (Humphreys, 2002).

It is, however, also necessary to scan existing files and documents so that they can be archived at the remote site. The Government Employees Pension Fund decided to initiate a project to back scan and index the existing documents and files and to archive the documents. The scanned documents would then be available to administrative personnel in electronic format. This back scanning project, by its very nature, is a rather enormous challenge for the Government Employees Pension Fund. Once this process of scanning all the approximately 250 000 files is complete, administrative processes will be enhanced (Government Employees Pension Fund, Scanner Proposal, May 2002).

4.4.4 Managing Risk in the Government Employees Pension Fund

Risk management forms an integral part of the processes of any institution. Managing risk is unique in each organisation or profession. Bankers define and manage risks differently to what safety professionals would. In the case of the Government Employees Pension Fund risk refers to protecting the integrity of the funds being managed on behalf of contributing members, ensuring that effective administrative processes are in place, ensuring effective client liaison, whilst ensuring that the human resources are sufficiently equipped to deal with administrative challenges. Risk management is therefore about mitigating potential losses to the organisation, in this case, the Government Employees Pension Fund. These potential losses are not limited to fraud and corruption, they also relate to

improving administrative efficiencies and structures, retaining staff and generally observing the accepted principles of good governance.

Van Scoy (1992:3) postulates that risk is inherent to any activity that may be initiated in any organisation. Van Scoy (1992:3) further points out that risk can never be eliminated nor can all risks ever be known. Van Scoy (1992), in pointing out that risk can never be eliminated, intimates that risk needs to be managed. In arguing that risk needs to be managed, Van Scoy (1992) is presenting a case for viewing risk as an opportunity for learning and progress. Risks are dynamic in nature. If a risk is mitigated at one point, other potential risks may surface.

With the advent of upgraded electronic systems at the Government Employees Pension Fund, there are concomitant risks. Operational risks within the Government Employees Pension Fund relate to human error in calculation of benefits relating to pensionable years of service, deliberate fraudulent activities, system risk where software and hardware malfunction during the execution of operations, lack of staff readiness for the new systems and the inability to obtain a critical mass of clients accessing the new system.

The noble intention of implementing e-government systems at the Government Employees Pension Fund places an additional burden on the Fund to adopt systems and procedures to mitigate risks or potential risks. Whilst it was mentioned that teleforms, that is electronic forms submitted to the Government Employees

Pension Fund, could potentially reduce the incidence of fraud and improve the efficiency of the administrative process, the verification of the information they contain could be problematic. Furthermore, electronic signatures still present cause for concern. Gates (1999:403) notes that information security has two dimensions. The first of these is protecting personal data while it is in transit and the second is authenticating the person who is initiating the transaction. Countries, such as Canada and Australia, are legislating to ensure that digital signatures are accepted as legal points of reference (Deloitte Research, 2000:14). South Africa, through the **Electronic Communications Security (Pty) Ltd Act**, 2002 (Act 68 of 2002), has also taken steps to provide credibility to e-initiatives. It would otherwise be difficult to convince users or potential users to utilise e-systems, especially where personal and financial information are involved.

The Government Employees Pension Fund is, however, currently not in a position to accept the necessary documents from clients in electronic format. Whilst the Government Employees Pension Fund is in the process of upgrading its electronic systems, it cannot as yet dispense with the current manual systems of control. This point is best illustrated by using the example of a certified copy of a document being facsimiled to the Government Employees Pension Fund. Even though the copy may be certified as per the requirement, a facsimile is essentially viewed as being a copy of the certified copy. A similar situation arises when a client calls the Call Centre to, for example, update his or her address details or to request information pertaining to payments. Verification of the true identity of the client

cannot always be done with absolute certainty (Interview, Manager of the Call Centre of the Government Employees Pension Fund, 3 September 2004).

Other areas of potential risk for the Government Employees Pension Fund and its clients include that computer viruses could access the systems of the Government Employees Pension Fund the more they are exposed to external access. Malicious computer viruses could potentially damage the systems of the Government Employees Pension Fund, with a resultant negative effect on service delivery. A further risk, which will be dealt with further in the research, is the absence of sufficiently -trained, -remunerated and -motivated human resources. Given that the Government Employees Pension Fund is part of the public service in South Africa, its salary structures are no different from those of the public service. These salary structures are often viewed as being restrictive hence its inability to attract highly skilled staff. This fore-going, coupled with a moratorium on appointments in the public service from 5 August 2002 to 12 September 2003, has meant that the Government Employees Pension Fund was unable to make appointments despite that many of the approved posts on the establishment of the Government Employees Pension Fund were vacant (Interview, Assistant Manager: Human Resources, Government Employees Pension Fund, 3 September 2004). In 2003 417 (88.9%) of the 469 permanent positions were filled and in 2004 the number declined to 395, which constituted 84,2% (Government Employees Pension Fund, Annual Report, 2003-2004). A fewer number of staff consequently has to perform at the same levels. This understaffing is tantamount to a risk to the business of the

Government Employees Pension Fund. Even if the Government Employees Pension Fund were able to appoint new employees, the departure of experienced staff and the time taken to appoint and train new staff present additional risks to service delivery.

Whilst the Government Employees Pension Fund has embarked on implementing new electronic systems, it is also necessary to ensure that there is a critical mass of users. Without this critical mass of users, the most state-of-the-art system cannot be optimal. Governments' focus on customer service is driven by the needs of the citizens for whom that service is intended. Governments should not assume that citizens want and will indeed use government online services (Deloitte Research, 2000:15). This situation is exacerbated by the fact that pensioners, many of whom during their working lives have not been exposed to the uses and potential uses of computers and e-services. Attaining a critical mass of users is further hampered by the lack of access to computers and by the inability to use computers.

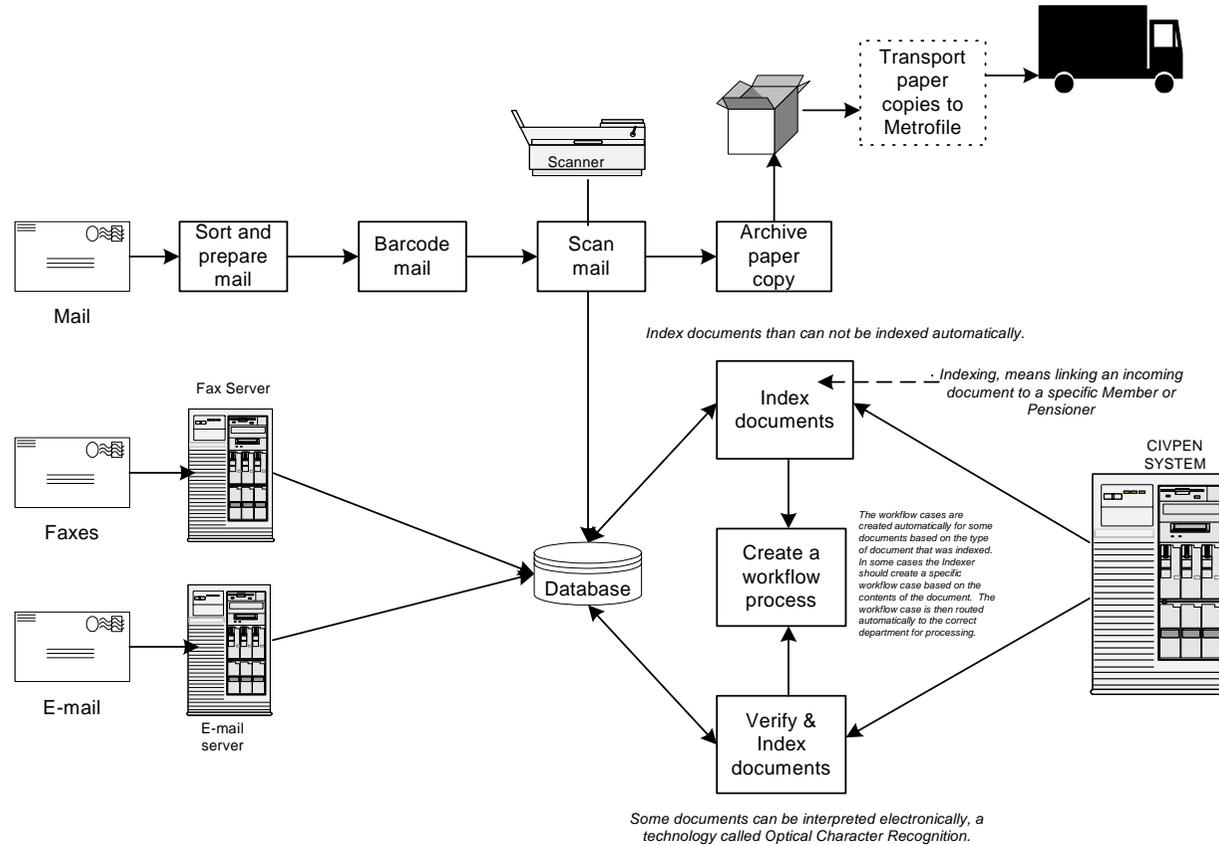
Resistance to change in implementing new computer software and the concomitant organisational changes is a risk that the Government Employees Pension Fund has to take seriously. Individuals affected by the proposed changes would not want to accept that the changes are necessary. Mood (1983:39) refers to two forms of resistance. These are the outspoken opposition and the inertial resistance to change. Resistance to change in the Government Employees

Pension Fund is predicated upon the belief that systems have been working effectively for so long and that they do not need to be tampered with. Resistance to embrace the changes manifests itself in the reluctance of individuals or groups of individuals to accept new or different responsibilities. This fore-going could be decisive in determining the success or otherwise of electronic service delivery in the Government Employees Pension Fund. There are, however, those people within the Government Employees Pension Fund who strongly embrace the changes as necessary and relevant for improved and sustained service delivery.

In an attempt to provide an international perspective to the challenges that face the Government Employees Pension Fund, comparative reference will be made to relevant local and international institutions, most notably Sanlam, the Office of the Compensation Commissioner and the efforts by Government in the United Kingdom to extend and promote electronic services to elderly people. The United Kingdom Government embarked on a comprehensive strategy to make government services available to elderly (retired) citizens.

FIGURE 4.1

Processing of Incoming Correspondence/Mail



Source: P. Dauth, GEPF, 2002

4.5 COMPARISON: E-SERVICE DELIVERY IN THE GOVERNMENT EMPLOYEES PENSION FUND, LOCAL AND INTERNATIONAL INSTITUTIONS

In attempting to assess the levels of success of implementation of its e-government system, institutions were identified where similar such systems - that is, workflow and the Comprehensive Pension Fund Administration Support System (COMPASS) – were either being implemented or had been implemented (Interview, Manager of the Project Support Office of the Government Employees Pension Fund, 3 November 2004). The Government Employees Pension Fund, it should be noted, does not have an equal in South Africa in terms of its business and business offerings. The comparative analysis in this section concentrates on similarities in work processes and principles of implementation of these systems rather than on the comparative business environment. The subsequent sections analyse and critique the implementation of workflow and document management at the South African Airways and the Compensation Commissioner, respectively. Additional analysis will follow on the implementation of the Comprehensive Pension Fund Administration Support System (COMPASS) at Sanlam and Old Mutual, two of South Africa's biggest insurance companies.

4.5.1 Assessment of the Implementation of Workflow at South African Airways and the Compensation Commissioner

South African Airways' (SAA) loyalty programme, Voyager, initiated its document management system in 2000, with the first phases going into operation during 2001. At the time of implementation Voyager membership was some 1,5 million, with 800 000 being active. Voyager was receiving an average of 30 000 documents a month, with 350 member detail updates being done daily and a total number of 20 000 cases being handled a month. South African Airways, Voyager, was dispatching 350 000 pieces of (snail) mail a month (Government Employees Pension Fund, January 2004).

A phased approach was adopted with the implementation of the new workflow and document management processes at South African Airways. This was done in order to ensure that problems were identified, assessed and resolved before proceeding to the next stage. The phased approach was adopted to ensure that there was continuity in business processes during implementation (Interview, Manager of the Project Support Office of the Government Employees Pension Fund, 3 November 2004).

Some of the challenges that were encountered revolved around the estimation of the magnitude of the project. To this end, the project implementation phase went beyond initial estimations both in terms of time and resources expended. Given

that South African Airways had three different service providers, coordination of efforts proved to be crucial to timeous implementation of the project deliverables (Interview, Senior Manager of Operations of the Government Employees Pension Fund, 9 October 2004).

The workflow system being used by South African Airways is not the web-based version hence it does not integrate with other systems that may be in use. The workflow cases are allocated to users manually which necessitates the constant availability of systems administrators. Furthermore, the use of teleforms by South African Airways has made processing of certain types of cases faster (Government Employees Pension Fund, January 2004). Teleforms are electronic forms that have been so formatted based on the paper-based form. The concept of the teleform, which has protected fields to ensure information security, provides a further dimension in enhanced service delivery, especially since teleforms require that certain compulsory fields be filled out before they can be submitted electronically. The use of teleforms, however, took some time to get accepted by users given that it was a radical diversion from the normal way of processing.

The Office of the Compensation Commissioner (OCC) of South Africa uses the scanning and indexing process as the initial administrative action in each claim. The system of the Compensation Commissioner is set up in such a way that all scanning is routed to a central point where a supervisor monitors and distributes work proportionately to individual employees. The scanning is done in batches with

separator pages forming part of the batch. Whilst the separator pages increase the number of scanned images drastically, the system is effective in avoiding misplaced documents. The scanning process also makes provision for high priority items to be scanned, indexed and distributed more rapidly so as to expedite administration. If errors are generated only certain designated persons are allowed to erase such errors. A total number of 22 000 items, entailing 58 000 - 60 000 pages are handled on a daily basis by the Compensation Commissioner (Government Employees Pension Fund, January 2004).

The Office of the Compensation Commissioner introduced workflow but a limited amount of processing was being done on it as a result of the numerous problems having been experienced. The biggest drawback of the current workflow system was the time it took to process a case. The Compensation Commissioner recognised that its workflow processes were not up to standard but efforts were being made to upgrade the systems.

Both South African Airways and the Office of the Compensation Commissioner tend to favour the centralised approach to their administrative processes. The regional offices of the Compensation Commissioner forward their documents to the Pretoria head office for scanning and indexing, hence the regional offices only handle enquiries without them having any processing functionalities. In the case of the South African Airways, the Cape Town and Durban stations only perform enquiry functions on the Voyager programme with Johannesburg being the only

station where processing is being done. No processing is done at the remote sites since the costs associated with implementing the network are apparently not warranted (Government Employees Pension Fund, January 2004).

At a comparative level, the Government Employees Pension Fund seems to display both similarities and differences to the systems being implemented by South African Airways, Voyager, and the Compensation Commissioner. The overwhelming similarity is that all three organisations opted for the centralised approach to scanning and indexing. The remote sites of the three organisations do not do any processing, they merely act as walk-in centres where documents are collected and forwarded to the head office for processing. The main criticism of this approach is that documents could go astray whilst in transit. A more prudent approach would be to allow for scanning to be done at the remote sites and for electronic images to be captured immediately after which the hard documents can be transferred to the respective head offices for processing.

Furthermore, whereas South African Airways is scanning approximately 30 000 documents per month and the Compensation Commissioner is scanning approximately 60 000 pages a month, the Government Employees Pension Fund is scanning an average of 245 000 documents per month (Government Employees Pension Fund, November 2004). The Government Employees Pension Fund average includes the back scanning of current hard copy files. Judging by these for-going comparative figures, it is clear that the Government Employees Pension

Fund has a far greater workload hence the concomitant need for a greater administrative capacity.

The Compensation Commissioner has not implemented the concept of the teleforms - that is, the electronic form with protected as well as compulsory fields. The Government Employees Pension Fund and South African Airways have, however, implemented the concept of teleforms. In the case of both the Government Employees Pension Fund and South African Airways, it took some time for the concept to take root amongst employees and clients (Interview, Senior Manager of Operations of the Government Employees Pension Fund, 9 October 2004). Once the efficacy and benefits of electronic submissions dawned on clients, however, the concept seemed to be used more extensively. The Government Employees Pension Fund has the added problem that several of its client or employer departments do not have access to Internet services, hence hard documents continue to be used. The benefits of the teleforms is that they are more accurate, they are submitted electronically and they are more readable, all of which assist to expedite administrative processes. Interestingly the initial planning and implementation phase of the new information and communications technologies into the organisations being compared resulted in a retardation of service delivery. The transition phase inevitably results in uncertainty. This uncertainty stems from various factors that are often beyond the control of implementers, despite the most meticulous plans. It is difficult to predict the amount of training that staff members need to ensure effective utilisation of new systems. Whilst one staff member may

grasp concepts easily, others may need more intensive training. These for-going are variables the outcome of which really cannot be predicted. All the difficulties around the design and implementation of new information and communications technologies could result in staff becoming disillusioned or demoralised because of the increasing uncertainty and the increased pressure being exerted by clients who are experiencing the delays. It does, however, seem inevitable that there will be teething problems when any new project is being implemented and contingent provisions need to be made.

Having assessed the implementation of electronic workflow and the document management procedures at the South African Airways and the Compensation Commissioner, it is necessary to compare the implementation of the Comprehensive Pension Fund Support System (COMPASS) at Sanlam, Old Mutual and the Government Employees Pension Fund so as to benchmark the study.

4.5.2 Comparative Analysis: The Comprehensive Pension Fund Administration Software System (Compass) At Sanlam, Old Mutual and the Government Employees Pension Fund

The Government Employees Pension Fund, it needs to be emphasised, is the largest pension fund in South Africa (Government Employees Pension Fund, Annual Report, 2003-2004). The comparison between the Government Employees

Pension Fund, Sanlam and Old Mutual is not necessarily the best comparison since each of the organisations has unique clients, products, mandates and service offerings. While each of the organisations is in the same business, manner in which they conduct their business is very different. The Government Employees Pension Fund, for instance, does not have to compete for clients since it is legislated that all permanently appointed civil servants should contribute to it (**Government Employees Pension Law**, 1996 (Proclamation 21 of 1996)).

At the same time that the Government Employees Pension Fund was selecting the Comprehensive Pension Administration System Software (COMPASS), other major South African role-players in the selfsame pensions administration industry as that of the Government Employees Pension Fund, such as Sanlam and Old Mutual, were either considering to purchase or had already initiated implementation of the software (Government Employees Pension Fund, January 2004). The consensus from the companies that were using the Comprehensive Pension Administration Application Software (COMPASS) was that it had added value as far as service delivery was concerned (Interview, Manager of Business Support Services at the Government Employees Pension Fund, 3 November 2004). Sanlam and Old Mutual are prominent private sector companies that administer pension funds on behalf of various companies and individuals in South Africa. Of the three institutions being compared, Sanlam was the first to pilot the implementation of the Comprehensive Pension Administration Application System Software (COMPASS) in 1999 with Old Mutual following in 2000 and the

Government Employees Pension Fund in 2001. Sanlam, Old Mutual and the Government Employees Pension Fund envisage completing the implementation of the Comprehensive Pension Administration Application System Software (COMPASS) by 2007, 2008 and 2005, respectively (Government Employees Pension Fund, January 2004).

Whilst the Government Employees Pension Fund and Old Mutual went for what could be seen as the all-or-nothing approach, Sanlam was more circumspect and adopted a more conservative, phased approach to implementation. Old Mutual and the Government Employees Pension Fund embarked on the full implementation approach in that both organisations implemented workflow, document management and business transformation (Interview, Manager of the Project Support Office of the Government Employees Pension Fund, 3 November 2004). It is such that the Government Employees Pension Fund is a government institution and the business transformation component that needed to complement the implementation of the Comprehensive Pension Administration System Software (COMPASS) proved elusive because of the administratively restrictive environment.

Sanlam, however, developed a system similar to that of the teleforms. This web-based programme allows members to submit documents online. The way this is being done is that template forms are posted on the Sanlam website. These are completed by the client and submitted electronically for processing. The difference

between this afore-mentioned system and the one being operated by the Government Employees Pension Fund is that, once received, Sanlam prints the document while the Government Employees Pension Fund envisages processing them electronically.

4.5.3 Comparative Human and Other Resources Devoted to the Respective Projects Under Review

Each of the institutions being compared has adopted different strategies as far as human resources availability for the project and training needs are concerned. Sanlam, for example, has three teams supporting the implementation of the new business requirements linked to the rolling out of the Comprehensive Pension Administration System Software (COMPASS). The first of the teams comprise 9 members, including business analysts that handle new system requirements, an additional team of 8 handles day-to-day issues and there is an information technology support team of 7 (Government Employees Pension Fund, January 2004). This excludes the support of the legacy-based systems. By contrast, Old Mutual has a team of approximately 100 full-time business resources involved in its information technology upgrade project (Government Employees Pension Fund, January 2004). The Government Employees Pension Fund identified a full-time team of approximately 20 resources to work on refining the Comprehensive Pension Administration System Software (COMPASS). The team members were identified on the basis of their expertise in the various sections of the Government

Employees Pension Fund. The team could also co-opt any member of the business that was required to provide specialised input with a view to capturing manual processes into an electronic format (Interview, Assistant Manager: Business Support Services at the Government Employees Pension Fund, 3 November 2004). Measured against the resources that are being employed by other Comprehensive Pension Administration System Software (COMPASS) users, the number of resources that the Government Employees Pension Fund has deployed is not nearly enough. Furthermore, the members of staff co-opted by the team from time-to-time to contribute to the development of the system, were not necessarily convinced of the value of their contribution to the process. These additional staff wanted to get to their original areas of responsibility so as not to fall behind with what they perceived to be their primary area of service delivery. In both the case of Sanlam and Old Mutual there are more than 50 business resources that are dedicated to supporting and implementing the Comprehensive Pension Administration System Software (COMPASS) and related projects. The comparison between the Government Employees Pension Fund, Sanlam and Old Mutual is made all the more stark in the light of the fact that the Government Employees Pension Fund is by far the largest fund in terms of membership and financial resources.

Having conducted the comparative analysis at a technical or systems level, the succeeding section conducts a comparative analysis of the social impact that the implementation of information and communications technology has on elderly

people. The comparison of the social impact of information and communications technology for elderly people in the United Kingdom has been used for its similarity in terms of the efforts to provide electronic services to retired civil servants by the Government Employees Pension Fund of South Africa.

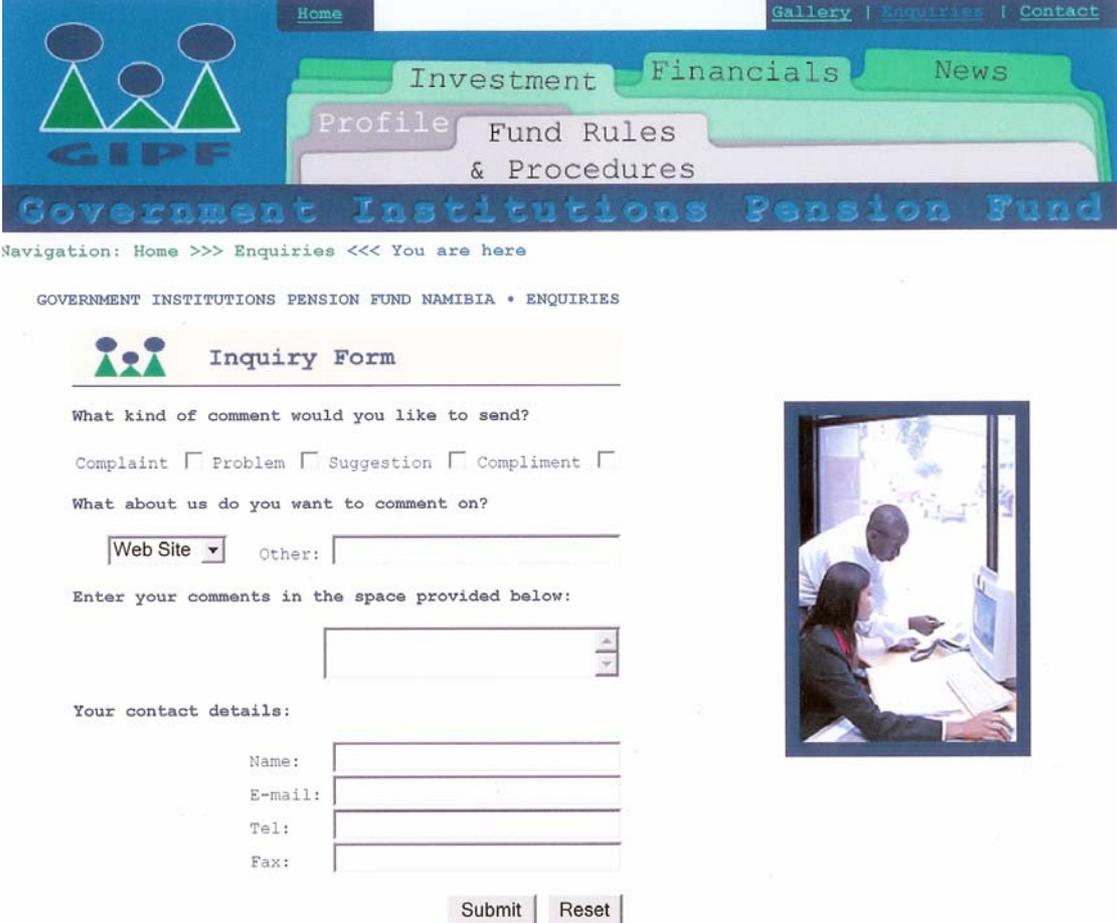
4.5.4 Comparison: E-Services to Elderly People in the United Kingdom and the Government Employees Pension Fund

The Government of the United Kingdom, within the broader context of providing e-government services to citizens, decided to specifically target providing electronic services to elderly or retired people (National Audit Office, 20 February 2003) (National Audit Office, 20 February 2003). This section will consequently focus on the challenges faced by the United Kingdom to promote the use of electronic service delivery mechanisms amongst elderly people. It is important to note that the comparison between the Government Employees Pension Fund and the efforts by the United Kingdom Government to provide e-government services to elderly people is probably not a fair one. What is, however, important is that similar principles are applicable to both scenarios. The first important principle that needs to be taken into consideration is access to electronic means (National Audit Office, 20 February 2003). The United Kingdom Government had, through its Education Department, distributed 24 000 refurbished computers to disadvantaged groups. The United Kingdom Government had furthermore installed information kiosks in public places so as to make a host of information and services available to citizens.

This programme to make electronic services available to elderly people is part of a bigger programme to make e-government services available to all citizens within the United Kingdom (National Audit Office, 20 February 2003).

A comparison between other African countries and South Africa, pertaining to civil service pension funds is particularly useful in determining the levels to which information and communications technologies are to be used to deliver services. The web sites of the Retirement Benefits Authority of Kenya, the Nigerian Civil Service Pension Fund, the Government Institutions Pension Fund of Namibia and Botswana, were visited. It is significant that these afore-mentioned African pension dispensations have web sites, all of which were wholly or overwhelmingly static. Of the several web sites of government pension funds that were visited, the Government Institutions Pension Fund of Namibia seemed to provide the highest level of electronic interactivity with clients. Figure 4.2 (see page 157) represents an example of the kind of electronic interactivity that the Government Institutions Pension Fund of Namibia engages in.

FIGURE 4.2



Home Gallery | Enquiries | Contact

Investment Financials News

Profile Fund Rules & Procedures

Government Institutions Pension Fund

Navigation: Home >>> Enquiries <<< You are here

GOVERNMENT INSTITUTIONS PENSION FUND NAMIBIA • ENQUIRIES

Inquiry Form

What kind of comment would you like to send?

Complaint Problem Suggestion Compliment

What about us do you want to comment on?

Web Site Other:

Enter your comments in the space provided below:

Your contact details:

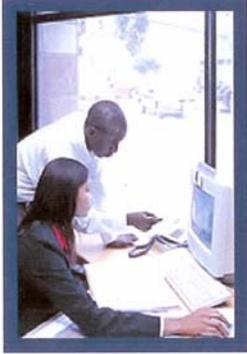
Name:

E-mail:

Tel:

Fax:

Submit Reset



Source: Government Institutions Pension Fund, Online, 27 July 2005

Furthermore, none of the web sites visited display any reference to e-government and e-service delivery, even though some of them may have instituted such initiatives. The success of the provision of e-services may be stymied in regard to obtaining a critical mass of users of e-services given the extent of the digital divide that exists. The pension fund web sites visited, displayed that telephonic contact with clients was predominant. If telephonic contact is viewed as e-government,

then it could be argued that the level of e-government in African civil service pension funds is extremely limited.

In considering making e-services available to clients, the United Kingdom identified a number of constraints that affect elderly people (National Audit Office, 20 February 2003). It could comfortably be assumed that more elderly people have access to telephony in the United Kingdom than in South Africa. South African civil pensioners - that is, those retired civil servants who are in receipt of monthly pensions - and contributing members - that is, all permanently appointed civil servants - show vast disparities in levels of access to telephony. Chapter Three indicates the vast disparities to access to telephony in South Africa. These disparities also extend to access to information and communications technologies. A case in point is the Modjadji district in the Limpopo Province where Government Employees Pension Fund staff, in trying to determine how to improve contact with clients in the area, discovered that a manual telephone exchange was still in use (Interview, Pekwa Training Officer at the Government Employees Pension Fund, 15 June 2004). The lack of telephony in the Modjadji area presents a microcosmic view that is symptomatic of reality in many rural areas in South Africa. The attached pictures (Figure 4.3: see page 159) depict the manual telephone exchange. Using the manual telephone exchange does not allow users the option of linking up to the Internet. This therefore means that clients of the Government Employees Pension Fund who make use of the manual telephone exchange

cannot access the web site of the Fund in an attempt to utilise the electronic access points.

FIGURE 4.3: The Manual Telephone Exchange at Modjadji Post Office



Picture taken by H. Fisher (2002)

Apart from providing access to telephony and communications and information technologies, these services are rather costly to ordinary South Africans. Affordability and infrastructure, according to Harrison (Pretoria News, 5 January 2005), are stumbling blocks to widespread fixed-line and Internet usage in South Africa. The advent of mobile telephony provides additional dimensions in making services available to people. Mobile telephony is largely out of reach for ordinary South Africans since it is a developing technology hence it is often priced out of reach.

One way in which the Government Employees Pension Fund can provide access to its systems for clients is to make the facilities available to them close to where they live or work. Access to Government Employees Pension Fund information can be facilitated by providing dedicated computer terminals that are linked by means of a wide area network to national, provincial and local government offices. Furthermore, dedicated closed network telephone lines that are linked directly to the Government Employees Pension Fund's Call Centre could also be offered to clients who may need to access the services of the Fund. In the case of the closed circuit network, dedicated telephones could be placed at strategic points where Government Employees Pension Fund clients can access them and the costs would be borne by the Fund. Providing access to the web site of the Government Employees Pension Fund does, however, not guarantee that clients will utilise the facility. This foregoing assertion is largely due to the fact that many retired civil servants had never used information technologies hence there would be lethargy

to access services via this means. Whilst providing remote access to certain service offerings of the Government Employees Pension Fund, clients also need to be trained to use the system so as to provide greater access. The aim of installing an e-government system is to improve service levels to clients. If the Government Employees Pension Fund is in the process of installing an e-government system, it should also ensure that clients are able to access the system so as to make use of the service offerings. One of the greatest fears is that the installation of an e-government system can have the opposite, unintentional effect of alienating clients from the Fund. Other factors that affect the utilisation of information and communications technologies are discussed in the next section.

4.6 ENCOURAGING THE USE OF TECHNOLOGY IN PROVIDING E-SERVICES TO CLIENTS

The digital divide between those who are computer literate, those who have access and those who are computer illiterate and do not have access in South Africa, is cause for concern. It is also true that older people continue to engage public services despite them not necessarily being economically active. In many respects one could argue that older, retired people are more in need of public services, such as pensions offices, hospitals, amenities and libraries, than their younger, economically active counterparts.

In trying to encourage clients of the Government Employees Pension Fund to utilise the electronic services offered to them there are a number of considerations. The first of the factors to consider are the physiological effects of ageing. These physiological effects include diminished vision and hearing, hand-eye coordination, arthritis, diabetes and cataracts. All of these fore-going ailments, on their own or in combination, affect the manner in which people interact with institutions that provide electronic services (National Audit Office, February 2003). Secondly, costs always remain a factor for older people especially since the income of older, retired people tend to be less than when they are economically active. Users can also be stymied by their ability to use new technologies. One could argue that many older people have been at the wrong end of the effects of the digital divide. Access to new technologies may not be the real problem, the real problem is the ability to use the technologies. One of the greatest concerns in the case of South Africa is language. Whilst most official documents and web sites conduct themselves in English, there are 11 official languages in South Africa (**Constitution**, 1996). A further concern around language is that electronic services may contain too much jargon and technical information. One solution is to offer electronic services in more than one language, which could have cost implications.

A survey that is being conducted by the Client Services Section of the Government Employees Pension Fund, an example of the questionnaire is included as Figure 4.4 (see page 164), commenced on 15 November 2004. Having assessed 300 replies by clients, 95% proved to be happy with the service that was being

provided by the Government Employees Pension Fund. These direct surveys may not be the best since clients may be quite accommodating in their responses when the person who is being assessed is sitting opposite one. Furthermore, if the person offering the service knows that he is to be assessed by the client, then the service he will provide will be such that he gets a good assessment.

Whilst the survey is geared to determining the levels of client satisfaction about services being offered, a shortcoming in the survey is the omission of questions pertaining to electronic service delivery mechanisms. It is also significant that none of the 300 survey replies assessed during the course of the thesis contained any comments by clients about electronic access to the services of the Government Employees Pension Fund. A number of possible reasons for the lack of interest in electronic services are lack of access to information and communications technology, a preference for direct contact, the inability to use the information and communications technology, health and expenses related to accessing information and communications technologies.

FIGURE 4.4: Client Satisfaction Survey Questionnaire: GEPF

Title: _____ Initials: _____
 Surname: _____
 Pens no: _____
 Tel.(h): _____
 Tel. (w) _____
 Cell: _____

YOUR OPINION IS IMPORTANT

Please indicate with an (X) the service rendered to you
 Please rate the following on a scale of Excellent, Good, Poor, Very Poor

| |  |  |  |  |
|---|---|---|--|---|
| | excellent | good | poor | very poor |
| Friendliness and courtesy with which the staff treated you | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The extent to which the staff are well trained and knowledgeable | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The efficiency and speed with which the staff assisted you | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The extent and willingness to which the staff is willing to go, to help you | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Were your needs met | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The overall level of service you recieved from this office | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

General Comments / Suggestions: _____

NATIONAL TREASURY : PENSIONS ADMINISTRATION
 Private Bag X 63, Pretoria, 0001
 Tel: 012 3191000 • Fax: 012 326 2507
[www@gepf.co.za](http://www.gepf.co.za)

4.7 CONCLUSION

Whilst reference is being made to the Government Employees Pension Fund in previous chapters, this chapter formerly introduces its structures and processes. In introducing the Government Employees Pension Fund, the chapter provides a brief historical account of its origin.

An assessment of the legacy-based administrative model of the Government Employees Pension Fund was conducted. The assessment of the legacy-based administrative model revealed that the introduction of computers to the Government Employees Pension Fund was essentially viewed as an add-on rather than as a tool of transformation. When the first information technology service provider was appointed to the Government Employees Pension Fund, a new software programme, CivPen, was introduced. The introduction of CivPen to the Government Employees Pension Fund revolutionised the manner in which civil pensions were being administered, since the functionaries had to be given personal computers to perform their duties. Even though the introduction of CivPen witnessed the rolling out of personal computers to functionaries, the hard file still predominated as the main source of storing documents.

After the formal establishment of the Government Employees Pension Fund in 1996 with the amalgamation of the disparate funds (that is, the former homeland civil pension funds) into one homogeneous fund, the need was identified for

electronic systems to be adjusted accordingly. Because the CivPen pension administration software had been adjusted to saturation point it was decided to embark on a new project to identify and implement a new pension administration software programme, the Comprehensive Pension Fund Administration Support System (COMPASS). The envisaged implementation of the Comprehensive Pension Fund Administration Support System (COMPASS), along with workflow and teleforms, are important innovations as far as e-government and e-service delivery are concerned.

The chapter analyses the concepts of workflow, seamlessness and paperlessness. These afore-mentioned concepts integrate to form a complete, co-operative electronic system that enhances administrative efficiencies and links internal and external clients into an integrated e-government system. The examples of life certificates, funeral benefits and teleforms are cited in an effort to illustrate the e-government principles at play within the Government Employees Pension Fund.

The chapter analyses the concept of risk and the related approach to risk management as they pertain to service delivery in the Government Employees Pension Fund. The risks presented by e-government regimes, for example, computer viruses and having a critical mass of users of the system, are important. Risks internal to the Government Employees Pension Fund include resistance to change and an adequately-trained human resources component.

The principles discussed in this chapter has highlighted that e-government is not solely about implementing electronic systems. Whilst electronic systems are important, complimentary dimensions such as human resources capacity, workflow, paperlessness and seamlessness are just as important.

Chapter Four proceeds to highlight the inadequacies of the comparisons especially since the Government Employees Pension Fund has no equal in terms of magnitude, products and niche. The chapter proceeds to compare the e-service delivery initiatives by Old Mutual and Sanlam, which are both South African insurance companies that have implemented the same software, the Comprehensive Pension Administration System Software (COMPASS) that the Government Employees Pension Fund has, in an effort to improve service delivery. The comparison between the Government Employees Pension Fund, the Compensation Commissioner and South African Airways concentrates on another aspect of e-service delivery, namely electronic workflow and document management. The final part of the chapter compares the Government Employees Pension Fund's e-service delivery to retired civil servants with the e-service delivery initiatives to older people by the Government of the United Kingdom.

The most significant determination of Chapter Four is whether the implementation of information and communications technologies at the various institutions that are being compared, was successful in improving levels of service delivery to clients. There is no doubt that all the institutions that are cited in the chapter had it as their

main aim to improve efficiencies in terms of administration and in terms of delivery. The document management process implemented by South African Airways achieved the successes that it wanted to in that it improved the flow of documentation through the system. The resultant effect is that the administrative processes were enhanced due to the electronic flows and increased monitoring. Enhanced delivery at South African Airways also resulted from the use of teleforms. The teleforms enabled the submission of electronic data, which improved efficiencies and information integrity. Amongst the other successes that can be cited is that the storage and retrieval of documents and administrative processing were enhanced as a result of electronic document management.

It is significant to note that South African Airways, the Compensation Commissioner and the Government Employees Pension Fund opted for the centralised approach in handling administrative processes. The centralised approach could be indicative of the lack of confidence that South African institutions have in information and communications technologies being able to enhance business processes between regional offices and the main office.

Each of the institutions being compared adopted different strategies as far as human resources availability for the information and communications technology projects were concerned. Whereas Sanlam had three dedicated teams and Old Mutual had more than 50 business resources at any one time, the Government Employees Pension Fund was at odds to assemble a team of more than 20

people. The conclusion that can be drawn from the analysis on human resources requirements is that the resources that are needed for any information and communications technology project need to be deployed without reserve in order to ensure success.

A further difference in the approaches to implementing new information and communications technologies in the Government Employees Pension Fund, the Compensation Commissioner and South African Airways could be seen in the phased manner of Sanlam as opposed to the all-or-nothing approach of the others. Implementing new information and communications technologies are extremely complex hence a phased approach is probably the more desirable route than the all-or-nothing approach. The Government Employees Pension Fund, given the magnitude of the information and communications technology project, was unable to meet several of its deadlines.

The final comparison that is made in the chapter is the one pertaining to the efforts by the Government of the United Kingdom to provide e-services to older, retired citizens. Having noted that the comparison between the United Kingdom Government's efforts to provide e-services to its retired clients and the Government Employees Pension Fund is not necessarily an appropriate one, it is significant to note that similar principles and challenges apply in both cases. The comparison analyses the challenges of access to electronic means, the

physiological challenges faced by older people, computer illiteracy and the costs involved in accessing services electronically.

The comparisons done in the chapter attempted to highlight the challenges faced by the selected institutions in providing e-services to their clients. It was identified that electronic service delivery is definitely a positive development provided that those who are intended to benefit by it are able to access and utilise the service. In line with developing new ways of interacting with clients, it is necessary to build a mutually beneficial liaison to enable both client and service provider to understand each others' requirements.

Chapter Five provides comprehensive analyses on the applied aspects relating to public management and administration and electronic administration in the Government Employees Pension Fund.

CHAPTER FIVE

ANALYSIS OF THE PROGRESS OF E-GOVERNMENT INITIATIVES AT THE GOVERNMENT EMPLOYEES PENSION FUND

5.1 INTRODUCTION

The study on e-government, the case of the Government Employees Pension Fund of South Africa, is predicated upon determining whether the advent of information and communications technologies can improve the delivery of services to clients. The approach adopted throughout the thesis tries to link the traditional theories and practices of Public Administration to the electronic means of Public Administration, namely, e-government. This fore-going idea, which will be explored during the course of this chapter, is novel.

The thesis has probed the levels of access to telephony as the first step in determining levels of accessibility to information and communications technologies for the clients of government in general. The assumption is that a lack of access to information and communications technologies would have a negative impact on clients' ability to make use of any electronic services that may be on offer by government. E-government should serve to enhance access to government services and not act as a wedge that will drive the citizen as client, away.

The thesis has further progressed with an assessment of relevant theoretical analyses attached to Public Administration on the one hand and e-administration on the other. In this regard the thesis has concentrated on a number of the important issues relating to traditional Public Administrative models as opposed to the electronic models of Public Administration as encapsulated by the broad definition of e-government.

The thesis has throughout been drawn back to the case of the Government Employees Pension Fund. The Government Employees Pension Fund presents an appropriate case study, especially since it serves clients from all walks of South African life and more so since the Government Employees Pension Fund is attempting to provide services to clients more effectively through employing electronic means.

As the previous chapter had introduced the theories of Public Administration, this chapter applies the said theories of Public Administration to the Government Employees Pension Fund of South Africa. This chapter will therefore assess the current link between the Government Employees Pension Fund and its clients. The concept and principle of seamless government are integral to the development of an electronic system that will enhance effective and efficient service delivery. The assumption is that e-government is a form of e-administration, hence theoretical aspects such as interoperability, seamlessness and digital divide.

The contribution on customer relationship management explores the Government Employees Pension Fund's attempts to deliver services effectively, efficiently and proficiently. This brings to the fore the additional access points that the Government Employees Pension Fund has provided to its clients as part of the e-government initiative to offer the quality of service that is expected. The Government Employees Pension Fund has a human element in that the human resources represent the face of the organisation. In this respect the Government Employees Pension Fund has had to train and retrain its staff to enable them to use the new information and communications technology system so as to ensure optimal delivery.

As the changes in administrative processes occur a number of other changes will, of necessity, take place concurrently. There needs to be a paradigm shift in the mind-sets of individual workers, just as there needs to be a realignment of human resources capacity – de-skilling, re-skilling, multi-skilling – in order to conform to the dynamicism in the process of electronic (e-government) service delivery.

5.2 A THEORETICAL ASSESSMENT OF THE PUBLIC ADMINISTRATIVE AND ELECTRONIC SYSTEMS OF THE GOVERNMENT EMPLOYEES PENSION FUND

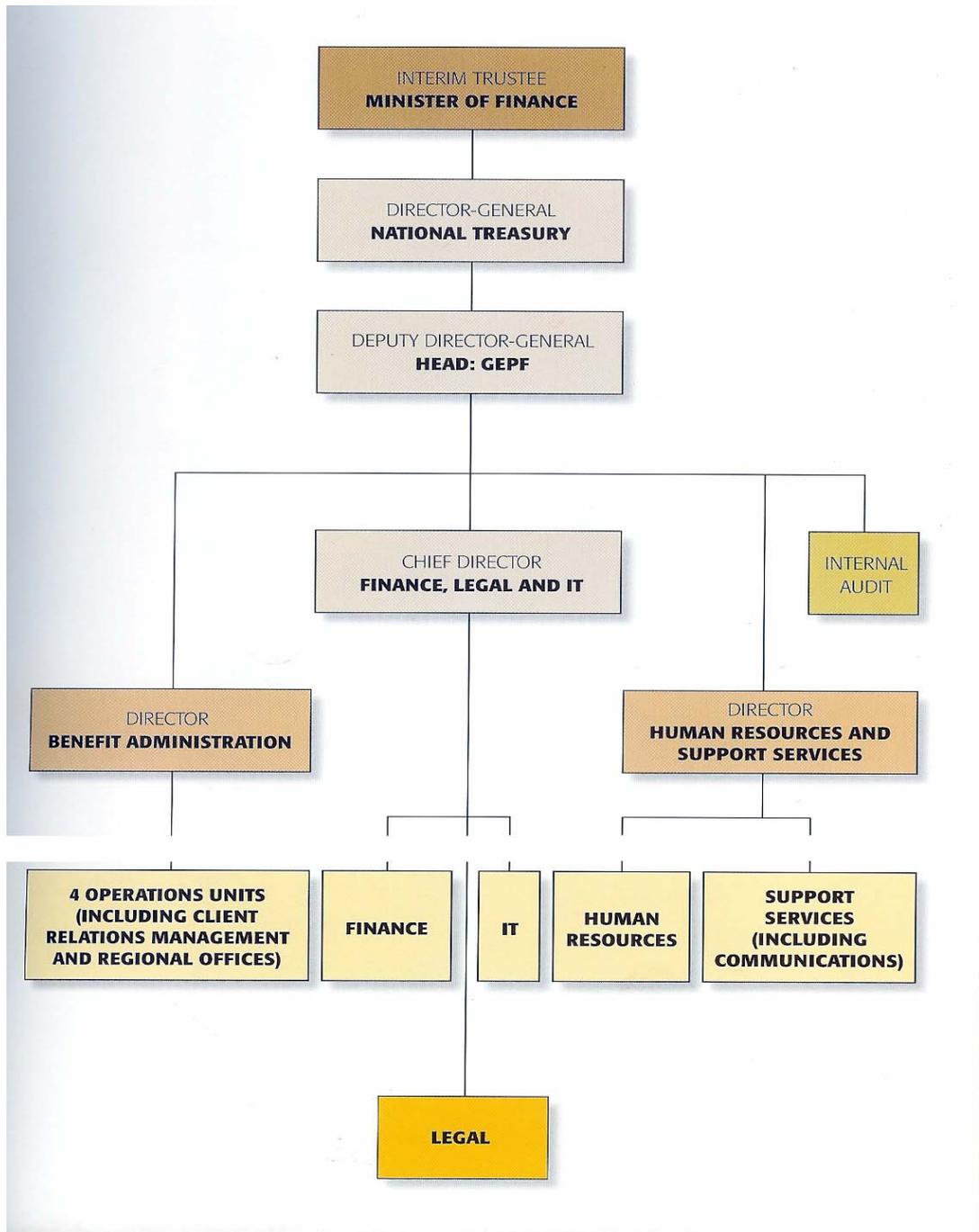
Whilst Chapter Four of the thesis has provided a comprehensive background to and analysis of the initiation of the e-government process at the Government

Employees Pension Fund, the following analysis provides insight to the administrative system within the Government Employees Pension Fund prior to the implementation of a fully-operational e-government system. A cursory analysis of the administrative and management structures of the Government Employees Pension Fund reveals the characteristics of a typical bureaucracy as espoused by traditional theorists such as Max Weber, Henry Ford and Frederick Taylor (Breiner, 1996:32). The rigid, rules-based regimen of the Government Employees Pension Fund with its highly entrenched hierarchical complexion is the realisation of the typical early twentieth century Management and Administrative theories.

5.2.1 The Bureaucratic Nature of the Government Employees Pension Fund

The Government Employees Pension Fund displays the elements of a classical bureaucracy. The Government Employees Pension Fund has a hierarchical structure that lends itself to a highly compartmentalised approach to conducting the business of administering pensions for former South African civil servants and their dependants. Figure 5.1 illustrates the highly structured and compartmentalised nature of the hierarchy of the Government Employees Pension Fund.

FIGURE 5.1: ORGANISATIONAL STRUCTURE OF THE GOVERNMENT EMPLOYEES PENSION FUND (as at 31 March 2002)



Source: GEPF Annual Report, 2002

The Government Employees Pension Fund has its own law and set of rules in terms of which it operates. The rules can be broken down into two sub-divisions, as it were. The first being the formal rules in terms of which pension payments are effected and the second being the rules that are applicable to the conduct of the employees of the Government Employees Pension Fund (**Government Employees Pension Law**, 1996 (Proclamation 21 of 1996)). Bureaucrats, to reiterate a statement by Breiner (1996:32), have no control over the rules and written procedures that they implement. The principle of bureaucrats not having control over the rules that they implement holds true for the Government Employees Pension Fund. The formal Rules of the Government Employees Pension Fund form the basis in terms of which payments are made to clients, thereby leaving no room for discretion. Why certain formulae are used at the Government Employees Pension Fund and how they are derived are not the domain of the bureaucrats. The bureaucrat interprets, implements and ensures that the administrative process is completed within a prescribed period.

Bureaucracies are impersonal by nature. Depending on their size, bureaucracies are dualistically impersonal, that is, toward their staff (internally) and towards their clients (externally). The Government Employees Pension Fund displays a close resemblance to the principles espoused in Max Weber's theory on Ideal Types. The Government Employees Pension Fund displays a formal division of labour, with the tasks being assigned to any one individual becoming the official duties of that individual. The actions of the individuals within the Government Employees

Pension Fund are separate but complementary. One individual may, for example, perform a purely administrative function such as calculating a pension benefit whilst another may be expected to confirm and yet another will be expected to perform the payment. These actions are specialised and limited to one individual (Interview, Manager of Operations Section of the Government Employees Pension Fund, 29 April 2004).

5.2.2 Ford's Theory on Management as Manifested in the Government Employees Pension Fund

Ford's Theory of Management is based on the concept of the assembly line that is geared toward ensuring mass production. The assembly line concept was taken a bit further with the advent of the conveyor belt (Breiner, 1996). The concept of the assembly line as propounded by Ford eradicates the need for the worker to move to the work. The work, instead, moves to the worker with the express aim of making production faster and more efficient (Breiner, 1996).

Given that the Government Employees Pension Fund uses hard, paper-based files, applications for withdrawal from the Government Employees Pension Fund (for a number of possible reasons such as death, retirement, resignation, incapacity, illness, inter alia) are received and processed accordingly. Only once hard copies of such withdrawal applications are received, will the actual administrative process be initiated (Interview, Manager of Operations Section of

the Government Employees Pension Fund, 29 April 2004). The file first goes to the preparations section of the relevant Operations Unit. Here the contents of the file are checked to ensure that the correct documents and information are available for the actual administrative process to take its course. From the preparation section the documents physically move to the section where the members' details are updated (Interview, Manager of Operations Section of the Government Employees Pension Fund, 29 April 2004). This section checks, for example, whether a member's marital status has changed or whether name changes have occurred without the Government Employees Pension Fund having been notified sooner. The file then moves to the payment section where the details are entered into the system which calculates the amount of money to be paid, generates a payment and generates correspondence to the beneficiary (Interview, Manager of Operations Section of the Government Employees Pension Fund, 29 April 2004). An employee performs one task and passes the file to the next employee so that the next task can be completed. This process is followed until the whole cycle is complete. The resultant effect is that uni-skilled specialists are created. This foregoing situation does not allow for any creativity beyond what is within the employee's area of expertise, hence Linden's (1994:28) assertion that Fordism, given its tendency toward fragmented roles for individuals, contributes to the de-skilling of the worker. When workers become specialists as opposed to generalists, they tend to be limited to the function that they perform. A case in point is when one particular specialist is absent from work, that another cannot readily step into

the functionality to perform the duty. Production consequently slows down as a direct result of the strict separation of duties.

5.2.3 Organisation Structure of the Government Employees Pension Fund

McMillan (2002), citing several writers, views organisation structure as the pattern of relationships between roles in an organisation and its different parts. Another definition offered is that organisation structure is the elements, visible and invisible, that bring together all the aspects of an organisation's activities so that functions and activities are synergised into a dynamic entity for a specific purpose (McMillan, 2002).

In an analysis on the importance of organisation structure, McMillan (2002) concludes that if an organisation is to achieve optimum performance, then its structure must match the rate of change in its environments. If the structure of an organisation and its many environments are not in synergy with its core purposes, then it is unlikely for the organisation to be successful. McMillan (2002) makes the point that all too often organisation structure is overlooked as being not important enough to warrant time, effort and resources.

Mabey, Salaman and Storey (in McMillan, 2002) tend toward the de-structured form of an organisation since this kind of organisation displays high performance, creates knowledge, empowers, is boundryless and is process-based. The de-

structured organisation form seeks to transform the rigid and cumbersome nature of the traditional organisation (McMillan, 2002). The following comparative table (Figure 5.2) presents various elements of the traditional versus the de-structured organisation type.

FIGURE 5.2: Design Principles for Organisation Success

| OLD SUCCESS FACTORS (Traditional) | NEW SUCCESS FACTORS (De-structured) |
|--|--|
| Size | Speed |
| Role clarity | Flexibility |
| Specialisation | Integration |
| Control | Innovation |

Source: McMillan, 2002

The current organisation structure of the Government Employees Pension Fund as approved, dates back to around 1992 (Le Roux, Government Employees Pension Fund Management Workshop, 30 April 2004). This organisation structure has not formerly adapted to the pressures of change that have necessitated the inception of a Call Centre, an Internal Audit Section, a Secretariat as well as an Operations Support Services Section in the Government Employees Pension Fund (Le Roux, Government Employees Pension Fund Management Workshop, 30 April 2004).

The Call Centre and the Internal Audit Section, for example, have come about as a result of unforeseen pressure on the Government Employees Pension Fund. The Call Centre, for example, came about as a result of the need for clients to be able to access information about their pensions without having to distract the production units from processing such pensions. The Call Centre is one of the sections that to date still does not appear on the formalised, approved organisation structure of the Government Employees Pension Fund, despite it providing a vital electronic service to clients (Interview, Manager Human Resources of the Government Employees Pension Fund, 29 April 2004).

The approved organisation structure of the Government Employees Pension Fund is too hierarchical and lends itself to the perception that too much responsibility is vested in too few senior managers. A particular area of responsibility, for example Communications, which also does not appear on the formal approved organisation structure of the Government Employees Pension Fund, is allocated to the Human Resources Manager simply because the current organisation structure does not allow for the appointment of a suitably qualified individual (Interview, Manager Human Resources of the Government Employees Pension Fund, 29 April 2004).

A further complication which is not directly linked to organisation structure, but is as important, is the absence of a fully-fledged Board of Trustees. Since the establishment of the Government Employees Pension Fund the Minister of Finance has been acting as the Interim Board of Trustees. This situation is

untenable simply because of the limited channels of communication between the Government Employees Pension Fund and the office of the Minister of Finance. Initiatives are, however, afoot to ensure the appointment of a full Board of Trustees to oversee the governance of the Government Employees Pension Fund. It is envisaged that, once the fully-representative Board of Trustees is in place, there will be an improvement in the time it takes to expedite all-important matters such as the organisation structure (Interview, Manager, Actuarial Services: Government Employees Pension Fund, 29 April 2004).

It could be argued that if a new organisation structure were in place at the Government Employees Pension Fund that it would improve efficiencies by having suitably qualified specialists in the portfolios. Similarly, specialists and dedicated individuals will be more focussed than is currently the case. Because no new organisation structure is in place at the Government Employees Pension Fund, the current senior management is thinly spread, so much so that even the Head of the Government Employees Pension Fund is directly involved in the line management functionalities to the detriment of strategic planning. A lack of effective strategic planning, in its turn, results in haphazard decision-making and inconsistencies (Interview, Manager Human Resources of the Government Employees Pension Fund, 29 April 2004).

The current organisation structure of the Government Employees Pension Fund lends itself to a disjointed, silo mentality. Whilst one administrative action

complements another, silo mentality advocates fragmented processing. Marcus (2003) notes that silo mentality is an impediment to organisational preparedness. Silo thinking refers to a perspective that is insular, parochial and isolationist (Marcus, 2003). Fragmented administrative processes in their turn are not conducive to cordial staff relations nor are they conducive to effective electronic service delivery. Further to the fore-going, silo thinking advocates negative competition between what should be complementary sections. This negative competition often results in policy provisions being interpreted and implemented differently across the sections of the Government Employees Pension Fund with the resultant negative effects for clients and for service delivery. Pressman and Wildavsky (Jenkins, 1978:212) assert that there are a multiplicity of participants and a multiplicity of perspectives that converge in the policy implementation process. Pressman and Wildavsky (Jenkins, 1978:212) further assert that these converging factors delay and most likely stifle administrative efforts. Public policy implementation can require a wide variety of actions ranging from the issuing of directives to disbursing funds and enforcing decisions (Edwards, 1978:293). Jenkins (1978:205) defines policy implementation broadly as the interaction between ends and means, that is, actioning programmes and activities to achieve objectives. Furthermore, policy implementation is often considered to be a once-off event within organisations. This presupposes that no further changes will occur in the organisation's operational structures. An organisation's operational structures could change given that demands may be placed on them by both, internal and

external factors, one of which is an organisation's ability to interoperate with other organisations.

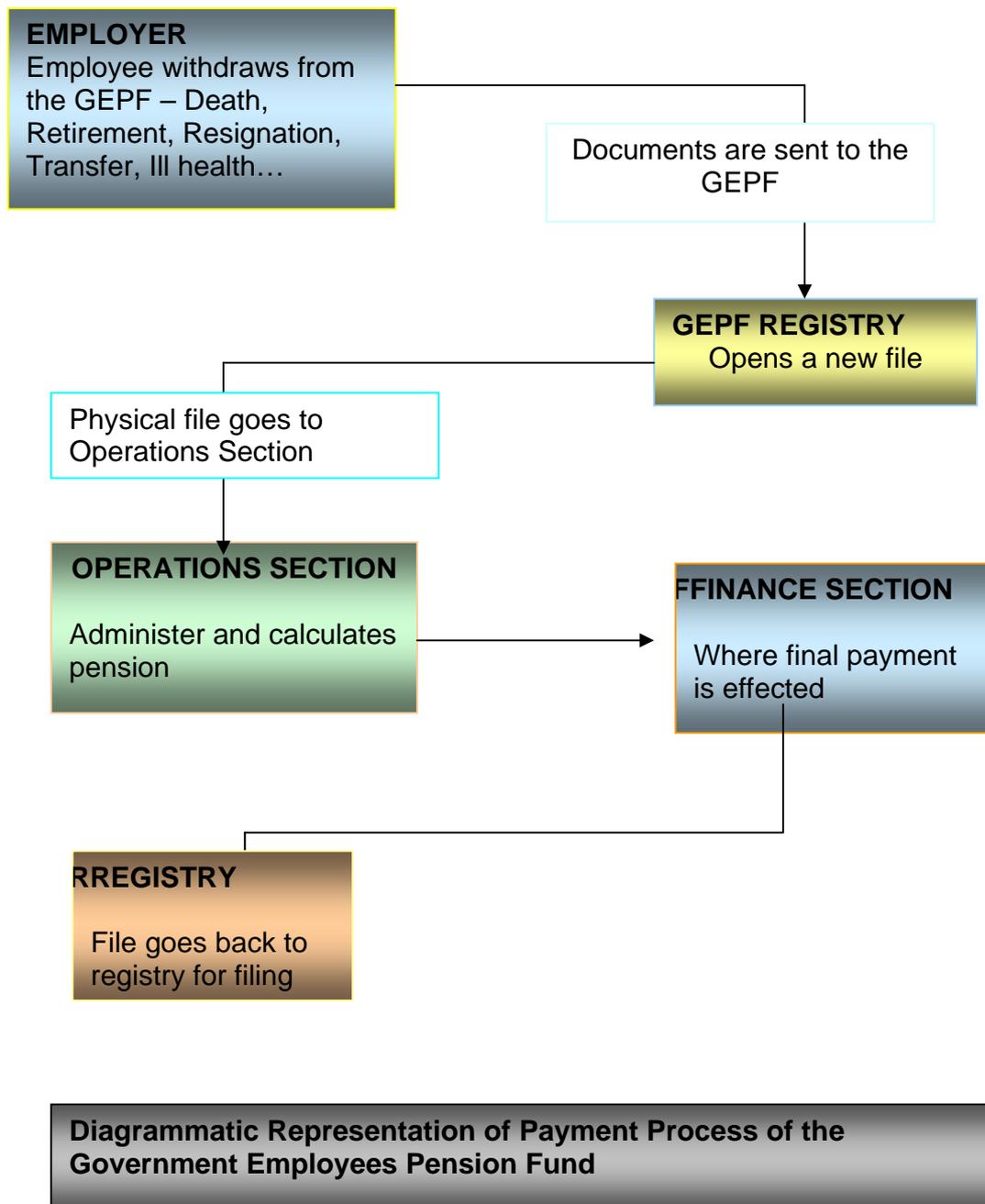
5.2.4 Interoperability Between the Government Employees Pension Fund and the Employer Departments

The employer departments in South Africa constitute all the government departments where civil servants are employed - national, provincial and local. It is compulsory for civil servants who are in the full-time employ of a government department to contribute 7.5% of their salary to the Government Employees Pension Fund, which in its turn administers the Fund in accordance with set rules and regulations (**Government Employees Pension Law**, 1996 (Proclamation 21 of 1996)). It is therefore imperative that there are open channels of communications between the employer departments and the Government Employees Pension Fund.

The process of withdrawing one's interests (benefits) from the Government Employees Pension Fund is largely still conducted manually. The employer triggers the process by completing the requisite forms and dispatches them to the Government Employees Pension Fund where they go through a process of verification and administration to finalisation (Interview, Senior Manager of Operations: Government Employees Pension Fund, 31 May 2004). The process is by its very nature slow, cumbersome and riddled with loopholes which could leave

the Government Employees Pension Fund vulnerable to fraud. The Government Employees Pension Fund has many hard files in its possession that cannot be processed because of discrepancies between the information supplied by the employer department and the information that the Government Employees Pension Fund has on its system (Interview, Senior Manager of Operations: Government Employees Pension Fund, 31 May 2004). This leads to delays in the administration process and to delays in the resultant payment process. Refer to Figure 5.3 for a simplified representation of the manual payment (administrative) process that the Government Employees Pension Fund follows.

FIGURE 5.3:



Source: Adapted by H. Fisher, 2004

The Government Employees Pension Fund is considering ways of improving the path and accuracy of the information that it receives so as to expedite payments to clients. One way of improving the flow of information from the employer departments to the Government Employees Pension Fund is to develop electronic processes that allow for requests for the withdrawal from the Government Employees Pension Fund to be submitted electronically. For such information to be submitted electronically, there needs to be compatible electronic links throughout government. Worthington-Smith (ed.) (2001) confirms that integrating the internal processes of the various government departments could prove to be a daunting task. Apart from the technical changes that are required for the integration of technological and administrative systems, public officials need to display the necessary willingness and commitment to the process. Whilst a number of government departments would be able to submit information to the Government Employees Pension Fund electronically, others would not be able to do so.

The challenge for the Government Employees Pension Fund therefore lies not in upgrading its own information and communications systems, but rather in how to ensure that those technologies are compatible with the same of other government departments. The challenge furthermore lies in finding solutions to systems that are not compatible or interoperable. A further challenge is to enhance human resources capacity to be able to deal with the demands that electronic information and communications media will pose. All of these challenges (and others which will be explored in more detail) are the foundation on which the concept of seamless

interaction between government departments is premised. Seamless interaction between government departments is a prerequisite for improved service delivery to clients. Part of providing seamless interaction is to ensure that the gap between those who have access to information and communications technologies and those who do not have such access is reduced.

Interoperability of systems between government departments is therefore an important concept in the development of an e-government system. The Government Employees Pension Fund, given the new Comprehensive Pension Fund Administration Support System (COMPASS) and the workflow software, has to be electronically linked to the employer departments, especially for the submission of withdrawal (from the Fund) instructions from the employer departments on behalf of their employees. The CivPen pensions administration software programme is not compatible with many of the new technological developments hence the decision to implement a new electronic programme (Interview, Manager AST - Information and Communication Technology, 5 July 2004). The electronic submission of documents to the Government Employees Pension Fund will enhance the speed, accuracy and efficiency with which documents are submitted. This enhanced efficiency will improve the services that are provided to the clients of the Government Employees Pension Fund. Some functions of the new system will also be available to employer departments, pensioners and members via the Internet. Such electronic access to clients via the Internet aims to reduce the number of queries and requests that must be

processed by the users and the Call Centre. Access to the Government Employees Pension Fund's electronic system will be controlled and the external users will be strictly limited to specific functions and data.

A case in point is the funeral benefit structure that the Government Employees Pension Fund offers its clients. A funeral benefit needs, by its very nature, to be paid rather promptly in order for beneficiaries to plan and execute funerals for their deceased loved-ones. The current procedure for claiming funeral benefits is largely paper-based. The relevant forms are completed after which they are submitted - by facsimile, courier or mail - to the Government Employees Pension Fund, for processing and payment. There are cases where claimants do not have access to any of the media - facsimile, courier or mail - in order to lodge the claim, hence delays will occur. The Government Employees Pension Fund can make payments in one of two ways. Payment can be made directly into the beneficiary's bank account or payment can be made through the national network of post offices (Interview, Administrative Assistant: Funeral Benefits Section, Government Employees Pension Fund, 15 June 2004). Ironically the direct electronic bank transfer is a lengthier process than the post office payment since additional forms need to be submitted and since there are only two electronic payment runs per week. Once an electronic bank transfer has been effected, it takes approximately three working days for the monies to reflect in the beneficiary's bank account, this after the administrative process has taken place. A post office payment can

happen within a period of forty-eight hours from the time that the documents have been received by the Government Employees Pension Fund.

As the fore-going case reflects, the paper-based procedure seems to display a number of inherent flaws. Physical documents – application forms, bank detail forms, death certificates, marriage certificates, inter alia – are submitted to the Government Employees Pension Fund in order for an administrative process to be initiated. During the course of the administrative process, the documents are handled by a host of administrators. The documents could get misplaced or the documents could be soiled, given the high number of withdrawals from the Fund applications that come in to the offices of the Government Employees Pension Fund. The misplacement and damage of documents invariably results in the client's pension benefits not being paid timeously. This situation places an additional administrative burden on the Government Employees Pension Fund, since it has to request for duplicate documents from the employer. Clients also suffer since they may be losing out on investment opportunities, on the one hand, and they go through the psychological trauma of not having a source of income during the period that they are waiting for their monies to be paid to them, on the other.

An electronic interface between government (employer) departments and the Government Employees Pension Fund will go a long way to resolving the administrative bottlenecks that occur as a result of the paper-based administrative

process. The implementation of the new Comprehensive Pension Fund Administration System Support (COMPASS) will create electronic interfaces between employer departments, the banks and the Government Employees Pension Fund. Electronic interfaces would result in the client departments being able to submit electronic documents to the Government Employees Pension Fund. It is envisaged that such electronic submission of forms can improve the accuracy of the calculation of payments and the turn-around time for the payment of pensions.

A case in point is the electronic link that the Government Employees Pension Fund has with the Department of Home Affairs (Government Employees Pension Fund, Annual Report, 2002-2003). This link was established in order to verify the authenticity of identity documents and for verifying the life status of pensioners. This electronic link with the Department of Home Affairs allows the Government Employees Pension Fund users to access the system electronically in order to determine whether a pensioner is still alive and therefore qualifying for continued pension payments. This electronic link with the Department of Home Affairs affords the Government Employees Pension Fund the opportunity to proactively suspend payments upon the death of a pensioner therefore mitigating the risk attached to overpayments (Government Employees Pension Fund, Annual Report, 2002-2003).

The concept of teleforms, that is, transcribing all high volume, paper-based forms that the Government Employees Pension Fund uses into electronic format, will also enhance service delivery (Government Employees Pension Fund, Customisation and Implementation Plan, 2001). The concept of the teleform, which has protected fields to ensure information security, will provide a further dimension in enhanced electronic service delivery. Teleforms also provide that certain compulsory fields be filled out before they can be despatched electronically to the Government Employees Pension Fund for processing. The teleforms would generally be the forms that come from the employer departments in order for the Government Employees Pension Fund to initiate an electronic administrative process. The electronic forms were designed to contain the same fields as the paper forms. This reduces the learning curve that employees have to undergo, thereby further expediting electronic service delivery.

Annuitants or pensioners need to annually submit a life certificate that is attested to by a commissioner of oaths that verifies the continued existence of an annuitant (pensioner) of the Government Employees Pension Fund. The introduction of the life certificate verification system serves as a mechanism to ensure that pensioners are still alive, hence preventing continued payments to deceased pensioners and preventing fraudulent payments. The Government Employees Pension Fund despatches an average of 23 500 life certificates per month to its approximately 250 000 annuitants or pensioners (Government Employees Pension Fund: Executive Information System, October 2002 – March 2004). Once a life certificate

is received it is scanned, that is, transformed into an electronic image, indexed against the pension number of the pensioner and the pension is activated for a further 12 months. The physical document is bar-coded and despatched to an external vendor for filing (Government Employees Pension Fund, User Manual: Introduction to Workflow, March 2004). What is important is that the Government Employees Pension Fund has an electronic image of the life certificate for reference purposes. The life certificate is one of the documents that, if accessed in the electronic format on the web site of the Government Employees Pension Fund, could expedite the submission and related administrative processes.

In addition to the life certificate, pensioners and members of the Government Employees Pension Fund could submit address changes on a teleform. These teleforms have been made available to clients on the Government Employees Pension Fund's web site. Other products and services that could be made available include the electronic web calculator to assist contributing members of the Government Employees Pension Fund to calculate their benefits, online applications for membership cards and online requests for tax certificates. The problem of verifying electronic signatures could, however, pose a security risk for both the Government Employees Pension Fund and the client. The matter of risk management and electronic security will be addressed later in the chapter.

5.2.5 The Digital Divide Between the Government Employees Pension Fund and Employer (Government) Departments

The success of any e-government system is dependent upon whether government departments have access to computers, whether people have been trained to use computers and, indeed, whether people believe that computers can improve the speed and accuracy of the administrative processes. The digital divide, that is the gap between those who have access to information and communications technology and those who do not, is cause for concern within the public sector in South Africa. The Government Employees Pension Fund, with all its good intentions to improve service delivery by upgrading its information and communications systems, will not necessarily improve service delivery if the digital divide between itself and the employer departments proves to be insurmountable.

The advantages for the Government Employees Pension Fund if the digital divide between itself and employer departments can be narrowed is an e-government process in which government delivers services in a manner which citizens had not experienced before. E-government improves communications between the respective line departments. The automation of routine tasks and the integration of services would generally improve workflow and productivity in government in general and specifically in the Government Employees Pension Fund.

Automation of services would also realise increased and improved service volumes as well as quality. Government's increased connectivity would allow for more citizens to interact with national, provincial, local, regional, continental and other governments further afield. Greater volumes of information will be shared more quickly and more efficiently in the event of such connectivity (Worthington-Smith (ed), 2001). One of the further benefits from this is that there would be less duplication.

Before the benefits of e-government can be realised a number of challenges need to be met decisively. The first of these challenges relates to financial resources. Worthington-Smith (ed) (2001) notes that finding the budget to establish and/or integrate information and communications technology systems and to make them available to the public, is extremely difficult especially in the face of other, seemingly more pressing social needs such as health care, the delivery of water and education, to mention but a few.

Worthington-Smith (ed) (2001) proffers that there is an acute shortage of information and communications technology skills in South Africa. Given this shortage, it is difficult for government with its structured salary packages to compete with the private sector to retain such skills. The South African Government further has to contend with internationally attractive packages for the highly skilled and marketable information and communications technology professionals. It is furthermore difficult for government to reach the public.

Worthington-Smith (ed) (2001) identifies two reasons for government's inability to reach the public, the first of which relates to the low level of literacy in South Africa. South Africa is still trying to come to terms with illiteracy whilst at the same time trying to inculcate a reasonable level of computer literacy. It is virtually impossible to attain any level of success as far as e-government is concerned, given the low levels of illiteracy on the one hand and computer illiteracy on the other. The only way to stem computer illiteracy is to ensure that people have access to computers. Hodge and Miller (1997:2) indicate to a clear distinction between the information and communications technology have and have-nots. Hodge and Miller (1997:2) seem to think that the gap between those that have access to information and communications technology and those who do not is becoming more pronounced, that is, the digital divide is widening.

The low level of access of staff to computers in the public sector needs to be addressed as a matter of urgency if the government is serious about delivering services electronically. Proactive efforts need to be made to train government officials to utilise the new technologies that will be made available to them. Limited access to computer technology and the lack of ability to effectively use such technology in the public sector poses challenges for the South African Government's ability to deliver an effective e-government service.

5.3 COMPREHENSIVE PENSION ADMINISTRATION SYSTEM SOFTWARE (COMPASS) SUPPORT – LOCALLY AND ABROAD

The Comprehensive Pension Administration System Software (COMPASS) is supplied by an American-based company, FDP Sungard. At the time of purchasing the Comprehensive Pension Administration System Software (COMPASS), FDP Sungard agreed that extra investment in the support infrastructure would be forthcoming (Interview, Manager AST - Information and Communication Technology, 5 July 2004). One mechanism that was mooted at the time was the establishment of a South African Comprehensive Pension System Software (COMPASS) user forum to ensure that the South African user community jointly funds customisations that are peculiar to the South African environment. This proposal has yet to be realised (Interview, Manager AST - Information and Communication Technology, 5 July 2004).

There seems to be a perception that Sungard does not provide sufficient support to its Comprehensive Pension Administration System Software (COMPASS) clients in South Africa. Sanlam, for example, noted that Sungard does not always consider the needs or requirements of South African clients (Government Employees Pension Fund, January 2004). Old Mutual seems to have had more success with the Comprehensive Pension Administration System Software (COMPASS) since it interacts with United Kingdom-based companies where it has business interests (Government Employees Pension Fund, January 2004). The South African office

of Sungard is not adequately equipped to support its clients since it does not have the requisite skills and knowledge. The ability of the local office to train users to use the software effectively is consequently compromised. This lack of infrastructural and back-up support for the Comprehensive Pension Administration System Software (COMPASS) obliged South African clients to make direct contact with support offices in the United States at much higher costs (Interview, Manager AST - Information and Communication Technology, 5 July 2004). This lack of interest to expand the support base seemingly stems from the inability of the expansion of the client base of the Comprehensive Pension Administration System Software (COMPASS) in South Africa. Furthermore, South African companies have developed in-house skills so that the software could be supported, modified and maintained cost effectively, efficiently and timeously (Interview, Manager AST - Information and Communication Technology, 5 July 2004).

One of the options put forward as a solution was that a South African software house takes ownership of the software and starts supporting South African business. Both Sanlam and Old Mutual re-iterated that South African companies have to join forces via the user group to ensure that companies did not pay for system developments that have already been requested (Interview, Manager AST - Information and Communication Technology, 5 July 2004). It therefore seems that the implementation of the Comprehensive Pension Administration System Software (COMPASS), despite being a complex process, is exacerbated by a lack of support. This could be due to the fact that the software is complex and is not

flexible enough to handle the range of South African specific requirements related to pensions benefit types, taxation and other related components. This fore-going principle of the lack of support for systems purchased abroad is typical of what Heeks (2002) refers to as the 'if it works for us (that is, western countries), it will work for you' syndrome as far as information and communications technologies are concerned. Heeks (2002) further states that the concept of the west does not only refer to a location, it also refers to a mindset, hence the belief that what has worked elsewhere (in the west), should also work in Africa. The perception that one can take a successful electronic system and transplant it elsewhere does not consider the context in which the system is to be transplanted. Heeks (2002) confirms that the west, as the custodians of intellectual property, can easily withdraw their involvement in information and communications technology projects, thereby leaving such projects destitute. The implication of such withdrawal of support for the western countries may not be that dire, but for the recipient countries the implications are almost always far-reaching. It is therefore important that human resources requirements related to e-government be developed so as to create the necessary capacity for e-government success. Given the dynamism involved in the development and growth of new information and communications technologies, the universal challenge is to ensure that employees are equally dynamic in updating their skills, individually and collectively.

A human resources development strategy requires a mix of processes, policies, training and development and structures. In short, a human resources

development strategy should be an integrated process. Facilitating the processes, establishing the training and development initiatives and designing the structures are reasonably uncomplicated. True success will, however, only be achieved if the fore-going initiatives are aligned with the organisation's goals and values and are implemented in an integrated, sustainable manner that will improve the electronic relationship between the customer by improving the levels of services.

5.4 AN ANALYSIS OF CUSTOMER RELATIONSHIP MANAGEMENT AT THE GOVERNMENT EMPLOYEES PENSION FUND

The reference to customer relationship management (CRM) aims to provide an analysis on the value that customer relationship management solutions could add to an organisation. Customer relationship management systems, be they operational (manual), electronic and/or mobile, provide significant opportunities to enhance service delivery in both the private and the public sectors. An explanation of what customer relationship management entails and how its implementation could improve service delivery ensues. In so doing, it is necessary to define the concept of client, a term more readily used in the private sector business environment.

Batho Pele (People First) is the official customer relationship management programme of the South African Government. The Batho Pele programme is an attempt by the South African Government to expunge any intransigence that may

exist amongst public servants. The concept and practice of Batho Pele will be explored and assessed in relation to the Government Employees Pension Fund. The Government Employees Pension Fund of South Africa provides a good case for the implementation of a customer relationship management model. The model for a customer relationship management system will, whilst considering the integration of the front and back office systems, be employed as a tool to provide new service offerings, such as investment advice, to Government Employees Pension Fund clients. Furthermore, given that the Government Employees Pension Fund is attempting to implement new technologies in an effort to deliver improved services, electronic and mobile customer relationship management are vital. The relationship between the implementation of the new information and communications technologies at the Government Employees Pension Fund and a customer relationship management model will be considered.

Customer relationship management models lend themselves to seamless operations especially since they connect logistics, manufacturing and accountability. Customer relationship management solutions connect demand internally with operations and externally with clients. A customer relationship management solution serves as a vital tool to keep updated information on clients, revenue and resources. An integrated customer relationship management solution helps institutions to add value for their clients.

Updated information will also allow the Call Centre agent to provide accurate, real time information to the client. The Call Centre needs to be able to provide the latest information relating to an enquiry. Many pensioners are not computer literate and many pensioners simply do not have access to computers, let alone access to e-mail facilities. In the event that information and communications technology is not accessible, the client of the Government Employees Pension Fund can access information via the Call Centre. It is therefore imperative that workflow systems are engineered in such a fashion that a client is able to access information and services via various access or touch points and that a record of such interaction can be accessed by any of the staff members to be able to provide instant, accurate feedback to clients.

It is envisaged that an interactive web page will allow clients to effect address changes, inter alia, by using their pension numbers as access codes. Other online services would include the dissemination of information – frequently asked questions, formulae in terms of which amounts payable are determined and a web calculator, where clients can determine their own benefits.

Customer relationship management is about people. People are at the centre of the business that the Government Employees Pension Fund offers. The people that are involved are the service providers as well as the client. It is therefore prudent to put people at the centre of the processes that dictate service provision. The South African Government's customer relationship management programme of Batho Pele provides impetus to the process of placing people at the centre.

5.4.1 The Relationship between the Citizen and Government

Customer relationship management is a strategy – implementable electronically or manually – to learn more about customers' needs and behaviours in an effort to provide a more comprehensive and effective service offering (Deck, 2004). Fielding (2004) draws a link between e-government and customer relationship management programmes to indicate that such a co-existence has as its goal to manage and disseminate information more prudently to enhance service delivery. Humphreys (2002:13) postulates that over the past twenty years there has been a steadily growing entrenchment of the idea of consumerism in the public sector and that governments have increasingly resorted to customer research, communications, public relations and marketing.

The hypothesis that there exists a client relationship between citizens and government is unique (Deloitte Research, 2000). Unlike with services and goods offered by the private sector, where several vendors can offer the same good or service, the customer satisfaction index and the pricing levels are determinants as to whether the client will use his or her spending power. If citizens, however, want to access the services offered by government, they have no choice but to go to the government agency that offers the service. E-government offers the opportunity for government to be more responsive to the needs of clients (Deloitte Research, 2000). E-government systems by themselves are, however, not enough because of the limited access to the Internet by customers. Customer relationship

management ensures that there are additional channels of access to services for the customer. Customer relationship management ensures that there is an integrated continuum of service provision between the front- and back-office environments (Hewson Group Report, March 2002).

The nature of the clients of the Government Employees Pension Fund is such that they also need to be informed about the new systems and the new service offerings that are available to them. Without this approach to tagging the clients along, as it were, the gap between the systems that the Government Employees Pension Fund is developing (for the clients' benefit), will widen. To mitigate the widening of the gap between the Government Employees Pension Fund and its clients, there needs to be an extensive process of education and orientation. The Government Employees Pension Fund needs to establish a critical mass of clients that are prepared to engage it on a regular basis in order to ensure that there is constant feedback on the levels of service delivery.

The idea of a relationship between the citizen as client and the government is made clear when the African National Congress-led Government in South Africa proclaimed the slogan of a People's Contract as its manifesto during the 2004 general election (Government Communication and Information System, 2004). The idea of government entering into a contract with its citizens is not unique, since it dates back to the philosophies of Plato, Hobbes, Locke and Rousseau (Bullock (ed.) 1988:783). Bullock (ed.)(1988:783) espouses that there is an unwritten

contract between members of society to behave with reciprocal responsibility in their relationship under the governance of the state. Bullock (ed.)(1988:783) further postulates that people could change the state if it did not adhere to its part of the contract. The contract that the African National Congress-led Government entered into when it received an overwhelming mandate during the 2004 general election was one that portended to extend the delivery of services to those people who may not have access to such services.

The Government Employees Pension Fund is in the unique position of being the largest pension fund in South Africa (Government Employees Pension Fund, Annual Report, 2003-2004). It is also the only pension fund in South Africa that administers pensions on behalf of civil servants. The Government Employees Pension Fund therefore has a constant source of contributing members. It is a condition of service that civil servants should contribute to the Government Employees Pension Fund (**Government Employees Pension Law**, 1996 (Proclamation 21 of 1996)). It is in this fore-going context that the Government Employees Pension Fund does not necessarily have to market itself and its product offerings to attract clients. The Government Employees Pension Fund also does not have to compete on the basis of private sector principles to attract new and additional clients. Given this scenario, it is extremely easy for the Government Employees Pension Fund to become intransigent to the needs of the clients. The client has no other option but to return to the Fund for administrative support.

The Government Employees Pension Fund is furthermore in the invidious position that not many civil servants are aware that they are contributing to the Fund. There is another category of civil servants who are aware that they are contributing, but they do not necessarily know at what levels, they do not necessarily know what their benefits are and they do not necessarily know how to access the benefits. This ostensible lack of interest makes it difficult for the Government Employees Pension Fund to have constant dialogue with its contributing members. Contributing members and/or beneficiaries begin to show interest - the extent of which is often limited to financial benefits – when they need to extract benefits from the Fund as a result of retirement, death, illness or dismissal. It is also such that contributing members, from the time of the initial contribution to the time of retirement, often transfer from one government department to another or may move from one physical address to another without informing the Government Employees Pension Fund of such changes. A female member may furthermore have altered her status and name due to marriage, a member may have experienced a divorce or there may be additional beneficiaries in the form of children, all of which may not have been communicated to the Government Employees Pension Fund (Interview, Manager of Operations Section of the Government Employees Pension Fund, 29 April 2004).

The customer relationship management processes at the Government Employees Pension Fund are consequently all the more important in that the programme should be pro-active in attempting to foster continual interaction with the client. The

Government Employees Pension Fund needs to foster such interaction based on the principles of the Batho Pele (People First) programme of the South African Government. Without an integrated approach to service delivery and customer relationship management, the Government Employees Pension Fund will not succeed in its efforts to provide constantly high levels of service.

5.4.2 Batho Pele: The Customer Relationship Management Programme Of The Public Sector In South Africa

The discussion on customer relationship management would not be complete without considering the South African Government's attempt to implement the Batho Pele (People First) programme. The main tenets of the Batho Pele programme hinge on effective service delivery. The principle of Batho Pele is premised on the idea that government has clients that need to be assisted in a client-centred approach to service delivery. Worthington-Smith (2003:217) notes that the each citizen (client) has to interact with government departments on an array of administrative issues between birth and death - birth, education, marriage, social benefits, tax, property, health, to mention but a few. The structures and procedures of government and government departments are overwhelming to the best of citizens.

The notion of Batho Pele was first mooted in 1997 (Department of Public Service and Administration, 2003). Batho Pele is a Government initiative to get South African civil servants to be service oriented, to strive for excellence and to

continually strive to improve service levels to clients. The Batho Pele programme espouses eight principles – consultation, service standards, access, courtesy, information, openness and transparency, redress and value for money (Department of Public Service and Administration, 2003). Whilst the eight principles of Batho Pele are noble, their implementation in public service departments has proven to be difficult. Because of the relatively low levels of success of the Batho Pele programme since its initial inception, it was deemed necessary to revitalise the programme. The four pillars of the Batho Pele revitalisation strategy – the strategy developed to intensify the Batho Pele campaign, especially in back-office operations of government – are more applicable to the Government Employees Pension Fund. The four pillars of the revitalisation strategy are re-engineering and improving the back-office operations of government, re-engineering and improving the front-office operations of government, internal communications and external communications (Department of Public Service and Administration, 2003). The Government Employees Pension Fund has established a number of channels for interaction with clients. These channels of communication include electronic means (by means of the web site), direct contact in the walk-in centres, remote telephonic contact and written interaction by means of the newsletters. All these channels of communications, however, seem quite remote to staff members who operate in the back-office environment of the Government Employees Pension Fund. Because there is no or little direct contact between back-office staff and the client, back-office staff tend to become intransigent to the needs of their front-office colleagues and consequently

toward the client. It is, however, such that front-office staff depend on the efficiency of the back-office staff to be able to provide an effective service to the client. Effective channels of communications are therefore paramount to efficient service delivery.

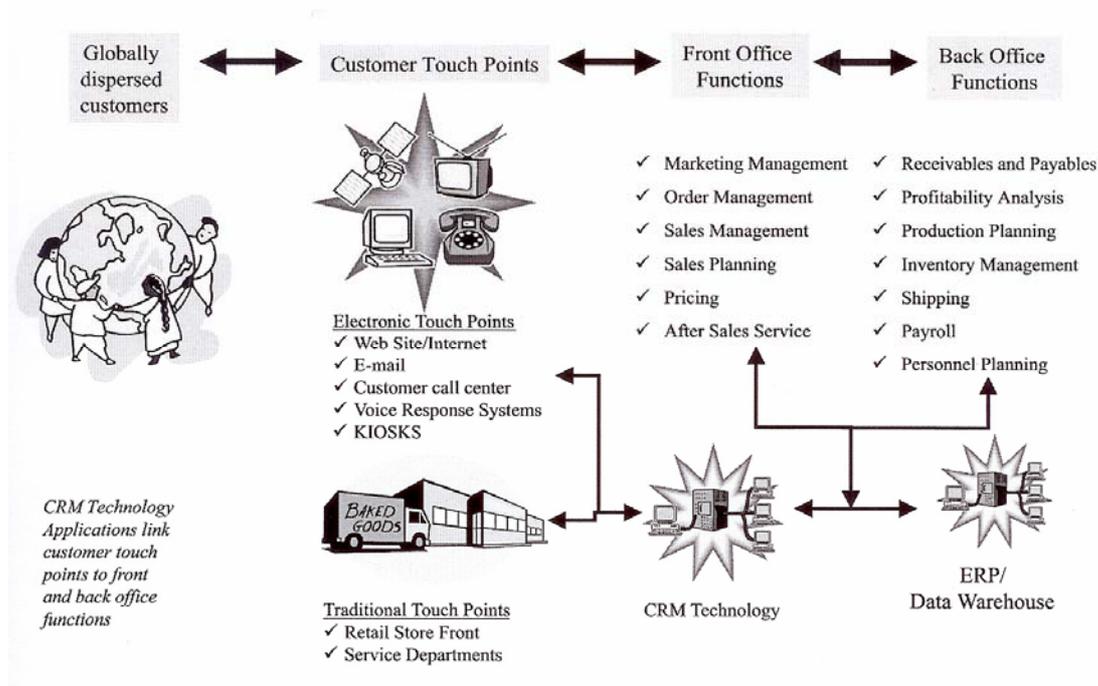
The Batho Pele programme further seeks to engender a professional, career-oriented ethic amongst public servants. Fraser-Moleketi (2004) notes that the adoption of an ethical, constructive and problem-solving approach to working life is important. The professional ethic, underscored by human resources development strategies for public servants, has to have as its goal the prioritisation of clients and their needs. Human resources development will not only provide staff with the knowledge of the Government Employees Pension Fund to enable them to provide a professional and self-assured service, it will also provide staff with the necessary sensitivities to deal with clients and the expertise to use the tools to enhance the points of access to the Government Employees Pension Fund.

5.4.3 Nodes of Access to the Government Employees Pension Fund

The Government Employees Pension Fund, as part of its drive to promote multiple points of access for clients, has developed a customer relationship management strategy that ensures access for all clients irrespective of their disposition. Chen and Popovich (2003) point to the fact that customer relationship management is about people, processes and technology. Technology facilitates the processes that

exist between the points of access or touch points in the organisation. Chen and Popovich (2003) further point to the fact that customer relationship management is not just about information and communications technology, it is instead an integrated customer-driven and cross-functional process that maximises relationships and is not limited to one part of the organisation. Figure 5.4 provides a graphic depiction of the cross-functional processes that are required to maximise interactive relationships with clients. As has been intimated, the back-office staff of the Government Employees Pension Fund do not necessarily subscribe to the notion of customer relationship management because of their lack of direct interaction with the client.

FIGURE 5.4: Customer Relationship Management Technology: The Link Between Customer Touch Points



Source: Chen and Popovich, 2003

Customer relationship management applications are not always successful in their implementation in organisations. Customer relationship management, especially if information and communications technology is the enabler, could be expensive. A failed customer relationship management project could result in dissatisfied clients, loss of employee confidence and loss of time and effort (Chen and Popovich, 2003). If the vast majority in the organisation do not embrace the implementation of customer relationship management strategies then they are virtually guaranteed to fail. Customer relationship management strategies often require organisational re-alignment, staff training and other extensive effort that could cost the company greatly in terms of financial and other resources (Newell, 2003:65-67).

The Government Employees Pension Fund established a customer relationship management strategy with a view to ensuring that clients are kept abreast of developments. There may be new product offerings such as funeral benefits, there may be procedural changes especially those pertaining to risk management and there may be information pertaining to, for example, pensions increases that need to be disseminated. If the client is kept informed about developments at the Government Employees Pension Fund, then it releases the operations staff to concentrate on administrative matters. Consequently, the Government Employees Pension Fund established a Client Relationship Management Section in September 2002 (Government Employees Pension Fund, Annual Report, 2001-2002). The establishment of a Client Relationship Management Section at the Government Employees Pension Fund in September 2002 is probably both an indictment and a vindication. An indictment because a Customer Relationship Management Section was established at such a late stage in the history of the Fund and a vindication in the sense that it was indeed deemed necessary to establish it. The Customer Relationship Management Section of the Government Employees Pension Fund comprises the Call Centre, the Walk-in Centres (one at the head office and the others at the satellite locations of Bisho, Polokwane and Mmabatho) and the Switchboard (Government Employees Pension Fund, Annual Report, 2001-2002). These points of access to service or touch points can be delineated along the lines of electronic and what could be described as walk-in service and yet other that could be described as written correspondence.

a. The Call Centre

The concept of a Call Centre for government departments imply that people who access the services offered by government by this means, are indeed the clients of government. The first of the electronic touch points of the Government Employees Pension Fund is the Call Centre. At the time of its establishment, the Call Centre comprised of 12 agents. All the agents at the Call Centre were transferred from the Operations Sections of the Government Employees Pension Fund (Interview, Manager of the Call Centre of the Government Employees Pension Fund, 3 September 2004). At the time of the establishment of the Call Centre of the Government Employees Pension Fund, it was generally viewed as being an add-on. There were no integrated systems and the Call Centre was essentially not given the necessary resources to make it operate optimally. Furthermore, the concept of a Call Centre for a government department is relatively new. As the Call Centre's business activities and knowledge of its existence expanded, further agents were recruited from within the Government Employees Pension Fund. The reason for the internal recruitment was that it would take time to train outside people on the complex rules and benefit structures of the Government Employees Pension Fund (Interview, Manager of the Call Centre of the Government Employees Pension Fund, 3 September 2004).

The project to replace the Government Employees Pension Fund's legacy-based information technology system with a new, state-of-the-art pension administration system, Project Pekwa, had a profound effect on the client services environment.

The systems infrastructure in the Call Centre was upgraded in order for them to be integrated into the broader Government Employees Pension Fund operations. The dissemination of information is the key result area of the Call Centre. With the new integrated system, the Call Centre is able to generate a workflow enquiry electronically that is dealt with and responded to electronically (Government Employees Pension Fund, 2002). The previous paper-based approach of generating enquiries was fraught with inefficiencies and flaws. The inefficiencies of the old paper-based system relate to a document physically having to be carried to the operations section that deals with the case. The paper could get lost and there would be no record of the enquiry, thus prompting additional phone calls from the client (Government Employees Pension Fund, 2002).

Whilst it is prudent to answer and deal with a call to the Call Centre at the initial point of contact, there are calls that are more complex in nature. The Call Centre of the Government Employees Pension Fund has established a team of individuals who investigate the more complex cases and who then make a follow-up call to the client. This follow-up team – the Action Group - ensures that the agent does not spend too much time on one telephone call, thereby ensuring that service to clients is timeous and accurate (Interview, Administrator: Government Employees Pension Fund, 6 September 2004).

The Government Employees Pension Fund has a toll-free telephone number that can be used by all members and pensioners to access services. The toll-free

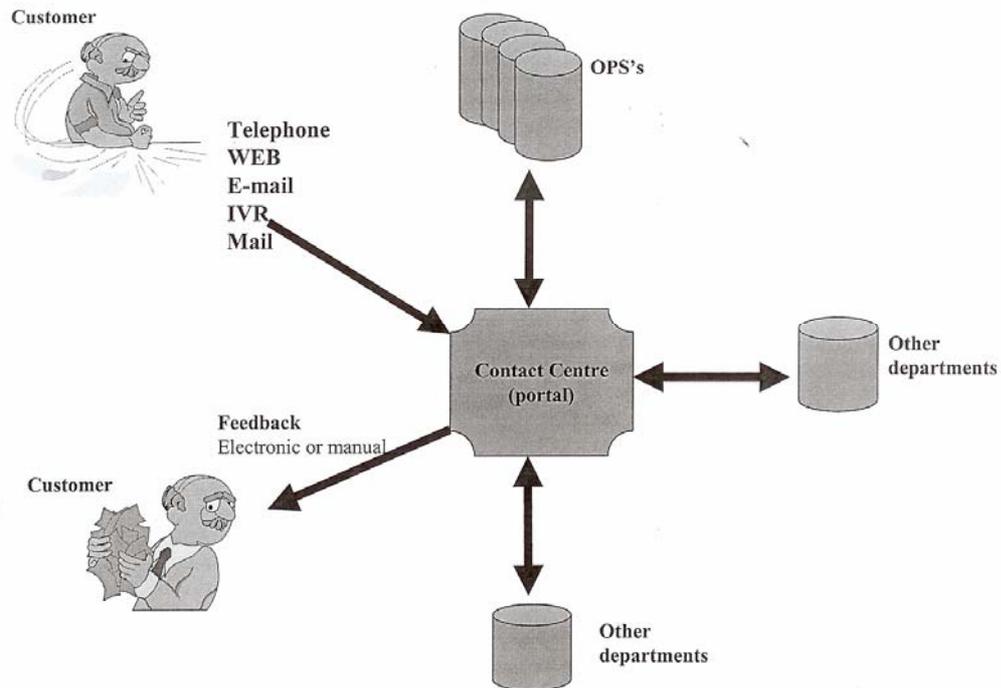
number is a further effort by the Government Employees Pension Fund to provide additional electronic points of access to clients (Interview, Manager of the Call Centre of the Government Employees Pension Fund, 3 September 2004). The toll-free number ensures that those clients who do not have access to telephones in their homes or who cannot afford a long-distance call, can still access the services of the Government Employees Pension Fund.

Improved efficiency in the Call Centre of the Government Employees Pension Fund has resulted in the operations sections having to answer fewer calls thus improving operational efficiencies. The fact that the staff who are involved in the operations can actually concentrate on what they are supposed to, is important for service delivery. The Call Centre furthermore has a standing policy not to transfer calls to the operations sections. This policy is in congruence with the idea of limiting the time spent on the telephone by operational staff (Interview, Manager of the Call Centre of the Government Employees Pension Fund, 3 September 2004).

As has been alluded to in this thesis, information security plays a vital role in an effort to protect the integrity of the Government Employees Pension Fund and in attempting to protect the clients. E-government information security has been a constant source of concern for the Government Employees Pension Fund. The Government Employees Pension Fund therefore has to ensure that the person conducting the telephonic transaction is indeed the member or pensioner. Information security is not always a simple matter when telephonic conversations are involved. Sometimes the Call Centre agent has to use his or her discretion to

conduct a transaction. Often a pensioner may be indisposed to conduct a telephonic discussion but needs some assistance from the Government Employees Pension Fund, in which case it is extremely difficult not to provide such assistance if a spouse or family member makes the call. In order to protect the integrity of the Government Employees Pension Fund, its information and its clients from possible fraudulent activities, a voice logger was installed. The voice logger is an instrument that records all the conversations that are conducted between the Call Centre agent and the client. This recording is kept in a safe environment and it could be used in the case of any dispute or discrepancy. The voice logger is also used as a tool for staff development and training (Interview, Manager of the Call Centre of the Government Employees Pension Fund, 3 September 2004). Trainers and staff can, for example, listen to selected calls as examples of what to do and what not to do. Electronic devices such as the voice logger consequently enhance the effort to improve e-service delivery at the Government Employees Pension Fund. Whilst the idea of a Call Centre in a government department may seem rather novel, it entrenches the idea of the citizen as a customer. The idea of clients of government goes beyond the concept of the Call Centre. Switchboards provide an added point of access or touch point for clients of the Government Employees Pension Fund (Interview, Manager of the Call Centre of the Government Employees Pension Fund, 3 September 2004).

FIGURE 5.5: Points of Access for Clients of the Government Employees Pension Fund



Adapted from a Presentation on Contact Centres, Raucsh, 2003

b. Switchboard Links

The Switchboard of the Government Employees Pension Fund has been developed in such a manner that it integrates with the Call Centre and the rest of the Government Employees Pension Fund. If a client calls the Government Employees Pension Fund via the switchboard, the call can automatically be routed, upon the choice exercised by the client as guided by the tele-prompt, to the section where assistance will be provided.

Another innovation is the interactive voice response facility that the Government Employees Pension Fund has linked to its telephone enquiry facility. The interactive voice response facility allows the Government Employees Pension Fund to provide continued service even if there is nobody to answer a call. The client, in the event that the Call Centre or the switchboard is closed, can leave a message (Interview, Manager of the Call Centre of the Government Employees Pension Fund, 3 September 2004). The Government Employees Pension Fund could return the call at the earliest convenience. This electronic interactive voice response facility allows the Government Employees Pension Fund to provide services to clients beyond normal office hours. The Walk-in Centres of the Government Employees Pension Fund are, however, bound by normal office hours (Interview, Senior Switchboard Operator, Government Employees Pension Fund, 3 September 2004).

c. The Walk-In Centre

The Walk-in Centre and the regional offices of the Government Employees Pension Fund provide a similar service with the difference being that the regional offices are remote while the Walk-in Centre is situated on the site of the main administrative offices. The Walk-in Centre and the regional offices are at the front-end of the Government Employees Pension Fund's service delivery apparatus. The Walk-in Centre and regional offices provide services directly to clients. They are one-stop offices where documentation can be submitted, where transactions

are performed and where immediate feedback can be provided to the client (Interview, Senior Manager – Client Services, Government Employees Pension Fund, 23 September 2004). The Walk-in Centre and the regional offices are electronically linked to the back-office systems of the Government Employees Pension Fund hence providing the capability of real-time transactions. The remote sites of the Government Employees Pension Fund provide a link between the provincial departments and the head office. The remote sites are often used for field contact with clients in the remote areas (Interview, Senior Manager – Client Services, Government Employees Pension Fund, 23 September 2004). The regional offices provide individual and corporate clients the opportunity to interact directly with the Government Employees Pension Fund without them having to travel the vast distance to the Pretoria-based head office of the Fund. The regional offices are linked to the head office on a wide area network system that provides real time assistance to clients who may need services.

At an administrative level, the Walk-in Centre and remote regional offices are at a disadvantage when it comes to scanning and indexing of documentation. These contact centres do not have the capability of generating a workflow system enquiry. All documents from these centres have to be transferred to the Scanning and Indexing Section at the head office where the necessary workflow processes are initiated (Interview, Senior Manager – Client Services, Government Employees Pension Fund, 23 September 2004). This practise leaves the Government Employees Pension Fund vulnerable in the sense that documentation can be

misplaced in the process. If documents are scanned as they are brought in to these contact points, the electronic image is immediately ready for processing. The tracing number in the form of a barcode is immediately appended to the original document which makes it easier to track. Even if the original document does go astray, the scanned image provides enough grounds for the administrative process to be continued to the satisfaction of the client (Interview, Manager in the Walk-in Centre: Government Employees Pension Fund, 3 September 2004).

Walk-in Centre and regional office staff are quite unique in that they are multi-skilled. Given that the Walk-in Centre is on the premises of the Government Employees Pension Fund, it is resourced in a manner that allows it to respond to enquiries pertaining to all the sections. These enquiries include tax, life certificate, civil pension, special pension and medical queries. Although multi-skilling of agents has taken place, there are still specialists in the various fields who can deal with the more complicated enquiries pertaining to a specific area (Interview, Manager in the Walk-in Centre: Government Employees Pension Fund, 3 September 2004).

Client advisers in the Walk-in Centre and the regional offices are provided with practical training on how to deal with customers. Given that the Walk-in Centre and the regional offices interact with clients at the coalface and given that the Government Employees Pension Fund pays people's pensions - people's livelihoods – it is important that they be trained to deal with clients sympathetically

and indeed empathetically (Interview, Manager in the Walk-in Centre: Government Employees Pension Fund, 3 September 2004).

The Government Employees Pension Fund has four Walk-in Centres - three remote sites and one at its head office - that need to be assessed in terms of service delivery. The services provided at these Walk-in Centres will be assessed with regard to electronic service delivery (Government Employees Pension Fund, Annual Report, 2001-2002).

There are currently two divergent views with regard to the remote or regional offices. The one view is that the remote offices should be closed down and that all the relevant administrative support should be coordinated from the head office in Pretoria. The second view is that regional offices should be expanded to other areas of the country. The expansion of the regional offices to other areas of the country will take services to the people. E-government systems will be used to link the remote site to the head office. An alternative to providing services to provinces where there is no regional office is to place a trained Government Employees Pension Fund employee in the government department to assist with the normal administrative functions of the Fund (Le Roux, Government Employees Pension Fund Management Workshop, 30 April 2004).

d. Web-site access to the Government Employees Pension Fund

The most likely point of access for a client in an e-government environment is the use of Internet technology. The Government Employees Pension Fund has clients in very many countries across the world and the application of Internet technology can only enhance communications channels with such clients.

The web site of the Government Employees Pension Fund is currently static. The site provides information to clients. The information relates to the rules of the Government Employees Pension Fund, the **Government Employees Pension Law**, Members' Booklet, annual reports, newsletters, frequently asked questions and answers to these (Government Employees Pension Fund Web Site, Online, 1 September 2004). The average number of hits per day during weekdays on the Government Employees Pension Fund's website are 6172 and 893 during weekends – averaging out at 4663 hits per day. These fore-going figures do not represent significant progress in the use of Internet technology to access the Government Employees Pension Fund, but it does indicate a significant enough access to enhance service delivery initiatives (Government Employees Pension Fund, Management Information System Report, 2004).

An interactive web site would allow clients of the Government Employees Pension Fund to access more service offerings. Amongst these could be change of address details, banking details and general member and pensioner details update. The

government departments, as clients of the Government Employees Pension Fund, can also access the web site to request quotations and admit new members. The Government Employees Pension Fund has appointed two individuals to deal with e-mailed enquiries. The Government Employees Pension Fund receives approximately 1500 e-mailed enquiries per month. The nature of these enquiries range from address changes to updating personal information to complaints and compliments. Interesting to note is that approximately 40% of the clients who interact with the Government Employees Pension Fund by means of e-mail are pensioners (Interview, Administrator: Government Employees Pension Fund, 6 September 2004). This indicates that a high number of pensioners are embracing the technologies that allow them to access the Government Employees Pension Fund via the electronic means. The total number of approximately 1500 e-mailed enquiries, whilst small in relation to the total number of pensioners and contributing members, still represents a significant shift in the manner in which pensions are being administered.

e. Operations Support Services

The Operations Support Services Section of the Government Employees Pension Fund provides back-up support to the rest of the organisation. Those clients who choose not to access the Government Employees Pension Fund through any of the electronic nodes on offer normally do so in the more traditional manner - that of mailing documents to the Fund. All the clients of the Government Employees

Pension Fund, however, have to mail documents to the Fund for administrative purposes. The core function of the Operations Support Services Section is to ensure that all documents are converted into electronic images by means of scanning them (Government Employees Pension Fund, Annual Report, 2001-2002). The documents are then electronically routed to indexers who check their authenticity. Once this process has been finalised, an electronic workflow process is initiated. The indexer has to determine which electronic workflow process to initiate. This is dependent on the nature of the document and the required administrative process that should be completed.

This relatively new section at the Government Employees Pension Fund is a clear step away from the traditional, hard file-based approach to disseminating and distributing work to the operations sections. The electronic mechanisms - scanning, indexing and workflow - while not customer-facing, are developed to improve service delivery in terms of improved turn-around times and accuracy of calculations.

f. Other Points of Access to the Government Employees Pension Fund

One form of electronic document that comes into the Government Employees Pension Fund is the facsimile (facsimile). Facsimiles come into the offices of the Government Employees Pension Fund at various points. This results in a lack of coordination of the official documents entering the Government Employees

Pension Fund (Interview, Manager AST - Information and Communication Technology, 5 July 2004). These documents are, in many cases, not traceable since they are faxed to machines that are not necessarily situated in the sections where the administrative process is to be initiated. The standalone facsimile machines therefore provide disjointed levels of service. The Government Employees Pension Fund has, however, implemented a Rightfax (facsimile to personal computer) facility for selected users. The Government Employees Pension Fund has set itself a goal to channel all incoming facsimiles into the electronic workflow system. This initiative was seen as a manner to channel all facsimiles into the system without them having to be transcribed into hard format thus reducing risks.

When the facsimile utility is fully operational it is envisaged that documents received in this manner would automatically be entered into the workflow system as electronic data. There are, however, those faxed documents that are unacceptable to the Government Employees Pension Fund since it essentially becomes a copy of a certified copy of a document. Even though the copy may be certified as per the requirement, a facsimile is essentially viewed as being a copy of the certified copy (Interview, Manager of Operations Section of the Government Employees Pension Fund, 29 April 2004).

Conventional mail still continues to be the pre-eminent form of submitting documents to the Government Employees Pension Fund. The documents received

in this format are scanned and converted into electronic images for processing. It is nevertheless time-consuming and labour intensive to open, prepare – unfold, remove staples, place in order – and scan the documents (Interview, Manager of Operations Section of the Government Employees Pension Fund, 29 April 2004).

The Government Employees Pension Fund also tries to make contact with clients by going out to their residences. Presentations are prepared electronically and presented to clients as the case may be. The Government Employees Pension Fund presenters use information and communications technologies to disseminate information to clients (Interview, Manager of Operations Section of the Government Employees Pension Fund, 29 April 2004).

g. Promotion of Access to Information Office

The Government Employees Pension Fund, in line with the South African Constitutional principle of access to information, set about implementing legislation in the form of the **Promotion of Access to Information Act**, 2000 (Act 2 of 2000). The purpose of this legislation is to address Section 32 (2) the **Constitution**, 1996, which provides that any person has a right to gain access to information held by a public or private body. There are, however, some exclusions most notably those related to state security.

One of the main requirements specified in the **Promotion of Access to Information Act**, 2000 (Act 2 of 2000) is the compilation of an information manual that provides guidelines on the types and categories of information that is available. The information manual of the Government Employees Pension Fund is available on the web site in Zulu, Xhosa, Afrikaans, Northern Sotho and English (Government Employees Pension Fund Web Site, Online, 1 September 2004).

The significance of the pre-conditions of the **Promotion of Access to Information Act**, 2000 (Act 2 of 2000) appearing on the web site of the Government Employees Pension Fund, allows clients to view them and to submit requests in electronic format. This is just one further example of how the Government Employees Pension Fund is trying to harness the power of information and communications technology to provide services to clients. The fact that the manual is published in five different languages attests to the Government Employees Pension Fund's commitment to providing services in as many languages as possible.

h. Language Policy of the Government Employees Pension Fund

The Government Employees Pension Fund does not have a formal language policy but in order to develop an effective customer relationship management programme, language needs to be integral. Historically the Government Employees Pension Fund has recorded language preference statistics on the then two official languages - English and Afrikaans – of South Africa (Interview, Senior

Manager: Management Information Systems, Government Employees Pension Fund, 2 February 2005). At the point of amalgamation of the disparate pension funds into the Government Employees Pension Fund, the Fund acquired clients of all walks of life and from all persuasions. The founding provisions of the **Constitution**, 1996 guarantees the official status of 11 languages and it further notes that the Pan South African Language Board will be established to ensure compliance with the afore-mentioned Constitutional principles. To ensure that the Government Employees Pension Fund provides a customer service in the preferred language of a client, the contact centres have the capability to provide verbal responses in the language of choice of the client (Interview, Manager in the Walk-in Centre: Government Employees Pension Fund, 3 September 2004).

One concern is that the new e-government system, that is, the Comprehensive Pension Administration System Software (COMPASS) and workflow, in the Government Employees Pension Fund are in English only. Given that the Government Employees Pension Fund serves customers from all the official language groupings in South Africa, it needs to develop the capacity to respond to clients in the language of their choice, whether written or verbal. The Government Employees Pension Fund is collaborating with the Pan South African Language Board to develop procedures on how to communicate with clients in as many languages as are possible.

i. Customer Relationship Management for the Future

Mobile customer relationship management (mCRM) is mooted to be the next step in the process of implementing customer relationship management solutions (De Waal, 2002). Whilst the implementation of mobile solutions may still be some way off, it is seen as the answer to staying in touch with the employee who is constantly on the move. The Government Employees Pension Fund will do well to be able to transmit messages by means of a short message service (SMS) to clients of the Fund.

The concept of the 'smart building' needs to be explored. The 'smart building' concept proffers that the demands of urban development necessitate that ecological factors, economic constraints and the possibility of modern warfare be taken into consideration. The development of a 'smart building' for the Government Employees Pension Fund, and for other government departments could provide an interesting challenge in bringing together the disciplines related to environmental safety and protection, e-government, Public Administration, Economics, Law, amongst others, in an effort to establish environmentally-friendly, safe working environments. This fore-going is an ideal scenario, therefore much work still needs to be done to determine the feasibility and practicalities around the concept of smart buildings in the South African e-government paradigm.

A further idea that could present some challenges in developing a vibrant e-government culture in South Africa is that of telecommuting. With the advent of e-government, the office has become mobile. Telecommuters are essentially involved in projects that require them to be out of the office. The notion of telecommuting challenges the traditional concept of the 'office', since the 'office' now becomes a secure connection rather than a single location. Other practical issues involved in telecommuting is its space-saving quality, its tendency to allow the government department to move closer to where the services are needed and its ability to ensure the employment of people with disabilities, ensuring that those who have physical disabilities do not have to travel (Worthington-Smith (ed) (2001). The Government Employees Pension Fund, as with all South African government departments, still has some way to go before such levels of maturity in both infrastructure and individual discipline are concerned.

j. E-Procurement

The impact of information and communications technologies in the public sector is also profound in the way in which governments procure goods and services. This fore-going includes building government-to-citizen/client/consumer (G2C), government-to-business (G2B) and government-to-government (G2G) links. Governments should also strive to exploit business-to-business (B2B) links in order to benefit itself and its clients. One way in which synergised technological and administrative systems can be beneficial to government departments, is through a

centralised system of e-procurement. Von Hoffman (1999:6) notes that e-citizens are e-consumers that are going on-line to order what they need for quick delivery. Citizens also expect quick and efficient delivery from legislators and government officials.

In the case of the e-procurement of goods and services by government, it is government that becomes the e-consumer. If service providers can provide procured services faster and in an efficient manner, then government should be able to provide services to its clients more efficiently. Worthington-Smith (ed) (2001:39-43) postulates that e-procurement sets out to achieve two main objectives. They are:

- to maximise buying power to reduce the price of supplies; and
- to reduce the clerical workload through automation, thereby reducing transaction costs (Worthington-Smith (ed), 2001:39-43).

One of the most important components of e-procurement is the creation of an electronic catalogue (Worthington-Smith (ed), 2001:39-43; 48-49). The electronic catalogue is a list of preferred suppliers and what they have on offer. In the case of Sasol, 4000 suppliers had to be incorporated into the electronic catalogue with the task proving to be labour intensive (Worthington-Smith (ed), 2001:49). In the case of Sasol the electronic catalogue contains pre-negotiated prices, precise descriptions, specifications as well as a photograph of the item (Worthington-Smith (ed), 2001:49).

An e-procurement market is a closed market. The parameters of the e-suppliers will be delineated by business requirements; hence the closed nature of the market is not necessarily a negative aspect. In the e-procurement process ordering, verification of purchase, checking the status of the order, paying for the order and analysing ordering trends can be done on-line. In so doing, e-procurement cuts down on the workload related to paper processes. E-procurement allows processing costs to be reduced and the order can be processed quickly and efficiently (Worthington-Smith (ed.), 2001:40). Other advantages of e-procurement include volume leverage, easier control and planning thereby reducing unnecessary high levels of stock (Worthington-Smith (ed.), 2001:40-41). E-procurement is about re-engineering internal processes and the processes that exist between the customer and the client.

An e-procurement approach could enhance the procurement of goods and services, such as, air tickets, furniture, building upgrades and maintenance. An e-government model should be able to enhance procurement systems so that goods and services can be delivered quickly with a view to expediting service delivery to clients. E-procurement models for government are to a large extent non-existent. The e-procurement process includes that e-invoices be submitted and the resultant e-payments are made.

The Government Employees Pension Fund currently procures its computer hardware through direct purchase. The contention is that this may not be the best

procurement model, given that computer hardware becomes obsolete rather rapidly. The suggestion is that the procurement and maintenance of the computer hardware should be outsourced given that it is not the core business of the Government Employees Pension Fund. The hardware should then be rented, hence the Government Employees Pension Fund will be able to hold a service provider accountable for the provision of the latest technology and its constant maintenance. No research has been conducted on the cost effectiveness of outright purchasing of computer hardware as opposed to the rental model.

One of the more pressing concerns with regard to e-procurement revolves around online security. These security concerns include concerns around electronic and digital signatures, the protection of intellectual property rights, copyrights and trademarks, the privacy of communications and the protection of personal and/or business information (**Green Paper on E-commerce**, November 2001).

5.5. CONCLUSION

A thesis on e-government would be lacking if it did not present discussions on Public Administration. This chapter has presented analysis on the traditional Public and Management Administrative theories of Henry Ford and Frederick Taylor. The analysis of the theories of Fordism and Bureaucratic Management is not unique. What is, however, unique is the attempt to apply the said theories to the Government Employees Pension Fund. A further contribution is the analysis of e-

administration in an applied manner. The theories, principles and concepts related to e-government and e-administration are not unique. In their applied form they, however, adopt a new thrust.

The chapter also deals with an assessment of the e-government initiatives embarked upon by the Government Employees Pension Fund. The structures and operational, legacy-based administrative model of the Government Employees Pension Fund are introduced and analysed. As an extension of the efforts of this chapter to document the attempts of the Government Employees Pension Fund toward achieving its service delivery goals, is the assessment of the additional points of access that have been created for clients. Service delivery, and by extension its sustainability, is indeed about clients being able to access the services in a satisfactory manner. The Government Employees Pension Fund has created such access nodes, a number of which are not traditionally associated with government departments, but without which a government department cannot operate optimally in the current business environment. In this fore-going regard, the chapter assesses the attempts by the Government Employees Pension Fund to develop a customer relationship management approach to assisting citizens as the clients of government. The customer relationship management model develops a strategy that incorporates the Batho Pele (People First) approach of the South African Government to service delivery. The concept of a Call Centre for a government department is relatively new in South Africa. The development and integration of the Call Centre of the Government Employees Pension Fund into the

e-government strategy is pivotal to providing services to clients. Web-site access also seems to be on the increase since more and more clients are accessing the services of the Government Employees Pension Fund via this means. Web-site access is the most likely point of access to services in an e-government environment.

A further aim of the chapter is to provide analysis of the initiatives around customer relationship management in the Government Employees Pension Fund. Definitions of customer relationship management are offered in an effort to situate the concept and practice within the macrocosmic South African context and within the microcosmic Government Employees Pension Fund context. The customer relationship management strategy of Batho Pele (People First), as espoused by the South African Government, is assessed in the chapter. The analysis around customer relationship management considers the link between the citizen as client and government, the provider of services.

Additional analysis on customer relationship management provided in this chapter relates to how the Government Employees Pension Fund has implemented a strategy that emphasises multi-nodal access to services for clients. The multi-nodal access to services offered by the Government Employees Pension Fund takes cognisance of the ability of clients to use electronic systems, the availability of electronic systems and knowledge of benefit structures of the Government Employees Pension Fund. The nodes of access or touch points of the Government

Employees Pension Fund are identified and analysed in terms of their levels of effectiveness to service delivery. The assessment of the touch points of the Government Employees Pension Fund emphasises an integrated approach to services being offered by the Government Employees Pension Fund.

The language of interaction between clients and the Government Employees Pension Fund is important since clients are able to access information in their language of choice. The matter of promotion of access to information by clients of the Government Employees Pension Fund is key to providing services. Further to this, it is important that the clients are aware and able to utilise the new information and communications technologies that are intended to benefit them. It is therefore equally important that the Government Employees Pension Fund develops an integrated human resources model to upgrade the skills levels of its staff to be able to cope with the significant changes in the working environment.

Having assessed the components of an integrated approach to systems development and having applied the findings to the case of the Government Employees Pension Fund, it is imperative to start drawing conclusions and identifying additional opportunities for research. Chapter Six of the thesis is the dénouement where the arguments proffered during the course of the thesis will be drawn together.

CHAPTER SIX

CONCLUSIONS, OBSERVATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The initial problem that was posed was whether the implementation of information and communications technologies - e-government systems – can improve service delivery to citizens, the clients of government. The research is premised on a belief that the implementation of an e-government system improves responsiveness, accessibility, success and efficiencies. The thesis is based on an assessment of the case of the Government Employees Pension Fund of South Africa.

The contribution of the research points to whether electronic service delivery (e-government) is a useful tool to implement in the quest to provide efficient, successful services to clients. Since e-government in South Africa is in its relative infancy, this thesis is an attempt to document its development and indeed to add value to how the Government Employees Pension Fund delivers services to its clients.

This study on e-government has therefore set out to build on the work that has already been done on the concept and the efforts around defining the role that e-government solutions can play in service delivery. This study has applied the

principles of e-government to the Government Employees Pension Fund in an effort to determine whether e-government - that is, electronic service delivery - can improve the efficiency, accuracy and accessibility of services to clients. The example used in the applied approach to the study makes it unique. Never before has there been written about the Government Employees Pension Fund in regard to documenting its attempt at implementing an e-governmental approach to service delivery. What follows is a brief summary and conclusions of the chapters of the thesis.

6.2 CHAPTER SUMMARIES AND CONCLUSIONS

Chapter One provides general background to the irreversible demands and challenges that the advent of information and communications technologies makes. The chapter presents an assessment of information and communications technologies from a global to African to a national, South African level and provides some valuable insight into the current positioning of South Africa's attempt to achieve successful e-government. The challenges highlight how governments should harness the power of information and communications technologies to improve service delivery offerings to their clients.

Chapter Two provides insight into the methodological approach that was to be followed in pursuit of the finalisation of the objectives of the thesis. To this end, Chapter Two entrenches the concept of e-administration as it relates to e-

government. Chapter Two briefly expounds on the approach to the research on e-government in South Africa by exploring the case of the Government Employees Pension Fund. Research methods, most notably that of the case study, are analysed during the course of Chapter Two. The typical sources employed during the course of the case study methodology are explored in terms of their effectiveness. The chapter finally presents how the data are to be assimilated and presented.

Chapter Three furnishes an overview of the literature and, in so doing, conducts an assessment of general accessibility to telecommunications in South Africa. Accessibility to telecommunications and, by implication, accessibility to information and communications technologies, is critical to the successful implementation of an e-government regime. Chapter Three has shown that there are vast disparities in access to information and communications technology in South Africa. The disparities are not only evident at individual, household levels, but also at sectoral levels.

An assessment of the accessibility to information and communications technologies at a sectoral level in South Africa revealed that the financial sector has the highest personal computer accessibility rate of 74%, while the public sector displayed the lowest personal computer accessibility rate of 7%. The personal computer accessibility rate and the rate of access to the Internet in private households were found to be showing a steady increase. During the course of

Chapter Three, it was revealed that the rate of access to the Internet in private households was reaching saturation point, whilst corporate and academic entities in South Africa were showing similar retardation in the rate of access.

A brief assessment of e-government initiatives in South Africa was conducted in Chapter Three to determine whether there are concerted attempts to use information and communications technologies to advance public service delivery. The Department of Public Service and Administration is the government department that is tasked to drive the process of e-government in South Africa. The Department of Public Service and Administration established a lead agency, the State Information Technology Agency, in order to drive the e-government process in South Africa. The State Information Technology Agency's approach to e-government in South Africa is based on what it refers to as the Information Technology House of Values. The Information Technology House of Values is premised on four pillars – interoperability, economies of scale, the elimination of duplication and information security.

Chapter Three also briefly presents and discusses the typical stages in the development and implementation of an e-government system. The stages of implementation typically range from the conceptual, complemented by an incremental process, to full integration, that is, once all systems are fully operational and clients can access and conduct business transactions electronically.

A thesis on e-administration would not be complete without having provided a brief theoretical grounding of the traditional theories of Public Administration, Public Management and Bureaucracy. To this end, Chapter Three provides a brief analysis of Taylor's theory of Scientific Management and Ford's assembly line (mass production) theories. The analysis reveals that Taylor and Ford's theories are geared towards increasing the levels of production of individual workers. The worker becomes a unit of production whose success is measured in terms of pre-determined levels of output. Weber's theory of Bureaucratic Management is based on hierarchy, authority and control.

Chapter Four submits a comprehensive introduction to the Government Employees Pension Fund and its core business activities. Chapter Four furthermore introduces the electronic administrative system, the Comprehensive Pension Fund Administration Support System (COMPASS), which is being implemented by the Government Employees Pension Fund. The aim of the theoretical analysis is to draw a thread from the traditional models of Public Administration through to the electronic models (e-government) and then to analyse the case of the Government Employees Pension Fund accordingly.

An assessment of the legacy-based administrative model revealed that the initial introduction of computers (information technology) to the Government Employees Pension Fund was essentially viewed as an add-on rather than as a tool of transformation. The introduction of the CivPen electronic administration system to

the Government Employees Pension Fund revolutionised the manner in which pensions were being administered, since the functionaries had to be given personal computers to perform their duties. The implementation of the Comprehensive Pension Fund Administration Support System (COMPASS), along with workflow document management and teleforms (electronic documents) at the Government Employees Pension Fund, are important innovations as far as e-government and service delivery are concerned.

Chapter Four also analyses the e-government-related concepts of workflow (document management), seamlessness and paperlessness. These aforementioned concepts collaborate to form a complete, integrated system that enhances administrative efficiencies and links internal and external clients into an integrated e-government system. The selfsame chapter analyses the e-government-related concepts of risk and the concomitant approach to risk management as they pertain to electronic service delivery in the Government Employees Pension Fund. The risks presented by e-government regimes, for example, computer viruses and having a critical mass of users of the system, are important. Risks internal to the Government Employees Pension Fund include resistance to change and a paucity of an adequately-trained human resources component.

Chapter Four proceeds to highlight the inadequacies of the comparisons especially since the Government Employees Pension Fund has no equal in South Africa in

terms of magnitude, products and niche. The chapter proceeds to compare the e-service delivery initiatives by Old Mutual and Sanlam, South African insurance companies that have implemented the same software, the Comprehensive Pension Administration System Software (COMPASS) that the Government Employees Pension Fund has, in their effort to improve service delivery. The comparison between the Government Employees Pension Fund, the Compensation Commissioner and South African Airways concentrates on another aspect of e-service delivery, namely, electronic workflow and document management. The final part of the chapter compares the Government Employees Pension Fund's e-service delivery to retired civil servants with the e-service delivery initiatives to older people by the Government of the United Kingdom. The comparison analyses the challenges of access to electronic means, the physiological challenges faced by older people, computer illiteracy and the costs involved in accessing services electronically.

Each of the institutions being compared adopted different strategies as far as human resources availability for the information and communications technology projects were concerned. The conclusion that can be drawn from the analysis on human resources requirements is that the human resources that are needed for any information and communications technology project need to be deployed without reserve in order to ensure success.

Chapter Five provides comprehensive analyses on the applied aspects relating to Public Management and Administration and electronic administration in the Government Employees Pension Fund. The previous chapter introduced and discussed relevant theoretical aspects, whereas Chapter Five presents an applied approach with regard to the selfsame theories. A thesis on e-government would be lacking if it did not present discussions on Public Administration. The analysis of the theories of Fordism and Bureaucratic Management is not unique. What is, however, unique is the attempt to apply the said theories to the Government Employees Pension Fund. A further contribution is the analysis of e-administration in an applied manner. The theories, principles and concepts related to e-government and e-administration are not unique. In their applied form they, however, adopt a new thrust.

Chapter Five assesses the attempts by the Government Employees Pension Fund to develop a customer relationship management approach to assisting citizens as the clients of government. The customer relationship management model develops a strategy that incorporates the Batho Pele (People First) approach of the South African Government to service delivery. Given that the concept of a Call Centre for a government department is relatively new in South Africa, the development and integration of the Call Centre of the Government Employees Pension Fund into the e-government strategy is pivotal to providing services to clients. Web-site access also seems to be on the increase since more and more clients are accessing the

services of the Government Employees Pension Fund via this means. The website is a prominent point of access to services in an e-government environment.

A further aim of Chapter Five is to provide analysis of the initiatives around customer relationship management in the Government Employees Pension Fund. Definitions of customer relationship management are offered in an effort to situate the concept and practice within the macrocosmic South African context and within the microcosmic Government Employees Pension Fund context. The multi-nodal access to services offered by the Government Employees Pension Fund takes cognisance of the ability of clients to use electronic systems, the availability of electronic systems and knowledge of benefit structures of the Government Employees Pension Fund. The nodes of access or touch points of the Government Employees Pension Fund are identified and analysed in terms of their levels of effectiveness to service delivery. The assessment of the access points of the Government Employees Pension Fund emphasises an electronically integrated approach to services being offered by the Fund.

Human resources strategies need to be as dynamic as the electronic environment in which they operate. This is especially so in the environment where the Government Employees Pension Fund is implementing its e-government strategies. Employees must, for example, be given access to the necessary systems and they must be given the necessary guidance that will enable them to

operate optimally. Even though advanced e-government systems may have been installed, the human resources capacity is paramount for effective service delivery. Chapter Five proffers that legislative, transformative and other influences need to conflagrate in order to advance an integrated approach to e-government as well as to human resources development.

Chapter Six is the dénouement where the arguments proffered during the course of the thesis will be drawn together. Chapter Six further presents chapter-by-chapter summaries and conclusions, which culminate in the main findings of the thesis. Opportunities for additional research are identified.

6.3 KEY FINDINGS

The unique contribution of this study on Public Administration and the related e-government initiatives of the Government Employees Pension Fund is that none of this research has been documented in this format before. The additional contribution relates to efforts by the South African Government to improve its service delivery offerings to clients more quickly, more accurately, more efficiently and more amicably by employing e-government initiatives.

The **first** finding of the research is that electronic service delivery is definitely a positive development provided that those who are intended to benefit by it are able to access and utilise the service. In line with developing new ways of interacting

with clients, it is necessary to build a mutually beneficial liaison to enable both client and service provider to understand each others' requirements. Whilst providing services to clients of the Government Employees Pension Fund electronically is a boon for accessibility, efficiency and success of e-services much, however, still needs to be accomplished in South Africa before such e-services can be delivered in an unencumbered way.

The principles discussed in this thesis has highlighted that e-government is not solely about implementing electronic systems. Whilst electronic systems are important, complementary dimensions, such as human resources capacity is just as important. The **second** finding on e-government as applied to the Government Employees Pension Fund, is the need for an integrated approach to systems development so as to optimise e-service delivery initiatives. The integrated approach does not only refer to systems but also to human resources management. The second finding determines that the integrated approach, an all-encompassing approach, identifies the human resource as a whole and the critical role that the human resources component plays when harmonised with an integrated systems approach in order to optimise e-service delivery initiatives.

The **third** finding relates to sustainable e-service delivery through providing multi-nodal access to service delivery while being cognisant of the evolution of the traditional nodes of access to government services. The public service has evolved and adopted what could be referred to as private sector principles in its efforts to

provide efficient, successful services to its clients. To this end the Government Employees Pension Fund has established a fully-integrated Call Centre, a static web site that provides certain kinds of information that a client may need, provision for electronic enquiries and the electronic dissemination of information, Rightfacsimile (facsimile to personal computer) facilities, interactive voice response, a Walk-in Centre and regional offices linked to a wide area network and workflow (electronic document management), as well as the traditional methods of snail mail and traditional facsimiles which are converted to e-data for easy processing.

The **fourth** finding is that one of the access or touch points to the Government Employees Pension Fund for clients, the web site, was found to be static. It is being argued that an e-government regime will be enhanced with an interactive web site, since it would allow clients more service offerings from remote locations. Sustainable e-service delivery is about providing more than one node of access so as to ensure optimal use of information and communications technology.

The **fifth** finding of the thesis is that sustainable, successful e-government must have a critical mass of users that is central to ensuring the sustainable use of information and communications technologies. If a critical mass of users is not ensured then it could drive a wedge between the clients and the service delivery entity.

The **sixth** finding reveals that there are vast disparities in access to information and communications technology in South Africa. The digital divide is a major stymieing factor in providing seamless, successful electronic services to clients. The disparities are not only evident at individual, household levels, but also at sectoral levels. Information and communications technology infrastructure, literacy and computer literacy levels in South Africa are not sufficiently plausible to favour the provision of reasonable levels of e-government services to elderly people.

The **seventh** finding of the thesis relates to the sourcing of software from Europe, America or elsewhere that is not always suitable for African circumstances. This sourcing of software from America or Europe often goes hand-in-hand with a paucity of product support. This paucity of product support was identified as being a contributory factor to extensive delays in the implementation of the software. Given that the Comprehensive Pension Administration System Software (COMPASS) is an American product it was found that western products are not necessarily suitable in other (e.g. African) environments.

The **eighth** finding relates to the language of interaction. Software products sourced from western sources do not take cognisance of the unique African languages. There are 11 official languages in South Africa and the client, even if she or he had access to information and communications technology, may not necessarily be able to or have the inclination to interact in English, since foreign software is available only in English.

Not all e-government initiatives are successful. Herein lies the **ninth** finding of the thesis. Information and communications technology initiatives are not always implemented according to planned timelines and budgets.

The thesis has also determined that the public and private sectors are moving closer together in the kinds of technologies that they are employing to providing services to their clients. A corroboration of the afore-mentioned is that the term clients are normally associated with the private sector business environment whilst governments in their drive to provide services have begun to adopt the same approach to providing services to the voting public – their clients. The comparative analysis conducted during the course of the thesis has found that exactly the same technologies were being implemented by the private pension funds as was being done by the Government Employees Pension Fund.

The findings of the thesis as has been elucidated, enunciate the necessity for recommendations as to how to achieve some of the challenges for e-government at the Government Employees Pension Fund. It is with the findings in mind that the following recommendations are offered.

6.4 RECOMMENDATIONS

The **first** recommendation hinges on providing access to e-government systems so as to ensure that there is a critical mass of users of the system. It is therefore

recommended that the Government Employees Pension Fund should provide access to its systems for clients close to where they live or work. Access to Government Employees Pension Fund information can be facilitated by providing dedicated computer terminals that are linked by means of a wide area network to national, provincial and local government offices. Furthermore, dedicated closed network telephone lines that are linked directly to the Government Employees Pension Fund's Call Centre should be offered to clients who may need to access the services of the Fund. In the case of the closed circuit network, dedicated telephones should be placed at strategic points where Government Employees Pension Fund clients can access them and the costs would be borne by the Fund.

The **second** recommendation is to enhance human resources capacity to be able to deal with the demands of information and communications technologies. It is consequently recommended that the Government Employees Pension Fund embarks on a drive to create the necessary capacity by training its staff as well as the clients to use the information and communications technologies effectively. Given the dynamism involved in the development and growth of new information and communications technologies, the universal challenge is to ensure that employees and clients are equally dynamic in updating their skills, individually and collectively so as to ensure optimal service delivery.

The **third** recommendation relates to multi-nodal access to electronic services. Whilst it would be good if all the clients of the Government Employees Pension

Fund could access the services of the Fund by means of its web site, reality dictates that this is not the case in South Africa. Multi-nodal access to services, using information and communications technologies as an enabler, should be encouraged. Multi-nodal access includes the Call Centre, the Walk-In Centres, the web site, road shows, interactive voice response mechanisms and information kiosks.

The **fourth** recommendation pertains to providing services in the language of choice of the client. An interactive voice response mechanism will, for example, not be successful if the client does not understand the language being used. Furthermore, an additional concern around language is that electronic services may contain too much jargon and technical information. One solution is to offer electronic services in more than one language. It is further recommended that the language of record of the Government Employees Pension Fund to be English, but interaction must be in the language of choice of the client.

The **fifth** recommendation lies in improving the flow of information from the employer departments to the Government Employees Pension Fund through enhanced electronic processes. An electronic interface between government (employer) departments and the Government Employees Pension Fund will go a long way to resolving the administrative bottlenecks that occur as a result of the paper-based administrative process.

It is recommended that South Africa (and Africa) develop software solutions that satisfy the unique requirements of the South African (and African) context. The **sixth** recommendation is therefore that African solutions be sought for African conditions. In the case of the Comprehensive Pension Administration System Software (COMPASS) it was found that the supplier had no support office in South Africa, hence the difficulty with finalising the project timeously and within the scope of the budget.

The **seventh** recommendation is that e-government projects be implemented incrementally. The incremental, phased approach allows for tighter control, better assessment of initiatives and for focus. Both financial and human resources will be concentrated on finalising one project successfully before embarking on another. Implementing new information and communications technologies are extremely complex hence a phased approach is probably the more desirable.

A further, **eighth**, recommendation is that hardware be rented as opposed to outright purchasing. Under such conditions, the Government Employees Pension Fund will be able to hold a service provider accountable for the provision of the latest hardware technology and its constant maintenance.

Whilst this thesis has covered as many aspects of e-government that impact on the case of the Government Employees Pension Fund, specifically and South African e-government initiatives in general, there are some pertinent matters that have

fallen outside its ambit. The issues that fall outside the ambit of this thesis provide opportunity for further research.

6.5 OPPORTUNITIES FOR FURTHER RESEARCH

When considering the case of the Government Employees Pension Fund, much research still needs to be done by way of assessing how the Fund can assume a competitive, profit-driven disposition within the South African marketplace. From a Public Administrative point of view, it is important to realise that the traditional parameters of Public Administrative discourse are shifting. An opportunity exists for the link between the traditional models of Public Administration and the 'new' Public Administration, as it were, to be analysed.

In this fore-going regard, the Government Employees Pension Fund could, for example, instil a competitive mindset within its ranks by ensuring that it attains the status of market leaders in the retirement industry, yet maintaining its identity of being a government organisation. For this to happen new, innovative ways of assisting clients need to be forged, hence the reference to a new Public Administration that is less traditional and more innovative. This presents a challenge for the development of a body of knowledge on new, innovative and custom-built parameters for future Public Administrative discourse. These could, for example, include further research on the reach and impact of mobile telephony

with particular reference to disseminating information via the short message service (SMS).

A further aspect that should be researched is the extent and impact that the concept of the 'smart building' could have on the innovations around information and communications technologies. The building of the Government Employees Pension Fund, for example, was not initially built to accommodate approximately 600 people, with a similar number of computers, air conditioners and the Call Centre, all of which have an impact on the space, electrical supply and general working conditions. The concept of the smart building could provide some impetus for very interesting research.

6.6 CONCLUSION

The current nature of information and communications technologies is so dynamic that there will always be opportunity to for further research and development in the area of e-government. In the South African context e-government is a developing concept hence the steadily growing body of knowledge.

Whilst conducting research for this thesis reference was often made to the expenses that need to be incurred in establishing an e-environment, whether in government or in the private sector. Revenue is often sited as a strong determinant in whether to procure information and communications technologies or not.

Establishing the necessary infrastructure for the optimal use of information and communications technologies is vital, yet it demands extensive capital input. Given that information and communications technologies are constantly changing, it is more capital intensive for developing countries, especially, to keep abreast. In developing countries such as South Africa there seems to be a dichotomy between spending on infra-structural development for optimal information and communications technologies and social spending related to basic needs such as housing, water and sanitation, health and education. It is, therefore, difficult to justify why revenue should be expended on information and communications technologies and not on the basic needs of people. The opposing argument that developing such information and communications technologies would lead to economic growth and its downstream benefits such as job creation is difficult to sell to someone who has been without a steady income.

It is in this afore-mentioned context that Pistorius (9 June 2004) posed the question of what the costs of innovating are as opposed to the costs of not innovating. The age-old adage of, 'if it's not broken, don't fix it' holds true only for the cynics who believe that theirs is the only approach to conducting the business of government. E-governance with its component parts - e-government and e-administration – is here to stay. How best to harness the power of these instruments is the domain of the new, innovative public service. Without such innovation e-service delivery will not materialise.

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