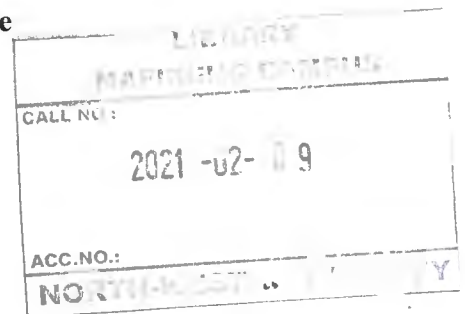


**Assessment on factors affecting Service Quality of Information Technology on Service
Delivery at Naledi Local Municipality.**

By

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Supervisor: Professor S. Lubbe

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Declaration

I, **Sanaga Daniel Ramadile** (Student Number: **21965595**) declare that the assessment on factors affecting Service Quality of Information Technology on Service Delivery at Naledi Local Municipality is my own work and that all the sources have been indicated and fully acknowledged.

Mr Sanaga Daniel Ramadile

Date

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Abstract

In the South African post-apartheid era, there continues to be high expectations of government in respect of improved delivery of service and of closer consultation with citizens. Public service delivery provision has been under the spotlight. South African policy makers, public servants and the media have urged government to make a concerted national effort to address service inefficiencies. This scenario thus calls for the need to ascertain municipalities' expectation and perception of the quality of IS support services rendered to them by either the Service Providers or the Department and also to measure the gap thereof. The main objective of the research was to assess the factors affecting Service Quality of Information Technology at Naledi Local Municipality which serves under Dr Ruth Segomotsi Mompati District Municipality.

During the investigations it was noted that the most imperative tools that should be used to measure constructs with regard to service quality, are internal customer satisfaction, management commitment, customer productivity, system, policy and procedure, human resource management, infrastructure and environmental factor (consisting with technology, equipment and facilities), overall service quality and performance, which the municipality has, complimented by the assistance from National Treasury. There were a total of 21 respondents who participated in the research and all of the questionnaires were answered. The population consisted of the Mayor, Municipal Manager (Accounting Officer); Chief Financial Officer; Deputy Financial Officer; Budget and Treasury Officers; all section 57 Managers; and other municipal officials. The researcher conducted the study in a quantitative perspective and the data collected from the respondents, through questionnaires, was used as an analysis to this study.

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CHAPTER ONE

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

The advent of democracy in 1994 brought with it not only the necessary political transformation but also the institutional reforms that were vital for dealing with the socio-economic and developmental challenges in South Africa. The White Paper on Transforming Public Service Delivery, the so-called 'Batho Pele' White Paper, was published in 1997 (Russell & Bvuma, 2001:242).

It required departments within government to improve their service delivery in terms of the eight 'Batho Pele' (a Sesotho expression translated as people first), tantamount to that, rapid changes fuelled by the world economy and technology have been forcing organisations to transform themselves in order to become more responsive and competitive. As Day and Halpin correctly point out, this has resulted in a pervasive need for people at every level to participate in the process.

The purpose of this study is to assess the factors affecting Service Quality of Information Technology on Service Delivery at Naledi Local Municipality, which serves under The Dr Ruth Mompati District Municipality in the North-West Province of the Republic of South Africa. The role of the Information Systems department within the local municipalities has broadened considerably over the last decade.

Information Systems plays a major role in helping local and provincial government to mitigate South Africa's service delivery problems. The introduction of personal computers has resulted in more users of information technology interacting with the Information System department more often. Users expect the IS (Information Systems) department to assist them with various tasks, among others being hardware and software selection, installation, connection to LANs and systems development.

1.2 BACKGROUND

Municipalities in South Africa are faced with great challenges to provide high-quality services to their citizens in a cost-efficient manner while meeting the parameters and guidelines covered in local legislation. Local government bodies and municipalities have been tasked among others to solicit the provision of one-stop service centres and access to quality and affordable services on behalf of government structures.

The continuing challenges we face therefore, is one of ensuring that all municipalities develop the requisite capacity to translate those resources into instruments with which to confront problems of poverty and underdevelopment. Now, multiple measures in all endeavours are required hence according to DeLone and Mclean there are six categories into which these measures can be grouped, they are inter alia, system quality, information quality, use, user satisfaction, individual impact and organisational impact, all of the aforementioned are linked to define an IS success model.

According to DeLone and Mclean categorisation is product categorization, information quality represents measures of information systems output, given measures in this area includes accuracy, precision, currency, timeliness and reliability of information provided. The current IS success measures, product and system quality, focus on the tangible end of spectrum. They further say there are two possible units of analysis for IS service quality, which are the IS department and a particular information system.

In the aforementioned scenario, the unit analysis is the information system. In case where users have multiple interactions with the IS department namely, a personnel manager using human resources management system, electronic mail and other various personal computer products and the unit of analysis can be a particular system or the IS department.

As pointed out by Conrath and Mignen, the second most critical component of user satisfaction after general quality of service, is the compatibility between users expectations and actual IS service. Rushinek and Rushinek further conclude that fulfilled user expectations have a strong effect on overall satisfaction. Another point stated by

Parasuraman and his fellows suggest that service quality can be assessed by measuring customers expectation and perceptions of performance levels for a range of service attributes, the difference thereof could be calculated and be averaged across attributes. As a result the gap between expectations and perceptions can be measured.

1.3 OBJECTIVES OF THE STUDY

The main objective of the study is to assess the factors affecting Service Quality of Information Technology at Naledi Local Municipality which falls under Dr Ruth Segomotsi Mompati District Municipality.

- The key areas to be looked at, are inter alia:
- The determination of the six measures of Information System success and its effectiveness.
- The six categories into which these measures can be grouped.
- Service Quality as one of the measure of IS success model.
- How the system quality describes the information processing system.
- Measures of information systems output.
- Assessment of customers expectations and perceptions.
- Five dimensions that the authors claim are used by customers when evaluating service quality, regardless of the type of service being disposed.
- Evaluation on the level of accountability and how it affects IS service quality.

1.4 PROBLEM STATEMENT



Public service delivery provision has been under the spotlight. South African policy makers, public servants and the media have urged government to make a concerted national effort to address service inefficiencies. This scenario thus calls for the need to ascertain municipalities' expectation and perception of the quality of IS support services rendered to them by either the Service Providers or the Department and also to measure the gap thereof.

Many of the problems currently being experienced in local municipalities in South Africa can be attributed to:

- the lack of integrated applications;
- disparate legacy applications;
- applications that are no longer supported;
- multiple databases;
- no single view of data/citizens/households;
- lack of standard financial practices;
- non-standard payrolls and HR applications; and
- inconsistent and inaccurate utility billing.

To do so, the researcher will employ SERVQUAL scale methodology to measure the service quality gap between municipalities' expectation and perception of the quality of IS support services. Questionnaires, which covers the five (5) dimensions of service quality, namely; tangible, reliability, responsiveness, assurance and empathy, will be compiled and forwarded to Naledi Local Municipality to complete and return to the researcher within a specified time.

The data will be analysed and conclusions will be drawn thereof. The research discovered that responsiveness, assurance, empathy and tangible dimensions are significant to municipalities for such an assessment (Service Quality). According to the research it thus show that on average most IS service providers are perceived by municipalities for rendering a desirable level of services to municipalities with respect to aspects relating to reliability, assurance, empathy and tangible dimensions.

1.5 RESEARCH DESIGN AND METHODOLOGY

The collection of data will primarily entail both the qualitative and quantitative research approaches. A questionnaire will be used to elicit information for analysis and also for reporting and recommendations. The relevant municipality (Naledi Local Municipality) within the Dr Ruth S Mompati District Municipality will be the main focal point.

The research study will be conducted in a form of questionnaire which will be administered by the researcher who will analyse the Service Quality of Information Systems in terms of Systems Development and Support in the Dr Ruth S Mompati District Municipality with specific reference to Naledi Local Municipality. Quantitative research will be used consequently when dealing with the assessment of SERVQUAL (Service Quality) validity, that will be its reliability, comparison of the factor analyses, reliability and its content validity. Evident experiences as per the records, with municipalities within the district with comparisons to their level of efficiency in a particular period. Content analysis will also be employed in order to compare the gathered or collected information against information presented in Municipalities documents. Senior Managers and their respective subordinates, Officials in the middle and lower levels, the questionnaires will be availed in one language which is English.

Results would however indicate how effective the IS Service Quality is and the level it enhances service delivery and their cost implications in terms of exploiting it to its entire functionality. Data will be analysed statistically, which will be represented in the form of a correlation analysis.

Expertise of a statistician will be obtained either from the University of North-West or University of South Africa. Finally the result from the above mentioned will be presented to the Provincial and National Government or any other relevant Government structures going forward.

1.6 LIMITATIONS OF THE STUDY

The study will be conducted within the Dr Ruth S Mompati District Municipality hence Naledi Local Municipality will be the main area of exploration.

1.7 PLAN OF THE STUDY

The study consists of 5 chapters that can be summarised as follows:

CHAPTER 1: Overview of the Study

In chapter one the background is given and the problem statement highlighted, objectives are formulated and the methodology to be used.

CHAPTER 2: Literature Review

This chapter will provide the reader with an overview of the factors affecting Service Quality of Information Technology at Naledi Local Municipality and in the local

municipalities in general and Naledi Local Municipality in particular to establish a theoretical background.

CHAPTER 3: Research Methodology

The purpose of this chapter will be to outline the research approach, research design and research methods used in the study.

CHAPTER 4: Data collection, Data methodology and Data interpretation

This chapter presents data collection, data analysis and data interpretation of the study.

CHAPTER 5: Recommendation and Conclusion

This chapter will discuss the findings and provide recommendations and ultimately provide the conclusion of the study. In chapter five there will be a conclusion on each research issue including implications and recommendations. Recommendations for future research will also be suggested.

1.8 CONCLUSION

To effectively manage these challenges and to meet the disparate demands of both government and citizens requires significant change in a number of areas. Predominant among these is the requirement to review and change existing business models and application architecture. Non-integrated legacy and outdated systems have resulted in data inconsistencies, operational silos, multiple versions of the truth and a real lack of transparency and accountability within public sector. In addition, several municipalities are still using paper-based systems to handle complex information transactions. All of this leads to a high total cost to company and inaccurate reporting. A single stand-alone enterprise-wide solution will be a highly cost-effective and risk-averse alternative to address the core business needs of a public sector organisation.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

As stated by Czerniewicz (2004) that just like many other countries, South Africa is also affected by the digital divide. In 1994 the new South Africa was born and great optimism and hope characterised the nation. More emphasis will be based on the current state of the digital divide in South Africa. The following will be addressed which are among others, the current overview of South Africa, Internet usage, factors contributing to the digital divide, and attempts to bridge the digital divide in South Africa. Many people anticipated the new policies and firm measures of readiness would contribute to the creation of a more equitable and fair society that would enable South Africa to become a player in the global economy.

What makes South Africa interesting in terms of the digital divide is the country's multi ethnic and multi-lingual profile. According to Guomundsdottir the cultural background of the people here reflects the different mother tongues and language use of students. According to Akinsola et al, South Africa is the fourth largest country in the Commonwealth and has the sixth largest population. With fifty per cent of its population in urban areas and has a highest rate of urbanisation than most Sub-Saharan countries.

Now, the purpose of this study is to make an assessment on factors affecting Service Quality of Information Technology on Service Delivery in the South African Local Government with more emphasis at Naledi Local Municipality which falls under The Dr Ruth Mompati District Municipality in the North-West Province.

According to Evans and Yen (2006) the implementation of e-government has been widely acclaimed in that, it provides new impetus to deliver services quickly and efficiently. In recognition of these benefits, various arms of the South African government have embarked on a number of e-government programmes. Examples of these include inter-alia, the Batho Pele portal, SARS e-filing, the e-Natis system, electronic processing of

grant applications from remote sites and a large number of departmental information websites.

2.2 DEFINITION OF A LOCAL GOVERNMENT

According to the World Bank website (2006), e-government can be defined as information technologies that have the ability to transform relations with citizens, businesses and other arms of government and can serve a variety of different ends, better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information or more efficient government management. The benefits can be less corruption, increased transparency, greater convenience, revenue growth and or cost reductions.

Local government describes the people who have the authority to make decisions or pass laws in a small geographic area near to them. E-governance is an important innovation for enhancing good governance and strengthening the democratic process and can also facilitate access to information, freedom of expression, greater equity, efficiency, productivity, growth and social inclusion.

As established in South Africa, although the Telecommunications Act of 1996 was repealed by the Electronic Communications Act of 2005, the Universal Services Agency, renamed as the Universal Service and Access Agency of South Africa, was incorporated under the new act and thus continues with its goal of promoting universal access by all areas and communities in the Republic to electronic communications services and electronic communications network services. The act further compels the agency to research into matters relating to its functioning. Currently, the agency is in the process of concluding a consultative process to define universal access and universal service as mandated by the Electronic Communications Act of 2005, other legislation is also supportive of achieving access.

2.3 SERVICE QUALITY

E-government in South Africa is the quest for higher quality public services, South Africa is a country spanning 1,219,090 square kilometres, with a population of approximately 48.7 million people, of whom 8.4% are internet users. Known as the gateway to Africa, South Africa is home to 6% of Africa's population and produces 25% of the continent's GDP (Department of Trade and Industry (DTI), 2009). Furthermore, while South Africa represents only 3% of the continent's surface area, it accounts for approximately 40% of the industrial output of Africa.

More than half of the electricity generated in the continent and 45% of mineral production occurs in South Africa (The International Development Research Centre, IDRC). According to Langa, Conradie and Roberts (2002), while South Africa is classified as a middle income country, the post-apartheid democratic government has inherited a society characterised by a huge range of developmental levels and as such it remains today as one of the world's most inequitable societies with extensive disparities between rich and poor people. Despite the government's well-intended policy reform and service delivery initiatives, economic and social disparities still perpetuate.

While there has been some success (eg South Africa ranked 44th out of 131 countries in the World Economic Forum's Global Competitiveness Report 2007/8), there are a number of areas in which inequalities prevail and the continued perpetuation of the digital divide is one such area.



In his 2010 budget vote speech, the Minister of Communications, Sipiwe Nyanda, stated that government can use ICT to improve its efficiency and streamline its operations it is urgent that government adopts and uses ICT in order to modernise services, improve administration and efficiency.

As stated by Farelo and Morris (2006), it is a formal government policy position that e-government services, as a component of the overall public service transformation, must subscribe to the tenets of Batho Pele. The South African e-government policy framework

explicitly refers to this policy and states that the starting point in the e-government drive should always be to identify what the customer wants and that the achievement of the delivery of measurable IT value is through, Improved Service Delivery through the achievement of the Batho Pele objectives.

The Batho Pele service delivery framework is underpinned by eight principles, consultation, conducting customer surveys, interviews with individual users and consultation with various representative groups are some of the ways the government intends to practice this principle. Consultation serves as a powerful tool that enriches and influences governance, setting service standards which means benchmarking against international standards, should be undertaken constantly to ensure the country remains competitive. Standards must be in place for citizens to evaluate how far service provision goes towards meeting their needs.

Increasing access, government intends to address the inequalities brought by apartheid by increasing access to public services. To achieve this objective, gateways, multi-purpose centres and call centres have been erected around the country. Ensuring courtesy, which emphasises treating citizens with consideration and respect. An open, honest and transparent community with citizens is desired to instil confidence in citizens on public services. Providing information, information must be readily available where it is needed and alternative plans made should this option fail. The information should be as comprehensive as possible. Openness and transparency, public office bearers should be accountable to the citizens on their resource utilisation and structures of governance. This principle is intended to also encourage citizen participation in governance. Redress, this principle promotes the quick identification of substandard performances and improving them to required standards.

Citizens are encouraged to air their grievances as this will be an opportune time for public servants to improve services. Value for money, the government note that some of the improvements that could be effected do not require any substantial investments on their part, they rather have a potential to reduce costs. Public servants could save costs and time by giving the correct information timely. According to the Department of Public Services

and Administration South Africa, e-government strategy is driven by the Centre for Public Service Innovation (CPSI), partnered by the DPSA. To extend its reach to the citizenry, the e-government services are delivered via a number of different public access sites such as kiosks in post offices and Multi-purpose Community Centres (known as Thusong Service Centres). Evans and Yen (2006) further states that although e-government in South Africa is advanced relative to other African countries, Farelo and Morris (2006) as well as Layne and Lee (2002) adds that it is considered to be at a rudimentary phase describe the four phases of e-government as, cataloging, government online presence that offers little more than information. Transaction, setting up ICT based two-way communication, with working databases that support transactions. Citizens could file tax returns and vehicle licensing requests. Vertical integration, the local systems are connected to national systems and citizens access all services at the local portal. Horizontal integration, integrating several services into entities based on needs and functions of citizens to provide a one stop shop. Various e-government websites are at different levels of maturity, these levels range from websites in a transaction phase, eg the South African Revenue Service (SARS) website, to websites in a cataloguing phase such as the main government portal named www.gov.za. Most e-government websites are still in the latter phase.

It is noted that most of the recent work on service quality in marketing can be credited to the pioneering and continuing work of Parasuraman, Berry, Zeithaml (1985) and Fisk, Brown and Jo (1993). Parasuraman, Zeithaml, and Berry (1985) identified ten dimensions of service quality based upon a series of focus group studies, which are tangible features, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding, and access. Parasuramn, Berry and Zeithaml (1988) noted that these dimensions capture facets of all ten originally conceptualized dimensions regardless of service industries these dimensions are defined as follows: Tangibles, the appearance of physical facilities, equipment, personnel, and communication materials; Reliability, that is the ability to perform the promised service dependably and accurately; Responsiveness, the willingness to help customers and provide prompt service, Assurance, the knowledge and courtesy of employees and their ability to inspire trust and confidence, and lastly Empathy, which is approachability, ease of access and effort taken to understand customers' needs.

2.3.1 Satisfaction

According to Ruyter, Bloemer and Pascal, Brady and Robertson (1997), Sureshchander, Rajendran and Kamalanabhan (2001), empirical studies regarding this issue support the assertion that service quality is the antecedent of satisfaction, in addition to that Anderson and Fornell (2000) also stated that within this causal ordering, satisfaction is described as a post-consumption evaluation of perceived quality.

According to Hair (1998) when measuring constructs with regard to service quality, the following items were highlighted inter internal customer satisfaction (ICS), management commitment (MGT), customer productivity (PRODTY), system, policy and procedure (SOP), human resource management (HRM), infrastructure and environmental factor (INFRA), overall service quality (SERQUA) and performance (PERFORM), were operationalised in order to attain substance into the study. That is the internal customer satisfaction (ICS), the instrument to measure internal customer satisfaction was adopted from the work of few researchers such as Parasuraman, Berry and Zeithaml (1994), Gilbert, Balestrini, and Littleboy (2004). According to Ho, Khairul Anuar, Curry and Kadasah (2004), Management commitment (MGT) is one of the most important elements in Total Quality Management (TQM). Customer productivity (PRODTY) is referring to the efficiency and effectiveness of employees. Bohorios and Tan (2004) mention that System, Policy and Procedure (SOP) has always been used as an instrument or criteria in the quality award winner assessment. It is believed that system, policy and procedures have direct impact on improving the internal factor rather than the external factor such as the employees and processes. Human resource management (HRM) is related with the training, recognition, promotion and carrier development. According to Lawler et al. (1995) employees must have power, information, knowledge and benefit to smoothen the business process. Infrastructure and Environment (INFRA) consist of technologies, equipments and facilities.

2.4 ACCOUNTABILITY

Romzek and Dubnick (1998) defines accountability as a relationship where an individual, agency or organisation is held to explain and answer for its acts and decisions. Moreover

Dwivedi (1989) noted this involves some forms of legitimisation and delegation of authority.

Accountability in these fields encompasses different ways to control political and administrative power. Schedler (1999) mention that monitoring (control acts), justification (give account for acts) and enforcement (give recognition or sanction for acts). In our work, we are particularly concerned with two dimensions: transparency and feedback.

African governments have understood and appreciated the contribution of e-government to the government agenda. At the moment, strategic plans have been initiated in Egypt, Senegal, Mozambique, South Africa and Kenya. Although, a claim cannot be made that all of African leaders have understood the importance of e-government, a handful of them have accepted the notion of e-government and recognise that this concept has come to stay if Africa were to compete favourably in global economic value chains.

The African continent as a whole cannot be excluded from this paradigm shift of e-government. This consensus statement further proves that policy makers in Africa do understand the need for massive engagement of ICT in their governance paradigms in order to be competitive enough in as far as national resource accountability is concerned. Thus, it is right to state that e-government has the potential to improve public service delivery by public institutions towards transparency, accountability and responsiveness, promote collaborative and joint-up administrations in which other stakeholders in the government business can access services through portals or one-stop-shops. Tassabehji and Elliman (2006) mentioned that E-government also has the potential to enhance the decentralisation reforms by bringing decision making closer to the doorsteps of ordinary citizens by collaborative reasoning made possible with the use of ICT.

2.5 COMMUNITY TRUST AND PARTICIPATION

According to Kumar et al (2007) an efficient public administration implies the existence of citizen trust. Citizens expect public servants to serve the public interest fairly and with decency and to manage public resources every day.

Actions that may lead to the proper application of the concepts of integrity, ethics, transparency and accountability are: Practices and measures to promote ethical conduct in public office; Methods of recovery of advisers and their business ethics; Measures to prevent and combat corruption; Positive and innovative solutions identified and investigated to prevent and combat corruption; Analysis and assessment of situations of risk and vulnerability to corruption and real achievements as a result of these actions; Instrumental integrity standards and indicators; Anti-corruption strategies or action plans implemented; Measures to avoid infringement regime of incompatibilities and conflicts of interest; Establish measures of motivation and retention of qualified personnel in the system; Identify the necessary skills and effective use of staff and lastly take steps necessary to achieve a more efficient management of career civil servants.



Citizens may perceive government as responsive, through improved communication and interactions with citizens. Both websites and e-mail systems create new opportunities for interaction with officials that are convenient and quick, potentially enhancing responsiveness and accessibility around the clock, seven days a week. Citizens may perceive government as transparent through the posting of information such as data, policies, laws, meeting schedules and minutes and contact information. Searchable databases on websites may also make information searches easier for citizens, responsible as demonstrated by privacy and security statements and policies for handling personal information submitted online and government data that are posted online.

According to Trusler South Africa has to deal with a number of challenges before they can begin with any initiatives for bridging the digital divide. The issues are as follow, a high level of inequality, a weak ICT infrastructure, particularly in rural areas, lack of ICT readiness in government. In addition to that more pressing demands in the public service that makes ICT development a lower priority in budget terms. ICT indicators are used to measure how widely diffused and accessible (real access, profiled by proximity, language and cost) are ICTs across all regions and sectors of society, see Table 1.

Indicators	Number
Population	47 390, 900
GDP	USD 200.5 billion
GDP per capita	USD 4,230
GINI co-efficient	57.8
Main (fixed) telephone lines	4,729,000
Teledensity or Telephone subscribers (fixed)	9.9%
No of fixed line operators	2
Mobile telephone subscribers	39,066,000
Teledensity (mobile)	68.2%
No of mobile operators	3
Internet subscribers (estimated)	5,100,000
Broadband internet subscribers	283,839
No of personal computers	5,300,000
No of internet service providers	355
No of television sets	10,000,000
No of television stations	6
No of radio stations	130

Table 2.5.1: South Africa-ICT Indicators. Sources: CIA (2007; ITU (2007); Lewis(2007); Telkom (2007); UNDP (2007); GCIS (2007); SADoc (2006); StatsSA (2007).

2.6 ADVANTAGES AND DISADVANTAGES OF E-GOVERNMENT

According to Chisenga (2004) there are many reasons and benefits of e-governance. The greatest advantage of e-governance and its benefits to the society lies in efficiency. Table 2 provides the advantages of e-governance.

Despite the huge determination of many governments the world over in implementing e-government and the acclaim that e-government has finally won, previous studies present mixed cases (failure or success) of implementing and adopting e-government into the socio-economic setup. Heeks (2003) partitions e-government success in three different categories: Total failure; Partial failure; and Success. The following table highlight the advantages of e-government.

Advantage	Brief explanation	Source (s)
Cost effectiveness	Reduce cost in rendering services	According to Chisenga 2004 and , Pardo 2000; Heeks 2001, Kumar and Best 2006, Kroukamp 2005, Norris 2001, Singh and Sahu 2008.
Time Saving	Reducing delays in delivery of services	According to Pardo 2000, Heeks 2001, Kumar and Best 2006, Norris 2001.
Improve communication	Communication between governments and citizens	According to Mokhele and De Beer.
Improve operations and services	Improve quality of service delivery	Noted by Kumar and Best 2006, Singh and Sahu 2008.
Expand access	Citizens access to Public Sector information	According to Chisenga 2004, Pardo 2000, Heeks 2001, Kumar and Best 2006, Kroukamp 2005,Norris 2001.
Reinforce innovation		
Increase transparency and Public accountability	Offers strong bonds between public and servants based on transparency and accountability	Noted by Pardo, Heeks, Kumar and Best. Kroukamp, Norris, Seifert and Bonham, Schwere, Singh and Sahu.
Increase efficiency	e-governance that produce	Noted by Kumar and Best

	more output at the same total cost in less time	2006, Kroukamp 2005, Talagadi 2007.
Increase effectiveness	Governance that works better, producing the same outputs at the same total cost in the same time but to a higher quality standard.	According to Kumar and Best 2006, Talagadi 2007.

Table 2.6.1: Advantages of e-governance. E-governance, if implemented properly it can bring all the benefits as indicated in Table 2.

According to Zhu and He (2002), nowadays there has been a paradigm shift because even governments are equally interested in using the internet in carrying out its day-to-day activities. Despite the huge determination of many governments the world over in implementing e-government and the acclaim that e-government has finally won, previous studies present mixed cases (failure or success) of implementing and adopting e-government into the socio-economic setup.

According to Barnes, Vidgen (2003) and Brunschwig (2006) e-government makes it easier for citizens to become involved in and make their contribution to government-related issues, it has a promise to improve the delivery of many public services, including on-line transactions and the dissemination of information about the operations carried out by the Administration.

According to Bitner (2001), Mick and Fournier (1998) the other dark side of information technology is, lest we come across as exceedingly positive on the role of technology and service, we should acknowledge some clear constraints, paradoxes and potential negative outcomes as well. Legitimate customer concerns over privacy and confidentiality raise issues for firms as they seek to learn about and interact with their customers online. Nor are all customers equally interested in using technology as a means of interacting with companies. These types of concerns are what have stymied and precluded many efforts to advance technology applications in the healthcare industry.

According to Parasuraman and Colby (2001), research on technology readiness suggests that some customers are simply not interested in or ready to use technology. Employees can also be reluctant to accept and integrate technology into their work lives for a variety of reasons, including job insecurity and reluctance to embrace change. With technology there is also less human contact which many believe is detrimental purely from a quality of life and human relationships perspective. Finally, from a company perspective, the payback in technology investments is often uncertain and the need to balance technology and human touch in developing relationships with customers can be challenging. Technology-delivered service is not always the best answer.

2.7 THE IMPORTANCE OF INFORMATION TECHNOLOGY

Technology, in particular information technology, has influenced the nature of services themselves, how they are delivered and the practice of service innovation and service management. Here we overview just a few of these basic changes and trends by identifying some key themes. Technology has been a basic force behind many service innovations now taken for granted, such as automated voice mail, interactive voice response systems, Internet-based services and various smart services for example the connected car, smart meters for monitoring energy consumption and remote health monitoring services. Internet-based companies like Amazon, e-Bay and Second Life have sprung up, offering radically new services for consumers. And, established companies have developed brand new services based on information technology.

For example, the Wall Street Journal offers an interactive edition that allows customers to organise the newspaper's content to suit their individual preferences and needs. Advances in information technology are also making it possible for entire suites of services including phone, Internet, video, photography and e-mail to be available through one device such as the iPhone and similar products.

It makes providence with new opportunities for delivering existing services in more accessible, convenient and productive ways. Technology facilitates basic customer service functions (bill paying, answering questions, checking account records, tracking orders),

purchase transactions (both retail and business-to-business) and learning or information seeking. Over the past few decades, companies have moved from face-to-face service to telephone-based service to widespread use of interactive voice response systems to Internet-based customer service and now to wireless service.

Technology also facilitates transactions by offering a direct vehicle for making purchases and conducting businesses. Finally, technology provides an easy way for customers to learn, do research and collaborate with each other. Access to information has never been easier. For example, more than 20,000 websites currently offer health-related information, resulting in consumers having increasing involvement in their health decisions and care.

Technology enables both customers and employees to be more effective and productive in receiving and providing service. Through self-service technologies, customers can now serve themselves more effectively, via online banking. Customers can access their accounts, check balances, apply for loans and take care of just about any banking need they might have—all without the assistance of the bank's employees. These online banking services are just one example of the types of self-service technologies that are proliferating across industries.

For employees, technology can provide tremendous support in making them more effective and efficient in delivering service. Customer relationship management, sales support and product information software are broad categories of technology-based information that can aid frontline employees in providing better service. These types of software also allow employees to customise and co-create services to fit customer needs.

As e-government services are mostly provided using ICT, it is imperative that the understanding of Information Technology (IT) adoption be done. This understanding can further be extended to help us understand the uptake and adoption of e-government systems.

According to case studies from different countries, there are many challenges and issues that need to be addressed for successful implementation of e-government. There are distinct factors that command the adoption of e-government and these factors depend on the local context of any country. E-government has shown a lot of maturity in Canada which currently is considered the most developed country in as far as implementing e-government is concerned. Kumar (2007) states it is so because the Canadian government has committed to shaping itself as the government mostly connected to its citizens. According to Kumar (2007) some of the commitments that the Canadian government has done is the allocation of a handsome CAD\$880 million to support the development of e-government initiatives in Canada, the only bigger challenge that Canada faces is citizen's usage of the available e-government resources (portals, websites etc).

Now the tools applied in realising the aforementioned results are inter alia: Intranet; Electronic case treatment or executive work; Electronic internal records; ICT-based professional support systems; Electronic application forms; Electronic subscriptions to information and news; ICT-based performance reporting systems; Digital payment services; Electronic hearings and Electronic discussion forum.

2.7.1 Service charters

The purpose of public quality management programmes is to achieve excellence in the provision of e-services which are usually based on the ISO 9000 standard, these charts will help rationalising the administrative processes.

2.7.2 Citizen's webpage

One of the most relevant facilitating factors is the design of a customer-oriented website, which will provide a number of organisational, strategic and operational benefits.

2.7.3 Employees' portal

Employees should be considered as internal users of the new system and their needs addressed as such. Therefore, as a technological support for B2E (business to employee)

policies, a single interface will provide the council's employees with access to all the applications needed for their daily work, including the e-service manager.

2.7.4 Redefinition of work positions

The council is seizing this chance to introduce changes in its organisational chart while adjusting people's competences and tasks towards a better performance of human resources.

2.8 THE FACTORS OF E-GOVERNMENT ON INFORMATION TECHNOLOGY

Overall, web management practices, general organisational factors and availability of resources for state agencies were factors that had a direct effect on the functionality of state websites. As presented early in this paper, some of the indicators for the first two constructs were size of the IT organisation, budget allocation, IT training, in-house development, outsourcing and marketing strategy. Brief discussions of each indicator and its importance are presented next.



Number of IT employees, the size of the IT organisation was considered important because some small agencies rely on the centralised IT organisation for applications development and website management. Budget allocation, the budget for website maintenance was identified as important. This budget is directly related to the ability to keep things up-to-date.

Specialised training, specialised training for state IT employees is closely related to website design and development, which require certain skills that are not always readily available in a state's IT workforce. In addition to supporting better design and programming, training can also help to communicate other organisational messages regarding standards, the business model in place and overall strategies, among others. Specialised training was recognised as an important factor in both cases. However, the specific skills deemed important varied in different contexts.

In-house development and outsourcing, in-house and outsourced responsibilities for the state website are also important. First, agencies are clearly able to shape the characteristics of their own websites. Their commitment to the website is reflected in the quality and currency of the information and services provided. Second, IT initiatives in general and website management in particular often involve outsourcing. In these situations the contractual requirements and the technical and organisational capabilities of vendors will have an impact on the quality of the state website.

Marketing strategy, the marketing of the website was one of the most frequently mentioned factors associated with website success and had a highly significant relationship in the PLS analysis. Marketing efforts can help to identify information and services that users really want as well as some of the characteristics that they would like the applications to have.

Availability of resources, the availability of resources for state agencies is represented by the overall size of the state economy and it seems to be another important success factor. One possible explanation for this situation is the fact that many large agencies develop their own websites from program budgets.

2.9 FUTURE CHALLENGES OF E-GOVERNMENT

Ebrahim and Irani (2006) cited a common problem associated with the public sector are the high turnover rates of government IT staff due to uncompetitive payment and employment conditions as compared to private sector organisations. Countries clash of culture and values, as well as large gaps between the design and reality. In the private sector, planning is usually carried out from the top down and implemented via a chain of command in collaboration with training and change management initiatives. This is not the case in the public sector and it is unwise to apply the private sector model to the creation of an information system that serves the government.

Ciborra (2004) further highlight the gap between the public and private sectors. Given the way that private sector systems are designed, governments would have to change their view of the recipients of these e-government projects from citizens to customers.

However, the former two issues have already been cited as contributors to the Hard-Soft gap and will not be discussed here. Tapscott (1997) further cite developing countries often have a poor IT infrastructure, which constitutes a further obstacle for the implementation of e-government. For e-government to succeed in a developing country, it is first required to put the necessary technological infrastructure in place, so that all citizens can have equal access. This lack of infrastructure can cause problems if an e-government model from a developed country is adopted in its entirety by a developing country. One of the benefits of e-government in developed countries is cost reduction in the transfer of information and online transactions.

Ensuring access to useful information and services, the initial informational presence of government on the web is helpful and will remain important, according to Kuk, Gupta and Jana (2003), the availability of meaningful content is an important concern. In order for e-government efforts to succeed, there must be both universal service, which indicates the necessary level of telecommunications infrastructure and universal access.

Co-ordinating local, regional and national e-government initiatives, as Kuk (2003) noted, the lack of co-ordination between different levels of government can have a significant impact on the success of e-government efforts.

Developing methods and performance indicators to assess the services and standards of e-government, so far, the limited amount of assessment of the demand, benefits and service quality of e-government initiatives remains a major weakness, in order to create e-government services that account for the needs of citizens, assessments should examine citizens needs, capacity to find, digest and use relevant information further important information policy issues that are likely to influence the development of e-government include:

Providing consistent and reliable electricity; telecommunications and Internet access; in most cases the problems of Internet access are common to the problems of access to other communication and information technologies; the danger exists that the digital divide will

deepen because efforts are too one-sidedly directed at the realisation of e-government; therefore e-government to be effective within a nation; the necessary technological infrastructure must be present and provide service to all citizens.

Addressing issues of language and communication, many nations have more than one language spoken by the populace, therefore effective e-government requires standardisation of spellings, word use and a common language or languages in which citizens are comfortable communicating.

Preventing e-government from lessening responsiveness of government officials, in many ways, it is easier to ignore a piece of e-mail than it is a human being, electronic interaction with a government cannot be allowed to become a way for government employees to be less responsive to citizens. Preventing e-government from lessening responsibility of government officials, e-government creates ways in which government officials could use technology to avoid taking responsibility for their duties. Including individuals with disabilities in e-government. The Internet is an environment that is, for the most part, not designed to consider the needs of individuals with disabilities, both e-commerce and e-government generally have very low levels of accessibility for individuals with disabilities.

The ongoing exclusion of individuals with disabilities from most e-government information and services has the potential to leave a large portion of the world's population unable to access e-government.

Curtin, Sommer and Vis-Sommer (2003) states that the full potential and powerful use of the Internet for local governments lay in building strong stakeholder relationships, ie for citizens, businesses and governments, the management of relationships, ie, new means of communications, civic engagement and creative ways of doing civic business and transforming the processes and essentially being a new art of government, was seen to be the hard part of this essential task in a time of an increasingly electronic future.

2.10 FUTURE DIRECTIONS

The planning and implementation of e-government, as it continues to develop and grow around the world, will have to focus on finding methods to address varied issues. Some of the most important sources of information about meeting challenges to effective e-government are actual e-government initiatives that are currently operational.

Furthermore, the examination of e-government projects from different levels of government and different parts of the world offers a method to share knowledge about e-government. In many ways, the future directions of e-government will be confronting the important policy issues that remain unaddressed. Studies such as those in this symposium issue are valuable to the conceptualisation and application of current and future e-government projects, regardless of where the projects occur.

2.11 RESEARCH QUESTIONS

The main area of concern underlying the study is the state of information technology and its management at Naledi Local Municipality which thus far is not satisfactory and dysfunctional.

The research questions comprise the concepts, procedures and categories relating to (perceptions, customer satisfaction and their behaviours, municipal responses, experiences and attitude etc) assessments of service quality in order to identify gaps between citizens' perceptions of municipal services and that of councillors. Finally, service quality assessments will be used as a strategic tool for marketing municipal services as highlighted by Parasuraman et al.

Following from the above key problem are the following research questions:

- 1) Does the Naledi Local Municipality have the customer satisfaction evaluation strategy?
- 2) Does the Naledi Local Municipality have management commitment and effective leadership?

- 3) Does the Naledi Local Municipality comply with the provisions of the Promotion of Public Access, the Batho Pele principles and other relevant legislative policies and directives? and
- 4) Does the Naledi Local Municipality have adequate information technology infrastructure and human resources to be fully compatible in moving forward with e-government implementation?

2.12 CONCLUSION

An ongoing task for democratic governments has been to find ways to effectively promote change at the local level. There are no recipes for success. Each country has to consider what is best for its citizenry. The evidence discussed in this paper suggests that despite technical challenges, institutional hurdles and economic uncertainties, e-government has great potential to transform the government and public service.

In the long term, it is likely to enable government to operate more efficiently, to respond to citizens more quickly and to behave more democratically. Many e-government programs have achieved benefits in efficiency, economy, effectiveness and citizen satisfaction. Compared to ten years ago or five years ago, significant progress has been made and tremendous experiences have been accumulated. Retrospectively, the optimistic progressive view does have its merit. E-government is an opportunity that no government should ignore.

In the mean time, however, e-government cannot deliver all the promises by itself, only people can. According to a review it was found that although efficiency gains have been reported by a large number of programs, it is more difficult to achieve economic gains and it is much more difficult to achieve other end results such as effectiveness, citizen satisfaction, government transparency and citizen participation.

It was also noticed that countries with more political rights and economic resources are more likely to lead in e-government; that federal and state governments are more likely to achieve better e-performance earlier.

Political, social, economic and institutional factors affect the performance of e-government, which actually creates a systematic societal transformation, not simply technology application. There are many technical and management challenges lying ahead. Elected officials and career public administrators as well as e-government experts have a shared responsibility to solve the problems such as the digital divide, information security, privacy, new technology, interoperability and inter-agency co-operation.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

It is very important for the researcher to ascertain this through converging essential information from the designated populace yet embarking on the required methodology and thus examining the responses. The chapter will be outlining the research design, approach and methods to be used in the said study.

Following from the above key problem are the following research questions for the study:

- (1) Does Naledi Local Municipality have the customer satisfaction evaluation strategy?
- (2) Does Naledi Local Municipality have management commitment and effective leadership?
- (3) Does Naledi Local Municipality comply with the provisions of the Promotion of Public Access, the Batho Pele principles and other relevant legislative policies and directives?
- (4) Does Naledi Local Municipality have adequate information technology infrastructure and human resources to be fully compatible in moving forward with e-government implementation?

This chapter will discuss the research design, sampling method and data collection methods established by the researcher, the strategy to be used. The study also makes credible strides to justify the procedures used in the research.

The main area of concern underlying the study is the state of information technology and its management at Naledi Local Municipality, falling under the sister Municipality named Dr Ruth Segomotsi Mompati District Municipality, which thus far is unsatisfactory and dysfunctional.

The research questions comprise the concepts, procedures and categories relating to (perceptions, customer satisfaction and their behaviours, municipal responses, experiences and attitude etc) assessments of service quality in order to identify gaps between citizens' perceptions of municipal services and that of councillors. Finally, service quality

assessments will be used as a strategic tool for marketing municipal services as highlighted by Parasuraman et al.

3.2 RESEARCH TYPES

3.2.1 Qualitative and Quantitative Research

In quantitative research your aim is to determine the relationship between one thing (an independent variable) and another (a dependent or outcome variable) in a population. According to De Vaus (2002) and Sarantakos (2000) quantitative research designs are either descriptive (subjects usually measured once) or experimental (subjects measured before and after a treatment). A descriptive study establishes only associations between variables. An experiment establishes causality. For an accurate estimate of the relationship between variables, a descriptive study usually needs a sample of hundreds or even thousands of subjects; an experiment, especially a crossover, may need only tens of subjects. The estimate of the relationship is less likely to be biased if you have a high participation rate in a sample selected randomly from a population. In experiments, bias is also less likely if subjects are randomly assigned to treatments and if subjects and researchers are blind to the identity of the treatments.

In all studies, subject characteristics can affect the relationship you are investigating. Limit their effect either by using a less heterogeneous sample of subjects or preferably by measuring the characteristics and including them in the analysis. In an experiment, try to measure variables that might explain the mechanism of the treatment. In an unblinded experiment, such variables can help define the magnitude of any placebo effect. Qualitative researchers are interested in answering questions such as why's and are not prepared to simply accept the quantitative answers.

That is not to suggest that the quantitative data is not important for to know that fifteen out of twenty have one view rather than another is useful. It is just not enough on its own. Going further we say that when placed alongside qualitative evidence, quantitative evidence is both clear and powerful. Unfortunately it sometimes appears powerful in such

a way that it overpowers the opinions of the people involved and this is a danger we have to guard against.

Hammersley accepts that qualitative researchers seek to articulate the views of people studied but adds that qualitative researchers often analyse the data in ways that are likely to be alien to those studied. He also asserts that much quantitative research concerns itself with the attitudes of those studied and is therefore grounded in the realities of people.

Quantitative approach	Qualitative approach
Epistemological roots in positivism	Epistemology roots in phenomenology
Purpose of testing predictive and cause-effect hypothesis about social reality	Purpose in constructing detailed descriptions of social reality
Methods utilise deductive logic	Methods utilise inductive logic
Suitable for a study of phenomena which are conceptually and theoretically well developed, seeks to control phenomena	Suitable for a study of a relatively unknown terrain, seeks to understand phenomena.
Concepts are converted into operational definitions, results appear in numeric form and are eventually reported in statistical language.	Participants' natural language is used in order to come to a genuine understanding of their world.
The research design is standardised according to a fixed procedure and can be replicated	The research design is flexible and unique and evolves throughout the research process. There are no fixed steps that should be followed and design cannot be exactly replicated.
Data are obtained systematically and in a standardised manner	Data sources are determined by information richness of settings, types of observation are modified to enrich understanding
The unit of analysis is variables which are	The unit analysis is holistic, concentrating

atomistic (elements that form part of the whole)	on the relationships between elements, contexts, etc. The whole is always more than the sum
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TABLE 3.2.1.1: A comparison of the Quantitative and Qualitative approaches in Social Research

3.2.2 Research Methods To be Used

Due to the nature of this study the researcher is going to approach the research in a Quantitative method, taking into consideration the research objectives and questions.

3.2.3 Data Required

According to Forshow (2000) the primary data are those that you have collected yourself, whereas secondary data originate elsewhere. Generally, you will find that you are expected to collect primary data when using quantitative methods but that secondary data are more acceptable when you are using a qualitative method. This is because there are certain common aspects of qualitative research which involve only secondary data, such as the study of television or newspaper discourses. If you wanted to understand the nature of the representation of Romany people on television, you wouldn't make your own television programmes. You would use those which exist and they would form secondary data.

A secondary data research project involves the gathering and or use of existing data for purposes other than those for which they were originally collected. These secondary data may be obtained from many sources, including literature, industry surveys, compilations from computerised databases and information systems and computerised or mathematical models of environmental processes.

Qualitative researchers may use different approaches in collecting data, such as the grounded_theory practice etc. Qualitative methods are also loosely present in other methodological approaches, such as action research or actor-network theory. Forms of the

data collected can include interviews and group discussions, observation and other materials.

The ways of participating and observing can vary widely from setting to setting. Participant observation is a strategy of reflexive learning, not a single method of observing http://en.wikipedia.org/wiki/Qualitative_research cite note 3. In participant observation researchers typically become members of a culture, group or setting and adopt roles to conform to that setting. In doing so, the aim is for the researcher to gain a closer insight into the culture's practices, motivations and emotions. It is argued that the researcher's ability to understand the experiences of the culture may be inhibited if they observe without participating

Some distinctive qualitative methods are the use of focus groups and key informant interviews. The focus group technique involves a moderator facilitating a small group discussion between selected individuals on a particular topic. This is a particularly popular method in market research and testing new initiatives with users/workers.

One traditional and specialised form of qualitative research is called cognitive testing or pilot testing which is used in the development of quantitative survey items. Survey items are piloted on study participants to test the reliability and validity of the items.

3.3 DATA COLLECTION METHOD



3.3.1 Survey

Survey research is one of the most important areas of measurement in applied social research. The broad area of survey research encompasses any measurement procedures that involve asking questions of respondents. A survey can be anything in a form of a short paper-and-pencil feedback form to an intensive one-on-one in-depth interview.

According to Trochim (2006) surveys can be divided into two broad categories: the questionnaire and the interview. Questionnaires are usually paper-and-pencil instruments that the respondent completes. Interviews are completed by the interviewer based on the respondent says. Sometimes, it's hard to tell the difference between a questionnaire and an interview. For instance, some people think that questionnaires always ask short closed-ended questions while interviews always ask broad open-ended ones. But you will see

questionnaires with open-ended questions (although they do tend to be shorter than in interviews) and there will often be a series of closed-ended questions asked in an interview.

Advantages of a Survey

Surveys are relatively inexpensive (especially self-administered surveys).

- Surveys are useful in describing the characteristics of a large population. No other method of observation can provide this general capability.
- They can be administered from remote locations using mail, e-mail or telephone.
- Consequently, very large samples are feasible, making the results statistically significant even when analysing multiple variables.
- Many questions can be asked about a given topic giving considerable flexibility to the analysis.

Disadvantages of Survey

A methodology relying on standardisation forces the researcher to develop questions general enough to be minimally appropriate for all respondents, possibly missing what is most appropriate to many respondents.

Surveys are inflexible in that they require the initial study design (the tool and administration of the tool) to remain unchanged throughout the data collection.

The researcher must ensure that a large number of the selected sample will reply.

3.3.2 Questionnaires

In general, questionnaires are effective mechanisms for efficient collection of certain kinds of information. They are not, however, a comprehensive means of evaluation and should be used to support and supplement other procedures for evaluating and improving teaching.

The advantages and disadvantages of questionnaires

The advantages of questionnaires

- They are practical.

- Large amounts of information can be collected from a large number of people in a short period of time and in a relatively cost effective way.
- Can be carried out by the researcher or by any number of people with limited affect to its validity and reliability.
- The results of the questionnaires can usually be quickly and easily quantified by either a researcher or through the use of a software package. Positivists believe that quantitative data can be used to create new theories and / or test existing hypotheses

The disadvantages of questionnaires

- Is argued to be inadequate to understand some forms of information - ie changes of emotions, behaviour, feelings etc.
- Phenomenologist state that quantitative research is simply an artificial creation by the researcher, as it is asking only a limited amount of information without explanation.
- Lacks validity.
- There is no way to tell how truthful a respondent is being.
- There is no way of telling how much thought a respondent has put in.
- The respondent may be forgetful or not thinking within the full context of the situation.
- There is a level of researcher imposition, meaning that when developing the questionnaire, the researcher is making their own decisions and assumptions as to what is and is not important therefore they may be missing something that is of importance. The process of coding in the case of open ended questions opens a great possibility of subjectivity by the researcher.

According to Chadwick *et al* (1984) in questionnaire surveys, a respondent fills out and returns to the researcher a self-administered 'interview', in which the questions and instructions are complete and understandable enough that the respondent can act as his or her own 'interviewer'.

A questionnaire was distributed to the employees of Naledi Local Municipality for completion, refer to attachment in annexure 1 together with the covering letter. Its measurement covered 21 questions. In order to ensure that respondents shared a common theme of information quality, a definition will be given in the questionnaire.

As objectives were set and had to be achieved at the stipulated time as set out in this dissertation, a planned questionnaire was designed and distributed for completion by members of the identified sample group. The sampling was therefore carried out through the collation of data as contained in the questionnaire that were completed by officials of Naledi Local Municipality.

A questionnaire comprising a choice of seven indicators, being: “Yes; No; Strongly Agree; Agree; Disagree and Strongly Disagree”. The respondents had to choose one answer per question. The questionnaire distributed was only meant for research purposes and the responses were not to be distributed to anyone else.

3.3.3 Sampling Design

It would normally be impractical to study a whole population, for example when doing a questionnaire survey. Sampling is a method that allows researchers to infer information about a population, without having to investigate every individual. Reducing the number of individuals in a study reduces the cost and workload and may make it easier to obtain high quality information but this has to be balanced against having a large enough sample size with enough power to detect a true association.

If a sample is to be used, by whatever method it is chosen, it is important that the individuals chosen are representative of the whole population. This may involve specifically targeting hard to reach groups. For example, if the electoral roll for a town was used to identify participants, some people such as the homeless would not be registered and therefore excluded from the study by default.

Table below illustrates a comparison of probability sampling designs, the type of designs includes a simple random, systematic, stratified, cluster and convenience sampling (Cooper and Schindler, 2003).

Simple random sampling	Each individual is chosen entirely by chance and each member of the population has an equal chance or probability of being selected.	One way of obtaining a random sample is to give each individual in a population a number and then use a table of random numbers to decide which individuals to include.
Systematic sampling	Individuals are selected at regular intervals from a list of the whole population.	The intervals are chosen to ensure an adequate sample size. For example, every 10th member of the population is included. This is often convenient and easy to use.
Stratified sampling	In this method, the population is first divided into sub-groups (or strata) who all share a similar characteristic.	It is used when we might reasonably expect the measurement of interest to vary between the different sub-groups.
Clustered sampling	In a clustered sample, sub-groups of the population are used as the sampling unit, rather than individuals.	The population is divided into sub-groups, known as clusters, and a selection of these are randomly selected to be included in the study. Clustering should be taken into account in the analysis.
Convenience sampling	Convenience sampling is perhaps the easiest method of sampling, because participants are selected in the most convenient way, and are often allowed to choose or volunteer to take part.	Good results can be obtained but the data set may be seriously biased, because those who volunteer to take part may be different from those who choose not to.

Table 3.3.3.1: COMPARISON OF PROBABILITY SAMPLING DESIGNS. Cooper and Schindler (2003).

3.3.4 Types of variables/measurements

The collection of observations constitutes our data and data come in the form of measurements. There are four basic kinds of measurements, which can be thought of a hierarchy of data. It is important to keep the types of data in mind, as certain types of analyses are appropriate for one level but not for another.

- a) Nominal data:** This means simply to name an object and thus to assign it to a class. For example, by classifying individuals as male or female we assign each individual to a class and thus have nominal data. Creating lists of species and numbers of individuals is another type of nominal data that ecologists often collect. Statistics can be applied to these data after they have been converted to percentages or proportions, for example 35 female and 65% male.

- b) Ordinal data:** Objects are measures as being either greater than or less than, higher or lower than a comparative object. For example, if we were at the store and a head of lettuce and the price was R1.50 per head. We might pick up several heads, hold them in our hands in an attempt to determine which head was largest. We would be collecting ordinal data in that we are simply determining their relative weights. Another example would be finishing positions in a race (first, second, third, etc).
- c) Interval level of measurement:** This is the point where we introduce a basic standard interval but not necessarily a true zero (that is the zero does not have a true meaning indicating the complete absence of whatever we are measuring). An example is temperature on the Celsius or Fahrenheit scales. Temperature is a measure of the energy in the molecules of a substance, the higher the temperature, the higher the kinetic energy. On either scale, zero does not indicate a complete absence of kinetic energy and sixty degrees is not twice as much energy as thirty degrees.
- d) zero value.** For example, in weight the basic standard interval could be defined as a gram and zero grams would indicate no weight, also sixty grams is twice as heavy as thirty grams. If you want to measure temperature using a ratio scale, then you would have to use the Kelvin scale, where zero degrees means the complete absence of kinetic energy in a substance and sixty degrees Kelvin is twice as hot as thirty degrees Kelvin.

3.4 DATA HANDLING

In interpreting the results, the researcher solicited support from The University of North-West Graduate School of Business and Government Leadership, which has experts in the field of research. They have softwares among others which calculate mean scores according to each of the 21 statements in the questionnaires. The same information was then used for doing the frequency distribution tables, bar charts, table and bar graphs, in addition to that the descriptive statistics will be used to analyse data from the survey. Equal to that this form of data analysis is normally used to describe, make clear and investigate the relationship among the variables. However the research results conclude in terms of giving out a direct and relevant discussion on the outcome of the study complemented by suggestions and recommendations for the future studies.

3.5 ETHICAL CONSIDERATIONS PERTAINING TO THE STUDY

According to Oliver and Gregory (2003) confidentiality and anonymity are related but distinct concepts in the ethics literature, confidentiality is commonly viewed as akin to the principle of privacy (Oliver, 2003; Gregory, 2003). This principle is integral to our societal

beliefs that individuals matter and that individuals have the right for their affairs to be private, although as Bulmer (2001) notes, in our information-led society upholding this right is far from straightforward. To assure someone of confidentiality means that what has been discussed will not be repeated or at least, not without permission. The notion of confidentiality (and anonymity) is invariably raised and discussed with research participants prior to their participation in research. However, in the research context, confidentiality (as it is commonly understood) makes little sense.

Confidential research cannot be conducted; researchers have a duty to report on the findings of their research and they cannot do so if the data they collect is confidential (ie cannot be revealed). What researchers can do is to ensure they do not disclose identifiable information about participants and to try to protect the identity of research participants through various processes designed to anonymise them. The extent to which anonymisation is successful varies according to the research context. In this respect confidentiality cannot be assured; researchers can claim that they will endeavor to ensure to the best of their ability that participants are not able to be identified but they cannot promise that this will be the case. As, van den Hoonaard notes (2002: 8), promises of confidentiality are easier to make than to keep. We do not know as much as we might about what sense research participants make of

the notions of confidentiality and anonymity in relation to research. Promises of confidentiality are made in relation to other areas of life, such as in interaction with financial institutions and health organisations but in these contexts meanings differ.

3.5.1 OBJECTIVITY VS SUBJECTIVITY

A key issue that arises with the recognition of subjectivity is how it affects objectivity. Two positions have been articulated. Many qualitative researchers counterpoise

subjectivity and objectivity. Objectivity is said to negate subjectivity since it renders the observer a passive recipient of external information, devoid of agency. And the researcher's subjectivity is said to negate the possibility of objectively knowing a social psychological world. The investigator's values are said to define the world that is studied. One never really sees or talks about the world, per se. One only sees and talks about what one's values dictate. A world may exist beyond values but it can never be known as it is, only as values shape our knowledge of it.

3.6 LIMITATIONS

This study will be limited to Naledi Local Municipality which serves under the sister municipality Dr Ruth S Mompati District Municipality. Due to time constraints work commitments could clash with the study schedule.

The integrity and objectivity of data could have a limitation from being disseminated for public consumption. A challenge could as well emerge as some staff within Management might not want the Municipal IT failures to be known hence enough funding have been provided to address that.

3.7 DATA ANALYSIS METHOD

In this regard, analysis of the results was solicited from The University of North-West's Graduate School of Business and Government Leadership who are well resourced in handling the kind of data collected. They have software's which calculates the mean scores in accord to each of the 23 statements in the questionnaire. This information was used for performing frequencies, graphs, bar charts, tables and the distribution table, the descriptive statistics will be used to analyse data coming from the survey. The research outcome finalises in bringing forth a suitable discussion on the results of the study, complemented by the suggestions and recommendations.

3.8 CONCLUSION

The chapter dealt with the research design that included sampling technique, measuring instrument, questionnaire, survey methods, data collection method and statistical methods

to be used. The next chapter, which is chapter four (4), will present the research findings and the results of the study.

CHAPTER FOUR

DATA DISCUSSION

4.1 INTRODUCTION

In this chapter the results of the observed analysis collected through the questionnaire, completed by numerous Naledi Local Municipal employees are analysed and interpreted. Now, the research findings, data analysis and interpretation of data are discussed in this chapter. The questionnaires were intended to make an assessment on factors affecting Service

Quality of Information Technology on Service Delivery at Naledi Local Municipality. According to the Minister of Communications Siphwe Nyanda in his 2010 budget vote speech, he stated that government can use ICT to improve its efficiency and streamline its operations; he further said it is urgent that government adopts and uses ICT in order to modernise services, improve administration and efficiency. Now, in South Africa, all three tiers of government have embarked on various web-enabled offerings. As stated by Kaisara and Pather, there are a number of specialised web projects such as the South African Revenue Services e-filing and the Department of Transport's e-Natis, which are aimed at extending the service delivery channel via the internet to both citizens and civil servants. In addition all South African e-government systems as well as traditional, brick-and-mortar-based service delivery mechanisms, are guided by the principles of Batho Pele.

The first section examines the biographical data that deals with influence of the age, gender and time worked at the institution, the position of the respondents and the questionnaire were answered in a tabular manner. The participants were anonymous but details like sex and gender were supplied in order to draw attention to their unique group diversities and needs, further to that the second section of the investigation observes the statistical setting of the data.

4.2 RESPONSE RATE

There were a number of twenty one (21) people in the population and all the twenty-one (21) of these people managed to complete the questionnaires. The data was summarised on a spreadsheet and the stats were calculated using SPSS.

The student has tried many times to show that she had met the requirements for the sample. The following statistical sample will show that the sample met the strict rules and that it was randomly selected. All names were allocated a number and numbers were drawn. If somebody did not complete a questionnaire, the next number was drawn and the person used. In this way the sample could be regarded as being representative. It is also acknowledged that, should somebody else want to use the results, they first test the results before it is used to confirm the results.

4.3 DEMOGRAPHICS

Naledi Local Municipality is one of the six local municipalities that fall under the jurisdiction of Bophirima District Municipality. It consists of Vryburg, Colridge, Huhudi, Kismet Park, Stella, Dithakwaneng, Devondale and surrounding farms. It is approximately 7264 square kilometres in extent with an estimated population of about 58 104. The larger portion (50.36%) of the population is in the economically active age (20 – 64 years), a large portion (44.83%) of the population is in the school going age (0 -19 years) and a small portion (4.53%) of the population is in retired age group (65 and older). About 58.30% of the total population of Naledi are staying in urbanised area (Naledi Local Municipality SDBIP, 2009).

The Naledi Local Municipality SDBIP 2009-2010 further states that the town of Vryburg/Huhudi represents a regional node with the town of Stella representing the local node. These towns are surrounded by vast rural areas like Dithakwaneng and Devondale. Vryburg and Stella comprise of higher density settlements with mainly a residential character except for the regional urban centre or node. These towns are surrounded by very low density scattered rural settlements and villages. Naledi may be described as the economic hub of Dr R S Mompoti District Municipality. About 73.55% of total population of Naledi is economically active and 62.84% of these people are not employed in the

formal economy, 37.16% are employed. The dominant employment sector is farming while other sectors such as private households, social services, trade and institutional are weak. Most of the respondents were black. This means that there is a need for more people of other races to be employed to ensure that all people can participate in the financial management and administration.

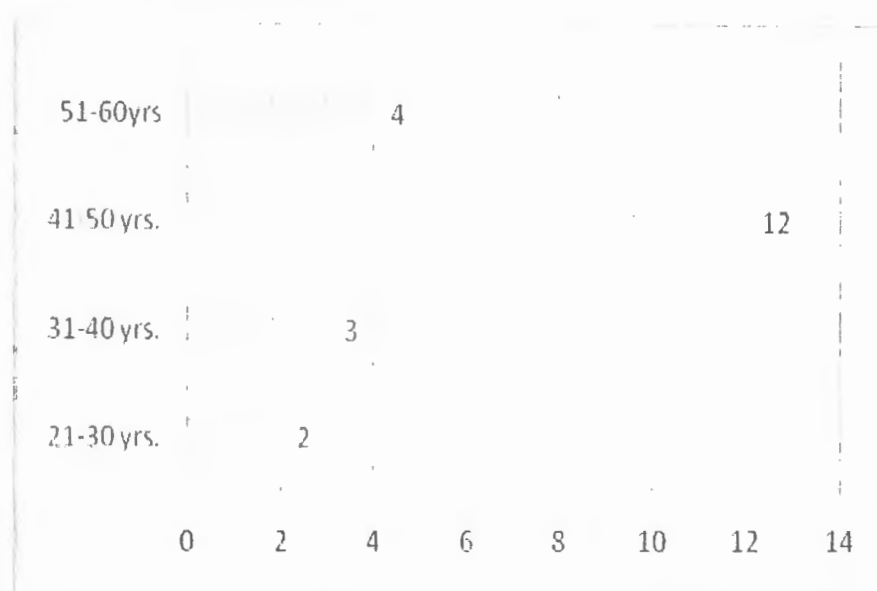


Figure 4.1 Age Distribution of Respondent

From the 21 respondents, 12 (57%) were aged between 41-50 years; 4 (19%) were aged between 51-60 years; 3 (14%) were aged between 31-40 years; 2 (9%) were aged between 21-30 years. The majority of respondents were aged between 41 and 50 years, this simply implies that the majority of those who took part in the Information Technology Project at the Municipality were aged between 41 and 50 years, which indicates that the majority of those in management understands the importance of Information Technology at their workplace and its contribution towards enhancing efficiency of Service Delivery in Local Government, this is in line with the findings that commitment and performance need to be integrated during performing the main activities in the organisation. Figure 4.2 shows the 76% were male dominates the management positions in the public sector which is strong (Hadesky,).

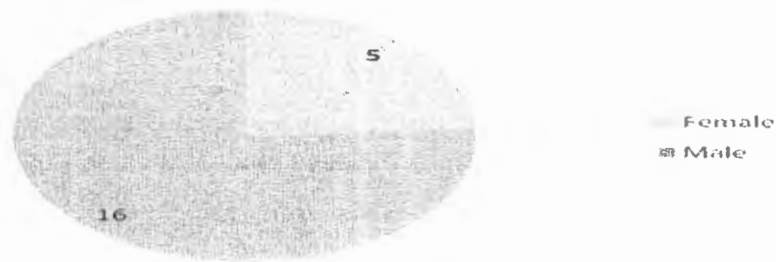


Figure 4.2 Gender Distribution of Respondents

Out of total sample of 21 respondents, 5 (24%) were female and the remaining 16 (76%) were male. Preference is mostly given to sex when it comes to Managerial positions in the public sector. This figure reflects that employees that participated in the Information Technology Project were dominantly male employees. Generally it is believed that female employees are mostly required as not capable of managing the institution's functions properly, contrary to that male employees understand the roles.



Figure 4.3 Position Distribution by Respondents

From the 21 respondents, 9 (43%) are occupying administrative roles, 12 (57%) are occupying managerial level. The majority 57 % are occupying managerial which indicates that this could be due to maturity level of management positions within the organisation in terms of commitment and performance of employees in achieving the organisation's key objectives.

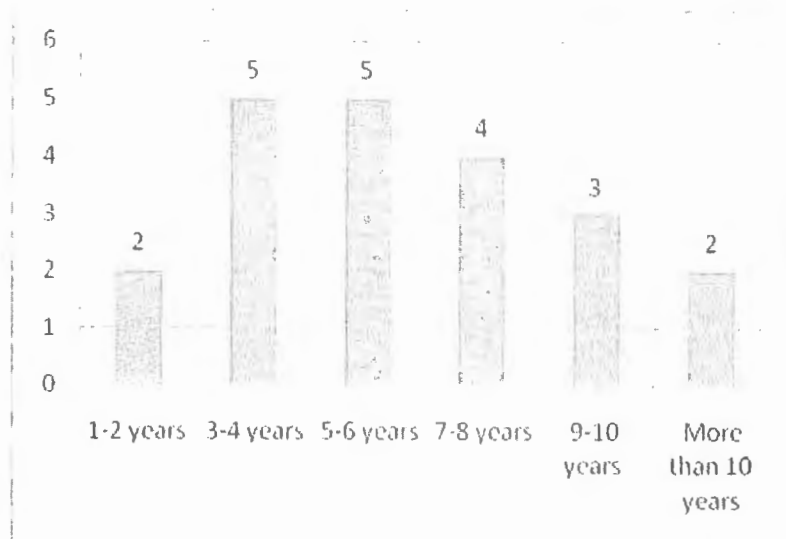


Figure 4.4 Years of Experience in the Organisation

From 21 respondents; 2 (10%) have experience that is less than 2 years within the organisation, 2 (10%) have experience that is more than 10 years in the organisation, 3 (14%) have experience that is between 9 and 10 years in the organisation, 4 (19%) have experience that is between 7 and 8 years in the organisation, 5 (24%) have experience that is between 5 and 6 years in the organisation and lastly 5 (24%) have experience that is between 3 and 4 years in the organisation. These figures indicate that the majority of respondents fell into category of more than three to six years of experience.

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Factors which influence the adoption of e-government websites and brings comfort to the users with regard to service and information quality are inter alia accuracy, relevancy and completeness were more significant than timeliness and precision with efficiency being the most significant factor, over and above the more experience you have the better the service quality with regard to the aforementioned. Many e-government programs have achieved benefits in efficiency, economy, effectiveness and citizen satisfaction. Compared to ten years ago or five years ago, significant progress has been made and tremendous experiences have been accumulated. Retrospectively, the optimistic progressive view does have its merit. E-government is an opportunity that no government should ignore. This is in agreement with Kuk, Gupta and Jana, 2003.

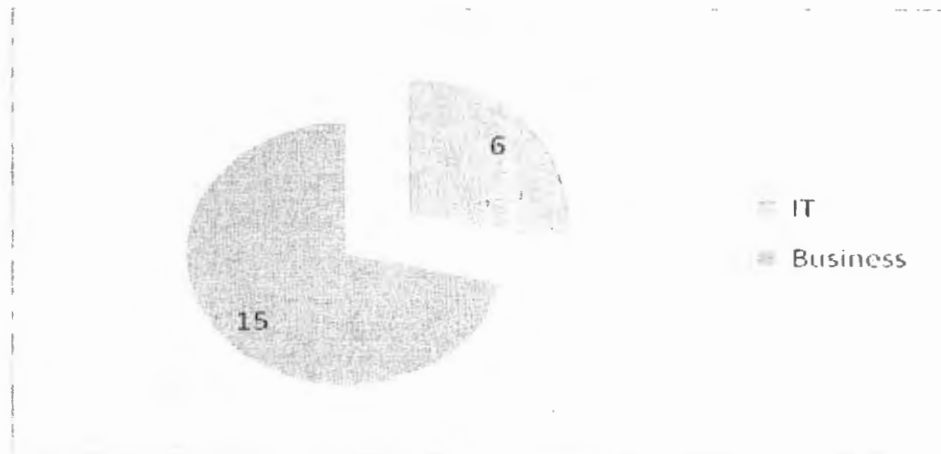


Figure 4.5 Distribution by Department

From 21 respondents, 6 (29%) are occupying positions within the Information Technology Unit whereas 15 (71%) are occupying positions in the business department. These figures reflect that most respondents were those occupying positions in the business department than in information technology department, which shows more people are becoming conversant with the information technology trends with the enthusiasm to learn and they are making efforts to learn more nonetheless their age. This is in agreement with Lawler et al.

According to Lawler et al (1995) employees must have power, information, knowledge and benefit to smoothen the business process. Infrastructure and Environment (INFRA) consist of technologies, equipment's and facilities. For employees, technology can provide tremendous support in making them more effective and efficient in delivering service. Customer relationship management, sales support and product information software are broad categories of technology-based information that can aid frontline employees in providing better service. These types of software also allow employees to customise and co-create services to fit customer needs (Kumar (2007).

Nowadays there has been a pattern shift because even governments are equally interested in using the internet in carrying out its day-to-day activities. Despite the determination of many governments the world done in implementing e-government and the acclaim that e-government has finally won, previous studies present mixed cases (failure or success) of implementing and adopting e-government into the socio-economic setup (Zhu and He, 2002).

Research on technology readiness suggests that certain customers are simply not interested in or ready to use technology. Employees can also be reluctant to accept and integrate technology into their work lives for a variety of reasons, including job insecurity and reluctance to embrace change. With technology there is also less human contact which many believe is detrimental purely from a quality of life and human relationships perspective. Parasuraman and Colby (2001) agree.

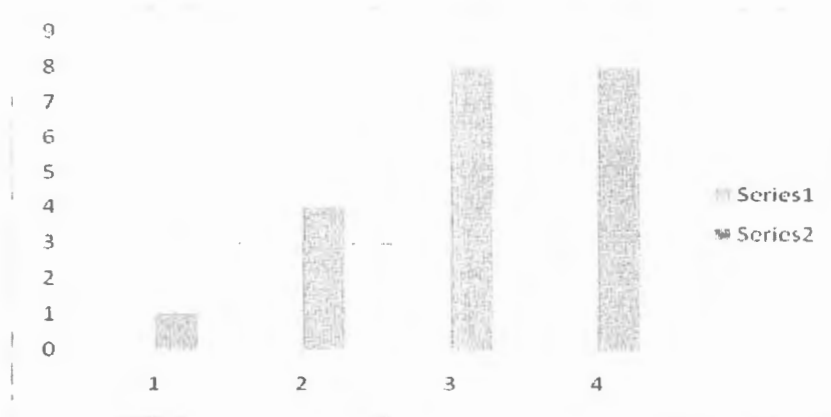


Figure 4.6 How many Service Implementation Plans have you been involved in including the current one?

Out of the 21 respondents, 1 (5%) person was his/her first IT projects was involved in, 4 (19%) of the respondents were involved in at least two IT projects including this one, 8 (38%) were involved in at least 3 IT projects inclusive of this one, lastly 8 (38%) were at least involved in 4 IT projects including the current one. This is in line with Evans and Yen that the implementation of e-government has been widely acclaimed in and it provides new impetus to deliver services quickly and efficiently. The purpose of public quality management programmes is to achieve excellence in the provision of e-services which are usually based on the ISO 9000 standard; these charts will help rationalising the administrative processes.

The planning and implementation of e-government continues to develop and develop around the world and will have to focus on finding methods to address varied issues. Some of the most important sources of information about meeting challenges to effective e-government are actual e-government initiatives that are currently operational. The implementation of e-government has been widely acclaimed in that and it provides new motivation to deliver services quickly and efficiently. In recognition of these benefits, various arms of the South African government have embarked on a number of e-government programmes. Examples of these include inter-alia, the Batho Pele portal,

SARS e-filing, the e-natis system, electronic processing of grant applications from remote sites and a large number of departmental information websites in agreement with Evans and Yen, 2006.

Employees should be considered as internal users of the new system and their needs addressed as such. Therefore, as a technological support for B2E (business to employee) policies, a single interface will provide the council's employees with access to all the applications needed for their daily work, including the e-service manager. This is in agreement with Evans and Yen (2006).

4.6.1 Did the functional area for service delivery receive sufficient and timeous training?

From the respondents of 21, 8 (38%) of the employees agrees that they did receive adequate training before the project could commence and 13 (62%) of the employees strongly agrees that training was adequate and given in time. These figures imply that the functional area where the e-government project is being established, enough training for the employees was solicited. According to Lawler et al (1995) employees must have power, information, knowledge and benefit to smoothen the business processes.

Number of IT employees, the size of the IT organisation was considered important because some small agencies rely on the centralised IT organisation for applications development and website management. Budget allocation, the budget for website maintenance was identified as important. This budget is directly related to the ability to keep things up-to date. Specialized training for state IT employees is closely related to website design and development, which require certain skills that are not always readily available in a state's IT workforce. In addition to supporting better design and programming, training can also help to communicate other organisational messages regarding standards, the business model in place, and overall strategies, among others. Specialised training was recognised as an important factor in both cases. However, the specific skills deemed important varied in different contexts (Ebrahim and Irani, 2006).



Figure 4.7 Was there Management Support and Commitment throughout the Project?

For the 21 respondents, 2 (10%) of the employees disagrees that they did not undergo any training relating to the implementation project, 8 (38%) of the respondents agrees to have undergone the project implementation training, whereas 11 (52%) of the respondents strongly agrees to have attended the project implementation training.

According to Bohorios and Tan (2004) that System, Policy and Procedure (SOP) has always been used as an instrument or criteria in the quality award winner assessment. It is believed that system, policy and procedures have a direct impact on improving the internal factor rather than the external factor such as the employees and processes. Human Resource Management (HRM) is related with the training, recognition, promotion and carrier development.

A formal government policy position that e-government services, as a component of the overall public service transformation, must subscribe to the tenets of Batho Pele. The South African e-government policy framework explicitly refers to this policy and states that the starting point in the e-government drive should always be to identify what the customer wants and that the achievement of the delivery of measurable IT value is through, Improved Service Delivery through the achievement of the Batho Pele objectives (Farelo and Morris, 2006).

The act further compels the agency to research into matters relating to its functioning. currently, the agency is in the process of concluding a consultative process to define universal access and universal service as mandated by the Electronic Communications Act of 2005, other legislation is also supportive of achieving access.

TQM (management) and customer productivity is referring to the efficiency and effectiveness of employees. System, Policy and Procedure (SOP) has always been used as an instrument or criteria in the quality award winner assessment. It is believed that system, policy and procedures have direct impact on improving the internal factor rather than the external factor such as the employees and processes. Human resource management (HRM) is related with the training, recognition, promotion and carrier development. Employees must have power, information, knowledge and benefit to smoothen the business process. Infrastructure and Environment (INFRA) consist of technologies, equipment's and facilities. Bohorios and Tan, 2004 agrees.

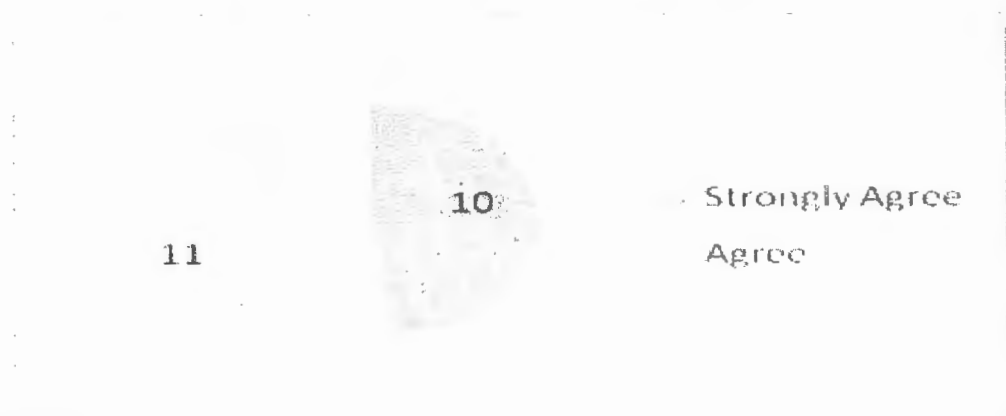


Figure 4.8 Was there satisfactory accountability placed on the IT?

Out of the 21 respondents, 10 (47%) agrees that the IT department was given all the authority to do anything at their disposal to ensure that the project becomes a success, while 11 (53%) of the respondents strongly agrees that effect. This is in line with Romzek and Dubnick (1998) whereby he defines accountability as a relationship where an individual, agency or organisation is held to explain and answer for its acts and decisions in terms of legitimisation and delegation of authority.

The African continent as a whole cannot be excluded from this standard shift of e-government. This consensus statement further proves that policy makers in Africa do understand the need for massive engagement of ICT in their governance paradigms in

order to be competitive enough in as far as national resource accountability is concerned. Thus, it is right to state that e-government has the potential to improve public service delivery by public institutions towards transparency, accountability and responsiveness, promote collaborative and joint-up administrations in which other stakeholders in the government business can access services through portals or one-stop-shops. E-government also has the potential to enhance the subsidiarity reforms by bringing decision making closer to the doorsteps of ordinary citizens by collaborative reasoning made possible with the use of ICT. This is in agreement with Tassabehji and Elliman (2006).

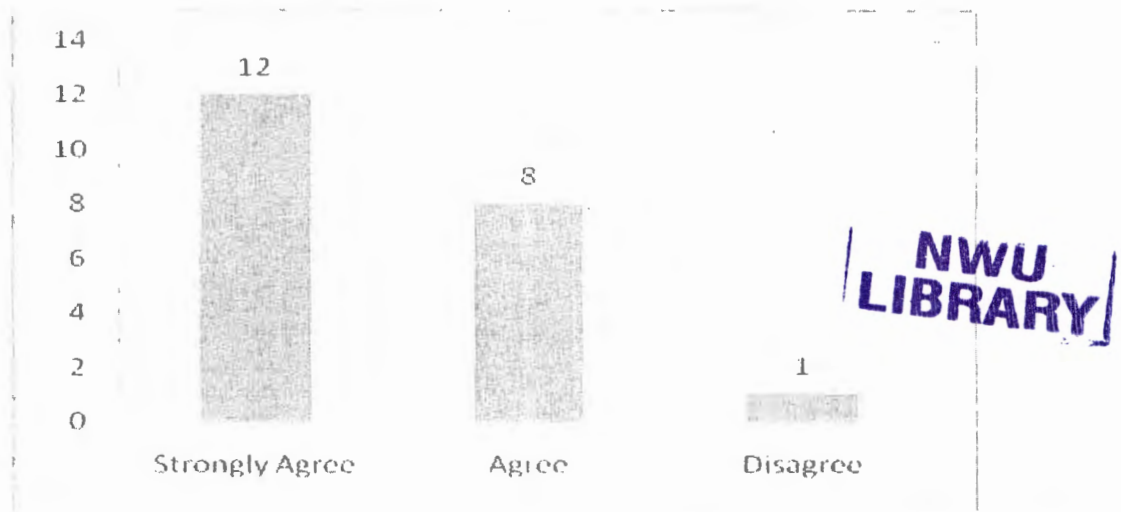


Figure 4.9 Were the Project Team Leaders sufficiently monitored to ensure that they were fulfilling their functions?

Out of the 21 respondents, 12 (57%) strongly agree that there was monitoring with the project leaders in ensuring that their functions were fulfilled, 8 (38%) agrees that there was monitoring with the project leaders in fulfilling their functions, whereas 1 (5%) disagrees that there was monitoring with the project leaders in fulfilling their functions. This is in line with Schedler when mentioning that monitoring (control acts), justification and enforcement (give recognition or sanction for acts) which result in accountability, hence in these fields encompasses different ways to control political and administrative power.

Improved interactions with business and industry, citizen empowerment through access to information or more efficient government management can lead to benefits than can be a lesser amount of corruption, increased transparency, greater convenience, revenue growth and or cost reductions.

At the moment, tactical plans have been initiated in Egypt, Senegal, Mozambique, South Africa and Kenya. Although, a claim cannot be made that all of African leaders have understood the importance of e-government, a handful of them have accepted the notion of e-government and distinguish that this concept has come to stay if Africa were to compete constructively in global economic value chains. Romzek and Dubnick (1998) agree.

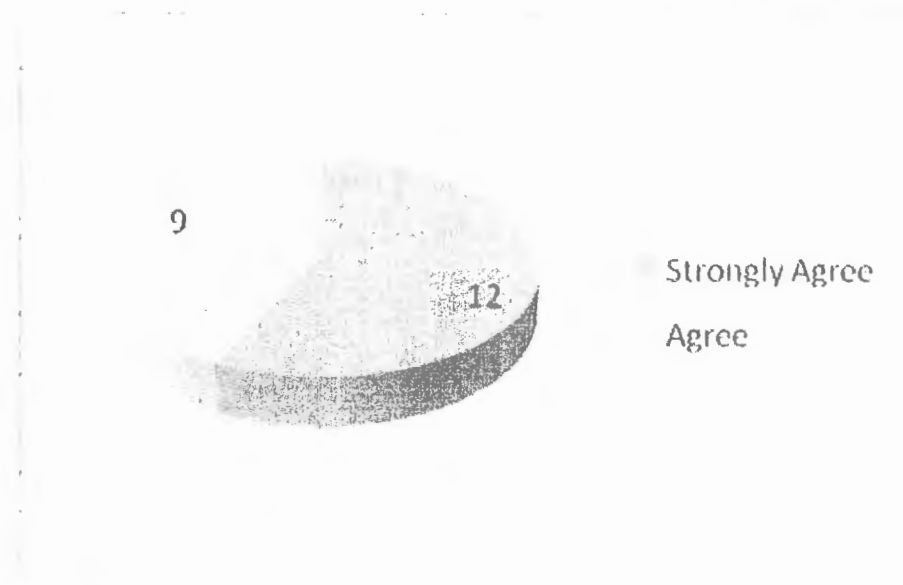


Figure 4.10 Was there appropriate planning measure implemented for service?

Out of the 21 respondents, 9(43%) agrees that there was appropriate planning measure for the Service Implementation Project, whereas 12(57%) strongly agrees that there was appropriate planning measure for the implementation project.

According to Trusler South Africa more pressing demands in the public service that makes ICT development a lower priority in budget terms. ICT indicators are used to measure how widely diffused and accessible (real access, profiled by proximity, language and cost) are ICTs across all regions and sectors of society see.

Actions that may lead to the proper application of the concepts of integrity, ethics, transparency and accountability are: Practices and measures to promote ethical conduct in public office, methods of recovery of advisers and their business ethics, measures to prevent and combat corruption, positive and innovative solutions identified and investigated to prevent and combat corruption, analysis and assessment of situations of risk and vulnerability to corruption and real achievements as a result of these actions,

instrumental integrity standards and indicators, anti-corruption strategies or action plans implemented, measures to avoid infringement regime of incompatibilities and conflicts of interest, establish measures of motivation and retention of qualified personnel in the system, identify the necessary skills and effective use of staff and lastly take steps necessary to achieve a more efficient management of career civil servants (Kumar et al. 2007).



Figure 4.11 Was the original business case adhered to, not adversely affected the implementation and design of the functional area?

Out of the 21 respondents, only 1(5%) strongly disagrees that the implementation plan and design went well, 4 (19%) disagrees that the implementation plan and design did go well, 9(43%) agrees that the implementation and design did not negatively affect the functional area, whereas 7(33%) strongly agrees that the implementation and design did not negatively affect the functional area. It is in line with Trusler that South Africa has to deal with a number of challenges before they can begin with any initiatives for bridging the digital divide.

A formal government policy position that e-government services, as a component of the overall public service transformation, must subscribe to the tenets of Batho Pele. The South African e-government policy framework explicitly refers to this policy and states that the starting point in the e-government drive should always be to identify what the customer wants and that the achievement of the delivery of measurable IT value is through, Improved Service Delivery through the achievement of the Batho Pele objectives (Farelo and Morris, 2006).

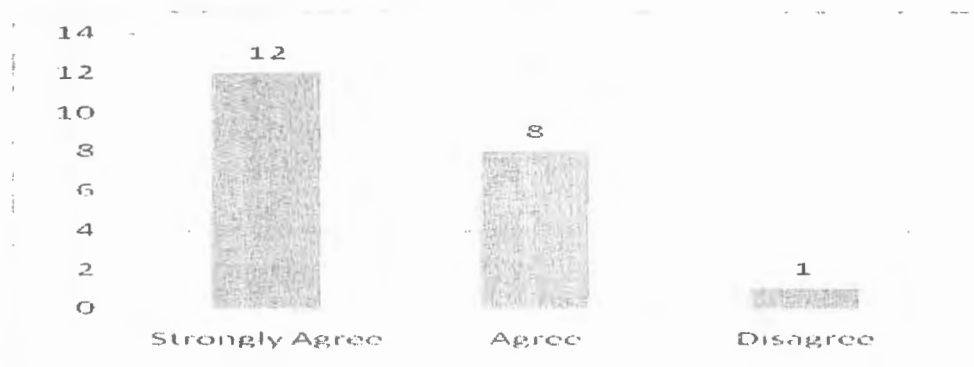


Figure 4.12 Did the employees know what the Organisational Business Strategy was for 2010/2011 financial year?

Out of the 21 respondents, 12(57%) strongly agrees that they are conversant with the current Organisational business strategy, 8(38%) agrees that they know the Organisational Business Strategy for the current year, whereas only 1(5%) disagrees to be aware with the Organisational Business Strategy for the current. This is in line with Parasuraman and Colby (2001) that employees can also be reluctant to accept and integrate technology into their work lives for a variety of reasons, including job insecurity and reluctance to embrace change.

There are many technical and management challenges lying ahead. Elected officials and career public administrators as well as e-government experts have a shared responsibility to solve the problems such as the digital divide, information security, privacy, new technology, interoperability and inter-agency cooperation (Layne and Lee, 2002).

4.12.1 Was the IT Strategy aligned to the business strategy for the 2010/2011 financial year?

All the 21 respondents have agreed that the IT Project implemented was aligned with the integrated development plan and it does form part of the developmental plan which was aimed at enhancing service delivery at the municipality.

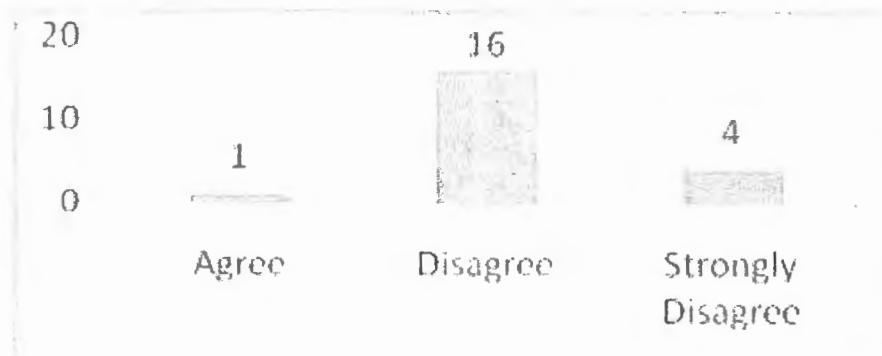


Figure 4.13 Did the concurrent restructuring and centralisation process had a negative effect on service delivery?

Out of the 21 respondents 1(5%) agrees that the whole process had a negative impact on service delivery, 16 (76%) disagrees that the entire process had a negative impact on service delivery and whereas only 4(19%) strongly disagrees that the whole process had a negative effect on the service delivery. This is according to Tassabehji and Elliman (2006) by mentioning that E-government also has the potential to enhance the decentralisation reforms by bringing decision making closer to the doorsteps of ordinary citizens by collaborative reasoning made possible with the use of ICT.

The other dark side of information technology is when coming across an exceedingly positive on the role of technology and service one should acknowledge some clear constraints, paradoxes and potential negative outcomes as well. Legitimate customer concerns over privacy and confidentiality raise issues for firms as they seek to learn about and interact with their customers online. This is in agreement with Mick and Fournier (1998).

E-government also has the potential to enhance the decentralisation reforms by bringing decision making closer to the doorsteps of ordinary citizens by collaborative reasoning made possible with the use of ICT (Tassabehji and Elliman, 2006). The Batho Pele service delivery framework is underpinned by eight principles, consultation: conducting customer surveys, interviews with individual users and consultation with various representative groups are some of the ways the government intends to practice this principle. Despite the government's well-intended policy reform and service delivery initiatives, economic and social disparities still perpetuate (Langa, Conradie and Roberts, 2002),

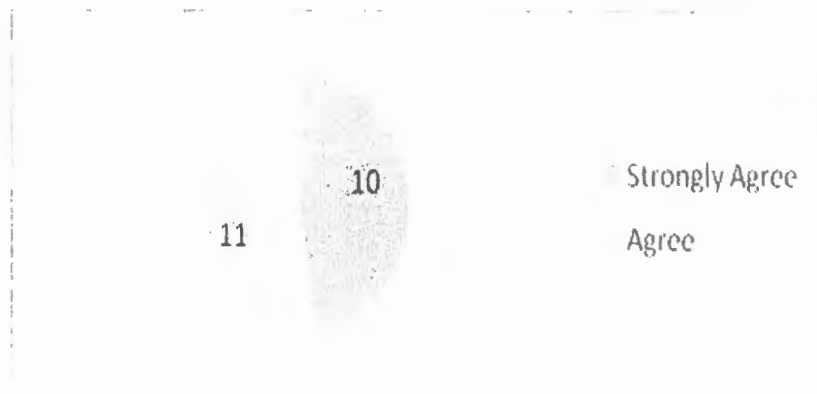


Figure 4.14 Was the Service Implementation Project successful from a business perspective?

Out of 21 respondents, 10(48%) strongly agrees that the Service Implementation Project was successful from a business perspective, whereas 11(52%) agrees that the Service Implementation Project was successful from a business perspective. This is according to Zhu and He (2002), despite the huge determination of many governments the world over in implementing e-government and the acclaim that e-government has finally won, previous studies present mixed cases (failure or success) of implementing and adopting e-government into the socio-economic setup.

The full potential and powerful use of the Internet for local governments lay in building strong stakeholder relationships, thus for citizens, businesses and governments, the management of relationships, a new means of communications, civic engagement and creative ways of doing civic business and transforming the processes and essentially being a new art of government, was seen as the hard part of this essential task in a time of an increasingly electronic future (Curtin, Sommer and Vis-Sommer, 2003).

Local government refer to people who have the authority to make decisions or pass laws in a small geographic area near to them. E-governance is an important innovation for enhancing good governance and strengthening the democratic process and can also facilitate access to information, freedom of expression, greater equity, efficiency, productivity, growth and social inclusion (Farelo and Morris, 2006).

From a business perspective, the payback in technology investments is often uncertain and the need to balance technology and human touch in developing relationships with customers can be challenging. Technology-delivered service is not always the best answer. Parasuraman and Colby (2001) agree.

4.4 CORRELATION

If there is commitment and it is monitored to stay on the required level the correlation is 0.9994. Monitoring help that good service stay on the right track. If the service quality is in place and people are committed to this the correlation is very high (0.98190). This is because commitment and service are committed to success. If the organisation strategy and commitment from people are in place the correlation is 0.7642. Strategy and commitment goes hand in hand. If restructuring and commitment are in place by people the correlation is 0.7419. If there is not enough resources and commitment from people the correlation is minus (-0.3390).

4.5 CONCLUSION

The chapter has presented the detailed results of the interpretation and analyses while using the statistical methods given and explained at the beginning. The results of the survey have been presented in the form of tables and graphs. Moreover, the analysis of the data presented in this chapter has been a clear confirmation of the service implementation project at Naledi Local Municipality. In the next chapter the recommendations and conclusion categorised in their relevance to all the stakeholders will be presented. The purpose is to make sure that the stakeholders understands the recommendations in order to add value to existing literature and also identify gap areas where further or new research can still be conducted. The discussions were based on how the tools identified in chapter two (2) will be employed to add value and improve the Service Implementation Project, in terms of e-government, at Naledi Local Municipality.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The researcher has in the previous chapter focused on data collection, analysis and interpretation in relation to the research objectives. The purpose of this research was to assess the factors affecting Service Quality of Information Technology on Service Delivery at Naledi Local Municipality.

The role of the Information Systems department within the local municipalities has broadened considerably over the last decade. Information Systems play a major role in helping local and provincial government to mitigate South Africa's service delivery problems. The introduction of personal computers has resulted in more users of information technology interacting with the Information System department more often.

The research discovered that responsiveness, assurance, empathy and tangible dimensions are significant to municipalities for such an assessment (Service Quality). According to the research it shows that on average most IS service providers are perceived by municipalities for rendering a desirable level of services to municipalities with respect to aspects relating to reliability, assurance, empathy and tangible dimensions. Conclusion of the study will be drawn and recommendations will also be outlined.

5.2 SUMMARY OF THE STUDY

The aim of the research was to analyse the Service Quality of Information Systems in terms of Systems Development and Support in the Dr Ruth S Mompati District Municipality with specific reference to Naledi Local Municipality. Quantitative research was used when dealing with the assessment of SERVQUAL (Service Quality) validity that will be its reliability, comparison of the factor analyses, reliability and its content validity.

Results would however indicate how effective is the IS Service Quality and the level it enhances service delivery and their cost implications in terms of exploiting it to its entire functionality.

The results of the survey have been presented in the form of tables and graphs. Moreover, the analysis of the data presented in this chapter set it clear that most of the stakeholders were significantly aware of the establishment and development of the project and that there has been a clear confirmation of the Service Implementation Project at Naledi Local Municipality.

5.3 RESPONSE TO THE RESEARCH QUESTION

The main findings of this research in relation to each research question will now be discussed. Each question is followed by a discussion of the findings relating to that question. Following from the above key problem are the following research questions:

5.3.1 Does the Naledi Local Municipality have the customer satisfaction evaluation strategy?

According to Lawler et al (1995) employees must have power, information, knowledge and benefit to smoothen the business process. Infrastructure and environment (INFRA) consist of technologies, equipment's and facilities. For employees, technology can provide tremendous support in making them more effective and efficient in delivering service. Customer relationship management, sales support and product information software are broad categories of technology-based information that can aid frontline employees in providing better service. These types of software also allow employees to customise and co-create services to fit customer needs (Kumar (2007).

It is highlighted that nowadays there has been a pattern shift because even governments are equally interested in using the internet in carrying out its day-to-day activities. Despite the determination of many governments the world done in implementing e-government and the acclaim that e-government has finally won, previous studies present mixed cases (failure or success) of implementing and adopting e-government into the socio-economic setup (Zhu and He, 2002).

Research on technology readiness suggests that certain customers are simply not interested in or ready to use technology. Employees can also be reluctant to accept and integrate technology into their work lives for a variety of reasons, including job insecurity and reluctance to embrace change. With technology there is also less human contact which many believe is detrimental purely from a quality of life and human relationships perspective. Parasuraman and Colby (2001) agree.

5.3.2 Does the Naledi Local Municipality have management commitment and effective leadership?

According to Bohorios and Tan (2004) that System, policy and procedure (SOP) has always been used as an instrument or criteria in the quality award winner assessment. It is believed that system, policy and procedures have a direct impact on improving the internal factor rather than the external factor such as the employees and processes. Human Resource Management (HRM) is related with the training, recognition, promotion and carrier development.

A formal government policy position that e-government services, as a component of the overall public service transformation, must subscribe to the tenets of Batho Pele. The South African e-government policy framework explicitly refers to this policy and states that the starting point in the e-government drive should always be to identify what the customer wants and that the achievement of the delivery of measurable IT value is through, improved service delivery through the achievement of the Batho Pele objectives (Farello and Morris, 2006).



The act further compels the agency to research into matters relating to its functioning. Currently, the agency is in the process of concluding a consultative process to define universal access and universal service as mandated by the Electronic Communications Act of 2005, other legislation is also supportive of achieving access.

TQM (Management) and customer productivity is referring to the efficiency and effectiveness of employees. System, Policy and Procedure (SOP) has always been used as an instrument or criteria in the quality award winner assessment. It is believed that system, policy and procedures have direct impact on improving the internal factor rather than the external factor such as the employees and processes. Human resource management

(HRM) is related with the training, recognition, promotion and career development. Employees must have power, information, knowledge and benefit to smoothen the business process. Infrastructure and Environment (INFRA) consist of technologies, equipment's and facilities. Bohorios and Tan, 2004 agrees.

5.3.3 Does the Naledi Local Municipality comply with the provisions of the Promotion of Public Access, the Batho Pele principles and other relevant legislative policies and directives?

According to the findings at Naledi Local Municipality, the implementation and design did not negatively affect the functional area. It is in line with Trusler that South Africa has to deal with a number of challenges before they can begin with any initiatives for bridging the digital divide.

A formal government policy position that e-government services, as a component of the overall public service transformation, must subscribe to the tenets of Batho Pele. The South African e-government policy framework explicitly refers to this policy and states that the starting point in the e-government drive should always be to identify what the customer wants and that the achievement of the delivery of measurable IT value is through, improved service delivery through the achievement of the Batho Pele objectives (Farelo and Morris, 2006).

This is according to Tassabehji and Elliman (2006) by mentioning that E-government also has the potential to enhance the decentralisation reforms by bringing decision making closer to the doorsteps of ordinary citizens by collaborative reasoning made possible with the use of ICT.

The other dark side of information technology is when coming across an exceedingly positive on the role of technology and service one should acknowledge some clear constraints, paradoxes and potential negative outcomes as well. Legitimate customer concerns over privacy and confidentiality raise issues for firms as they seek to learn about and interact with their customers online. This is in agreement with Mick and Fournier (1998).

E-government also has the potential to enhance the decentralisation reforms by bringing decision making closer to the doorsteps of ordinary citizens by collaborative reasoning made possible with the use of ICT (Tassabehji and Elliman, 2006).

The Batho Pele service delivery framework is underpinned by eight principles, consultation: conducting customer surveys, interviews with individual users and consultation with various representative groups are some of the ways the government intends to practice this principle.

5.3.4 Does the Naledi Local Municipality have adequate information technology infrastructure and human resources to be fully compatible in moving forward with e-government implementation?

Most respondents whom are in the management agree that there were appropriate planning measure for the service implementation project. As stated by Trusler South Africa more pressing demands in the public service that makes ICT development a lower priority in budget terms. ICT indicators are used to measure how widely diffused and accessible (real access, profiled by proximity, language and cost) are ICTs across all regions and sectors of society see.

Actions that may lead to the proper application of the concepts of integrity, ethics, transparency and accountability are: Practices and measures to promote ethical conduct in public office; Methods of recovery of advisers and their business ethics; Measures to prevent and combat corruption; Positive and innovative solutions identified and investigated to prevent and combat corruption; Analysis and assessment of situations of risk and vulnerability to corruption and real achievements as a result of these actions; Instrumental integrity standards and indicators; Anti-corruption strategies or action plans implemented; Measures to avoid infringement regime of incompatibilities and conflicts of interest; Establish measures of motivation and retention of qualified personnel in the system; Identify the necessary skills and effective use of staff and lastly take steps necessary to achieve a more efficient management of career civil servants (Kumar et al 2007).

5.4 LIMITATIONS

The study is limited to Naledi Local Municipality but it has its relevance on all the South African Municipalities.

5.5 MANAGERIAL GUIDELINES

From the results of this study the following guidelines are given to the Naledi Local Municipality so that they can have a sustainable solution even in the future:

- The Batho Pele service delivery framework is underpinned by eight principles; Consultation, conducting customer surveys; Interviews with individual users and consultation with various representative groups are some of the ways the government intends to practice this principle.
- Consultation serves as a powerful tool that enriches and influences governance.
- Setting service standards which imply benchmarking against international standards should be undertaken constantly to ensure the country remains competitive. Standards must be in place for citizens to evaluate how far service provision goes towards meeting their needs.
- An ongoing task for democratic governments has been to find ways to effectively promote change at the local level.
- There are no recipes for success. Each country has to consider what is best for its citizenry.
- The evidence discussed in this paper suggests that despite technical challenges, institutional hurdles and economic uncertainties, e-government has great potential to transform the government and public service.
- In the long term, it is likely to enable government to operate more efficiently, to respond to citizens more quickly and to behave more democratically.
- Many e-government programs have achieved benefits in efficiency, economy, effectiveness and citizen satisfaction.
- Compared to ten years ago or five years ago, significant progress has been made and tremendous experiences have been accumulated. Retrospectively, the optimistic progressive view does have its merit. E-government is an opportunity that no government should ignore.

- A single stand-alone enterprise-wide solution will be a highly cost-effective and risk-averse alternative to address the core business needs of a public sector organisation.

5.6 CONCLUSION

According to a review it was found that although efficiency gains have been reported by a large number of programs, it is more difficult to achieve economic gains and it is much more difficult to achieve other end results such as effectiveness, citizen satisfaction, government transparency and citizen participation. It was also noticed that countries with more political rights and economic resources are more likely to lead in e-government; that federal and state governments are more likely to achieve better e-performance earlier.

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Appendix A: A short disclaimer describing the purpose of the study

Dear Respondent

I am an employee of Naledi Local Municipality working as an Accountant in the Finance Department. At current I am completing the research component of a Master's in Business Administration (MBA) with the North-West University (NWU-Graduate School of Business and Government Leadership).

Towards this end, I would really appreciate your input in understanding the factors which affects Service Quality of Information Technology at Naledi Local Municipality.

For reference I have attached a questionnaire which will assist me in collating the required data.

May I request your assistance in the following:

- 1) Please complete the questionnaire to the best of your ability and
- 2) Kindly forward it to other decision makers within your area. For consistency and follow-up purpose, kindly do copy me when you forward the questionnaire to colleagues.

The questionnaire will not take more than 15 minutes to fill in. After filling in, please e-mail your response to: **sanagadr@gmail.com**.

Thanking you for your contribution in this regard.

Kind Regards,

Sanaga Ramadile: 073 791 3010

APPENDIX B: QUESTIONNAIRE

FOR OFFICE USE ONLY: Respondent Code: _____

VOLUNTARY QUESTIONNAIRE FOR OFFICIALS

"Assessment of factors affecting Service Quality of Information Technology on Service Delivery at Naledi Local Municipality: INFORMATION TECHNOLOGY"

Graduate School NWU

University of South Africa

Researcher Mr Sanaga Ramadile

Supervisor: Prof S Lubbe

Note to the respondent

- We need your help to understand factors affecting service quality of information technology in Naledi Local Municipality.
- Although we would like you to help us, you do not have to take part in this survey.
- If you do not want to take part, just hand in the blank questionnaire at the end of the survey session.
- What you say in this questionnaire will remain private and confidential. No one will be able to trace your opinions back to you as a person.

How to complete the questionnaire

1. Please answer the questions as truthfully as you can. Also, please be sure to read and follow the directions for each part. If you do not follow the directions, it will make it harder for us to do our project.
2. We are only asking you about things that you and your fellow researchers should feel comfortable telling us about. If you don't feel comfortable answering a question, you can indicate that you do not want to answer it. For those questions that you do answer, your responses will be kept confidential.
3. You can mark each response by making a tick or a cross or encircling each appropriate response with a PEN (not a pencil) or by filling in the required words or numbers.

Thank you very much for filling in this questionnaire.

Part I: Permission to use my responses for academic research

I hereby give permission that my responses may be used for research purposes provided that my identity is not revealed in the published records of the research.

Initials and surname _____ Postal address: _____

_____ Postal code: _____

Contact numbers: Home: _____ Cell: _____

No.	PART I: PERSONAL PARTICULARS AND BUSINESSLIKE QUESTIONS Please mark only ONE option per question below.		
		12.	Was there appropriate planning measure implemented for project implementation service? ☐ Agree ☐ Strongly agree ☐ Disagree ☐ Strongly disagree
1.	I am within this age group ☐ 21-30 ☐ 31-40 ☐ 41-50 ☐ 51-60	13.	Was the original business case adhered to, not adversely affected the implementation and design of the functional area? ☐ Agree ☐ Strongly agree ☐ Disagree ☐ Strongly disagree
2.	I am ☐ Female ☐ Male	14.	Did the supporting infrastructure for service implementation project run smoothly? ☐ Agree ☐ Strongly agree ☐ Disagree ☐ Strongly disagree
3.	How long have you been working at the organisation ☐ 1-2 years ☐ 3-4 years ☐ 5-6 years ☐ 7-8 years ☐ 9-10 years or more	15.	Did sufficient change management phase take place to ensure success of the project ☐ Agree ☐ Strongly agree ☐ Disagree ☐ Strongly disagree
5.	How many service implementation projects have you been involved in including this one? ☐ 1 ☐ 2 ☐ 3 ☐ 4 or more	17.	Did you know what the organisational business strategy was for 2010/2011 financial year? ☐ Agree ☐ Strongly agree ☐ Disagree
6.	What business ranking do you have? ☐ Managerial ☐ Non-managerial	18.	Was the IT strategy aligned to the business strategy for the financial year 2010/2011? ☐ Yes ☐ No

7.	Was your functional area of service implemented as stipulated in the project plan? ☐ Agree ☐ Strongly agree ☐ Disagree ☐ Strongly disagree	19.	Did the concurrent restructuring and centralisation process had a negative Are proper record, keeping policies and procedures implemented and monitored? ☐ Agree ☐ Strongly agree ☐ Disagree
8.	Did the new IT project had enough people resources assigned to it in your functional area? ☐ Agree ☐ Strongly agree ☐ Disagree ☐ Strongly disagree	20.	Was the service implementation project successful from an IT perspective? Agree Strongly agree Disagree Strongly disagree
9.	Did your functional area for service delivery receive sufficient and timeous training? ☐ Agree ☐ Strongly agree ☐ Disagree ☐ Strongly disagree	21.	Were the project team leaders sufficiently monitored to ensure that they were fulfilling their functions? ☐ Agree ☐ Strongly agree Disagree ☐ Strongly disagree
10.	Was there adequate management support and commitment throughout the project? ☐ Agree ☐ Strongly agree ☐ Disagree ☐ Strongly disagree	22.	Was the service implementation project successful from a business perspective? ☐ Agree ☐ Strongly agree ☐ Disagree ☐ Strongly disagree
11.	Was there satisfactory accountability placed on the IT? ☐ Agree ☐ Strongly agree ☐ Disagree ☐ Strongly disagree		

Thank you very much for filling in this questionnaire.

APPENDIX C: Thank you' Note

Dear Respondent

Please accept my compliments for the supportive role you played in filling out the questionnaire.

I would like to thank you for the insight and commentary you provided. I will be using the data from the survey to make recommendations on assessment on factors affecting service quality of information technology on service delivery at Naledi Local Municipality.

Thank you for your time.

Kind Regards,

Sanaga Ramadile

073 791 3010