A FEASIBILITY STUDY ON THE INTRODUCTION OF AN IT HELP DESK AT THE NORTH WEST UNIVERSITY (MAFIKENG CAMPUS)

BY

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DECLARATION

I Nolwane Beauty Mphantswa declare that the dissertation for the degree of Master of Business Administration at the North West University (Mafikeng Campus) hereby submitted, has not previously been submitted by me for a degree at this or any other university, that it is my own work in design and execution and that all materials contained herein have been duly acknowledged.

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SIGNATURE

DATE __________________________

PLACE _________________________
ACKNOWLEDGMENT

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I dedicate this work to my mother who is always prepared to give me support, especially when the going gets tougher. Lastly, thanks to the Almighty God who stood by me through thick and thin to see this manuscript completed.
DEDICATION

I dedicate this study to my late father Mr. Eliphas "Konki" Namane and, my special thanks to my late Sister Alvinah Phungy Ramothibe, for playing an important role by bringing up my baby boy Kagiso and taking care of my household while I was busy with my studies.
ABSTRACT

The main focus of the study was to find out whether tertiary institutions such as the University of North-West (now North West University – Mafikeng Campus) can handle the Help Desk effectively, with regard to IT staff workloads and skills, and students' and staff IT skills. The aim of the research was to examine the extent to which users can make use of the help desk for different sectors of the university community (administrative, academic, support personnel and students). The study looked at the structure of a user help desk appropriate for the North West University (Mafikeng Campus), and also examined the distribution and channels to be used for a user help desk. The assumption was made that a help desk at the North West University (Mafikeng Campus) can provide services of high quality to its entire community.

A questionnaire was used to solicit the perceptions of the university community towards the introduction of the Information System’s helpdesk. The respondents’ responses were then analysed with the use of spreadsheet tables. The target was 150 respondents of which 120 managed to respond to the questionnaire.

Most of the participants agreed that they were prepared to accept changes brought about by the use of help desk. The study also revealed that there were serious problems at the NWU (Mafikeng Campus) regarding shortage of support received from the Information Technology department of the University. The researcher therefore recommends that the automated Helpdesk be introduced as soon as possible so that the users can become familiar with it. In general the skill of staff and students are actually good and most of them will welcome the help desk. The IT staff workload is more with few members of staff, and the recommendation is that there is a need to implement the help desk.
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Chapter One
Orientation and Introduction

1.1 Introduction

The focus of this study was based on the introduction and the use of a customer/user support helpdesk at the University North West, which will contribute to the effectiveness of the service to the entire university community. The term ‘Helpdesk’ refers to the software that was developed to keep a log (a record of instances) of, and track telephone calls to the information technology department, generally from internal employees reporting faults, find solutions to problems, and provide means to dispatch service personnel when necessary.

The help desk system generally falls into two broad categories:

- Instructional tools – advising help desk staff about what information retrieval tools that are available.
- Providing a useful data and not leaving interpretation to the user.

This chapter will include the background to the study, statement of the problem, method of research to be used, significance of the study, limitation of the study and organisation of the study.

According to Goffin (1999) the concept of the role of user support and a help desk is an essential element in the success of a company. Users of many types of products, ranging from high technology computer systems to domestic appliances require customer support.

The helpdesk software should be able to provide the following capabilities:

- Logging problem calls
- Tracking calls
- Providing a way to improving the quick resolving of serious problems that are
normally slow in being resolved.

- Identifying recurring problems, reporting trends to management and recommending solutions procedures to correct faults.

- Facilitating the resolution of as many problems as possible on the initial call, thereby reducing the number of calls redirected to upper level personnel.

The North West University (Mafikeng Campus) has a significant amount of money invested in information technology, but if the personnel are not skilled or if the system does not work, then the objectives of investment will not be realised. It is therefore vital to remain as productive as possible. The university’s Information Technology Department is therefore faced with the challenges of delivering a good service needed by the entire university community. The study seeks to determine whether the implementation of help desk will improve the services provided by the Information Technology department.

1.2 Statement of the Problem

In order for any organisation or community to survive and be satisfied with the support given to it by its Information Technology Department, the department must embark on different strategies that improve on current practices. These improvements will enable the department to be timeous in the delivery of services to the satisfaction of the users.

A help desk should not only be cost-driven, but also effectiveness-driven and as a result it will have a positive aspect on the effectiveness of the entire organisation.

- What types of help desk should be established?
- What is the perception of the North West University (Mafikeng Campus) community regarding the user help desk?
• What are the benefits of a user help desk?

1.3 Objectives of the Study

The objectives of the study were:

• To determine the structure of a user help desk appropriate for the North West University (Mafikeng Campus).

• To examine the distribution and channels used for a user help desk.

• To determine how the user help desk at the North West University (Mafikeng Campus) can provide services of high quality to its entire community.

• Establish how the user help desk at the North West University (Mafikeng Campus) can improve the productivity and effectiveness of staff working at North West University (Mafikeng Campus).

• To determine the role of IT in the establishment and operation of a user help desk at North West University (Mafikeng Campus).

This will look at different types and different definitions of a help desk, and will investigate how to deploy and implement a user help desk that will help overcome not only technical hurdles that the support professional faces, but interpersonal issues as well.

1.4 Research questions

Based on the above objectives, the research questions of this study were:

• The help desk can be feasible under certain conditions and programmes.

• The establishment of a help desk can assist the North West University (Mafikeng
Campus) to improve its service delivery.

- Information technology can play an important role in the services of help desk.

1.5 Scope of the study:

- To determine the best practice of the help desk, its strategies and importance in achieving users satisfaction.
- Examine the help desk software used for user support satisfaction and provision of high quality services, in the context of North West University (Mafikeng Campus).
- To ensure that users who report computer problems receive prompt, professional and courteous service.

1.6 Significance of the study

This study focuses in the areas of the help desk that have never been researched in the field of information technology in the North West University (Mafikeng Campus). This will address current and the future problems associated with a help desk. Although the study was limited to the North West University (Mafikeng Campus) community, it provided valuable insight into how the problems of a user help desk can be tackled or handled by similar institutions.

The method of research that was used in examining the need for user help desk effectiveness includes a literature review, a survey and interviews.

An experimental user help desk was established in order to derive sound conclusions on the effectiveness of the help desk. This will be based in the Information Technology Department.
1.7 Literature Study
Different sources and other researchers' findings relating to the effect of user help desk were reviewed in order to gather information on the nature of a user help desk that can be implemented in the formation of a well managed help desk. Previous studies relating to the effects of support help desks were also reviewed.

1.8 Empirical Investigation
The primary instrument of data collection in this study was the questionnaire. The questionnaire was developed and pre-tested to gather information and ideas from the organisation community about the support help desk, also about the current computer literacy level of users, and whether they were satisfied with the current services provided by the IT department.
The target groups was a sample of the population representing staff and students at the University of Northwest.
Data was analysed with the use of statistical software package, i.e. MS Excel, using frequency tables and descriptive statistics and graphs.

1.9 Limitations and de-limitations
Since the study was limited to the North West University (Mafikeng Campus), its findings and conclusions may not be generalised to other similar institutions without some adjustments.

1.10 Definition of Concept
- User help desk: refers to the support or services given to users when faced with the hardware or software problems and any other problems related to information
technology. The Help Desk is a generic name typically associated with end user support centres, refers to the telephone service and the response used to organise and to provide an immediate response to the user’s request and problems.

1.11 Importance of the study

Organisational effectiveness involves the ability of the system to achieve high-level output in the form of productivity, service, and information in terms of quality, quantity, cost acceptability and related criteria in support provision. The study aims to show the importance and the need for a help desk.

1.12 Organisation of the study

The research study is organised in the following chapters:

- Chapter One: Orientation
- Chapter Two: Literature Review
- Chapter Three: Research Design and Methodology
- Chapter Four: Data Analysis and Interpretation
- Chapter Five: Summary, Findings and Recommendations.

1.13 Summary

This chapter introduces the problem of the proposed study on the effect of a user-Help Desk at the North West University (Masikeng Campus). It includes:

- the background of the study,
- a statement of the problem,
- objectives of the study, method of research,
- the significance of the study,
• limitations of the study and
• organisation of the study.

The next chapter reflects the literature reviewed for this study, what other research has found about the user help desk and what they concluded. All the necessary resources will be explored in the next chapter.
Chapter Two

Literature Review

2.1 Introduction

The previous chapter introduced the study and gave the outline of the problem investigated. This chapter examines the literature on help desks and starts with the meaning of a help desk; the role, concepts and the goal of the user help desk and how it affects the entire University community. It also looks at the setting up of an experimental help desk.

2.2 Role of user help desk in an organisation

Help desks are very important to the running of an IT organisation. The help desk as a monitor of quality, must be able to provide a quality service, must have a central place in the organisation and its role must be clearly defined internally and externally. Over the past decade or so, the model, of the help desk has changed from being a basic IT help desk that solved users problems to a more business oriented support centre (McBride, Perry & Sainsbury, 2001). The help desk has emerged as a vital part of an organisation and has been recognised as a place where an organisation can gain competitive advantage.

There has been a proliferation of organisations that provide support for help desk managers and to their organisations such as Help desk.com, the Help Desk Institutes, Help Desk Online and others. These organisations provide the latest information on the help desk. These IT magazines have established that a help desk is an important element within an organisation. The quality of a help desk is measured by its ability to perform two major functions: resolving customer problems and providing useful business information.
Research in academia has tried to identify successful ways of implementing a help desk. This research did not focus on the software used in running a help desk. The Internet provides a good source of information on help desks as mentioned above. The information about help desks is somewhat generalised and scattered. This study looked at using a help desk in order to make the IT support more effective and efficient.

2.3 Meaning of a user help desk

A help desk is a generic name typically associated with the end user support centre. It’s a single point of contact within a company used to manage customer problems and requests and for providing solution-oriented support services. Increasingly, the help desk is being seen as an integral part of the service function responsible for bringing multiple resources to solve issues to the client’s satisfaction (Vergis, 1998). According to Microsoft (1997), a help desk is defined as “A body that provides technical support for users internally or externally to the company.”

A help desk is a part of the overall support mechanism that is responsible for the functioning of IT in such areas as rolling out new software, writing software and developing software. Most writers define a help desk as a technical function that is placed within an organisation’s IT department. Vergis (1998) wrote in the ‘Frequently Asked Questions’ (FAQs) page of the Help Desk website that ‘help desk’ is a general term that is applied to the support function. McBride, Perry & Sainsbury, 2001 states that, in many organisations the entire support function is called the “help desk” and this would involve servicing PC’s and their installations. It may also include network and communications support systems.
An analysis of areas that are critical to the development of help desks and their functioning by Marcella and Middleton (1996) showed that there is no definition of a help desk that was agreed upon by everyone. The researcher found that a help desk is typically located internally, usually within an IT Department, or under a customer services department. The researcher concluded that a help desk is typically responsible for supporting software applications, making repairs and adjustments to systems. Help desks are also responsible for managing inventory, selecting equipment and statistical reports. Help desks also support training of all users but to a lesser extent.

2.4 Forms of user support systems
The capability and form of support provided by a help desk varies, depending on the organisation. Bruton (1995, 1997) states that user help desks come in different forms and divides support into the forms as discussed below:

2.4.1 Help desk
Is the process by which technical knowledge is used by specialists to solve computing problems experienced by lay users. This typically provides support to users by telephone, e-mail and fax to answer queries and to solve as many problems as possible. The help desk may be there to provide support for simple problems and motivate the help on to other groups.
2.4.2 Technical Support

Technical support refers to a wide range of services that enable people and companies to continuously use the computing technology they have acquired or developed. The function of technical support is to provide solutions to technical problems, but generally it is more a source of information and guidance than actually providing solutions. The various services include installing the hardware, software, network and the application components that enable technology users to do their work; keeping the system in good repair; upgrading hardware and software when needed; and providing customer support. In this respect, it differs from customer support or support centre help desk.

2.4.3 Customer Support

This includes services that help a customer understand and benefit from product capabilities by answering questions, solving problems and providing training. A help desk with broader scope of responsibility has the goals of providing faster service and improving customer satisfaction. The new technologies, such as remote control systems and software distribution systems, have enabled this enhanced help desk to absorb many customer related activities from other groups, such as field services and network support.

2.4.4 Research and development

Clients use research and development when the resources of the help desk are not adequate, and this could also be used where a product has a bug. This service can be provided by a software supplier or by people within the organisation. This is another form of support that manages technical documentation. Users can often
find documentation on software to help them solve problems. The technical library only enables the user to help them rather than solve their problem directly.

2.4.5 User group representative
A certain group of users or a department may have a user who is experienced in the applications they use. This user will be an expert in the software that is used and can filter out problems before they go to the help desk or technical services, for the assistant. This is a popular method referred to by users.

2.4.6 Workstation Management and System Maintenance:
Users are supported in making a list of their requirements of software and hardware. Personal Computers (PC’s) may have software installed that require changes in certain settings. Further, if a PC is moved then a technician will need to set up the PC in a new location. System maintenance often involves replacing hardware when there are malfunctions, rather than waiting for a supplier to replace the hardware.

The help desk provides IT support to help users in organisations do their tasks effectively and efficiently. A help desk is typically a function of an organisation where information technology problems are solved and preventative measures taken. The help desk is usually a centralised point within an organisation. More than just fixing problems the help desk is proactive in anticipating possible problems, finding malfunctions, interruptions or network problems such as communication, revision level, compatibility, configurations and capacities (Thomas, 1996).
Thomas (1996) describes two types of help desks, external and internal help desks. This research project focuses on the internal help desk. Internal help desks operate within organisations and provide support to users in all the different departments in an organisation. They solve problems for users in different departments in the organisation. Typically the internal help desk supports infrastructure such as networks, PC's and peripherals. Internal help desks will deal with application problems and operating system problems.

The operation of help desk supplies technical information to customers and solves technical problems by providing support and information. A help desk manages problems through various support and priority levels. A user help desk may be established to provide information technology support or to support other functions of an organisation as well. The role of a support service or a help desk is to provide high performing, mission critical customer and technical assistance services. A help desk, also tracks problems for trend analysis to prevent mission - critical problems (HDI, 2000). It is also known as a customer support centre, customer service centre or call service centre (Wave Technology, 2000).

2.5 Challenges facing the Implementation of a user help desk

Staffing is a key issue and includes the help desk personnel who answer calls and the management that oversees operations. In most cases, the help desk personnel position is often seen as an entry level one, having less experienced staff to handle calls and deal with sometimes complex problems. To compound the problem, these individuals seldom receive the necessary on-the-job training to keep up with the changing applications and hardware configurations. Career development for the Help desk professionals is thus
another challenge. A user help desk has seen a relatively high level of turnover of staff because of low moral, meaning motivation (especially for front-line workers). High turnover would seem to follow from the high stress and low salaries found there.

Researchers have found positive but weak relationships between employees, job related attitudes and performance. Therefore most help desk personnel try to treat simple problems over the phone and by e-mail immediately or within a few days. Typically these problems are recorded in a database by the first line support. If the problem cannot be solved, they may be passed on to the second line of support.

2.5.1 Difficult clients and co-workers

Inevitably one will encounter difficult client and co-workers, keeping in mind that it is the job of the help desk personnel to identify and solve problems, not only software and hardware related, but also system mechanical problems. According to Fontana (1989) stress may emerge in customer contact users being faced with hostility and verbal aggression or from misunderstanding or from misplaced antagonisms by the personnel to the client.

2.5.2 Lack of top management involvement and support

This often dooms the introduction of any project to failure before it starts. Secure buy-in from the top, often by putting a strong business case before the project is started.
2.6 Measuring quality service

The measurement of customer service is the most important variable that a company has to manage. Measuring customer satisfaction has currently become an increasingly important factor for successful business operation (Baggs and Kleiner, 1996). The measurement of quality of service seems to pose difficulties for academics and practitioners because of the unique characteristics of service including:

- Intangibility
- Heterogeneity
- Inseparability
- Perishability

Researchers have attempted to conceptualise and measure service quality. Contribution and discussions have been centred on the SERVQUAL. An important aspect of customer or user help desk is the distribution channel used and whether an organisation uses its own user support or makes use of a third party. According to Cooper and Kleinschmidt (1993), the customer or user help desk, also referred to as product support service, is important for any organisation because:

- It is essential to achieving user or customer satisfaction as identified by a number of researchers (Armistead Customer Support).
- It can provide a competitive advantage and can also save costs for the organisation. This plays a role in increasing the success of the organisation help desks.

2.7 Objectives of the User Help desk

Despite the importance of a user help desk the subject has been neglected and is an area on which too little has been printed or published (Hull and Cox, 1994). These services might be standardised and should be customised in a way that is designed and delivered,
bearing in mind the implication of these approaches for satisfying services. In other circumstances, users are likely to attribute more credibility to the internal support than the external source for delivering services, assuring total quality of services.

2.8 Key factors or elements in the development of a help-desk or user support

The help desk has come out of necessity, usually reactively, and is generally still in a state of development, although the development of a user help desk is advancing rapidly. The help desk develops at two levels:

- At the “micro” level, developments take place within the help desk itself, by defining how it carries out its remedies of user support.
- At the “macro” level the role of the help desk is defined within an organisation in terms of its integration with the business of the organisation and communication with other units and management levels.

Figure 2.1 on the next page illustrates the significant factors in the development of help desks that may have influenced its sphere.
Motivation

A motivator is required in the first instance, to identify the need for a Help desk, or a change to it. Motivators tend to be those involved with current service provision: managers, team leaders at the point of contact.

Backing

The backing of the management is then required. This can be gained by highlighting current problems and their cost to the various departments in terms of time and money. The marketing of the concept to management is crucial, since considerable financial and organisational backing may be required to get any development.

Definition

The services should be defined rigorously with the participation of all necessary groups. This includes internal and external procedures and the application of appropriate standards.

Marketing

The new service must be marketed to the users

Monitoring

Once operational, the services must be rigorously monitored in order to ensure that it is achieving its goals and meeting its standards.

Figure 2.1 Path of help-desk development. Source: OCLC System & Services 1996.
Definition of the services, including the consultation of standards, is vital to successful implementation and service delivery. Management and users must be informed about services they can expect and be assured of certain levels of services through ongoing performance measurement. The planned services must match the spectrum of users’ requirements, which may be diverse and not technically related. “Increasingly, help desks deal with clients on a global basis with varying levels of technical familiarity”.

(Marcella & Middleton, 1996)

2.8.1 People

Expert personnel, who are able to resolve issues as quickly as possible, are essential to a successful help desk. The availability of on-going training and career development elevates the skill and maturity level of individuals who staff a help desk.

2.8.2 Installation

The first element of product support following sales is installation of the product (e.g. Computer Systems) where safety issues are involved. A good example of the importance of installation is that IBM recognised that customers who purchased their PC’s wanted to be able to unpack their purchases and have them running as soon as possible. This led to the pre-installed software which could be unpacked and be used immediately (Haug, 1990).

2.8.3 User training

The complexity of some types of equipment necessitates that manufactures provide good training for users. Many computer - based products include functions which help users to learn and use them more efficiently. These can range from simple help functions to full training packages that can be used by an
organisation to get its staff trained. This reduces cost because training is done internally rather than using a third party (Taylor, 1995).

2.8.4 Documentation

The form of documentation lowers equipment operation, installation, maintenance and repair (Goffin and Price 1996). Good documentation can lead to lower support costs and increase productivity or customer satisfaction. A help desk documents its contribution to the company by providing accurate referrals and answers in a timely manner to several areas of a company. The referrals provide users with the ability to track repetitive customer problems and relay them to the source (Sorkin and Briggs Jr., 1997).

2.7.5 Maintenance and repair

This constitutes an important element of product support. If a piece of equipment fails, efficient repair is essential in many markets, because downtime costs run typically at anywhere from 100 to 10000 times the price of spare parts or service. One way to achieve a fast response is to provide over equipment in the event of breakdowns where this is feasible (Loomba, 1998).

Another strategy for maintenance and repair is to design disposable products. Where repair costs do not exceed the significant percentage of product replacement costs, having repairable products is the best strategy for companies (Lele and Karmarkar, 1983). For repairable product it makes sense for companies to develop good diagnostics – efficient means to test for problems and identify the cause. However, where products become cheaper and more reliable, as in the case of PC’s, service becomes less viable (Mandel, 1995). In the computer sector
where fewer mechanical parts are involved, remote support technology enables computers to be updated, diagnosed and repaired by linking them to the support centre via telephone lines.

2.8.6 Online support

Telephone advice on product or service is a major demand of customer support in many industries since direct visits are time consuming. Product experts give online consulting to customers to help them to use products more effectively or sometimes to trace the cause of the fault (troubleshooting). Whenever problems can be solved over the telephone, costs are much lower than an engineer having to visit a customer site, offering users a chance to enhance the performance of existing products can be an important aspect of support (Cespedes, 1995; Davidow, 1986).

2.9 Seven steps for a quality customer or user service implementation

Takenchi and Ovelch (1983) quote seven steps for a quality customer or user service implementation. The seven steps are outlined below:

2.9.1 Customer education

An expert can be employed in a variety of situations involving users or customers from purchasing to repair decisions. Help desk personnel can ask customers or user for specific information about his or her needs and return by supplying a course of action that might ameliorate the situation.
This could reduce time for a technician to go all around solving minor problems
that can be solved by just a phone call. Motilvalla and Gargeyer (1992) stated that
expert systems can be linked to all systems that are available to ease the schedule
of time and can provide assistance when specialists are available. For example, the
system can be set in a way that users dial a number and communicate via touch-
tone phone.

2.9.2 Educating Employees
According to researchers not only should employers be trained how to deal with
employees but also how to deal with them. The employer must also know how to
do their job well. A help desk can enhance current skills and can also improve
user performance. It can also improve the performance of the skilled by
increasing accuracy. If employees can be provided with computers and training
on the usage and have access to a help desk system, the use of graphical user
interface or user friendly systems can facilitate the implementation of the new
technology. Not only does the help desk officer need to be skilled in the changes
in Information Technology, users should also be skilled in the use of IT.

2.9.3 Efficiency should precede courtesy
The benefit of expert systems, especially with current advances in computer
technology, is the speed with which the personnel allow decisions to be made.
The response is faster and there is no need to call a user back because personnel
can just give responses immediately.
2.9.4 **Standardising services response systems.**

When a system is filled with appropriate advice and solutions it prevents incorrect decisions. It also ensures that the same decision is made time after time given the same information. A help desk system does not have judgement or a memory, it does not get sick nor does it resign. Standardisation will increase the efficiency of delivery and the satisfaction of users.

2.9.5 **Involving sub-contractors, when necessary**

"Nothing lasts forever" and users or customers know that. They do not expect that all services for a product will be free forever. Where a suggested solution does not work, then the problem may be directed to the sub-contractor.

2.9.6 **Evaluating customer satisfaction**

An organisation should be able to incorporate new information and new knowledge into an existing system. The system can be very easily updated to make use of new expertise. A help desk module tracks outstanding requests for service such as problems, installations and training. Information such as responsibility, dates and cost is kept on this request form. As work requests or orders are completed they are added to a work order history where they can be later used (for future referencing).

Customers are pleased with a service when their hectic expectations are met and exceeded. Researchers used the evaluation to determine when standardising approaches that are “Etic” are appropriate over “Emic” approach.

**Etic:** Service delivery approaches are universal and the help applies to all cultures (customers).
**Emic:** Service delivery strategies are customised to apply to one particular culture (customers).

### 2.9.7 Total contact ownership (TCO)

To implement TCO successfully it should be integrated with the Help desk processes: i.e. ensuring that all support professionals understand the concept of TCO; that a help desk professional who receives an initial contact from a customer is responsible for customer satisfaction.

The following are the characteristics of TCO:

- Monitoring customer service interaction and giving feedback to a professional regarding compliance to TCO practice.
- Measuring each professional performance in resolving and closing issues.
- Standardising an opening call greeting, technical call script that supports resolution and collection of appropriate technical information.
- Measuring the performance of help desk escalation resources, such as how timely the users respond to the help desk.
- Implementing a consistence tracking process using a problem management tool that allows help desk personnel to report on compliance of process.
- Customer progress notification within a predetermined time frame if issues are not resolved on the first contact.

Responding to customer satisfaction feedback captured in surveys, successful implementation of the TCO methodology requires agreement from all support resources. Involvement of all resources from the first stages of TCO development is also essential. These additional actions are helpful in leveraging the benefits of TCO. Refer to the diagram on the next page (Tucker & Civiletti, 2000).
Figure 2.2: Total Contact Ownership of User Help desk. Source: White Paper Tucker and Civiletti, 2000

The diagram above can be explained as follows:

- Firstly, assess the problem management system for the ability to track the necessary information.
- Assess the current performance standards and determine how the TCO processes can be incorporated.
- Assess the knowledge base and whether it contains the technical and procedural information to streamline the TCO process.
- Determine, collectively with all support groups, the appropriate response time frames for escalating issues.
• Document the process that will be implemented and communicate these to the Help desk and support resources.
• Change the technology to flow with the processes, communicate service levels and process changes to the customer to set expectations.

2.10 Measuring service quality

As Sorkin (1998) states an abstract idea remains an abstract until it is successfully quantified. Defining quality and understanding its role is always subject to interpretation, resulting in the need to measure the effect of quality practice. Although the development of the academic field of services marketing has been spectacular, few researchers have attracted as much attention as the research stream of service quality.

Measuring service quality seems to pose difficulties for academics and practitioners because of the unique characteristics of service provided by help desks. Listening to users provides information about performance and insights to the real world acceptance of software. Personnel should be polite and professional in all respects. Delivering quality services to customers is a primary objective for all services.

Customer satisfaction is seen as related to a specific transaction. Incidents of satisfaction over time lead to perceptions of good service quality. The measurement of service quality acts upon understanding of those attributes, which contribute to users’ expectation and perception of service quality (Dawes & Rowley, 1998).

Some authors, most notable with their work on SERVQUAL, sought to identify some generic dimensions of service quality such as RATER:
• Reliability: ability to perform the promised service dependably and accurately.
• Assurance: knowledge and courtesy of employees and their ability to inspire trust and confidence.
• Tangibles: appearance of physical facilities, equipment, personnel, and communication material.
• Empathy: caring, individualised attention the firm provides its customers or users.
• Responsiveness: willingness to help the customer and provide prompt service (Dawes & Rowley, 1998).

Nevertheless, there is a central need to identify the above factors that are most important in delivering service. When users ask for or purchase service, they undergo an experience that centres on the simultaneous delivery and receipt of the service. Services are viewed as being unique from goods, due to their inherent characteristics generally to be internal.

Customer satisfaction has become an important issue not only for commercial organisations but also for public service and charitable organisations. The dissatisfaction is attributed to the existence of gaps in customers' expectations and experience of services provided. Organisational loyalty has become the spearheading of strategy to retain customers, and the need to learn what all internal or external customers really want from a provider or an organisation on how the internal service can function more efficiently (Toombs & Bailey, 1995). This introduction and transition of the department from its previous orientation to becoming a service-oriented department depends on the introduction of a help desk.
During the 1960’s -1970’s, it was important that the help desk service used all means at their disposal to identify the needs and requirements of their users and then ensure that these needs were satisfied. To identify and satisfy users’ requirements, service dimensions need to be defined on the basis of training and performance rewards and systems developed to monitor and measure success. An employee or service provider and the users or customer are physically and psychologically drawn together by the help desk.

Much of service literature reports that a personal interaction is control to an assessment of service quality. According to Lovelock (1997) there are some guidelines, which can be categorised into three levels of conduct, high, medium and low. The author suggests that low contact services take place through an electronic or physical distribution channel. The element of high contact services may also be considered suitable for the further embedding of IT, in cases where the consumer characteristics of chosen segment are suitable, and they display a willingness to interact electronically (Dawes & Rowley, 1998).

2.11 The Relationship between culture and service quality

Customers are pleased with services when their expectations are met and exceeded. In order to ensure such an outcome, the support manager needs to be cognisant of the parts of the service delivery experience that are open to cultural influence as compared with those that remain stable across cultures. “While cross-cultural research is not very mature, one consistent view shared by researchers is the need to determine when standardisation approaches, that is “etic” approaches are appropriate over “emic” approaches” (Douglas and Graig, 1992).
Riddle (1992) believes that companies must consider cultural barriers in implementing any customer services or help desk model, particularly when considering how to target specific individual needs. In targeting individual needs, a precise statement drawn up of the knowledge, skills and understanding should be acquired by, for example, an employee who has recently joined or moved from one department to another. Riddle further argues that the challenge is to balance the need for continuous cultural customisation with the need for standardised service production. In order to understand cultural differences the author focuses on two cultural variables as being relevant to the service delivery process. These are outlined below:

2.11.1 The relationship between attitudes, performance and customer satisfaction with service quality
Research has found positive but weak relationships between employees' job-related attitudes and performance. Areas of recent research have included customer satisfaction in relation to employee attitudes and performance, stressing the importance of quality service.

2.11.2 Expectation and perceptions, quality and satisfaction
The quality represents the difference between customers' perception of the service received compared with their expectations based on previous experience. “Based on even a cursory perusal of leading journals, a not inconsiderable portion of marketing literature has focused on particular aspects of services” (Fisk 1993). There are four areas of service satisfaction:
- Customer expectations of service contrasted with their realisation;
- Technical and functional approaches to service satisfaction;
• Influence of time; and
• Service quality versus service satisfaction.

A fourth research dimension has been to distinguish between service quality and service satisfaction. Sometimes these have been viewed as separate perceptions, sometimes as factors that interact.

"First, customers expectations of service contrasted with their realisation has been the subject of extensive research since the early 1980's example". Second, a number of researchers have pointed out that customer service expectation of service contrasted with their realisation, include technical and fictional aspects of service delivery. "Temporal aspect of service delivery may also be influential in customer provider relationships. In many circumstance in our time-poor society, Americans prefer a speedy service" (Taylor, 1995).

As the importance of customer support has become more widely recognised, companies are currently taking a more professional approach to support service than they did previously. There are two kinds of customer support, which particularly deserve management attention. First, there is a need for customer support requirements to be fully considered at a design stage of the help desk, using what is called design for supportive techniques. Second, the logistic of delivering customer support through suitable channels is a key to a successful help desk (Goffin, 1994, 1998).

According to Knapp (1998) a successful help desk plays an important role in providing quality technical customer support. It is made up of many tightly integrated components. Each component is related to the other in some way and all of these components together enable the help desk to satisfy customers. The components of a
successful help desk include the following:

- **People:** The staff and structure put in place within a company or a department to support its customers by performing business processes. The main roles that the people who work at a help desk play include the front line service providers who interact directly with customers and the help desk management personnel.

- **Processes:** These involve interrelated work activities that take a set of specific inputs, and produce a set of specific outputs that are of value to a customer or a user.

- **Technology:** The tools and technologies customers or personnel use to do their work. Help desk employees and managers use technology to perform processes. They also use technology to capture and use information about their customers and their work.

- **Information:** People need information to do their work. For example a help desk analyst needs information about customers and the details of their problems to provide support. Management needs information to evaluate team and individual performance and identify improvement and opportunities.

### 2.12 The advantages of a help desk

While many organisations recognise the absolute need for a help desk, too many still narrowly view its management as a cost of doing business rather than an opportunity to improve employee organisational effectiveness. Key benefits of a well-managed help desk operation include heightened effectiveness in a number of areas: cost and asset
management; technology migration, upgrades; infrastructure management; problem management and field service management.

2.13 The potential of the help desk in the strategic management of information technology

The potential of a help desk to act as a management asset is beginning to be recognised. "The development of customer service orientation has shifted the emphasis away from the help desk as IT’s technical problem fixer. The help desk as an automated management centre, acting as the nexus for the full integration of IT and customer services into organisation, is evidence both of an increased recognition of the role which the help desk can play strategically and a signal of the expansion of the help desk in a manner that might not have been predicted from its original “mop up” role". (Bruton 1997)

The presence of the help desk is not the admission of failure: users will always require support in the face of inevitability of change and the growing complexity in the IT environment; the level of ability among users is highly variable and despite education and training, the help desk personnel will continue to operate on a “need to know” basis. Whatever the means of support available, it has been established that users prefer help provided by the human voice. The help desk project would suggest that, far from being doomed to extinction, the broader role of a help desk as a communicator, facilitator and coordinator would ensure an important continuing role for a help desk. While aiming at reducing the problem calls, a help desk may take on the broader role of acting as the front line for IT with a move towards a more expert service, acting as advisor in the decision making and direct involvement in development.
The move from the traditional manual help desks to modern help desk is a move towards the embodiment of IT within the organisation, aware, informed and informative. At its most highly developed, the help desk can be a highly approachable public face of IT within an organisation and a probing and highly critical tool (Hayward, 1995). The new approach to the help desk represents a paradigm shift in the understanding of the role it plays within an organisation. While effort has tended to focus on how a help desk can organise itself better internally, it is currently recognised that actually, to provide service to a user, a help desk must be an integral part of the IT and customer service process.

A help desk is at the nexus of a web of dependency and Figure 2.3 below illustrates the links that may potentially be made throughout and outside the organisation. The significance of the help desk in the provision and development of effective information systems has yet to be fully established: however there are a number of ways as outlined below, in which a help desk can be used, and is already used by some organisations, to improve information systems provision and support.
Figure 2.3: Help-desk dependencies on the implementation. Source: OCLC Systems & Services (1996)
2.14 Process guidelines

The above diagram outlines the process guidelines of the help desk dependencies on the implementation, which are explained as follows:

- Gathering data on the present patterns of systems use.
- Improving intra- and interdepartmental communications.
- Facilitating the management of change.
- Developing a responsive and interactive relationship via the Help desk’s interface with customers.
- Collecting data on IT needs both present and future.
- Investigating the impact of IT developments and strategies on customers and functions.
- Facilitating software or product implementation and development.
- Producing management reports consolidating information gathered in a way that may be of use to management in developing IT or IS strategies and future plans.

2.15 Conclusion

The issue of customer support strategy needs further research and best practices need to be identified because a research finding is vital to the practitioners in this field. Budgetary pressure and political atmosphere has left IT managers questioning the appropriate staffing of the help desk. The help desk is segmented into many groups but due to budgetary constraints, often times the roles and responsibilities overlap to cover all help desk functions with limited staffing. The help desk personnel need to understand the company’s business and client contracts to effectively maintain service level agreement
(SLA) at acceptable levels. There is a lot of pressure that affects the establishment of help desk including budget constraints and the need for rapid response to immediate needs.

There is evidence in this chapter that research into customer support is lacking and there are many areas that require further investigation. The main priority for a wide survey of companies in different industries is to determine how important support is in further sectors. Providing high levels of service quality to customers has become a necessity for most companies to remain competitive in the market place.

Delivering a service to customers is a primary objective of all organisations. It is suggested that the way a service delivery system receives and processes customer information should be related to the quantity of customer information provided. This implies that service providers should be given an environment that facilitates the information processing involved in delivering a service to customers.

The function of help desks has changed from being a “techies’ backroom, to becoming the nerve centre of business, facilitating its knowledge management, business planning and user needs analysis activities” (Middleton, 1996).

The next chapter will look at the research methodology used in this study.
Chapter Three
Methodology

3.1 Introduction

Chapter two examined the nature of a help desk, its advantages and disadvantages, and also reviewed literature for this study. This chapter outlines the method of research and explains the reasons behind the methodology used and the way the study was conducted. It describes in detail the population as well as the sample utilised in the collection of data. The chapter also shows the steps taken to ensure the reliability of the study.

Any method, which produces fruitful results and is compatible with the assumptions of a theoretical system, is a good method (Bloom 1986; Best and Kahn, 1989). In the empirical investigation of this study, the researcher collected data by means of a questionnaire (Appendix A). The questionnaire was developed using information collected from articles related to the study.

3.2 Research Tools

3.2.1 Questionnaire

According to Borg and Gall (1989) in conducting an investigation the researcher should select a research tool among the variety of procedures available. In this study the researcher opted to use a questionnaire as a data collecting technique most appropriate, after exploring several tools of collecting data. These techniques have advantages and disadvantages.

In view of the wide-ranging investigation anticipated, the questionnaire became the most important research tool for this study. A questionnaire is regarded as a
device which enables subjects or respondents to answer questions. It usually contains questions aimed at eliciting specific information on a variety of topics. In this study a questionnaire was preferred because it was found that it was not time consuming. The questionnaire also helps to provide access to what is inside somebody’s mind, making it possible to measure what this person knows, likes, dislikes and what he or she thinks.

3.2.2 Characteristics of a good questionnaire

A good questionnaire should meet the following requirements or criteria. The questionnaire should be simple and short. Complex questions should be broken up into several simple ones. Questions should be unambiguous. Words which are too general, too vague, should be replaced with more specific terms, meaning that it must be understandable. The researcher should use vocabulary adapted to the level of education of the participants. Technical expressions and sophisticated language should be avoided (Bless and Higson – Smith, 1995).

A question should not be double-barreled - it should not contain two questions in one, e.g. if the respondent is asked to answer “yes” or “no” to the question. The researcher should avoid leading questions that favour one type of answer over another. Questions should be asked in such a way that the respondents are free and willing to part with the required information.
3.2.3 Reasons for choosing the questionnaire as a research tool
In this study the researcher used a questionnaire because it was felt that it would be helpful to bring forth the most up to date opinion of users with regards to the introduction of a help desk. Through its use the study would determine whether or not there was resistance against the introduction of the help desk. The researcher felt that the respondents would be more frank and open because of the anonymity of the questionnaires.

3.2.4 Advantages of a questionnaire
The major advantage of using questionnaires is that, if properly prepared it can offer reliability and consistent presentation of items.

Legotlo (1996) summarises the general advantages of the questionnaires as follows:

- Many individuals may be contacted at the same time.
- Each selected respondent receives identical questions.
- A written questionnaire provides a vehicle for the expression without fear of embarrassment to the respondent.
- Responses are easily tabulated.

In this study the main objectives of using questionnaire was to save time. The questionnaire enabled the researcher to get different views by giving the respondents the same questions. The respondents also expressed their opinions without fear and embarrassment. Further a questionnaire provides data that is easy to analyse.
3.2.5 Disadvantages of a questionnaire

Although a questionnaire is commonly used as a tool for data collection, there are some criticisms against its use that researchers should be aware of. These include:

- High non-response rate.
- Poorly constructed items.
- Questionnaire dealing with biographical data of respondents.

In this study in order to avoid and overcome the non-response rate, the researcher made the appearance of the questionnaire attractive and easy. A total of 150 copies of the questionnaire were personally distributed to respondents. They were collected five days after distribution in order to avoid further discussions on the questions raised. The reason was mainly to avoid a situation where a respondent changes a response after discussing it with a colleague. The copies of questionnaire were numbered and a record was kept in order to determine the responses received from participants as well as the non-responses.

3.3 Data collection

In this study the researcher collected data personally. The questionnaires comprised 20 questions for staff members, 15 questions for students and 10 for deans: Copies of the questionnaire were sent to faculties and managers and secretaries at the North West University (Mafikeng Campus). A structured questionnaire was preferred because its greatest advantage is that it is simple to administer and easy to analyse.

- The questionnaire was thoroughly scrutinised to ensure that it measured what it was supposed to measure.
• It was ensured that the questionnaire comprised anchor and related questions. Anchor questions refer to questions that focus on the topic under research. Related questions refer to questions that highlight matters and have relatively related importance to the problem under research.

The questionnaires were pre-tested after construction, and amendments were effected to avoid irrelevance and invalidity. All respondents were given the same questions and time to respond to questions.

The researcher deemed it necessary, convenient and relevant to deliver copies of the questionnaire personally because the research project was undertaken at the university where she is employed. The researcher also personally collected the questionnaires to save time and cost.

3.4 Population and sample
In deciding the size of the sample, several factors were considered. The main consideration was that the sample had to be large enough to allow for meaningful generalisation of the findings. However, it should not be too large to pose management problems. The survey population was drawn from the university community. A total of one hundred and twenty(120) responded out of a target sample of one hundred and fifty(150) were selected from the university, i.e. eighty staff members both academic and administrative, thirty students and ten members of management, specifically deans and managers, were used for this study.
### Breakdown of sample

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<th>STUD</th>
<th>MANAGEMENT</th>
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<td>5 Deans and 5 managers</td>
<td>120</td>
</tr>
<tr>
<td>Admin</td>
<td></td>
<td></td>
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<tr>
<td>Academics</td>
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</table>

#### 3.4.1 Sampling Method

The researcher wished to include as many members of the university communities as possible. However because of the time constraints the researcher concentrated on the few chosen. The sample was drawn from staff, students and members of the university management.

The questionnaires were used to elicit data from students and academic staff and management as follows:

- Thirty academics were selected, not more that five per faculty for the sample.
- Fifty administrative staff members were selected and not more that five per department and not more than two per faculty for the sample.
- Students were selected randomly, based on the years of study and above for the sample.
- Five deans from faculties and five managers were selected for the sample.

Data was presented in a table form and analysed by using chart-represented percentages.
3.5 Summary

In this chapter the researcher discussed the techniques that were applied to collect data. The questionnaire was employed as the main instrument of data collection because of the advantages. Through these techniques the researcher tested the sentiments, attitudes and opinions of the staff members, both academic and administrative, the students and the management, towards the introduction of the Information Technology help desk. Their feelings and views made it possible to work out commitment and to suggest the recommendations towards the help desk. The next chapter focuses on data analysis and the interpretation of findings.
Chapter Four

Data Analysis and Interpretation

4.1 Introduction

The previous chapter described the research design of the study. This chapter focuses on the results analysis of data collected from the questionnaires, and the views of the users or the university respondent community. The researcher also looks at the findings and results. The researcher with the assistance of an experienced researcher used Microsoft Excel, which is software that uses tables and graphs, to analyse data.

4.2 Data Analysis

A total number of 150 (one hundred and fifty) potential respondents were targeted for this study. Copies of the questionnaire were distributed to North West University (Mafikeng Campus) students and staff members who are all in need of the help when coming to information technology, but only 120 (one hundred and twenty) respondents’ returned completed copies of the questionnaire to the researcher.

![Gender Distribution](image)

Figure 4.1: Gender Distribution
The above chart shows that 50% of the respondents were females and 50% males. This implies that the views expressed in the following questions are viewpoints of both sexes equally.

![Figure 4.2: Age of respondents](image)

The above chart reflects that 22% of the respondents fall in the 31-40 years and 21-25 age categories. They were followed by 20% who are 41 – 50 years old, 19% who are 26 – 30 years old and those under 20 years old and over 50 years formed only 6 and 11% respectively. The respondents of this research were therefore relatively young, that is between 20 and 40 years (About 69% were under 40).
24% of participants who returned their questionnaires had already completed at least one postgraduate degree. 26% had bachelor's degrees, 37% had the minimum of Grade 12 and 13% had diploma qualifications. From the figures above, most of the participants were staff members and students who had either Grade 12 only or were undergraduate students pursuing their first degrees.
The above graph shows that lecturers excluding heads of departments formed only 9% of the selected respondents. Heads of departments formed 11% of the research respondents. Students, administrative staff and secretarial staff formed 41%, 23% and 13% of the total number of respondents, respectively. The majority of the respondents at 41%, were students bearing in mind that many staff member are also students. It can therefore be inferred that the overwhelming response in this research was from students who were using the computer services almost every day to type their assignments, access e-mails and surf the internet for assignment and research purposes.

![Pie chart showing years of experience]

**Figure 4.5: Years of experience**

8% of the respondents have 16-20 years of experience working at the university, 57% have been working at North West University (Mafikeng Campus) for one to five years and 11% have 11-15 years of service at the institution while those with 6 to 10 years of experience formed only 24% of the respondents. This shows that the majority of respondents have less than 15 years of experience of working for the North West University (Mafikeng Campus).
Figure 4.7: Do you in general agree or disagree with the introduction of the helpdesk.

The above pie chart reflects the responses to the introduction of a help desk and how the university community will benefit from it. The chart shows that 93% of the respondents agreed with the introduction of a help desk, only 4% disagreed and the 3% did not understand the question. It shows that the majority of the participants recognise the need for a help desk.

Figure 4.8: What is your view regarding the quality of service rendered now?
The pie chart above, reflecting views about the quality of service that is currently provided by the information technology department or the computer centre, shows that 10% of the respondents considered the quality of service very bad, 33% of respondents considered it bad, 7% as good, 19% as very good and 31% undecided. This implies that there is a need for a help desk at North West University (Mafikeng Campus).

Figure 4.9: Improvement of productivity to sections when compared to what the IT doesn’t have currently.

With regard to the question on how the introduction of the help desk services will improve productivity to various departments when compared to what is not available; 48% agreed, 31% strongly agreed, 9% disagreed, 3% strongly disagreed, and 9% were undecided. The implication is that the introduction of a help desk will have a good impact on the university community.
Figure 4.10: Will this increase staff and student morale?

The pie chart above reflecting the responses of the selected community, on the question of morale, showed that 49% agreed, 31% strongly agreed, 7% disagreed, 6% strongly disagreed and 7% were undecided.

Introducing the help desk will thus increase staff and students morale when working with computers. It is possible that those who falls under ‘undecided’ may be people with poor computer skills.
Figure 4.11: Will job performance improve because there will be a person or someone to answer to your queries all the time?

The above pie chart reflects that 52% of the respondents strongly agreed that job performance would improve with reference to the response of the help desk personnel, 34% agreed, 1% disagreed, 9% strongly agree and 4% were undecided with regard to whether job performance would improve prior to the fact that there would be someone to respond quickly to queries and questions that users were having.
Figure 4.12: Do you fear that the introduction of a help desk will be depriving you as a user to get the necessary help you need from the department or centre.

The above pie chart reflects that most users' fears about the introduction of a help desk were as follows 30% of the respondent agreed, 20% strongly agreed, 27% disagreed, 7% strongly disagreed and 16% undecided. They feared that the introduction of a help desk would restrict them to the rule of first in first out or they would not get help they were used to.
Figure 4.13: Do you think that you'll have a problem as a user when the system is introduced?

When looking at problems with the introduction of the system, most users welcomed the system. 46% disagreed, 19% strongly disagreed, 16% agreed, 3% strongly agreed and 16% were undecided.

Figure 4.14: Do you have any fear that the system may fail?
The above graph reflects that 26% of the respondents disagreed, 20% strongly disagreed, 20% agreed, 7% strongly agreed and 27% were undecided with question of the system failing. This shows that half of the users are sure that the system won’t fail. Possible reasons for the fear of the system failing are that it being new, only a few will know about it and how to use it, and it is not easy to accept change.

![Pie chart showing responses](chart.png)

Figure 4.15: Do you have some doubts that the system might erode your self-confidence and damage your personal development?

The above graph reflects that 40% of respondents disagreed with the statement that the system will erode their self-confidence and damage personal development, 11% strongly disagreed, 11% agreed, 0% strongly agreed and 13% undecided.

Referring to the idea that the system will erode their self-confidence and damage personal development, the users showed that they would be motivated and encouraged by the system.
Figure 4.16: Do you feel uncomfortable about the introduction of the help desk because you are used to the old way.

The above pie chart reflects that 45% of the respondents disagreed with the statement that they will feel uncomfortable with the introduction of the help desk, 37% strongly disagreed, 6% agreed, 3% strongly agreed and 9% were undecided. The chart shows that the users were comfortable about the introduction of the help desk.
Figure 4.17: What would the user want the help desk service to provide?

The above graph shows that users prefer to be provided with the service concerning the hardware maintenance and software installation.

Figure 4.18: Which forms of support would users like to be provided with.

According to the above graph the preferred help desk would be the walk in help desk, followed by the telephone help desk.
Figure 4.19: How do you rate your Computer Skills?
Of the selected respondents who returned questionnaires, 3% rated their computer skills as very poor whereas 42% rated them as good. Those with average computer skills formed 23% of the total respondents and only 17% of respondents described their skills as excellent.

Figure 4.20: Whom would you prefer to have assistance from?
The above graph indicated that most of the respondents would be prefer to be assisted by the help desk services.

4.3 Conclusion

This chapter dealt with the analysis of the data collected from the North West University (Mafikeng Campus) community. It shows that the North West University community will welcome the introduction of a help desk, as it will be a quicker and faster way to get their problems solved more effectively and efficiently. The results of the questionnaire are intended as a base for any further investigation into the introduction of the help desk. The next chapter will discuss the findings, recommendations and the impact of introducing the help desk system.
Chapter Five
Findings and recommendations

5.1 Summary

Chapter one introduced the study and consisted of the following: background to the study, statement of the problem, objectives of the study, scope of the study, the significance of the study, limitations, and definition of concepts and the organization of the study.

Chapter two focussed on the merits of a well-functioning IT help desk in an organization, and further discussed the challenges that impact on the successful implementation of such well-functioning help desks. It also looked at seven steps for quality user support desk implementation in IT-driven organizations.

Chapter three focussed on various methodologies that are used to carry research efforts. The merits and demerits of employing any of the methods were sufficiently discussed and the researcher also explained why the questionnaire was used as the main data collection instrument for the present study.

Chapter four focussed on the analysis of data collected through the questionnaire. Pie charts graphs were used to present the collected data.

5.2 Findings of the study

In relation to the study's first objective, refers to determine whether the structure of the help desk is appropriate for the North West University (Mafikeng Campus), it was found that the North West University (Mafikeng Campus) IT needs a help desk that would be
manned by help desk personnel who also had to serve a university population with the telephone as a point of contact with clients. The personnel would also serve as the computer centre's technicians. It may be concluded that at present North West University (Mafikeng Campus) has no valid IT help desk structure. This can be further stressed by the fact that the Computer Centre has no written manuals outlining a protocol of logging calls for a help desk. The present system of the user help desk is haphazard, randomly done and often frustrating to the consultants and the clients.

The second finding based on objective two, which the distribution channels used for the help desk, is that telephones and office visits are the only and main channels of user support at North West University (Mafikeng Campus) community. There are no online troubleshooting manuals available to clients. Given that there are only two IT consultants for user support, these distribution channels are found to be really ineffective and not helping the IT environment at North West University (Mafikeng Campus).

The findings on objective three which is to determine how the help desk can be of high quality service, may be drawn from the above two findings in that the university was found to be spending more money towards the acquisition of IT software and hardware without availability or deploying enough resources to help students and staff (academic, support and administrative) to use such technology.

5.3 Recommendations

The challenge from the help desks services and computer services in general is to stay relevant to the needs of the users. Technology is becoming convergent with educational needs and it requires to be managed as an important part of education. It is therefore
recommended that North West University (Mafikeng Campus) put into place a well-defined strategy in which IT help is well defined to be budgeted for with particular reference to staffing and resources. Without prompt responses and help, most of the users in the North West University (Mafikeng Campus) have little knowledge when coming to IT skills, although there is a serious need for a help desk so that all the users can be familiarised with present technology and informed of any new technology and upgrading of systems. The introduction of a help desk will also reduce the stress on the frustrated users because assistance will be immediately available when needed.

Real-time and remote troubleshooting software should also be introduced to help release time spent by consultants walking up and down the campus doing repair and troubleshooting tasks from office-to-office. It is also important to ensure that users know what the services are all about. Once this help desk is in place it will automatically demonstrate to management how positively the help desk operation will affect the university.

5.4 Conclusion
The study was limited to the North West University (Mafikeng Campus) and other researchers who intend to research the same topic are welcome to do so. Having examined the IT department’s transition process and failures, the conclusion drawn from the study was that there is a serious problems at the North West University (Mafikeng Campus), regarding the inadequacy of support received from the Information Technology department of the university, and also the lack of a proper system to manage user problems. That is why it is important to introduce a Helpdesk system that is user friendly and easy for all the University community to access. The help desk must
have the backing and involvement of senior management across the university. This can be achieved if the IT and help desk can communicate across the organisation on a more strategic rather than technical level with innovative methodologies that will drive the user support centre to a higher level of excellence.

Once the users’ requirements have been identified and standards of service are defined, it is necessary to define the system that will enable the standard to be translated into achievable goals of the IT department. The introduction will encourage users to launch their complaints to the help desk, not to their colleagues. This will also save the university a great deal of money because users will not take their personal computers to outside companies since the service will be better and more promptly managed by the help desk.
References


Appendix A

Dear Respondent

I am a student in the North West University (Mafikeng Campus) pursuing a Master of Business Administration degree programme.

I am conducting a mini dissertation towards the completion of my studies and the topic in this regard is “A feasibility study on the introduction of IT help desk at North West University (Mafikeng Campus)”.

You are kindly requested to respond fairly to the attached questions in the questionnaire. May you please take note of the fact that the study is solely done for academics purpose, therefore, you may not have to attach your name or signature. Furthermore, the information that you provide will be treated with strict confidentiality.

Your co-operation in this regard will be appreciated

Thanking you in anticipation.

----------------------------------
N.B MPHATSWA
INSTRUCTIONS:

- Against each of the question presented below please indicate your answer by placing an x in a provided box.
- Answer all questions.

Section 1

Questions relating to biographical data

Indicate your gender

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<td>Male</td>
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1.1 What is your age?

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<tr>
<td>31 - 40 Yrs</td>
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<tr>
<td>Under 20 Yrs</td>
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1.2 Highest Qualification obtained

71
### 1.3 What is your job title?

<table>
<thead>
<tr>
<th>Students</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretarial</td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td></td>
</tr>
<tr>
<td>Technical</td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td></td>
</tr>
<tr>
<td>Head of department / department</td>
<td></td>
</tr>
</tbody>
</table>

### 1.4 How long have you been occupying this position?

| 0 – 5 Yrs |  |
| 6 – 10 Yrs |  |
| 11 – 15 Yrs |  |
| 16 – 20 Yrs |  |
Section 2
Set of questions to investigate how the pursuing of the helpdesk will benefit the University community.

2.1 Do you in general agree or disagree to the introduction of the helpdesk.

<table>
<thead>
<tr>
<th>Agree</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td></td>
</tr>
</tbody>
</table>

2.2 What is your view regarding the quality of service provided by the information technology department known as Computer Centre at North West University (Mafikeng Campus)?

Rating Scale

<table>
<thead>
<tr>
<th>5. Strongly Agree</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Agree</td>
<td></td>
</tr>
<tr>
<td>3. Strongly Disagree</td>
<td></td>
</tr>
<tr>
<td>2. Disagree</td>
<td></td>
</tr>
<tr>
<td>1. Undecided</td>
<td></td>
</tr>
</tbody>
</table>

2.3 Do you think that the Help Desk service will improve productivity to your section when compared to what we don’t have now.

<table>
<thead>
<tr>
<th>5. Strongly Agree</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Agree</td>
<td></td>
</tr>
<tr>
<td>3. Strongly Disagree</td>
<td></td>
</tr>
<tr>
<td>2. Disagree</td>
<td></td>
</tr>
<tr>
<td>1. Undecided</td>
<td></td>
</tr>
</tbody>
</table>
2.4 Will the Help Desk increase staff/student morale

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>4.</td>
<td>Agree</td>
</tr>
<tr>
<td>3.</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>2.</td>
<td>Disagree</td>
</tr>
<tr>
<td>1.</td>
<td>Undecided</td>
</tr>
</tbody>
</table>

2.5 Job performance will improve because there will be a person or someone to answer to your query all the time.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Strongly Agree</td>
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<tr>
<td>4.</td>
<td>Agree</td>
</tr>
<tr>
<td>3.</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>2.</td>
<td>Disagree</td>
</tr>
<tr>
<td>1.</td>
<td>Undecided</td>
</tr>
</tbody>
</table>
Section 3

Questions about users participating and been able to use helpdesk services.

3.1 Do you fear that by introducing the helpdesk you'll be able to get the necessary help you need from the department / centre?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Strongly Agree</td>
<td></td>
</tr>
<tr>
<td>4. Agree</td>
<td></td>
</tr>
<tr>
<td>3. Strongly Disagree</td>
<td></td>
</tr>
<tr>
<td>2. Disagree</td>
<td></td>
</tr>
<tr>
<td>1. Undecided</td>
<td></td>
</tr>
</tbody>
</table>

3.2 Do you think that you'll have a problem as a user when the system will be introduced?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Strongly Agree</td>
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<tr>
<td>4. Agree</td>
<td></td>
</tr>
<tr>
<td>3. Strongly Disagree</td>
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</tr>
<tr>
<td>2. Disagree</td>
<td></td>
</tr>
<tr>
<td>1. Undecided</td>
<td></td>
</tr>
</tbody>
</table>

3.3 Do you have any fear that the system may fail?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Strongly Agree</td>
<td></td>
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<tr>
<td>4. Agree</td>
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<tr>
<td>3. Strongly Disagree</td>
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</tr>
<tr>
<td>2. Disagree</td>
<td></td>
</tr>
<tr>
<td>1. Undecided</td>
<td></td>
</tr>
</tbody>
</table>
3.4 Do you have some self doubts that the system might erode your self-confidence and damage your personal development?

<table>
<thead>
<tr>
<th>5. Strongly Agree</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Agree</td>
<td></td>
</tr>
<tr>
<td>3. Strongly Disagree</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>1. Undecided</td>
<td></td>
</tr>
</tbody>
</table>

3.5 Do you feel uncomfortable about the introduction of the helpdesk because you are used to the old way.

<table>
<thead>
<tr>
<th>5. Strongly Agree</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Agree</td>
<td></td>
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<td>3. Strongly Disagree</td>
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<td>2. Disagree</td>
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</tr>
<tr>
<td>1. Undecided</td>
<td></td>
</tr>
</tbody>
</table>
Section 4

Question pertaining to the services required by users.

4.1 From the list below please tick the three you would like the user support services / helpdesk to provide.

<table>
<thead>
<tr>
<th>Service info: Lab hours, info, etc</th>
</tr>
</thead>
<tbody>
<tr>
<td>System status: Campus networking</td>
</tr>
<tr>
<td>Hardware maintenance: Pc Broken.</td>
</tr>
<tr>
<td>Application assistance: questions on campus software</td>
</tr>
<tr>
<td>Software installation and upgrade: how to get access to new version of software</td>
</tr>
</tbody>
</table>

4.2 From list the below please indicate which forms of user support you would like to be provided with.

<table>
<thead>
<tr>
<th>One on one consultation: Personal assistance in the office or lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone helpdesk: Call in for a question.</td>
</tr>
<tr>
<td>Walk in helpdesk: Go to a location for help.</td>
</tr>
<tr>
<td>Electronic mail helpdesk: Submit question through email</td>
</tr>
<tr>
<td>Web based helpdesk: With frequently asked questions &amp; other user documents on the WWW</td>
</tr>
<tr>
<td>Published manuals: Have manuals for applications available use.</td>
</tr>
</tbody>
</table>
4.3 How do you rate your Computer skills?

<table>
<thead>
<tr>
<th>Excellent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td></td>
</tr>
<tr>
<td>Very poor / No skills</td>
<td></td>
</tr>
</tbody>
</table>

4.4 Who would you prefer to get assistance from:

<table>
<thead>
<tr>
<th>Some one from the Faculty</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Helpdesk services / support</td>
<td></td>
</tr>
<tr>
<td>Lab consultant</td>
<td></td>
</tr>
</tbody>
</table>