AN INVESTIGATION OF INTERNET USAGE AMONG

A GROUP OF PROFESSIONALS IN SOUTH AFRICA:

A USES AND GRATIFICATIONS APPROACH

By

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DECLARATION

I declare that **AN INVESTIGATION OF INTERNET USAGE AMONG A GROUP OF PROFESSIONALS IN SOUTH AFRICA: A USES & GRATIFICATION APPROACH** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Juliet F. Gilbert

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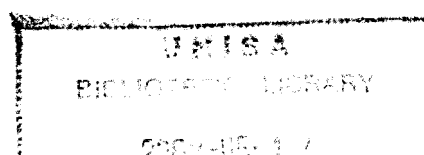
APPROACH

Summary:

New mass media impact on the nature of public communication and the use and gratification of existing mass media because each new medium is used and experienced differently. As a new mass medium, the Internet offers different forms of communication, such as Internet Relay Chat, Multi-User Dungeons and chatrooms. It has also combined traditional mass media, namely print, radio and television, into a single powerful medium. Due to the fact that the Internet is still an emerging medium, its long-term effects on the nature of public communication and traditional mass media warrants ongoing investigation.

The first part (Part A) of this dissertation situates the Internet chronologically within the development of traditional mass media and their impact on public communication. Part B investigates Internet use among a group of professionals in South Africa. The objective is to identify how they use the Internet and the gratification they derive from it.

Key terms

Internet; use and gratification; mass media; public communication; impact of technology; virtual worlds; e-mail; newsgroups; chatrooms; online publishing; Internet Relay Chat; WebTV; MUDs; South African professionals

"The use of technology is a basic feature of all human societies, and our technologies strongly influence the way we live. Equally important, but less obvious, technology itself is a product of social, economic, political and cultural patterns. The kinds of technologies found in a particular society reveal a great deal about the nature of that society. The study of technology is therefore important not only for its own sake, but also for what it tells us about the kind of societies we make for ourselves," (Volti 1988:vii).

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1.1 Introduction: The impact of technology

The purpose of this introduction is to provide a broad background for the study of the Internet and how it is used by a group of professionals in South Africa. The intention is to situate the Internet in the context of the technological evolution that has brought about the Age of Information. The researcher will briefly discuss why it is important to study the effects of technology, describe the creation of the information society, explain the gap between the information rich and the information poor and make some assumptions regarding future technology trends and developments.

Technological development and deployment is unique to the human race. The rapid progress of technology - since the invention of the printing press in the 1450s which detribalised society and gave birth to the first true form of mass communication, through to the evolution of the Internet which has seen the birth of the Age of Information and individualism - has changed the way societies think, communicate, interact, work and live. As a human phenomenon, technology is not merely a system of components that perform a specific function. Human skills and attitudes are as much a part of technology as the material objects that make technological systems work.

While technology has made communication easier, information more accessible, companies more productive and global markets a reality, it has also disrupted the fabric of societies and communities, forcing their members to adapt and change – to evolve as technology evolves.

The impact of technology on people has traditionally rested in the hands of the minority: the scientists and engineers who create and develop technological tools and components. The degrees to which individuals are able to access and manipulate technology is relative to the success and survival of new technologies as well as the extent to which people influence – or are influenced by - technological change. The pervasive nature of many technologies (most recently, the Internet) calls for research into the use of these technologies and their impact on human lives.

With the advent of the printing press, radio and television, researchers condoned, praised, hailed, cautioned and rejected each new medium. The widespread adoption of the Internet calls for similar caution and in-depth research if we are to avoid the blind embrace of a technology that is all pervasive and that presents many positive and questionable consequences.

Information technology forms the core of the post-industrial information society – it's highly computerised, with huge volumes of data transmitted at ever-increasing speeds to an ever-growing number of recipients. Information is a commodity, a key economic factor. "It is a creator of possibilities, a truly enabling and liberating presence in our midst. No important field of human endeavour remains immune to its influence, no corner of life is left undisturbed by its coming," (Martin 1988:11).

McLuhan (McLuhan & Zingrone 1995:118) explains how a new technology is experienced for the first time and induces change: "new sense ratios set up at once by the technological dilation of eye or ear, present men with a surprising new world which evokes a vigorous new "closure", or novel pattern of interplay among all of the senses together. But the initial shock gradually dissipates as the entire community absorbs the new habit of perception into all of its

areas of work and association. But the real revolution is in this later and prolonged phase of "adjustment" of all personal and social life to the new model of perception set up by the new technology."

Has technology actually improved the quality of life for modern day man? As technology assumes responsibility for more and more functions traditionally performed by the human brain -- from calculations to designs to the spontaneity of interpersonal, face-to-face human interaction -- the machine has become an extension of the self. Technology has largely become the eyes and ears through which humans learn about, understand and interact with their world.

The human memory is greatly assisted by the printed word and the computer chip, both of which store information for easy recall. Less human input means less innovation -- we no longer have to think for ourselves. The trading of goods has been replaced by printed money and online banking; we no longer have to navigate using natural landscapes and the skies; cars are fitted with warning lights to remind us when fuel is low or when our seatbelts are not fastened; television and radio tell us which products to buy and we can order many of them over the telephone or Internet; news broadcasts selectively show events and happenings around the globe and the Internet connects us effortlessly and anonymously to the amorphic mass of online communities.

Looking to our ancestors, who were technologically "deprived", it is interesting to note that succeeding generations of inventors, writers, composers and artists have arguably not produced any works as complex or masterful as Einstein, Shakespeare, Mozart or Michelangelo. Instead, the Age of Information has become an age where mankind "has lost his sense of prophecy and, above all, his sense of the sacred. Reality has become dreary, flat and utilitarian, leaving a great void in the souls of men which they seek to fill by furious activity and through various devices and substitutes," (Volti 1988:12).

The information society

The computer is widely claimed to have launched society into an age of information. However, as Postman (1993:62) points out, society was launched into that age with the advent of the printing press over four centuries ago. The difference lies in the use and transfer of information. Only one person can read a book at a time. Over the Internet, a large audience can read a text message on a screen simultaneously. Content of - and access to - information has been transformed by the computer. Instead of flipping through the pages of a book, users can press a key or click a mouse and get information on any topic they desire. And this information comes from myriad different sources.

The proliferation of information through technologies such as the mass media and, more recently, the Internet, has made it a commodity. IT (information technology) companies have sprung up all over the world, selling faster and more powerful computers and networks that feed insatiable appetites and fiercely competitive environments. Information has become the basis for economic growth and a new source of power.

And with it has come the information society: a highly computerised society in which massive volumes of data are transmitted in seconds, providing information at the press of a button. But there is only so much information the human brain can process and sifting through the mounds of data can result in information overload. The danger lies in technology that drives society and subordinates social needs. This is why it is so important to study and research new technologies (such as the Internet) to understand the role they play in society and the consequences of these new technologies for the human race.

One has only to consider the worldwide panic initiated by the millennium bug. Computer programmers did not foresee the problems a simple date could cause to programmes that used the last two digits of the year as their primary reference for processing data. Everything from electricity supplies to pension funds, personal finances and daily business operations could have been disrupted. The world realised the extent to which daily life was influenced by

computers and people felt helpless. Our utter reliance on technology has made us vulnerable to technological breakdown: we are becoming slaves to the machine.

The integration of technology into human life has resulted in a fractured and fragile society where people no longer have control over their lives and are increasingly alienated by technology. E-mail has replaced the warmth of the human voice and the intimacy of the hand-written word, newsgroups replace social gatherings, the chat room offers solace to lonely people, business is conducted through encrypted messages and digitised signatures.

And with this interdependence has come the freedom to choose and consume. But as Mulgan (1997:15) warns, this freedom brings with it the cost of other people's choices, which is becoming increasingly hard to avoid. "Our challenge is to develop new forms of connection, and new shared institutions that draw on our innate sociability and our instinctive dispositions to act ethically. If we don't, we face a future where individualism will lead not to richer lives and diversity but rather to an atomised society of people fearful of strangers, who hide behind locked doors and impersonal screens."

The interlinking of communities around the world via e-mail, chat rooms and online trade makes personal information far more accessible. Spammers and hackers can tap into personal conversations or transactions and users' details are entered into databases and sold to companies for fortunes. This could result in a loss of privacy that becomes increasingly difficult to avoid.

McLuhan (McLuhan & Zingrone 1995:150) argues that "the aspiration of our time for wholeness, empathy and depth of awareness is a natural adjunct of electric technology...Every culture and every age has its favourite model of perception and knowledge that it is inclined to prescribe for everybody and everything. The mark of our time is its revulsion against imposed patterns. We are suddenly eager to have things and people declare their beings totally. There is a deep faith to be found in this attitude – a faith that concerns the ultimate harmony of all being."

The extent to which computers impact on human lives is dependent upon the use to which this technology is put. This in turn will determine the negative or positive consequences and impact of technology on society. As Edmund Burke wrote: "men are qualified for civil liberty in exact proportion to their disposition to put moral chains upon their own appetites," (Mulgan 1997:55).

The information rich versus the information poor

While the new information economy continues to boom, it is increasing the gap between first world countries that can tap into this global economy and third world or developing countries whose economies are still emerging. The accessibility to new technologies is a luxury many of these countries cannot afford, which means they will continue to lag behind. Alternatively, if they receive financial aid and skills transfer from developed countries, they may be able to leapfrog the technological revolution, enter the Age of Information and become a player in the global market place.

In countries where the communications infrastructure is either absent or still in its infancy, basic communication technology such as the telephone is a luxury. The struggling economies of many African countries, coupled with a volatile and unstable political environment, has forced citizens to focus primarily on day-to-day survival. Government bodies lack the funds to build the infrastructure that could assist their countries to leapfrog technological evolution and take advantage of information technology. And raging wars have destroyed what little infrastructure they have.

Despite international aid, which has contributed towards building telecommunications infrastructures, developing nations lag behind in the global information revolution. The gap between the haves and the have-nots is widening, and the information rich continue to reap the benefits of increased knowledge while the information poor are left behind.

Adding to this dilemma is the lack of exposure to new technologies. The transfer of technologies is not an instant cure-all for developing countries as they lack the basic skills to implement, operate and maintain the sophisticated and complex equipment that drives computer networks. High levels of illiteracy and lack of basic education are compounding matters.

As Volti (1988:74) explains: "Due to the drastically different circumstances of today's underdeveloped countries, technologies that have worked well in the rich nations that originated them may fail when they are taken to a different setting. Even worse, they may seriously distort the course of a nation's development and leave it poorer than when it started out. Human and financial resources will be concentrated in a few privileged segments of the economy and society, leaving much of the population, especially those in rural areas, destitute."

The diverse cultures of underdeveloped countries are unique and virtually untouched by western influence. By bringing television and the Internet to these communities, one risks disrupting their traditional social and cultural patterns. How much mass media content reflects or reinforces the traditions and social norms of non-Western societies? Very little, in fact they tend to be featured in documentaries as the wild and curious inhabitants of an alien world.

There are four major areas of concern to developing countries: "First is the major imbalance of information flows, which are heavily weighted in favour of the developed countries. Second is the control exercised by the developed nations over all forms of information including the allocation of radio frequencies. Third there is the de facto perpetuation of colonialism, through operation of the current system of information flow. Fourth, the fact that the developed nations have a virtual monopoly of world communications means that they can broadcast exactly what they choose, and that, as a result, only stereotyped and sensational images of the developing countries are transmitted in the international media," (Martin 1988: 129).

Yet developing countries are driven by national pride and the desire to halt exploitation by developed nations in their quest for self-sufficiency through communication technologies. Where local telephone networks are inefficient, satellite technology may be the answer. But the only way to access this technology is through a telecommunications infrastructure which will invariably be implemented by a multinational that comes into the country and dominates the local market.

In order to compete with the rest of the world, developing countries may have to succumb to Western domination, for it is through technology that they can become educated, interact with the world and trade in global markets. And perhaps this access will enable them to make their voices heard and to bring unmediated reports of their plights to the rest of the world. But first they have to address the abject poverty that prevents citizens from having basic amenities such as food and water.

In many respects, then, the Internet is not the great leveler. As Marshall (1983:6) notes: "Rather than seeing the genesis of Marshall McLuhan's global village, what we are witnessing is the promotion of the global supermarket in which half the world cannot afford to buy".

Future trends in the information revolution

Whether one hails the Internet as the purveyor of knowledge and freedom, or one cautions about the detrimental effects of an over-rated, alienating technology, the fact is that the Internet remains at the core of the information society. As technology continues to make advancements, it continues to permeate our lives and with the convergence of different technologies, the Internet looks set for future growth and development.

Technological innovation appears to have superceded the stage where technologies were developed to aid humans in performing mundane tasks and is taking us to a stage where technology dictates how we live and interact.

Wireless Application Protocol (WAP) is the latest new buzzword. This technology enables users to access the Internet and e-mail via cellular telephones, introducing the next phase in connectivity: the mobile Internet. Already leading cellular firms such as Nokia and Ericsson have launched cellphones with WAP capability. There still, however, remains much speculation as to the degree to which WAP will be adopted by its target audience (telecommuters). The difference between the size of a cellular screen and that of a personal computer is remarkable and it is doubtful that cellphones will handle the flow of text messages, not to mention audio-visual data, with equitable ease. Bandwidth capabilities may also prove to be a hindrance. Yet the inventors persist, trying to force a market for their new creations and have raised expectations of dramatic increases in mobile Internet connection speeds in the next few years.

The scientists who created the Internet and the World Wide Web are deep into the next phase of global connectivity: the grid. Their vision of the next Internet is a global grid millions of times more powerful than anything available today. "Imagine being able to sit at your desk and access all the information in the whole world to answer your question, in the format you need. Not just a list of links to relevant web sites or even selected online articles, but every piece of data ever collected on the subject, in a relevant, user-friendly way," (Cookson 2000:7).

Driven by scientists who need to share massive quantities of data between laboratories, the grid presents the greatest computing challenge to date. A high-speed network that will link supercomputers, databases, specialised processors and personal computers, the grid will enable collaborative computing, easing the frustration of searching for specific information. The software will be designed to find information for the user without him/her having to worry about which web site it originates from.

In much the same way as the standard Internet protocol was identified by the US National Science Foundation in the late 1980's, opening the way for hyper linked documents and

navigation tools such as Netscape, public funding is expected to contribute to extending the grid to home users. "The distinction between scientific and commercial computing is starting to blur, particularly for applications that involve remote visualisation...A huge rise in the capacity of the communications infrastructure will be required to bring the benefits of the grid to the consumer market. But this is achievable," (Cookson 2000:7).

Whether this will compound the impact of the Internet and the issue of information overload remains to be seen. Electronic commerce is still in its infancy and, while organisations around the world are rushing to advertise and sell their products and services over the Internet, the teething problems have not been fully realised. But web shoppers are on the increase every year and the choice of goods continues to expand. It is in the early stages of adoption of new technologies that consumers must keep their wits about them and ponder the pros and cons of the tools that are being made available to them. Perhaps this is what the visionaries see as the dawning of the Age of Knowledge: an age of a more discerning public that shifts the focus away from technology for technology's sake.

Following this broad introduction to the promises and threats of the information society and despite the challenges facing developing countries as far as information and communication technologies (ICT) is concerned, the aim of this dissertation is to investigate the Internet as a new technology and to determine Internet use and gratification among a group of professionals in South Africa.

As a developing country, South Africa is divided into those members of the population that have access to ICT and those that don't. By examining how and for what purposes these people use the Internet, we can enhance our understanding of Internet usage and gratification and make assumptions about the effects and future use of this new communication medium. It may even benefit initiatives aimed at providing Internet access to the have-nots.

The fact that there are so many issues surrounding the Internet as a new technology suggests that researchers should focus more intently on the Internet to gain a better

understanding of its characteristics and impact. The focus of this dissertation is to describe the evolution of the Internet and place this in context with the evolution of traditional mass media, to make assumptions about the impact of the Internet on traditional mass media and to study how people are using this new medium.

1.2 Research questions, theory and methodology

Objective of the dissertation

This dissertation examines the evolution of communication technologies, focusing on the rise of traditional mass media, their effects on society and the different uses and gratifications sought and obtained through exposure to a particular medium. The media studied are the printing press, the radio, television and the Internet. The first part of the study also considers how each new technology has impacted on other media, on humankind and media exposure and postulates what long-term impacts new and old technologies will have.

The aim is ultimately to determine how the Internet is used and whether the Internet, as a new communication medium which requires the individual participation of virtual communities, will supersede traditional mass media through its ability to satisfy needs in more diverse ways, or whether it will create new needs and join traditional mass media by forcing audiences to embrace a technology that subverts individualism in the name of technological advancement. More specifically, the focus will be on how professionals in South Africa use the Internet and the gratifications they seek and obtain from it. For the purpose of this dissertation, professionals are defined as people employed as skilled workers by a registered company. Secondary education is a prerequisite, but tertiary education is not stipulated as certain skills may be acquired through job experience in a particular field.

The dissertation will focus on providing answers to the following research questions:

- How do people use the following traditional media and what gratifications are sought and obtained from them:
    - Printing Press?
    - Radio?
    - Television (see chapter 3)?
- How does the usage of these more traditional mass media compare to use of the Internet and the gratifications sought and achieved? (see chapter 3,4,5 and part B)
- How will the Internet influence the way in which conventional media develop? (see chapter 4)
- What is the nature of communication on the Internet (newsgroups, multi-user dungeons, IRC, e-mail, print, radio and television broadcasts)? (see chapter 4 and 5)
- What needs are sought and gratified by the Internet? (see part B)

The objective of this dissertation is thus to conduct a broad investigation into the use of the Internet by a specific group of South Africans (i.e. professionals operating in a diverse range of industries) against the background of the evolution of information and communication technologies (ICT) and the rise of the Internet as a new mass communication medium.

The underlying assumption is that each new medium is used and experienced differently and thus affects the nature and impact of public communication. This assumption will be applied to the Internet to determine how a group of professionals in South Africa use the Internet and what gratification they derive from it. It will also examine the various forms of communication on the Internet, how they are used and to what effect (see chapter 4 and part B).

In order to explore this assumption, the study commences with a brief and descriptive overview of the development of traditional mass media and their impact on public communication. The reason for selecting these media is that the Internet itself embodies - and has impacted on - print, radio and television. In other words, all these media are

available over the Internet and have, as a result, had to adapt to differentiate themselves from their virtual forms. The aim of such an overview is (i) to situate the rise and growth of the Internet chronologically within the context of the development of traditional mass media and their impact on public communication, (ii) to deduct from this historical overview knowledge about media use for the purpose of formulating a questionnaire on the use of the Internet in South Africa.

The ultimate research question is, therefore: how do people (a select group of professionals in South Africa) use the Internet and what gratification do they derive from it?

1.3 Structure of the dissertation

Part A: Theory

Part A, chapter two of this dissertation is a broad examination of the assumptions of the uses and gratification theory, categories of gratification, varying levels of audience participation and an explanation of the relevance of this approach to an investigation of Internet usage and gratification among a group of South African professionals.

Chapter three commences with a brief historical overview of the printing press – the first mass communication medium, followed by radio and television. The intention is to use this overview to understand the environments in which each mass medium evolved and the impact of this technology on man and society from a communications perspective. It looks at how people used the new medium and the gratification they obtained from exposure to it. Ultimately, the objective is to compare the development of the printing press with that of radio, television and the Internet and to examine how people use different mass media to achieve a variety of needs gratification.

The discussions are closed with conclusions regarding how people use the Internet and the strengths and weaknesses, from a uses and gratification perspective, of each traditional

medium versus the Internet. By understanding how and why each new medium developed and created a mass audience, it is believed one can look at technological advancement from the perspective of the audience and compare their experiences and the impact of technology on man and society.

Chapter four comprises an overview of the Internet as a new mass medium, looking at the various types of communication available on the Internet and the different gratification they may offer. As a new medium, the Internet can be understood from the perspective of traditional mass media and assumptions can be made regarding the ways in which it will impact on man's selective exposure to print, radio, television and the Internet. The chapter also examines the ways in which the Internet has absorbed traditional media and the impact this has had on each medium. If publishing can be done online, radio broadcasts can be accessed from the Internet and television can be viewed from web sites, what future do these traditional mass media have? Is the Internet capable of converging mass media into a single source from which one can access virtually anything? Will the Internet draw audiences from conventional mass media by offering unique or improved ways of satisfying needs?

The social consequences of having needs satisfied by the Internet is something mass media researchers need to examine. With print, radio and television, governments, publishers and broadcasters have strict control over content and can regulate the medium. No-one owns the Internet and therefore no-one has to assume responsibility for the information it contains. In many cases, the authors and producers can remain anonymous or assume new identities, making it difficult to enforce a sense of responsibility. The impact of this anarchy may have extremely positive effects on personal freedom and communication, but it also poses dire consequences for individuals who are unwittingly exposed to uncensored information. These issues require in-depth investigation, discussion and debate, which is beyond the scope of this dissertation. However, chapter five contains a brief summary of the potential impact of the Internet on communication and society.

Part B : Survey

The questions and assumptions regarding Internet use and the gratification it offers are investigated in part B of the dissertation. Chapter six comprises an analysis of a survey which has been conducted among a group of professionals in South Africa to determine how and why they use e-mail, visit chat rooms, listen to online broadcasts and subscribe to online publications. The aim is to determine the uses and gratification of the Internet user.

Chapter seven provides a summary and interpretation of the results, giving consideration to assumptions made in part A of the dissertation. Certain comparisons are drawn between the use of - and gratification obtained from - traditional mass media and assumptions are made regarding the impact, use and gratification of the Internet in general.

In summary

The underlying assumption and research question can be investigated from many theoretical standpoints and in multifarious ways. The researcher provides an idealistic view of how the Internet is experienced in the context of a developing country such as South Africa, which has basic needs such as electricity, a high rate of illiteracy and unemployment, as well as widespread poverty.

Although the researcher is acutely aware of the technology gap characteristic of developing countries, the criticism and doom prophecies of the Internet, the poor performance of technology companies on the world's stock exchanges and a global economic slowdown, the researcher wishes to draw the reader's attention to the fact that the dissertation does not focus on:

- examining the role of ICT in developing countries and the accessibility to this new medium
- formulating media policy related to the Internet

- discussing the legal issues that arise on the Internet (for example, privacy, copyright, pornography)

- focusing on one particular form of communication on the Internet

- investigating electronic commerce and e-business

- analysing the role the Internet plays in education (i.e.. use of the Internet by schools and universities)

The next chapter explores the theoretical foundation of the uses and gratification approach in order to explain its relevance to the investigation of how a group of professionals in South Africa use the Internet and the gratification they derive from it.

PART A : THEORY

2. CHAPTER TWO: THE USES AND GRATIFICATION APPROACH

2.1 Theoretical point of departure: uses and gratification

The uses and gratification theory and research (Blumler & Katz 1974; Rosengren, Wenner & Palmgreen 1985) is used as the theoretical point of departure. A critical analysis of this theory is beyond the scope of this dissertation. The approach was selected due to the fact that it focuses on human needs and the extent to which the media satisfy these needs and to which they create needs. The latter forms part of the effects of exposure to - and usage of - mass media, while the former relates to selective media usage by humans to achieve a particular purpose. The uses and gratifications approach assesses media consumption from the perspective of the audience, rather than from an ideological, aesthetic or elitist perspective, moving away from approaches such as the hypodermic needle theory by considering the audience to be active participants.

In order to use the Internet, people have to actively click on web pages and navigate their way to the web sites or topics of interest they have selected. It is for this reason that the uses and gratification approach was selected for an investigation of how a group of South African professionals use the Internet and the gratification they derive from it.

2.2 An overview of the uses and gratification theory

The uses and gratification approach builds on Maslow's Hierarchy of Needs (Larson 1989:165), which ranges from basic needs such as food, shelter, security and love to more complex needs such as recognition and self-actualisation and assumes that humans have certain needs for which they seek gratification through exposure to specific media. The approach looks at what people do with media, taking into consideration the social environment in which the media operate, audience expectations and perceived gratification.

Katz, Blumler and Gurevitch (1974: 20) explain that empirical investigations of audience uses and gratifications have several points of departure, but all are concerned with "(1) the social and psychological origins of (2) needs, which generate (3) expectations of (4) the mass media or other sources, which lead to (5) differential patterns of media exposure (or engagement in other activities), resulting in (6) need gratifications and (7) other consequences, perhaps mostly unintended ones."

The approach rests on several assumptions, including purposeful audience activity in which the audience consciously chooses specific media to satisfy a particular need and how this compares to other, more conventional methods of need satisfaction. It relies on the ability of the audience to be aware of (and report on) their motives for exposure to mass media and their perceptions of the effects of this exposure. A variety of gratifications makes it necessary to identify which needs are most important, to what extent the media gratifies them and whether there is any unconscious gratification or unintended media effect.

Categories of gratification

Rosengren et al (1985:174) define some of the different types of gratification achieved from media news. Process gratification occurs when an individual receives gratification primarily from being involved in the process of communication behaviour rather than the message content. This is typical of medium usage for escapism (such as for entertainment or to escape social isolation). Content gratification is characterised by users seeking to gain knowledge to increase or decrease their uncertainty in personal and social situations or to affirm existing predispositions.

"Orientational gratifications are message uses for information that provide for the reference and reassurance of self in relation to society. Social gratifications are message uses that link information about society derived from news to the individual's interpersonal network," (Rosengren et al 1985:175). Orientational gratification increases self-esteem, enables individuals to situate themselves in the political spectrum and provides information for use in

conversation. In the case of social gratification, individuals personally identify with the actors (heroes, presenters, politicians) and use them as a source of reference or behavioural model for their own interpersonal interactions.

Audience activity

The nature of the medium affects the degree of satisfaction or gratification achieved. The media compete with other sources of need satisfaction and the greater the choices available to audiences, the more selective (and active) they become in choosing a medium they perceive will satisfy a particular need. The value accorded by audiences to a particular medium is based on the perceived importance and success of need gratification.

Rosengren et al (1985:113) developed a typology of audience activity, taking into account surveys conducted by researchers, including Levy, Windahl and Katz, and identified different levels of audience selectivity. Firstly, there is the selection of a particular medium. This reflects the individual's decision to be exposed, which is based on his/her experience and perception that the medium is capable of satisfying a particular need - there is an anticipated outcome. During exposure, the individual will pay attention to certain messages or parts of messages and disregard others. This is determined by the gratification sought. For example, someone interested in the arts may flip through a newspaper and ignore the financial and business sections, selecting the cultural or entertainment section as an area of focus. The degree of recall after exposure to a medium reflects the level of audience activity, which in turn depends on the gratification sought. If an individual listens to the radio for relaxation or as a background to another activity, the level of information processing is likely to be lower than someone who has been following the story in a soap opera closely.

By identifying the level of consciousness and audience activity, one is able to study the degree to which passive and active audiences experience - and are affected by - exposure. The more motivated the audience, the more active, selective and involved they are likely to be.

Factors affecting media use

According to Johnstone (1974:35), research has shown that social environment also has an impact on media use because members of the mass audience experience a medium as members of an organized social group that exists within a particular cultural milieu. Therefore, different social environments will result in different media usage and experiences. Changes to these environments can also impact on media usage.

Rosengren et al (1985:22) note that demographics - such as age, sex, income and family environment – also play an important role in media use and gratification. Behaviour and attitudes are a function of expectancy, which is the perceived probability that a particular behaviour will result in certain consequences. They are also a function of evaluation, which is the positive or negative effect of media exposure and the degree to which this influences the behavioural outcome. It is the audience's expectation of the medium that influences and determines their media consumption. The more the audience is motivated to use a particular medium (through repeated positive outcomes and gratification), the more actively they will consume that medium. In order to make a selection, the audience must be aware of the extent of gratification offered by non-media alternatives (such as family, friends and social groups). Their beliefs can be formed through the trusted opinions of friends and family, direct observation of a situation or inferred on the basis of logic.

Orientation towards a specific medium may be motivated by several needs. For example, the need for companionship or self-affirmation may be gratified by identifying and associating with stereotyped characters in television, such as the widely-popular *Friends* series, or by listening to one's favourite radio talk-show host and gaining a sense of familiarity with that person which extends beyond the impersonal airwaves. In addition, these programmes may provide information about the latest fashions or socially-acceptable behaviour, or they may include news clips and advertisements that inform audiences about events and new products. This

satisfies the need for information. It could also satisfy the need to be entertained, the need for escapism, acceptance and the need for relaxation.

"Studies have shown that audience gratifications can be derived from at least three distinct sources: media content, exposure to the media per se, and the social context that typifies the situation of exposure to different media," (Blumler & Katz 1974:24). Listening to the radio in the car may have a different effect to listening to it at work. A professional may listen to Radio 702 on his/her way to work to hear the latest local and international news (the need for information or social orientation) or to find out about traffic jams. Once at work, he/she may switch to Classic FM for background listening (need for entertainment or relaxation).

The collective experience of watching a television programme may form part of family socialising time (satisfying the need to share the experience of watching a particular programme, the need for entertainment or the need for diversion from the often harsh realities of family life) or the television may be switched off during this time to allow the family to focus on each individual and engage in discussion (alternative need gratification such as the need for interpersonal, human communication). Some people will watch television or listen to the radio to use this media content for discussion with others, some will use the media to entertain guests, while others may view this as a collective experience that they can share with others by watching television or listening to a radio show together.

Each medium is assumed to offer a unique experience and possess typical attributes and exposure situations. This will determine the type of media used and the gratification sought. Psychological disposition also plays an important role. "Books and cinema have been found to cater to needs concerned with self-fulfillment and self-gratification: they help to "connect" individuals to themselves. Newspapers, radio and television all seem to connect individuals to society," (Blumler & Katz 1974:26).

Peer pressure and social milieu also influence media exposure. Studies have shown that certain social groups have common needs and seek similar means of gratification of those

needs. For example, reading may be a favoured pastime of an older generation who may be more conservative, feel comfortable with this medium and are more solitary than teenagers who look to television for role models and programmes that feature their favourite pop artists donning the latest fashions. Culture is also an important determining factor in selective media exposure, although Western culture (and American television programmes in particular) appears to dominate the airwaves.

As listenership and audience are strong draw-cards for advertisers, audience research by broadcasters and publishers is used to gauge popular media content and comply with it. However, the media can also create needs or fail to gratify perceived needs, as is evidenced by the unanticipated success or failure of certain radio and television series. *Ally McBeal*, for example, is highly unpopular with the American audience, many of whom find her irritating. In other countries (including South Africa), the series enjoyed exceptionally high audience ratings. It is therefore important to distinguish between gratifications sought and gratifications obtained.

The extent to which audiences determine the success or failure of a programme suggests that need satisfaction results in selective media exposure. If their needs are satisfied, there is a positive media effect. In some instances, the audience may find that an entirely different need is satisfied by a medium, which is an unintended consequence of media exposure. This makes it difficult for broadcasters and publishers to predict positive or negative media effects.

McLeod and Becker (1974:142) note that "certain media effects may be anticipated but others may be interactive with orientations serving as contingent or contributory conditions". They divide media effects into "those stemming from message reception, including attention and comprehension, and those involving organisation of the message through cognitive restructuring and overt behaviour." Someone watching a television soap opera such as *Egoli* may be seeking relaxation, not information but if political undertones and comments are included in the script, they may also learn something about South Africa's political climate.

Sometimes, media exposure that is not pre-meditated can change effects and patterns of media usage. Scanning through radio or television stations, or browsing through a magazine in a doctor's waiting room may expose a person to a new medium, programme or publication and result in greater satisfaction or satisfaction of a need not gratified elsewhere. Conversely, if exposure is discontinued, there is nothing to reinforce the habit and it ceases. Media exposure thus influences effects and is often determined by needs.

External factors such as hours of work, location and social setting also contribute to media exposure. Prime time on television is considered by broadcasters to be between 20h00 and 22h00. This accommodates the nine-hour regular working day and dinner time. However, if one's spouse works longer hours or if there are young children at home, this could impact on the times and thus programmes which a viewer watches. It depends on the needs people have and the ways in which they seek to satisfy them.

While consumption is constrained by availability of the medium, work schedules and programming, motivation also plays an important role. "People show clear and loyal preferences among equally accessible mass communications. Such characteristic persistence cannot be viewed as mere continuation of a chance habit, if we remember learning theory's fundamental law of effect that repetition does not stamp in a response unless there is reinforcement; without reinforcement, repeated exposure would have the opposite effect of extinguishing the habit," (McGuire 1974:168).

The gratification achieved is related to the media effect – be it knowledge, dependency, affirmation or changes to attitudes, perceptions of social reality or agenda-setting. People actively seek a medium that affirms their beliefs. For example, those that believe television accurately reflects life and reality are most likely to seek information about life from that medium.

Society also determines acceptable media usage and gratification. Patterns of consumption of traditional media are formed in social circumstances, therefore frequency and preferred

content are socially determined. Broadcasters that don't conform to societal mores risk a barrage of criticism and outrage, which could have a negative impact on ratings and their ability to attract mass audiences. In turn, mass media systems develop audience roles – ranging from fan to aficionado, information-seeking monitor, spectator or explorer - by presenting different content in different ways.

Changes to media usage and gratification

Changes to the media environment results in new attacks on the senses by new technologies and a wider selection from which to choose. This in turn results in changes to patterns of media consumption. The videocassette enabled people to record their favourite programmes, thereby overcoming the restrictions imposed by programme scheduling. DStv offers a far greater variety of programmes than the SABC and has channels dedicated to specific areas of interest ranging from sport to music, politics, nature, series and movies. The Internet has opened communication channels globally, linking individuals across the world and giving them the freedom to explore, discuss and share their views.

Political and economic upheavals also influence and change values and belief systems. The democratisation of South Africa resulted in the lifting of sanctions and programmes that were previously banned are now available to South African viewers, exposing them to different ideologies and values. As Rosengren et al (1985:35) state: "Current uses and gratification theory thus posits that change will arise from the dynamic interaction of an active, resourceful audience with responsive and equally resourceful media systems, within the context of fluctuating social, political and economic environments".

2.3 Justification of the uses and gratification approach

The popularity of the mass media suggests that they are satisfying certain needs and the large amount of time devoted to media exposure suggests that it offers gratification that is unattainable in the real world. However, as Wright (1974:210) cautions: "The uses and

gratifications tradition in research tells us much about the extent to which certain personal needs are being fulfilled by one or another of the communications media. The next step is to ask, what are the social consequences of having these needs of individuals fulfilled in this manner rather than in some other way? Such questions are not easily answered, even in one's imagination, let alone through rigorous research." Perhaps some consolation can be found in the fact that media content is created by humans, for humans and that an element of personal choice exists.

Some proponents of uses and gratification research warn against the over-generalisation of media gratification and encourage an analysis of human needs in order to discover whether the media contribute to the creation and satisfaction of these needs and to what extent. More in-depth research is required into the social origins of gratifications. "To assert that mass communication is a latter-day opiate of the masses predisposes a media-output audience-satisfaction nexus that gratifications research treats as hypothesis rather than fact," (Blumler & Katz 1974:30).

The assumption that gratification is achieved through selective exposure to mass media has been studied and substantiated by many researchers from a wide range of perspectives. What is evident is patterns of media consumption that imply a willingness to expose oneself to a specific medium or programme on a regular basis. This is obviously also affected by the accessibility of the medium. However it does support the theory that media exposure is a conscious activity that is highly motivated by human needs in search of gratification. As McGuire (1974:174) notes: "From the partial point of view of the person as a striving problem solver, mass communications media offer a wide range of gratifications in the form of content that is perceived as instructive regarding how to live, how to manage, what is happening and what it means".

Relevance of the uses and gratification approach

Following this overview of the assumptions of the uses and gratification approach and its application to mass media research, the question arises as to whether this approach provides a suitable theoretical background for the investigation of Internet usage among a group of professionals in South Africa.

The renaissance experienced by the uses and gratification approach in the 1960s resulted in much of the research focusing on television, which was the youngest and therefore least understood medium of that time. Even today, there is little research being conducted to address new communication technologies, such as the Internet, to ascertain their impact on traditional media, audience selectivity and patterns of consumption.

The uses and gratification approach assumes that the audience is an active participant in the mass communication process and selectively exposes itself to certain media in its search for the gratification of specific needs. This point of departure is consistent with the nature of the Internet user, who has to point and click on hypertext links to access pages on the World Wide Web. Without the active participation of its "audience" (who are also the creators of content), the Internet would cease to exist: it offers a higher level of audience participation than any other mass medium, thereby changing the nature and experience of the audience.

By using this approach as a framework from which to investigate how people use the Internet and what gratification they seek or obtain from it, one can draw comparisons between the uses and gratification of traditional mass media, namely print, radio, television, and the Internet. From such a comparison, one can make assumptions regarding the unique gratification offered by these media and the way in which new mass media, such as the Internet, impact on the use of traditional mass media.

For example, are Internet users primarily seeking companionship from newsgroups or chat rooms on the Internet, or is it mainly a source of information, escapism or relaxation? Does a

high level of participation make it easier for people to gratify needs via the Internet? Are people spending more time on the Internet than they spend reading, listening to the radio or watching television? Considering that the Internet is not subject to the programming schedules or agenda-setting of traditional mass media, that it is accessible 24 hours every day and that anyone who has Internet access can post information on web sites, enjoy unlimited, unrestricted access to information and can create mass media content, it opens new opportunities for gratifying needs and possibly does so in a way no other mass medium can.

The high level of interactivity on the Internet may impact on the way people use traditional mass media and the gratification it offers may be better than that offered by conventional mass media. The only way to substantiate these assumptions is to study Internet use and gratification. Because professionals in South Africa are highly likely to have access to the Internet through their employers, they have been chosen as the target audience for a survey.

Current uses and gratification studies of the Internet

Internet research conducted to date (for example, research by MIT Media Lab, eLab Research, IDC, Gartner Group, Media Africa, MSN) focuses on providing statistics regarding the number of web sites, the average gender and age (general characteristics) of the Internet user and is also very business-orientated, looking at competitor analysis, electronic commerce, online marketing and the performance of Internet Service Providers. It would appear that research is being steered in this direction due to the funding available from organisations eager to master the Internet and increase their profits.

Papers are being written about the possible effects of the Internet and the varying degrees of Internet exposure and assumptions are being made regarding the impact of the Internet on individuals and on society (Radovanovic 1995; Shields 1996; Stoll 1995). However, despite searches through web sites using the key search words "Internet research" and "Internet + uses + gratification" on sites including Amazon.com, university libraries and large search

engines (including goto.com, msn.com, SearchEdu.com, google.com), it appears that the trend is towards Internet usage and that very little research is being conducted into the gratification sought and obtained from the Internet. This is important to the field of mass communication research, as one needs to understand the Internet as a new medium and postulate the short- and medium-term effects of exposure to this medium.

Hunter [sa], a doctoral candidate at the Annenberg School for Communication of the University of Pennsylvania, proposes using Katz, Blumler and Gurevitch's process model (Edelstein 1989:135) as a basis for exploring the World Wide Web (the Web) from a uses and gratifications perspective. His justification for choosing the uses and gratification approach is the active nature of the Web user.

According to the Katz, Blumler and Gurevitch process model, all media users share the same five categories of needs. Cognitive needs are related to increasing information and knowledge about our environment. These needs are probably best served by the Web. There are millions of pages of information related to virtually any topic the user can think of. From weather reports to maps, recipes and e-zines, the Web is a massive, virtual library with seemingly inexhaustible resources. As Hunter [sa] says: "This spirit of sharing data has come to be one of the most cherished aspects of the Web".

Affective needs will result in the user seeking aesthetic, pleasurable and emotional experiences from a medium. Here too, the Web appears to address these particular needs in the form of sites that list, review - or take the user behind the scenes of - the latest plays, music concerts, art or exhibitions. There are also more insidious sources of entertainment such as pornographic web sites where users can engage in virtual sex or be entertained by their own virtual private dancer.

Personal integrative needs are related to improving the credibility, confidence and status of an individual. Self-help sites and communities on the Web provide information on everything from relationships to cures for the common cold. Some also provide the opportunity for

people with common problems to share their experiences and support each other. This suggests they have the potential to satisfy the need to improve self-esteem and confidence.

The need to associate with the larger world is defined as the social integrative need. By clicking on hypertext links on Web pages, the Internet user can travel across the globe, visiting numerous places in different countries and communicating with people one would never normally have the opportunity to connect with. In this way, the Web provides global interaction that is accessible to anyone who has access to the Internet making the world a smaller, more intimate place.

The Internet also creates its own virtual worlds in the form of fantasy games such as Multi-User Dungeons (MUDs). In chat rooms, users can assume any identity or character and interact with others in virtual settings such as the beach or a bar. These types of web sites are likely to appeal to escapist needs such as the need to release tension or the need for diversion.

It is therefore possible that the Web can satisfy the five media users' needs. But what motivates their choice of the Web? Hunter [sa] proposes that traditional media have given a lot of exposure to the Internet and created a positive impression of it. So, while it is still a relatively new medium, users approach the Internet with the expectation that a particular need will be satisfied by it. This is evident in the exponential growth of Internet use.

Obviously, the cost of Internet access has resulted in a technology gap between those who can afford it and those who still only have access to traditional media. In these cases, the choice of medium may be motivated by socio-economic factors, rather than a lack of motivation to select a particular medium.

Hunter [sa] concludes that the Web offers three main gratifications: browsing (exploration), information and entertainment. His claims are substantiated by references to studies such as the Nielson survey and the Georgia Tech study, both of which found that users spend much

of their time simply browsing or surfing the Web, exploring a new world. However, Hunter [sa]
also points out that these researchers were not studying Web usage from a uses and
gratification perspective. He appeals to communication researchers to undertake carefully
structured studies that use this approach to explain what needs are being met by the Internet
and how. "By examining the content of the pages that people are visiting in order to receive
gratifications, researchers can compare the aspects of each media that appear on that page,
and receive a clearer picture of what each individual medium can provide, and more
importantly, what happens when all of these media are presented together" (Hunter [sa]).
This is, however, difficult to monitor due to issues of privacy. One would have to rely on the
ability of research subjects to identify and describe their experiences.

This dissertation will attempt to understand the Internet from a uses and gratification
perspective by conducting a survey among a group of South African professionals. The
survey will investigate the different types of Internet usage and gratification and the amount of
time spent in different areas of the Internet. From this survey, one can make certain
deductions about the rapid, widespread adoption of this new technology.

3.   CHAPTER THREE: TRADITIONAL MASS MEDIA

3.1   Introduction

As referred to in the preceding chapters, new technologies impact on society in multiple ways, changing the way people interact with each other and the media. New media offer new ways of satisfying needs and they challenge existing patterns of consumption. This chapter provides a brief description of the development and impact of traditional mass media – from the printing press to television - in an attempt to analyse and compare the development and impact of each new medium. In addition it will examine the uses and gratification offered by each medium to demonstrate how audiences adapt to new media. This will ultimately provide a chronology of - and knowledge about – the evolution of mass media and mass media usage. Such a chronology can be used as a point of departure for an analysis of - and enable deductions to be made about - new media (namely, the Internet). The historical overviews are necessary to identify the socio-political and economic environments in which the mass media evolved and also to determine how these environments influenced media use and gratification.

3.2   The printing press

Historical overview

Invented by Johann Gutenberg in the mid 1400s, the printing press sparked revolutions in the field of exploration, religion, science and education as well as communication. While some people viewed it with skepticism, others saw the printed word as the great leveler. "The printing press moved man from the primary manuscript to the secondary or derivative printed page...more people than ever before became involved in the manufacture, writing, printing, binding, publishing, distributing, buying, selling and reading of graphic materials; indeed, in due course Western society at large was even persuaded that every single citizen of every

single state in the world could become more or less literate (a dream that is still far from fulfillment)," (De Beer 1993:56).

By drawing on the diverse skills of different workers, printing encouraged new forms of cross-cultural change by bringing these people together in the work environment. "In those places where [the Master Printer's] enterprise prospered and he achieved a position of influence with fellow townsmen, his workshop became a veritable cultural centre attracting local literati and celebrated foreigners; providing both a meeting place and message centre for an expanding cosmopolitan Commonwealth of Learning," (Eisenstein 1979:56).

Through the vast quantities of books that were produced, print promulgated ideas and knowledge originally reserved for the learned elite. It presented these ideas in a standardised form that appealed to a far wider audience, potentially satisfying the need for information and integration into a society that was previously reserved for the privileged minority. By the end of the fifteenth century, over 40 000 books had been printed and the art of printing had spread from Germany to twelve other countries.

As De Beer (1993:55) observes: "The power of the book has been uncanny, mysterious, inestimable, overpowering and infinite – just as the activity of reading has a unique individuality, intimacy and privacy...Never since the discovery of fire and the invention of the wheel has any innovation had so pervasive and so enduring an influence on ways of thinking, feeling, worshipping, teaching, governing and discovering".

Printing provided new methods of collecting, storing and retrieving data and gave rise to new communications networks and an increased flow of information. In addition, the accuracy of data was greatly improved, as it did not have to be laboriously copied several times by scribes (which created a large margin for error). This was particularly critical in the case of maps and diagrams.

New forms of feedback were possible as collaborative texts evolved and records could be preserved for future generations. This had a significant impact on scientific developments. "It was of course the rapid dissemination of knowledge to whole new classes that created the modern new attitudes to both science and religion at the end of the fifteenth century," (Eisenstein 1979:691). Man's perception and understanding of the universe was revolutionised by the works of learned men such as Galileo, Copernicus and Newton, who applied mathematics to solve the problems of the natural world.

The storyteller was replaced by the literate villager who read out loud for people at gatherings in the town. Gradually, communal solidarity diminished as more people became literate and the solitary act of reading withdrew them from these social events. Communal gatherings shifted to bookshops, coffee shops and reading rooms, where new ideas were discussed and debated, contributing to a transformation in private life and a spirit of revolution. The printing press thus may have offered a new means of gratifying the need for companionship, integration into society, the need to share ideas and information through discussion and debate, the need to learn new skills or life skills and the need for solitude. The author (through the printed word), not the tribal elder, became the person from whom gratification of these needs was sought.

A barrage of "how-to" books hit the new presses, explaining step-by-step how to master everything from dressmaking to bookkeeping, feeding appetites for knowledge that were insatiable. Able to benefit from improved maps and navigation and exposed to the wide variety of fauna and flora of distant exotic lands, adventurers were replaced by explorers in search of wisdom, eager to fill the gaps in man's knowledge of the planet. This may have satisfied the need for exploration of - and knowledge about - foreign places to understand the world in which we live (social integrative needs).

By exposing dispersed communities to common messages and familiar phrases or quotations, print fostered stereotypes and uniformity. It also promoted cross-cultural interchange, changing perceptions and expanding boundaries. But the preservation of

vernaculars in the printed word fortified language barriers between groups and fostered nationalism.

From books to newspapers and magazines

In the eighteenth century, a new type of publication emerged that would cause a second wave in the modernisation of society: the newspaper. Initially, newspapers had little impact, being small in volume (four pages on average) and accessible only to the literate few who could afford to pay for them. This changed during the next century, when newspapers became a product of technologies of mass production characteristic of the Industrial Revolution, possibly offering an alternative gratification of the need for information (cognitive needs).

The quality and nature of information disseminated by newspapers was generally far inferior to that of books. Their frequency and vast array of topics necessitated the sacrifice of accuracy for timeous delivery. "Newspapers built up circulation by running stories that stressed scandal, crime and bizarre occurrences. The debasement of news reporting accompanied the increase in newspaper readership which turned the high drama of life into a cheap melodrama and led to stories being twisted into the form best suited for sales by the howling newsboy," (Volti 1988:145). Newspapers therefore offered a new alternative for satisfying the need for escapism and entertainment, as well as the need for information about the society and world in which people live.

A free press emerged in the form of underground publications which propagated views that challenged traditional modes of thought and exposed controversial issues which were censored by the daily press. This caused outcries and stimulated debate.

Improvements and developments in public schooling generated a larger literate population that in turn increased the potential newspaper readership. Following the expansion of networks of news, trade and transport, newspapers carried reports from across the globe.

Newsgathering and dissemination was enhanced and expedited by technological inventions such as the telegraph, telephone and radio.

Web-offset printing – a versatile process that handles short and long print runs on a variety of paper stock – saw the rise of consumer, trade and special-interest magazines during the 1960s and 1970s. These publications were able to take greater advantage of advertising due to their glossy paper and the high quality of colour reproduction. Once again, they offered an alternative source of need gratification to the book or newspaper and a new way of satisfying needs by focusing on particular topics and interest groups.

The impact of the printing press

The printing press heralded the age of information and mass production. In support of claims by the likes of Marshall McLuhan that it has linearised and segmented thought, heightened the sense of sight at the expense of the remaining four senses, fostered solidarity and internalised dialogue, print undoubtedly caused dramatic changes to the organisation and character of society. It vastly expanded knowledge, facilitated the widespread dispersion of information and ideas and resulted in innovations that lead to a better understanding of our world. Perhaps one of the primary gratifications offered by the printing press was the need for information and knowledge.

The printing press also presented new ways of communicating. Ideas, news and knowledge were shared through books, newspapers and magazines. New communities sprung up in the work place and coffee shops where people could interact with other communities and discuss their ideas. It offered new ways of satisfying the need for socialising, debating, sharing information, escaping into the imaginative world created by the author and identifying with the stereotyped characters that inhabited that world – in a similar way to the new modes of communication over the Internet (e-mail, newsgroups, Internet Relay Chat, Multi-User Dungeons, etc.)

Improvements to the storage and retrieval of information by recording information in the printed form, has assisted future generations in further expanding their knowledge and recording their progress. No longer do we have to rely on the oral tradition: we can read the same information that was available to audiences from the past. This has resulted in a trade-off of skilled memory techniques and oral tradition for greater wisdom and a global community.

The effect of this mass medium was the erosion of traditional hierarchies in society as information which had previously been accessible to a privileged minority was available to anyone who could read. Literacy became an essential requirement that would allow individuals to share the knowledge and experience of diverse cultures. The loss of identity that resulted from the transition from an oral to a literate society meant that people had to adapt to a new society and regain their sense of belonging. The spoken word was subordinate to the printed word, making communication impersonal and standardised.

In what is commonly termed "modern-day life", print continues to exert a profound and significant influence. The authority of the printed word has prevailed in the face of newer technologies such as radio, television and the Internet, enriching activities and enhancing wisdom. And it would appear that this medium's impact on society was experienced in a similar manner to succeeding technologies that gave rise to radio and television. Blumler and Katz (1974: 248) note that around the turn from the eighteenth to the nineteenth centuries, people all over Europe complained about a mania for reading, which was later to be echoed by similar sentiments surrounding the television set.

As Giddens (1991:24) concludes: "Today the printed word remains at the core of modernity and its global networks. Practically every known language of humankind has been set down in print, and even in those societies where levels of literacy are low, printed materials and the ability to produce and interpret them are an indispensable means of administrative and social co-ordination. It has been calculated that, on a global level, the amount of printed materials produced has doubled every fifteen years since the days of Gutenberg".

A uses and gratification perspective of print media

Despite fears that other media such as radio and television would detract from reading and cause illiteracy, research conducted in 1978 by INFRATEST, a German polling institute, indicated that 37% of all reading is stimulated by television (Steinberg 1983:246). The interest of the reader was shown to have been aroused by television programmes. Books have retained their bourgeois status, while television continues to be seen by many as a medium for the masses.

While radio and television are more limited in content, books continue to offer information on a greater diversity of topics and offer this content in a permanent form (the printed word). A study conducted by Human (1981:149) on television's impact on the use of public libraries by whites in South Africa indicated that individuals who engage in a high level of television viewing also read more books than those who watch less television and that people use a combination of media to satisfy their needs. Of the sample group, 66% indicated that they read for relaxation, 39% for information, 7% for education purposes and 1% for social activity.

Older age groups tend to read more travel stories and Westerns, while men prefer adventure, politics and scientific novels. Women have a tendency to read historical romances and light love stories, as well as lifestyle and child-care publications. These findings are supported by Frank and Greenberg's nationwide survey of 2476 Americans aged thirteen and over (Frank & Greenberg 1980:156). The average number of books read per year was 15.6 while daily newspapers averaged 4.1 per week. Adult males (in the money and nature's product category) show an above-average use of daily papers and have a preference for travel books. This was attributed to their need for settings in which strong male personalities are in a position of power or control (self-affirmation and identification). The adults in this sector are older males with interests in activities providing some form of tangible return or product (fishing or investments, for example), with a need for interpersonal contact and support.

Adult females in the arts and cultural activities interest group are heavy users of books, as well as Sunday, daily and financial newspapers. These women are highly educated and interested in a broad range of intellectual activities and subjects, therefore demonstrating a need for intellectual stimulation and growth. Their broad range of interests could be satisfied with intellectual material provided by a combination of printed matter that enables them to track news and information. Adult females in the home and community group also indicated a preference for local weeklies, Sunday and daily papers but used these media for cooking recipes, social news, personal advice and entertainment. And youths satisfied their need for escapism and fantasy with humour and science fiction books.

These findings clearly indicate that media selectivity (printed media in particular) is directly related to audience demographics and social environment, which determine the combination of media selected to satisfy a range of different needs.

In support of the underlying assumption of this dissertation, it is clear that, as a new medium, the printing press dramatically altered the nature of public communication and had a profound impact on the content and diversity of information to which people were exposed. The use of this medium was influenced by the different styles and focal points of specific publications.

As the first and oldest mass medium, the printing press offers a benchmark for examining the impact of newer media such as radio, television and the Internet. It also provides a point of reference for media usage and effects and for comparison with the impact of other media on man and society. Until the arrival of wireless communication, the printing press uniquely satisfied a range of needs from information to life skills, education and escapism. Radio and then television presented new challenges to the printed word by offering alternative ways of gratifying needs and offering new opportunities to satisfy different needs.

The survival of the printed word in the face of competing media suggests it offers unique need gratification that is unattainable through exposure to radio, television or the Internet. While it cannot compete with the mobility of the radio or the intense engagement of the mosaic

television screen, print still allows its audience to stretch their imaginations, trust in the finality of the printed word and escape into their inner world or try to enter that of the author. Reading is primarily a solitary activity, leaving interpretation open to the reader and perhaps even encouraging internal dialogue.

Comparisons between the print media and the Internet

In order to explain the relevance of this discussion of the evolution of the print media and the uses and gratification derived from it, several comparisons will be drawn between the print media and the Internet. The intention is to identify similarities between the way in which these media evolved and their impact on public communication and to highlight the differences between traditional print media and the Internet. In chapter four there is a discussion on the nature of online publishing and journalism and the impact of the Internet on traditional print media.

The evolution of the Internet has been compared to that of the printing press and some reporters have claimed that the Internet is the only technology that has revolutionised the world in the same way that the printing press did. The printed word is an important component of the Internet, which will be discussed in chapter four.

Several comparisons can be drawn between the print media and the Internet:

- They both evolved at a rapid pace and revolutionised society by making a diverse and large quantity of information available to the masses.
- The printing press required literacy. The Internet requires computer literacy.
- Like the printing press, the Internet has opened up the world to society, encouraging the sharing of knowledge and ideas.
- The author of the printed word or online publication can remain anonymous. However, the author of the online publication can also be more readily accessible to his/her audience.

- Authors require large financial resources and have to appease publishers in order to have their work printed. On the Internet, anyone can publish anything: nothing is censored and the cost is negligible. It offers the opportunity to make oneself "heard" and to propagate one's views. This does, however, raise the question as to the accuracy of the information.

- Both media rely on the printed word to communicate, although the Internet is incorporating the spoken word and allows the user visual references through video-conferencing and broadcast technology.

- The printed word has a sense of permanence. On the Internet, web sites change daily and information can be easily and instantly updated. On-line publications can therefore be far more transient and may not satisfy the need for permanence and faith in the accuracy of information.

- On-line publishing tends to be less in-depth, due to the limitations of the computer screen, which requires the user to scroll down to continue reading, coupled with the irritation of the flickering screen. However, some people who have not got a lot of time to spend reading (or may not enjoy reading) only want to read the headlines or a summary of the story.

- Like magazines, newsgroups on the Internet focus on specific topics of interest – from finances to sport, politics, hobbies, fashion and music.

- The nature of the Internet user is arguably such that he/she demands access to information quickly because time spent connected to the Internet costs money and users have become accustomed to the ease and speed with which the Internet allows them to access information. On-line newspapers therefore tend to highlight the main points or news items rather than provide detailed reports (although some do offer users the option of a hot key to go directly to the full report).

- A printed publication can be read anywhere, whereas on the Internet, users have to remain seated in front of the computer.

- Some authors are testing the success of online publishing. For example, Steven King has made waves in the publishing world by making chapters of his latest novel "The Plant" exclusively available on the Internet. Fans that read Part 1 of "The Plant" have to

pay $1 to keep the project going. If less than 75 percent of those who download the story don't pay the nominal fee, the story will be terminated. A report from Amazon.com indicated that on one day, there were "41 000 downloads of 'The Plant' and 32 000 (78%) were paid for," (Moore 2000).

In terms of need gratification, the Internet may be able to satisfy the need for information more quickly than the printing press can. On-line publications can be customised according to the unique requirements of the reader, sifting through the pages to provide him/her with specific information and providing summaries of the most salient points. News can be uploaded instantly to a web site and readers can engage in online debate or add their personal accounts of events. These activities are impossible with the printed equivalent.

However, the fact that publications such as *Business Day*, which is available free of charge in its electronic form and available on a subscription basis in its printed form, continue to survive in both the traditional mass medium and on the Internet, suggests that there is still a demand for the traditional print medium.

The reason could be that both media satisfy the need for information, but in different ways. The selective exposure of the audience will be determined by their personal need at the time. This suggests that online publishing may be complementary to traditional publishing. In the case of the novel, this is debatable, however. Reading as a form of escapism or relaxation is not conducive to online publishing. Not many people would be willing to scroll through a few hundred pages, even if they do download the information. There is something less personal about the printed screen than there is about the text printed on paper – be it the uniformity of the type or the lack of contact with natural material like paper.

Time will determine the future of online publishing. It is beyond the scope of this dissertation to conduct an in-depth investigation into the quality, nature and content of online publishing. What one can deduce from the comparisons between the Internet and the printing press is that there could be similarities in the use of and need for the media. One can use our

understanding of exposure to the print media as a framework for understanding Internet usage and preparing a survey to determine how professionals in South Africa use the Internet from an online publishing perspective. We will return to some of these deductions in the conclusion of part B of this dissertation.

3.3 Radio: mass communication goes wireless

If the printing press launched the mass communications revolution, radio added an entirely new range of weaponry to this revolution, impacting on and influencing once again the nature of public communication and the nature of the printed word itself. The radio presented fierce competition for the delivery of news by expanding the choices available to mass communication audiences and forcing printers to re-examine their content. The nature and impact of this medium can provide insight for the investigation into other new media (television and the Internet) and their influence on society, by allowing assumptions to be made on the basis of historical knowledge.

Historical overview

Guglielmo Marconi is widely hailed as the father of radio, although many other inventors and scientists had a significant impact on the development of radio. Initially, wireless communication was developed to improve communication between ships and land stations: Marconi did not consider that his creation would add an entirely new dimension to mass communication.

It was some time before radio communication was perceived as something more than a simple wireless telegraph for ship-to-shore communications. Military forces used radio communications extensively, and the techniques of mass production developed during World War I stimulated the production of radio components.

It was during the 1920s that radio's potential as a medium for mass communication and the commercial benefits thereof were eventually realised. The 1920s saw a flourish of amateur radio operators throughout the United States, who created their own equipment for transmitting and receiving messages. Many of these people had learnt the basic skills of wireless communications during World War I and began to broadcast news, weather bulletins, musical recordings, and even live musical performances. "In a manner resembling the early days of the personal computer, enthusiastic amateurs made significant contributions to the new technology by constructing their own apparatus, finding new applications for radio communications, and in general exploring the potentials of the new medium," (Volti 1988:151).

As was the case with the printing press, it was not long before business entrepreneurs saw the commercial potential of radio. In 1920 the USA-based Westinghouse Electric and Manufacturing Company instructed one of its employees, a dedicated radio amateur, to construct a broadcasting station on top of one of the buildings of its Pittsburgh headquarters. On November 2, radio station KDKA went "on the air" in the USA, giving up-to-the-minute feedback on the 1920 Presidential Election to an audience numbering several hundred. Other entrepreneurs followed suit, and by 1922 there were over 500 stations transmitting music, sporting events, speeches and news programmes.

The transistor heralded the next significant development in the history of radio. "The power of this minute invention revolutionised radio...the radio could now be taken outside the home since its only source of power was a tiny battery. It suddenly became the vogue to own a transistor radio and there is little doubt that the sheer fashion and convenience of the portable radio influenced contemporary pop culture," (De Beer 1993:127).

The impact of radio

"When I hear... I gather sound simultaneously from every direction at once: I am at the centre of my auditory world which envelops me, establishing me at a kind of core of sensation and existence," (Ong 1982:72).

The radio reverted mankind to the oral tradition through its dependence on the single sense of sound. In contrast to the class distinctions enforced by the printing press and the prerequisite for literacy, radio was accessible to everyone. Unlike the uniformity of the printed word, radio is a private and intimate medium that can be enjoyed in company or in solitude. It could therefore offer an alternative, more immediate and mobile form of gratification for needs such as information, entertainment, escapism, solitude and companionship and it brought an increased sense of intimacy through the human voice. Referred to by some as a theatre of the mind, radio encouraged a reawakening of the auditory senses.

Plato (Hamilton 1988:91) describes the function of speech as being "to influence the soul". Radio's ability to transcend boundaries and accompany its listeners in their homes, at the office and travelling in between has made it a companion. The regionalisation of radio stations and content has fostered tribalism and a sense of community. As McLuhan (McLuhan & Zingrone 1995:163) explains: "A tribal and feudal hierarchy of traditional kind collapses quickly when it meets any hot medium of the mechanical, uniform and repetitive kind...Similarly, a very much greater speed-up such as occurs with electricity, may serve to restore a tribal pattern of intense involvement such as took place with the introduction of radio". This can be compared to the virtual communities on the Internet, where regional and global sites bring people with common interests together to debate, discuss and share their views.

Before 1950, radio provided a form of family entertainment: listening to the radio was considered a group activity. This was largely due to the fact that only a few households had a radio, so people gathered together wherever there was a set. It therefore offered a new

form of socialisation and entertainment, presenting an alternative gratification of social integrative needs. With the replacement of valves by transistors, receivers used less electricity. Batteries that were small, cheap and disposable were installed in the casing of the receiver, giving rise to the portable radio. The medium became mobile, changing the way in which people used it. Wherever they went, the radio could follow, opening a whole new range of opportunities for gratification.

As a companion when performing solitary tasks, radio is often used for "background" listening. Music plays a large role in entertainment, as do talk show hosts who "accompany" listeners and reduce their sense of solitude. Music "is highly suited because, in being largely free of signification, it allows us to listen without making strenuous efforts to imagine what is being referred to, but to assimilate it, if we wish, to our own thoughts and moods," (Crisell 1986:52).

The introduction of the phone-in programme exposed listeners to voices on the radio speaking informally and even inarticulately, much as one would overhear a conversation on the street. The phone-in has given listeners a "voice" – an opportunity to participate in the communication process and to provide feedback to the broadcasters and share thoughts and feelings with them and their mass audience. It creates the illusion of radio as a two-way medium and enables broadcasters to verify the nature of their audience and determine how successfully their messages are decoded.

In times of crisis, talk radio comes to the fore as a medium that bonds communities, giving them a means of sharing their grief with people they may otherwise never communicate with. This has been particularly evident in the case of Radio 702 in Johannesburg. During a bloody highway shoot-out between a cash-in-transit van and robbers on the M1, one the city's busiest routes, the presenter Jenny Cruwys-Williams, encouraged motorists, who were trapped in a traffic jam lasting over four hours, to tell their stories and share their experiences on air. A counselor was brought into the studio to help them get through the shock of what they had witnessed. Like print, television and the Internet (for example, the bomb that exploded in Oklahoma city in 1995), radio not only serves the community – it draws its raw

material from it. And its ability to transmit information immediately enables radio to penetrate human lives and "live" through events with its listeners.

Radio is accessible to everyone and therefore it must have mass appeal. Its mobility and variety have resulted in radio retaining its popularity as a mass medium that continues to permeate human lives. Through narrowcasting for specific audiences, radio programming has focused itself on individual tastes: from weather reports to up-to-the minute news and sports bulletins, traffic updates, talk shows and a wide variety of music. Like newspapers and specialist magazines, radio appeals to a wide variety of interests, satisfying the need for information in a multitude of ways. Radio also links communities on a national and international scale and plays a significant role in determining contemporary culture. Its ability to link communities and provide a sense of nationhood has been taken one step further by the newsgroups, chat rooms and news broadcasts that are provided on the Internet.

For developing countries such as South Africa, where illiteracy, poverty and widely dispersed, culturally diverse communities are commonplace, radio is an ideal and popular medium for information, entertainment and culture. It has become part of the psychological fabric of South African society.

A comparison between radio and other mass media

Today, radio has become a multi-faceted, personal and portable medium. It has survived the introduction of television, which replaced radio as the ultimate entertainment medium, and adapted itself to emerge victoriously from the battle for the airwaves. The flexibility and immediacy of radio has enabled it to provide a form of mass communication unattainable by traditional mass media. "[This has] made radio a true chameleon of the ether," (De Beer 1993:125).

One of the primary differences between radio and other mass media is its dependence on one sense, sound, to communicate. As a blind medium, radio has contributed to the

development of a language that is unique to the airwaves – a language comprised not only of the human voice, but of silence, music and a myriad sounds that communicate meaning to the listener.

The absence of an image, text or physical presence that includes gestures and facial expressions, makes it more difficult to clarify meaning and aid decoding of the message. Radio has to appeal to the imagination, compelling the listener to supply the visual data for himself. In this way, it provides a sense of personal companionship as the listener "meets" people through the medium. Like the Internet user, the radio listener can remain anonymous and can "listen in" to people's conversations in a similar way that an audience can "meet" the author and characters through the printed word, the presenter through the airwaves or another user on the Internet, satisfying needs ranging from information to escapism, companionship and fantasy.

Just as television creates a world through the iconism of images and the Internet through Multi-User Dungeons and chat rooms, radio uses the symbolism of words. It has many languages, hopping from authoritative comment, to idle chatter, spontaneous talk, confidential whispers and serious discussion.

Radio further distinguishes itself from other mass media by virtue of its immediacy as a a provider of news and information (although this is now being contested by the Internet where news flashes can be uploaded in real-time). Whether it is traffic, crime, politics or weather reports, radio offers instant communication on a regional, national or international level. As such, it is relied upon by a wide audience on a daily basis. During World War II, radio was a source of cohesion and it clarified issues that were masked in rumours and propaganda. Today, radio has become a forum for the whole of the cultural life of a community.

Unlike radio and television, print and the Internet are able to conceal personal signs, presenting the "facts" in structured black and white patterns of text. The printed word is

therefore often perceived as being more credible than radio or television, despite the existence of editorial staff who set agendas by highlighting some facts and downplaying others. However, the immediacy of radio and the Internet enables them to transport the audience to the scene, giving these media a unique grasp on reality. Radio is able to offer a direct impression of the world and unravel events as they occur. The onus is on the individual listener to interpret and judge its content.

"Language is bound up with our very efforts to make sense of the world and images are seldom as explicit: even in newspapers, where the images are surrounded by text, they invariably need separate captions to explain their relevance...the solitary microphone is more conducive to honesty...to be interviewed on radio is like being asked to pause and tell them the truth; to be interviewed on television is like being asked to lie quickly in case people start switching off," (Crisell 1986:103).

A uses and gratification perspective of radio

Radio plays many roles – entertainer, informer, companion and educator – which has given rise to diverse progamming that covers art, sports, education, religion, social issues, politics and economics. Listeners rely on radio to fulfill specific needs at specific times. It is for this reason that uniform, predictable programming has been adopted by radio stations. Some focus entirely on a particular music genre (for example, Classic FM and Radio 5), while others focus on news and talk shows (Radio 702). Each station has a set programme for the week, enabling listeners to tune into the programmes that interest them individually, thereby satisfying a variety of needs.

"In Listening to Radio (Mendelsohn 1964:239-49), Mendelsohn points out that listeners do not greatly distinguish between different kinds of content, whether informative or entertaining, but use radio to 'structure' their day and as a 'companion'. It provides material for conversation and its importance lies less in the amount of time people listen to it than in the psychological needs which it gratifies...radio gives the isolated listener a feeling of

community, not simply with the broadcasters, but with the other isolated listeners," (Crisell 1986:202).

However, Beatty's (1952) study of talk radio in Austin, Texas indicates that companionship is not one of the main gratifications sought by listeners. It is important to distinguish between loneliness and being alone. In many cases, listening to the radio was considered a solitary activity, but this did not mean that the listener was seeking companionship. For some listeners, radio is used for current affairs information and debate, entertainment and community news. The latter is more common among people who are new to a community and who use talk radio to gather information about their environment and its inhabitants. Beatty's uses and gratifications analysis of talk radio listeners indicates the following primary reasons for listening: "to learn how people feel about different issues; to know what's going on in my community and to keep up on issues of the day," (Beatty 1952:142). He concludes that listeners enjoy the sense of community they feel when listening to talk radio. Whether these results can be extended to other types of radio stations is debatable, as their content varies significantly to that of talk radio stations.

Rosengren et al (1985:53) refer to a study conducted among regular listeners (predominantly women) to the British soap opera The Dales. The study found that one of the main attractions of the programme was that its view of social reality conformed to the norms and experiences of the listeners, thereby affirming their beliefs and satisfying the desire for reinforcement. The lack of violence or bad language appealed to their values and morals while at the same time affording them the opportunity of being nosey without the harmful effects thereof. The soap opera also served as a reminder of the importance of family ties (reinforcing the role of women) and the need for a sense of belonging.

Frank and Greenberg's survey (Frank & Greenberg 1980: 155) referred to earlier indicated that adult males in the mechanics and outdoor life sector were heavy users of radio (34% above average). This group is characterized by their interests in mechanical and outdoor

activities and their need to escape from boredom or problems. Country music and farm programmes were rated as the most popular programmes.

Audience orientation to a particular medium depends on the value they place on that medium, which in turn depends on the degree of perceived gratification it can offer. This in turn is linked to the nature of the medium and the content it offers. The above studies indicate that radio is a flexible medium that satisfies a wide range of needs and is used in different ways by different individuals and groups of people.

Despite fierce competition from television, and more recently the Internet, radio still has a strong foothold as a mass communicator in the twenty first century. The increasing mobility and pace of modern life has retained the demand for a medium that can follow its audience and does not require their undivided attention. While it continues to educate, inform and entertain, it remains unmatched by any traditional medium as the primary purveyor of instantaneous news broadcasting. Like daily newspapers, radio can focus on regional news that integrates listeners into their immediate environment and keeps them informed on events unique to that environment.

As Sir John Reith (Tomaselli, Tomaselli & Muller 1989:71) said: "Of all communications media...the warm, human spoken word is and remains the most powerful and influential. Whatever is carried in the other media, and however these media do it, the influence and effect depends on the last instance on whether (the substance) is taken up in human conversation, and how it is passed, processed and spread in living conversation".

Radio supports the assumption that each new medium is used differently and offers different gratification, impacting on man and society in various ways. People seeking a human interface and the immediacy of information broadcast may choose radio above print media. Most print media tend to provide a more in-depth analysis of news items than do radio stations while radio stations can offer sports commentary, traffic and weather reports more rapidly and frequently than is possible by the printing press. The Internet, however, offers

news covering a wide range of topics in a summarised or detailed account – and in real-time. Depending on the needs of the audience, they will selectively expose themselves to a particular medium.

Comparisons between radio and the Internet

While the printing press increased the quantity and type of information available to humans, the radio brought them information almost instantaneously and added a human touch through sound. It also added mobility to mass communication, allowing people to access information from wherever they are and to perform other tasks while doing so.

The fact that radio has survived the threat posed by television and the Internet and continues to be a popular medium suggests that it offers certain gratifications that print, television and the Internet cannot match. Perhaps its success lies in the flexibility of the medium, evident in its adaptation to online broadcasting, integration of Internet-related news and the use of websites for the promotion of radio stations and their disc jockeys (see chapter four).

This overview of radio as a new mass medium demonstrates the impact a new medium can have on existing media. By offering new and alternative methods of need gratification the medium influences the way people use the communication technologies at their disposal to interact, work and live. Each new medium presents information in a different way, stimulating different senses and carving its niche in the battle for mass audiences.

In terms of the relevance of this discussion for the purpose of comparison with the use and gratification of other mass media and to the ultimate research question: How does a group of professionals in South Africa use the Internet, several comparisons can be drawn between radio and the Internet:

- The development of radio can be ascribed to military operations that required this technology to perform their functions efficiently. The Internet emerged from the military network ARPANet.

- Citizen Band Radio, run by amateur broadcasters, encouraged the extension of the airwaves to the public. Amateur Internet users encouraged the extension of the Internet to the public (ARPANet became a separate, closed network).

- While the Internet is a global medium, it comprises communities that converge to discuss issues of concern and interest to them. Like talk radio, these communities on the Internet can provide support in times of crisis, encourage debate (although on the Internet, the audience can participate without the interference of broadcasters) and air their views.

- The radio listener and the Internet user can remain anonymous.

- The Internet is not subject to the rules and regulations of broadcast corporations, so the information disseminated via this medium can come from multiple sources and is not affected by the agendas of broadcasters or presenters. It also allows a greater degree of audience participation that is free from restrictions.

- One can listen to radio broadcasts over the Internet while engaging in other activities. However, the user must remain at his/her computer to do so. With the introduction of Wireless Application Protocol (WAP), the Internet is becoming mobile and this may provide competition for radio broadcasters. WAP technology is targeted at the mobile professional – a phenomenon that is becoming more popular as companies gear themselves towards the new economy which is fast-moving and facilitated by wireless mobile technology.

- Like radio, the Internet "broadcasts" news instantaneously – perhaps even more so as there are web sites dedicated solely to news and these can be updated in real-time.

- The Internet can target its audience with bulletins on virtually any topic of interest. Radio is limited by programming schedules that prescribe what information is broadcast and when.

- The Internet may compete with radio's ability to provide a sense of community through its newsgroups, MUDs and Internet Relay Chat.

- The human voice is accessible over the Internet, although it is still primarily a text-based medium and the source of much of its information remains anonymous. This is due to bandwidth limitations that result in long waiting periods as voice, data and even video are downloaded. One can, however, listen to some local and international radio broadcasts over the Internet.

- The introduction of web cameras into radio studios allows listeners to watch disc jockeys presenting "live" (depending on the time it takes to download and update images). This brings the audience closer to the presenter by allowing them into the studio. The audience can also communicate with the presenters via e-mail.

- Listening to the radio can be a solitary activity, as can browsing Internet sites.

The nature of webcasting and the impact of the Internet on traditional radio is discussed in chapter four of this dissertation. The survey in Part B looks at how often a group of professionals in South Africa tunes in to online radio broadcasting and whether they listen to international or South African radio stations. From this survey, certain deductions about the impact of the Internet on the traditional radio audience are made (see part B).

3.4 Television

While radio was hugely successful, it only demonstrated a portion of the potential of electronic media due to its restriction to one sense: sound. The addition of sight would vastly expand the appeal of electronic communication. Television evolved as an extension of wireless broadcasting and replaced radio as the primary entertainment medium.

The impact of this technology presented new methods of communication that challenged radio broadcasters and the print media. Television created new needs and offered alternative ways of satisfying existing needs, expanding the range of options available to mass audiences. However, not all the effects of television are positive. While the focus of this dissertation will not extend to specific studies of mass media effects, a broad overview of the

impact of television on man and society is provided for the purposes of comparing the effects of new technologies and the impact this has had on media usage and gratification.

Historical overview

In April 1939, television debuted in the United States, with a speech by President Franklin Roosevelt and shots of the New York World Fair. However, the USA lagged behind Britain in television progress, and suffered a number of technical problems. The Second World War interrupted the development of television, particularly in the United States, where television was resigned to the laboratory, following the bombing of Pearl Harbour. The war did, however, result in the improvement of electronic techniques and equipment, particularly the image-orthicon tube.

From 1952 to 1960, television experienced its golden years. "During this time, television developed into a mass medium. Colour television and the videocassette were invented and most of the major programming formats were developed. Television news first became important during the 1960s, and for a while it rivaled newspapers in the area of public credibility and acceptance," (De Beer 1993:174).

During the next 20 years, television experienced phenomenal growth in the form of technological developments, which spawned a new era in programme delivery systems. The rise of satellite technology, cable television and videocassette players opened endless opportunities for television viewers. By the early 1980s, the satellite distribution of programmes was widespread. The television industry underwent intense change and competition became increasingly fierce.

Before television sets became affordable enough to pervade every household, they were only accessible to the high-income households and the rest of society watched in public places such as bars. This created a problem for television programming, as the upper-income

individuals preferred comedy-variety shows while the television audiences in bars enjoyed watching sport and news.

Following a similar evolutionary path to that of print and radio, television eventually transcended its elitist audience and became increasingly accessible to the masses. During the mid-1950s television audiences changed from high-income to middle- and low-income households, resulting in changes to programming. Live anthology dramas gave way to filmed situation comedies (sitcoms) that reflected suburban lifestyles.

Rising incomes, the influx of people to suburbs and an increasing demand for entertainment resulted in a boom in television audiences. "In February 1955 there were 36 million sets in the USA and only 4.8 million in all of Europe, with 4.5 million of those in the UK; in February 1956 the number of TV sets outside the USA had more than doubled over the previous two years to 10.5 million," (Smith 1995:58).

A comparison between television and other mass media

Television used and developed existing forms of entertainment and education - such as radio, film, music, theatre and literature – to create its own particular range of programmes and invent its own genres.

Unlike print and radio, television uses a range of codes to signify meaning. Lighting, camera angles, wardrobes, actors, scripts and editing techniques all play an important role in constructing a particular "reality" and coercing the viewer into perceiving situations from the writer/actor/producer's perspective.

Television broadcasting became a new tool for politicians as well as entertainers. The broadcast institutions appointed in each country reflected the nature of the prevailing national political system. This was particularly evident in South Africa, where television only became a reality in 1976, due to resistance from the ruling National Party. The degree of audience

involvement in mass media and the restrictions on the freedom of broadcasters was greatly influenced by the political ideology of the country.

Like newspapers, magazines, books and radio programmes, television shows cover a wide range of genres, from dramas, to feature films, infotainment, quiz shows, series, soap operas, documentaries and comedies. Their purpose is to entertain, educate, offer escapism, promote unity through stereotypes and to reflect the cultures and attitudes of a particular society.

Quiz shows like *Win 'n Spin* give television audiences a chance to participate in a television programme – either as contestant in the studio or the viewer at home, who measures his/her performance against that of the contestants. In a similar way to the talk radio audience, the television audience can become an active or passive participant. In this way, viewers actively participate in creating their own pleasures. "There is an in-built tension between chance and rules in a game structure – between the predictable and unpredictable, the controllable and uncontrollable, which creates enjoyment," (Smith 1995:111).

Comedy teaches viewers to laugh at life, at social structures and norms, by destroying hierarchy, demystifying dominant systems and representing situations in unusual ways. It offers them a safe space from which to witness social transgressions, satisfying the need to learn about life and providing an alternative medium from which to do so. From old age (*The Golden Girls*) to marriage (*Married to the Mob*) and family life (*The Cosby Show*), "we find in the situation comedy the first expressions of the changes in the domain of the private. Comedy is institutionalised humour which contrasts social norms and values in a public forum...comedy is extremely national-cultural specific," (Smith 1995:113). Studio audiences guide (cue) the viewer and, by creating a sense of companionship, enhance the idea of a public with shared values.

Television also plays an important role in gathering and disseminating news and as such competes with the print media, radio and the Internet to satisfy the public's need for

information. As with other mass media, it is subject to the influence of politicians and media moguls, who influence content. Censorship, which was evident in world media coverage of the Gulf War, emphasizes that the viewer's right to know is often subordinated by public or political interest.

As Smith (1995:111) concludes: "Entertainment on television is not a distinct genre but a continuum of programming which extends from drama at one end to coverage of the real world at the other. It includes comedy, game shows, quizzes and variety shows. It is television's space for expressions of abundance, but also in part, like drama, for coping with society's neuroses....entertainment offers available pleasures in the face of the problems of life...a way to lead people to question and criticise the status quo by reference to the ideal world in the entertainment utopia. Abundance, energy and community are seen then in distinction to the dreariness of everyday life". In this way, television offers an opportunity to escape from reality, to be informed and entertained.

The impact of television

The invention of television converted the linearity of the printed word to a mosaic image that communicated vast amounts of information quickly. It combined this with the oral tradition of radio to simulate reality. In many cases, it has done this so well that it has *become* reality for some people, hence the cautionary words of media critics.

The phenomenal growth in television audiences led an NBC executive to caution: "Television comes directly into the home. All the precautions that have been thrown around sound broadcasting to render it domestically acceptable may be automatically assumed to be essential for television. Furthermore, because the visual impression is apt to be more vivid and detailed and because to be understood it requires less imaginative response on the part of the observer than does an auditory impression, television must be much more carefully supervised if it is to avoid giving offense," (Smith 1995:45).

Like the print media, television demands concentration and attention. It is difficult to engage in social or other activities while watching television. Unlike radio, television is not conducive to mobility (although recent technological developments are changing this). The mosaic image has an hypnotic effect on viewers, commanding their absolute attention. It is a powerful medium that draws the viewer into its world so effectively that some are not even aware of the impact of television.

McLuhan (De Beer 1993:163) views television as a cool medium. "The televised image is indistinct and requires that viewers "fill in the blanks" in a way that involves all the senses. Unlike reading, viewing television is not a single-minded, inner process. Exposure to television in turn leads to a mode of perception that affects many other aspects of life. For McLuhan, a television-based culture is less concerned with sequence and more with complete, all-at-once involvement. In McLuhan's view, these changes in perception are transforming every aspect of our lives; he attributes everything from a desire for small cars to changes in church liturgy to the influence of television."

By engaging more senses than print and radio, television offers greater stimulation and perhaps a more satisfactory entertainment experience. As Du Plooy (1989:4) states: "One source of television's influence has been described as its capacity to communicate directly with large numbers of people in intimate, comfortable surroundings, provoking from its audience an immediate, personal, socially-orientated response".

Television penetrates the barriers of illiteracy that make the print media inaccessible to mass audiences. Its use of iconic signs, that are graphic representations of the real thing, allows the television image to reproduce reality to a far greater extent than any traditional medium. It is the only traditional form of mass communication that appeals to more than one sense. The old adage "seeing is believing" gives television more credibility than other mass media: it is viewed as the most accurate and objective source of national and international news.

There has been much debate over the effects of television on society. From the hypodermic needle theory, which postulates that audiences are helpless victims of mass communication, unable to resist the injection of propaganda and one-sided communication, to the studies of the effects of violence on society (children in particular), television has fallen prey to widespread criticism. Despite in-depth research, no tangible evidence has come to the fore to truly substantiate these claims. Many research projects have lost credibility due to the controlled, laboratory conditions in which audiences are observed.

What researchers have identified is links between the way television is organised and economic and class structures. "In essence there are two views on the nature of this linkage. In the first, television is seen as part of an ideological apparatus dominated by ruling classes to maintain privilege and control – a top-down power structure where messages originated by a few reach many. In the second view, it is seen as a means of providing expression for competing ideologies within a relatively free, competitive or pluralist society," (De Beer 1993:187).

Fascist regimes and warmongers such as Hitler mastered the power of the media to manipulate the masses. This gave rise to theories of mass society and media effects studies, which concluded that industrialisation and urbanisation had eroded traditional forms of social organisation, resulting in the atomisation of individuals from society and networks of social relationships. As such, they were extremely vulnerable to manipulation by remote and powerful elites that controlled the mass media

Television is a powerful medium, which offers escape from reality and is at times undemanding and formulaic. However, television also offers a means of coming to terms with problems in life. Like the newsgroups and virtual worlds on the Internet, television provides a safe haven in which to explore all possibilities. In this way, television has the potential to alter the viewer's perceptions and understanding of his/her world.

Research into the effects of mass media has indicated that traditional opinion leaders and role models in society, namely the family and close friends, are still highly influential. People seek assurance from leaders and close social circles and viewers are able to exercise their choice of programme and express their opinions. What a mass medium such as television does is present different viewpoints and provide broad information to people who may otherwise not have had access to this data. In the case of imported programmes, viewers are exposed to other cultures and ways of perceiving life and the world they live in. The media, therefore do not necessarily tell audiences what to think, but rather what to think about.

Satellite communication contributed to the rise of the global village, making it possible to bring widely dispersed viewers news from around the globe. Modern mass media has exposed authoritarian societies to alternative world views. In this way, the mass media has influenced the demise of communism and raised questions about the effectiveness and justice of authoritarian rule. South Africa's Apartheid regime was a point in case. The Internet continues this process of change by providing a medium through which people can express their views to a mass audience without censorship, appeal for international aid, make the public aware of injustices or exert political pressure (for example, Iraqi supporters spamming US government web sites).

Giddens (1991:26) adds: "The visual images which television, films and videos present no doubt create textures of mediated experience which are unavailable through the printed word. Yet, like newspapers, magazines, periodicals and printed materials of other sorts, these media are as much an expression of the disembedding, globalising tendencies of modernity as they are the instruments of such tendencies. As modalities of reorganising time and space, the similarities between printed and electronic media are more important than their difference in the constituting of modern institutions."

In the United States, television content includes politics, popular literature, religion, news and commerce. It has become as legitimate a source of moral affirmation and information as the medieval church was in the 14th or 15th centuries. Like radio, television plays an important

role as an agent of socialisation, transmitting uniform social messages and values and offering national and international curricula of items for debate and discussion. Television presents experiences in a symbolic form, which is preferable to reality.

This becomes questionable when one considers the amount of time the developed world (in particular the United States of America) spends watching television. In many modern societies, television has impacted heavily on interpersonal communication. Not only is it a significant topic of daily communication, it has, in some instances, created individuals who prefer to nurture their relationship with the mosaic images on the box than with family and friends. Fears are already being raised that the Internet is having the same effect on society by drawing its audience into a virtual world in which time and space have little consequence and the boundaries between reality and the world of the medium become blurred.

In an interview with David Cherniak Films, Postman makes an interesting observation: "...there are certain shared symbols now that television gives everyone access to...a symbol or an icon is repeatable endlessly but the more that you repeat it the more you can drain it of its meaning and television uses symbols up at an extraordinary rate" (Neil Postman interview...[sa]).

While television may originally have formed the locus of household entertainment, it has become a solitary activity for many, replacing human interaction. It is the core of western culture, one of the major forms of entertainment that offers escape from mundane activities and the harsh realities of the real world.

A uses and gratification perspective of television

Volti (1988:165) summarises the role of broadcast media as follows: "Television and radio also have become an essential feature of modern life because they have helped to migrate the disruption of stable community ties that has been a characteristic of our era. Economic and social changes have produced a great deal of mobility and general rootlessness. In

response, television and radio have contributed to the construction of a new common culture that has served at least as a partial substitute for local ties. The loosening of these ties has also resulted in a greater degree of privatisation in our lives; in a rapidly changing and often bewildering world, we retreat to the stability and security of our homes. Privacy, however, is often accompanied by loneliness. For many people, the electronic media fill a void by bringing into their private environments the information and entertainment that helps to mitigate their aloneness".

Research by Greenberg (1974:73) into the uses of television by school children indicates that exposure to this medium spans a wide range of needs from merely passing time to diversion, education, information, entertainment, arousal, relaxation and companionship. Where the print media and radio served some of these purposes in the past, television has replaced them in some instances as the ultimate form of entertainment, presenting similar and more diverse information in different ways.

McGuire (1974:190) describes how the print media present vividly and dramatically models of physical behaviour from which the individual can obtain gratification by imitation in fact or fantasy (of, for example, a hero or housewife)."

According to Rosengren et al (1985 :196), studies such as those conducted by Schramm, Rubin and Palmgreen indicate that television viewing is higher amongst younger age groups who are more susceptible to the medium due to limited literacy, low levels of concentration and peer pressure. "Children and adolescents select television and media content in terms of their own needs and their personal capacity for understanding; in adolescence this involves greater responsiveness to information about personal relationships and about adult life," (Rosengren et al 1985:196).

Television is perceived as having a high entertainment factor, although it also provides excitement, escapism, security, reassurance and identification with heroes and personalities for younger viewers. Older viewers were identified as having three structures of gratifications

sought: "interpersonal utility/surveillance, entertainment seeking and para-social integration," (Rosengren et al 1985:199). Watching television is the primary leisure activity of older persons who are less mobile and perhaps more solitary. Television is used by some people to pass the time, structure their day or connect them to their environment.

Social class, education and income affect the range of choices in communication media. Who the audience watches television with often determines which programme is watched. Family values and styles of communication will impact on patterns of media exposure and consumption in the same way that differing levels of education will determine different preferences for programme content. The more educated and emotionally secure the individual, the less reliant they are likely to be on television because they have a wide choice of alternatives to choose from.

Television remains a popular medium for satisfying needs ranging from escapism to entertainment, companionship, information, self-affirmation, association and social integration. What is evident from the studies referred to above is that, like the radio listener, the television audience is highly selective and it would appear that they use the medium for very specific purposes. Age also appears to play a major role in exposure to the medium and in selecting television over other activities.

Comparisons between television and the Internet

To explain the relevance of this discussion on the evolution, impact, uses and gratification of the television medium to the ultimate research question, several comparisons are drawn between the gratifications sought and satisfied by (and the impact of) television and the Internet.

- Both television and the Internet appear to satisfy the need for escapism and provide a safe haven in which to retreat from reality.

- They also both appear to offer information, entertainment, companionship and a sense of community.

- Like television, the Internet lacks mobility as a medium, demanding the audience's attention and luring them into its world.

- It is interesting to note that each new medium draws from its predecessors to launch itself to the public. Television appeared in print before the technology had even evolved; the print media conducted surveys to determine audience preferences for radio programming; television and radio programme schedules are printed in newspapers, magazines and on web sites; dramas that previously existed only in the printed word are enacted on radio and television; newspaper articles are discussed by radio presenters; radio and television are discussed by the print media; many of them advertise web sites and they have their own e-mail addresses.

- Television was the most costly medium to access but it required no literacy. Internet access requires computer literacy, a computer, software, a telephone and a modem.

- Like television, the Internet brings communities together across the globe.

- A large portion of television content promotes stereotypes. The Internet fosters individualism.

- Time spent watching television is becoming comparable to time spent on the Internet.

- Both media fill a void in the lonely lives of many people.

- Television is traditionally a home medium. The Internet is used both at home and in the workplace.

- Television broadcasters control how their audience is introduced to new ideas, cultures or characters and represents them in a particular way. On the Internet, new ideas, cultures and characters roam freely.

- Watching television is both a solitary and social activity (in the case of sports matches, for example). Surfing the Internet is more of a solitary activity.

The assumptions made in this comparison regarding Internet use and gratification will be tested in a survey conducted among a group of South African professionals (see part B). The impact of the Internet on television and the nature of web TV is discussed in chapter four.

3.5   In summary

It is clear from the above discussion that the media impact on human lives in diverse and profound ways and that this is influenced by the socio-economic and political environment in which they evolve and operate. Media consumption is determined by a wide and varied range of needs that audiences consciously and unconsciously seek to gratify. It appears that the mass media both shape - and are shaped by - the gratification of particular needs.

As new media emerge, they impact on both society and the existing media, resulting in changes to gratification and media exposure. While the debates on media effects may continue to rage, it is clear from the numerous studies conducted and referred to above that they have a definite impact on society and that society itself impacts on the mass media.

From this historical overview of media development and the comparisons drawn between them – their nature, content and characteristics – one can gain a better understanding of media use and gratification for the purposes of comparison and investigation of the Internet as a new medium and the impact it has (and will have) on audiences. As a new mass communication medium, the Internet demands the same attention paid to its predecessors and warrants ongoing, in-depth research to understand its unique nature and the way it will impact on society and existing patterns of need gratification.

In the next chapter the researcher looks at the birth and evolution of the Internet, the communication tools it offers and the impact it has had on traditional media. This is important in determining how people (a group of professionals in South Africa) use the Internet and what gratification they seek from it. Although beyond the scope of this dissertation, research needs to be done to compare the use and gratification of traditional media with that of the Internet, to determine whether it offers new gratification and whether people view the Internet as being complementary to traditional media or whether it will ultimately replace them.

4. CHAPTER FOUR : THE INTERNET – THE COMMUNICATION MEDIUM OF THE 21ST CENTURY?

4.1 Introduction

Against the background of the chronological evolution of traditional mass media and the preceding discussions regarding media usage and gratification, this chapter will examine the development of the Internet as a new mass medium. As such, the Internet is still evolving and while concerns have already been raised regarding the impact of the Internet (Shields 1996, Stoll 1995, Rheingold 1993 and Postman 1993, for example), its long-term effects remain to be seen. Using the history and knowledge gained from traditional media as a point of departure, certain comparisons and assumptions will be made to determine the role the Internet plays in mass communication and the way in which people use this medium as opposed to print, radio and television. These assumptions will be investigated through a questionnaire that focuses on the use of the Internet by professionals in South Africa (see part B).

4.2 The birth of the Internet

In 1950, there were less than twelve electronic computers and these were so large that they filled entire warehouses. No-one foresaw the need for more powerful computers or for increased use of these "electronic brains". By 1960, people began to see computers as useful tools, and smaller, less-expensive devices evolved. But computers were used strictly by scientists or businesses as high-tech instrumentation. "In 1957, the Soviet launching of the first artificial satellite, Sputnik, shifted some funding paradigms in Washington D.C.; two direct side effects of that shift were the personal computer revolution and computer-mediated communications (CMC)...It took two more decades of research and development for interactive personal computers and CMC to mature, proliferate, and converge into the increasingly citizen-accessible Net of the 1990s," (Rheingold 1993:66).

The Internet is a worldwide network of networked computers, linking together large commercial computer communications services with millions of smaller academic, government and corporate networks. By November 1998, the number of Internet users in South Africa had reached the one million landmark – a figure considered by industry pundits such as Arthur Goldstuck of Media Africa to be critical mass (SA market reaches...1998). But the figures continue to rise.

The Internet has been described as the fourth cognitive revolution after speaking, writing and printing and offers a wide variety of services. It has grown more quickly than any other communications medium or consumer electronics technology. In many respects, it poses a threat to traditional mass media by opening up access to areas that were previously inaccessible to the masses and by absorbing radio, print and television into a single medium. As a one-to-one, one-to-many medium, the Internet also brings into question conventional models and theories of mass communication and calls for an entire rethink and review of the definitions and perceived impact of such communication. It is beyond the scope of this dissertation to investigate the impact of the Internet on models and traditional theories of mass communication, however.

The worldwide adoption of the Internet has seen it permeate every aspect of daily human life – from banking to shopping, travel, interpersonal communication, electronic commerce and virtual worlds. And it has arguably resulted in some radical changes to the way human beings interact and perceive the world; to social mores and values; to global markets and the way organisations conduct business.

The Internet has created an Information Superhighway populated by new and virtual communities – a cyber world in which almost anything is possible: anyone can be anybody and do anything. As Shields (1996:102) says: "The cardinal points and life's materiality disappear into the weightlessness of cyberspacetime. One initially experiences a bodiless exultation that may shortly settle into the armature of addiction. Going online 'flatlines' a person. That is, it immobilises the body and suspends normal everyday consciousness. One

remains at once wholly engaged in and yet set apart from the information nexus. Cyberspacetime technologically extends and partly replaces consciousness."

4.3   The evolution of the Internet

The Internet developed in a similar manner to the radio, with amateurs infiltrating what was previously a military domain, forcing a shift in the demarcation of technological boundaries. Developed in the 1960s and 1970s by ARPA, the Advanced Research Projects Agency within the United States Defence Department, the Internet evolved from ARPANet, an experimental computer network designed to support military research and enable academic and military researchers to continue to perform government work, even if part of the network was destroyed in a nuclear attack, which was an ever-present threat during the Cold War.

The system allowed every computer on the network to talk with any other computer. This is made possible through the Internet Protocol (IP), which is a common language that enables different computers to communicate with each other. Information is transmitted in IP packets which are "addressed" to a computer. The significance of this technology means that a central controller is not required: each packet transmits information from one machine to the next. This means that, as technology becomes smarter, these packets can carry virtually anything humans can think of and that machines are capable of processing, from voice to sound, text, graphics and video.

The scientists who had free access to ARPANet soon exploited it for personal communication, using the technology to send private messages, post information on electronic bulletin boards and design more user-friendly tools for navigating the network. Their actions attracted attention from users who did not have authorised access to the United States Defence Force network, posing a threat to the security and privacy of military information. The decision was made to split MILNET, the military network and ARPANet, which had entered the public domain. In 1982, it was renamed the Internet.

Towards the end of the 1980s, the National Science Foundation (NSF) shifted its attention to supercomputing. Five supercomputer centres were established and access for remote users was sought through ARPANet. This was unsuccessful due to problems with bureaucracy and the NSF then tried to build its own network based on the IP technology of the ARPANet. However, a new protocol had been developed to allow multiple networks to interconnect. "The protocol was called the Transmission Control Protocol and Internet Protocol (TCP/IP). As bodies such as the Organisation for International Standardisation (ISO) struggled with a definition for a computer networking standard, the ARPANet approach became the practical way to build the network," (Radovanovic 1995:22).

Regional networks were created, connecting computers to their nearest neighbours and linking these chains to a supercomputer centre at one point. These centres were then interconnected, creating one massive network that spanned continents, transcending geographic boundaries and linking users across the globe.

As the traffic on the network increased, the computers controlling it and the telephone lines connecting them became overloaded. In 1987, the network was upgraded with faster telephone lines and more powerful computers.

The NSF's project enabled everyone to access the network. This meant that it was no longer dominated by computer scientists and government staff. As universities joined the network, it grew even bigger, linking networks to desktop computers. Internet developers throughout the world made their software available to people on the network, which allowed them to share it (hence the term Shareware for software which is freely available on the Internet). This also prevented computer giants such as Microsoft from dominating the network (despite recent attempts to do so by loading their Explorer browser onto new personal computers, giving users little reason to try Netscape's competitive browser software).

4.4 The Internet in South Africa

South Africa's Internet connection was only introduced at the beginning of the 1990s. It evolved from the South African academic network, UNINET-ZA which is co-ordinated by the Foundation for Research Development (FRD). "Uninet ZA has evolved over the past several years from extremely small beginnings to a network that compares favourably to many regional networks in the US and elsewhere. Until recently, the political situation made it difficult to find international organisations willing to co-operate with South Africa," (Radovanovic 1995:22).

In 1986, several universities in Gauteng linked their computer systems onto a network, which extended two years later to Rhodes and Potchefstroom universities. The Foundation for Research Development provided funding for the project, enabling the lines connecting the network to handle more traffic flow. Initially, the university network was used for transmitting electronic mail (e-mail) messages, but in 1990 the first TCP/IP link was established between the University of Cape Town and Rhodes University. In November of the following year, South Africa gained full access to the Internet.

The global explosion of the Internet has exceeded analysts' expectations. A report produced in February 2000 by the International Data Corporation (IDC) on Internet usage and electronic commerce attributes this growth to the fact that "the Internet is moving from a university, management and technophile phenomenon to a tool for many user groups and a concept used actively for marketing purposes in mass media," (IDC predicts huge...2000).

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According to the IDC report, the number of users buying and selling goods and services over the World Wide Web increased to 142 million users in 1998 and was expected to surpass 500 million users by 2003. This rapid adoption of the Internet will continue to drive electronic commerce (trading and conducting business on the Internet) to an estimated trillion dollars, reflecting a compound annual growth rate of 92% from 1998 to 2003.

Local research organisation BMI-T anticipates similar growth in the South African market. "Over one million South African households, representing 10.5% of all households in the country, will have some form of Internet access by 2003. The number of active Internet users in households grows from just over 500 000 in 1998 to 1.84 million by 2003, representing 4.4% of the entire population of 42 million people. The high incidence of decoders and satellite TV indicates a potential for broadband Internet access (for the downlink), and the suitability of TV set-top boxes as the next growth area for alternative access devices - at least in the high-income segment of the population. However, BMI-T still believes that Smart Handheld Devices (including smart phones) will lead NetTVs in this country," (IDC predicts huge...2000).

4.5   Communication tools on the Internet

One of the main differences between the Internet and traditional mass media is the wide array of communication tools and services it offers. Whether one wants to communicate or chat in real-time to an individual or a group of people, listen to a radio broadcast or watch a webcast, the Internet appears to offer something for everyone.

This may be the reason for its mass appeal. If the Internet offers similar communications to print, radio and television and combines this with new and exciting ways of interacting with the world, it could offer new ways of satisfying needs or it may create new needs that other media don't satisfy. As a new medium, it is important to understand these different modes of communication in order to investigate how people use them and for what purposes.

Electronic mail (E-mail)

E-mail, the electronic transfer of text, remains the most widely used Internet tool. This is arguably due to the fact that entry-level personal computers automatically provide an e-mail facility, without the need for upgraded memory, video and sound cards and the bandwidth-hungry multimedia technology that video and audio transmissions demand.

E-mail enables users to transmit messages instantly and simultaneously to a single recipient or group of recipients. Anyone who has Internet access and an e-mail account can send and receive messages. More than 20 million people can be reached through e-mail and if they are not logged into the Internet when the message is sent, it is stored in an electronic mailbox for later retrieval. Sound and graphic images can also be sent via e-mail, provided the sender and receiver have the necessary software, processing power and memory capacity. E-mail can be accessed from anywhere in the world, allowing people to keep in touch and be updated at all times.

Communicating via e-mail can be compared to the internal memos distributed in companies, letters sent to friends and family and even news bulletins. This mode of communication has the potential to satisfy a wide variety of needs, from the need for knowledge to the need to stay in touch with families and companions, to keep updated on news and events and to communicate information to a group of people simultaneously, ensuring that everyone receives the same message. It does, however, also replace the warmth and assurance of interpersonal interaction with the impersonal computer screen, which could have negative consequences. Aside from the anonymity of communication on the Internet, there is a tendency to assume less responsibility for one's communication, which could result in alienation. It is far easier to type a brief e-mail than to pick up a telephone and call someone or go to the trouble of writing a personal note by hand.

World Wide Web (WWW)

Also referred to as the "Web", this is a graphical user interface, which allows users to access Internet resources without having to learn the complex codes of Internet protocols. Each web "page" is a combination of text and graphics and sometimes even sound clips and video, which is downloaded from one of the thousands of web servers on the Internet. Web sites are machines which function as web servers and can be accessed using browsers (software

packages designed to search for information on the Internet) such as Netscape or Microsoft Explorer.

Embedded in the text on the WWW are links to other WWW pages. These links are identified through hypertext. Hypertext is formatted text which is highlighted and underlined or which appears in a different colour to the rest of the text. By clicking with a mouse on hypertext, users are able to move from one web page to another. It is thus possible to hop from a web site in Finland, to one in Japan or Hawaii, without having to know the Internet address of the site being visited.

The WWW therefore links users around the world, making it easier to find information and presents this information in a user-friendly manner. The relative ease with which one can set up a web site has resulted in families creating their own sites and posting photographs of their children for relatives to view and companies advertising their goods and services to previously inaccessible audiences. This wide accessibility has, however, also enabled undesirable elements to creep onto the Internet, with web sites that offer anything from child pornography to recipes for home-made bombs.

The Internet thus both draws people closer together and exposes them to elements of society from whom they may have been protected by government bodies, laws and regulatory authorities. Perhaps that is the price to pay for true freedom of communication. The key to Internet usage relies on selective exposure – as is the case with traditional mass media.

Uniform Resource Locator (URL)

A URL is the standard way in which to present the address of any resource on the Internet that is part of the World Wide Web – in much the same way that one addresses an envelope for paper mail. It specifies the type of information being accessed, the address of the server housing the information and the location of the information on that server.

Search engines

To assist users in navigating the WWW and locating information from specific websites, search engines prowl the Internet constantly updating their database of new sites and the topics they tackle. There are numerous search engines available, including Alta Vista, MegaSpider, Lycos, Infoseek, Yahoo, Go to.com, Ananzi and ZAWorm (the latter two are South African-based search engines). Users type in key words or questions related to the information they're looking for and the search engine scans the Internet and provides hypertext links (short cuts) to related websites.

Usenet News

Usenet News is a way of managing multiple conversations about various topics, which are not located or controlled at a central site, but spread throughout the system. Usenet newsgroups ride on computer networks, but do not need them in order to function. They are comprised of thousands of newsgroups which each deal with a specific topic. Users who have access to Usenet are able to "post" their own articles or comments to newsgroups and read articles posted by others. These electronic discussion groups form a hierarchy based on their subject areas, which fall into one of seven major categories:

comp	computer science, hardware, software, hobbyists
misc	miscellaneous: law, jobs, investments, sales
sci	sciences, research
soc	social issues, socialising, cultures
talk	debates, open-ended topics, endless talk
news	network information, maintenance, software
rec	hobbies, recreational information

Like specialist magazines or books, radio talk shows and television shows, these discussion groups focus on particular topics of interest. They offer a greater degree of interactivity and participation than traditional media, drawing people with common interests together to discuss, debate and share their knowledge and ideas. In this medium, a new form of socialisation has emerged, providing a common meeting place for people who may never have had an opportunity to cross paths in the real world.

Internet Relay Chat (IRC)

Internet Relay Chat is also a forum for interactive discussion. IRC is similar to Citizen Band (CB) radio: users convene on a channel (a virtual place usually with a topic of conversation) to "talk" and participate in real-time conversations in groups or privately. The thousands of people tuned into IRC at any one time "are divided into hundreds of "channels" that Internet users can "join" or "leave" at any time; like Usenet Newsgroups, the channels operating at any one time include a rich variety of topics, from the scholarly to the obscene," (Rheingold 1993:177).

The nature and usage of IRC is discussed in more detail later on in this chapter.

Multi-User Dungeons (MUDs)

On the Internet, there are "imaginary worlds in computer databases where people use words and programming languages to improvise melodramas, build worlds and all the objects in them, solve puzzles, invent amusements and tools, compete for prestige and power, gain wisdom, seek revenge, indulge greed, and lust and violent impulses," (Rheingold 1993:145).

Like the actors in a television programme, MUDders have to create an identity and give their character a name. The character plays a particular role within the world of the MUD and supports the roles of other characters, contributing to the belief that maintains the illusion of the fantasy world - be it a magical castle or a space ship. Participants can communicate with

one another through various public or private channels. Actions are described using text and people are given new stages on which to test new identities and affirm the reality of this virtual environment. MUDs combine real-time chat and operate like social meeting places and game boards. Participants also create objects with powers, such as magic carpets to transport their characters or weapons with which to manipulate others. They thus encourage the participant to exercise his creativity and imagination in an endless stream of possibilities.

The virtual worlds of MUDs offer a place where people can escape from reality, explore their fantasies by assuming different personalities and test social boundaries or norms in the safety of cyberspace. They extend the fantasy world of the fiction novel, radio play or television soap opera by allowing participants to create their own sets, characters and storylines.

4.6   Accessing the Internet

The Internet is available only to those who are computer literate and who have access to a computer and a telephone line, making it possibly the most difficult mass medium to access. However, looking at the rapid adoption of the Internet, this has not significantly hampered its penetration into society. The tools required for a single user to gain access to the Internet are a computer (at least a 486 - either IBM-compatible or Apple Mac), a telephone line and modem (to dial into a Service Provider) and Internet software such as Internet Explorer or Netscape (web browser). While older computers and low-speed modems (that transmit digital information at a rate of 9 600 bits per second) are able to access the Internet, the information is received at a slower rate, especially if it contains a lot of graphic material. It is therefore beneficial to have a high-speed modem (28 800 bits per second (bps) is now the standard, although modems are moving towards speeds of 56 900 bps) and a powerful computer to enable information to be processed with greater efficiency and clarity.

The user also needs to acquire an account with an Internet service provider (ISP). Internet service providers have their own dedicated links to web servers around the world, via underground sea cables. They offer a single user dial-up access to the Internet, whereby the

user dials the local telephone number of the service provider, connects to the ISP through a modem, and thus pays the cost of a local telephone call for access to any computer throughout the world that is connected to the Internet. The user's modem links the computer and the telephone line and, with the help of advanced software, contacts the service provider's computer and establishes a PPP (Point to Point Protocol) link across the telephone network. Data flows back and forth across the link, allowing the user to "surf" the Internet. For users who access the Internet more frequently (such as a company, who has its own web site), a service provider can supply a direct, dedicated link to a web server in America, for example.

The Internet is not as inaccessible as many people believe. The software which has been developed to make the Internet more user-friendly enables people who have little knowledge of technology or computers to navigate their way around the web of information in an on-going voyage of discovery. The wide range of services available on the Internet also make it an attractive tool for businesses, mass media communication and education. It allows people to communicate on a many-to-many or interpersonal basis, cost-effectively and interactively. The Internet has been hailed the "great leveler", as it places its users on an equal footing and is a valuable and limitless source of information and activity.

4.7   The Internet and traditional mass media

The Internet makes use of multimedia through graphics, sound, and text. It incorporates a wide variety of communication technologies and has even absorbed the traditional mass media: print, television and radio. It has transformed the sender-receiver features of traditional models of mass communication, at times putting them into new configurations in a one-to-one, one-to-many or many-to-many communications environment.

This has forced traditional mass media to adapt and evolve in order to survive. As Nguyen and Alexander (1996:110) note: "From the centre, government and big companies once effectively controlled the most powerful industrial age communications media, the mass

media. Political and corporate elites used forceful vertical or top-down communications processes of mass advertising and propaganda. Now, however, existing communication channels and media have become saturated. Technological innovation responded with egalitarian, demassifying, information media".

4.7.1 Publishing on the Internet

According to Hall and Carr (1995:17), MIT Professor of Media Technology Nicholas Negroponte, predicted as early as the 1970s that there would be a merger between the publishing industry, the world of television and film and the emerging communications and computing industries. Negroponte envisaged an integrated information industry by the year 2000. This has become a reality as people hail the new millennium as the age of information, of knowledge. The burgeoning home users' edutainment and games market has contributed to the demand for more interactive and visual production techniques: for multimedia information.

Many traditional publishers are exploiting the multimedia CD (compact disc) market and have identified the benefits of its cost-effectiveness. Multimedia can be used to enhance publications with colour graphics and moving video and can be easily updated at significantly reduced costs. This is potentially where the future of publishing could lie.

In the same way that video-on-demand is replacing video rental, the Internet may become the vehicle for distributing all types of electronic information. It is the natural environment for publishing. As in the case of television, the Internet connects producers and consumers, opening up new lines of communication and enabling feedback to take place.

As with other international artists, authors have set up their own websites, offering excerpts from their latest published works and providing an opportunity for readers to communicate directly with the author. Howard Rheingold is a case in point. Some, such as Steven King,

have taken it a step further and actually published their novels (*The Plant*) online (see discussion in chapter two).

According to Rheingold (1993:104) Project Gutenberg, under the leadership of Michael Hart, professor of electronic text at Illinois Benedictine College, aims to add ten thousand volumes of public-domain literature to the Net by the year 2001. One can already find digitized versions of *Moby Dick, Aesop's Fables, Alice in Wonderland,* the complete works of Shakespeare, *The Federalist Papers* and *Roget's International Thesaurus* (www.gutenberg.net).

The interconnectedness of the information on the Internet creates the potential for a database that can be used both as a source of information and as a link to other related information. Academic research would benefit tremendously from such a system, as students would be able to travel along connected sites, sourcing information on a specific topic. The potential for the electronic publishing industry is therefore not simply producing electronic versions of paper documents, but providing access between documents in ways which would not be possible in paper form. For example, cross-referencing could be established when quotes are provided, enabling the reader to refer directly to the original source. The danger, however, lies in users plagiarising literary works and research, something that is virtually impossible to control or avoid. Again, the issue of copyright is challenged by the freely available information on the Internet.

While tools for navigating or searching the web have been developed, they are not adequate when one is looking for something very specific or esoteric. "A better infrastructure is needed to provide more sophisticated methods of communication between users and publishers of information, in which the user is not required to be constantly 'surfing the net' to find the information they want by serendipity, but rather the information is in some way advertised to them or they know where to look for it," (Hall & Carr 1995:17).

Amazon.Com one of the largest online virtual bookstores, has done just this. By linking to Alta Vista, one of the largest search engines, the site provides information on published material available for purchase through Amazon.Com based on keywords identified in the search or request the user has entered through Alta Vista. If, for example, the user is looking for information on the Internet and types in the words "history of the Internet", Alta Vista begins searching the Internet for related web sites, while Amazon.Com has a window appearing on the same page that lists all the books on its virtual shelves that cover the same topic. They can then order and pay for the item via the Internet. Kalahari.Net, a South African web site is another example of a virtual bookstore, although it has expanded to sell video discs and CDs online.

Many services on the Internet are offered free of charge and that is perhaps why they are not as accurate or reliable as they should be. Users should be prepared to pay for services in the long-term if they require improved access and navigation. Initially, entire publications were available on the Internet. Now, publishers are starting to offer only abstracts and present electronic coupons for ordering the book.

Stoll (1995:39) notes that much of the content found on the Internet is of poor quality. "Researchers naturally save their best work to publish it in journals and books, realising that the review process ensures that better papers make it into print. They're unlikely to post good, original stuff on the network first; somebody might swipe their material."

The impact of the Internet on publishing

Looking at the increasing number of publications and authors that are transferring to online formats (*ComputerWeek, Business Day*, and Steven King's *The Plant*, for example), it appears that the Internet will change the face of traditional publishing, but it will not replace it entirely. It is doubtful that people would be able to tolerate "reading" vast volumes or lengthy novels on a computer screen. The leisurely activity of "snuggling up with a good book" and relishing each word is part of the reading experience. Feeling the weight of the work and

turning the pages is part of the fun. On-line versions of text expose users to a publication, providing an initial introduction or a useful tool for research.

The Internet also allows people to publish what they write in a form that is accessible to millions of people all over the world. The freedom of expression nurtured by the medium means that anyone can become their own publisher and can bypass the editor. On-line publishing is easy and available to anyone who has Internet access. While this may be exciting for the publisher, the readers may have to suffer poor quality or content. This may impact negatively on the future quality and nature of publishing.

A smaller scale of publishing on the Internet occurs on Usenet - the electronic discussion system. Anyone can post articles onto the "bulletin board" and read or reply to articles which appear there. A survey conducted by Elizabeth Reid, a student from the University of Melbourne, showed that during two weeks in June 1994, over 925 000 articles were posted to nearly 2000 different subject areas by 180 000 different people accessing the Internet from 58 000 different sites (Reid 1991).

With the increase in information flow and input, one could argue that Internet users will be faced with an information overload that becomes overwhelming. But if one considers the methods which people have developed for dealing with the vast amounts of paper publications, the problem does not appear insurmountable. If one enters a newsagent or bookshop, one is confronted with more magazines, journals and publications than one could ever hope to read. Instead of being overwhelmed by all this information, people take note of those items which interest them and ignore the rest. They are selective about media exposure. The same behaviour is likely to apply to electronic publishing. "However, in a future world populated by electronic agents configured to sort and sift through the global database for information to meet our requirements on a customised basis, the filters that we will develop to deal with electronic information will be much sharper than those we use for dealing with paper publications," (Hall & Carr 1995:19).

Some online publications, such as *ITWeb* (www.itweb.co.za), a South African IT e-zine (electronic magazine) and *Business Day On-line* (www.bday.co.za), have mastered the art of online publishing by providing a quick overview of the latest news and offering personalised services. *ITWeb* e-mails its subscriber base daily, with a list of the headlines that comprise its "Breaking News" front page section. If users want further information, they simply click the HTML link to the full story. The *Personalised Business Day* service lets users identify which topics are of interest to them (be it marketing, Internet, world news or sports) and then searches the stories of the day that pertain to these topics. These options allow users to scan through vast amounts of information and easily identify what to read. The Internet therefore encourages a greater degree of selective exposure, however it also could make this exposure more superficial, if people breeze over headlines and disregard the full story.

As with webcasting, online publishing caters for the characteristic Internet user, providing a wide variety of information and customising this to suit individual needs. It also provides instant access to news, something which was previously the domain of radio broadcasting and has never been possible in the publishing world. However, while the Internet may have transformed daily newspapers, it is doubtful whether it will replace novels.

Legal issues, copyright protection, royalties and charging structures will have to be clarified for electronic publishing and this poses numerous challenges for the professionals in each field. Policies must be examined now, before the new industry truly evolves and the pressure mounts. Standards for quoting and referencing online publications and articles also need to be established.

On-line publishing thus provides access to a greater variety of publications and releases authors from the restraints imposed by publishing houses (through censorship and financial restrictions). It also brings the reader closer to the author, allowing feedback or debate to take place. In an era where the pace has quickened to the extent that leisure time is limited and people need fast, quick access to information, the Internet answers their need to expand

their knowledge in a way no traditional medium can. This has forced traditional print media to convert to online formats.

On-line journalism

The fact that many newspapers are dominated by large corporations that provide much-needed financing, means that they are often not able to exercise full control over their content. Publishing information which is sensitive to the main sponsors of a publication could seriously jeopardise future financial support and result in the closure of the publication. It could also cause advertisers to withdraw their business and seek an alternative publication. For this reason, many newspapers are biased in their reporting and the editors have to select material and dispose of certain articles.

The ethics of journalism and freedom of speech are curtailed and restricted by a variety of external influences - be they corporate, political or social and the public's right to know often gives way to powerful companies or autocratic governments. The freedom of expression on the Internet is changing the nature of journalism and poses a threat to the future of newspapers that tell only part of the full story.

In the same way that anyone can publish anything on the Internet, anyone can report on worldwide events on the Internet, giving users access to personal accounts of happenings and graphic illustrations of actions. "The deal is, say the Negropontine net-boosters, that come the great day when net accessibility is built into our television sets, the world will be shrunk to the size of a modem. We will know everything there is to know about anything that takes our interest, rather than that of agenda-following press and broadcast news editors. When news, as opposed to newspapers, succumbs to the vote of the free market, it will be hash-settling time for those who insist that the press is a leader rather than a follower," (Diamond 1995:57).

When a bomb exploded in Oklahoma City in 1995, a web site was set up by the same evening, sending and receiving information. The following day over a dozen web sites were dealing solely with the bombing and a couple of newsgroups started discussing it. The University of Oklahoma dedicated its own daily newspaper to the bombing and made its reports available on the Internet. Diamond (1995:57) observed: "Whether the self-indulgence ("Day One: Forgive me if this is a little incoherent, I'm a tad drunk right now...") was a function of the we're-all-journalists-now Net or of the scoop-hungry style of the trainee reporters who staff American university newspapers, I couldn't say, but certainly the solipsism and the crediting of all those without whom etc. is par for the Net course. Then came the non-university local papers. These really did give an insight missing from even the deepest coverage our own press could give the bombing - letters from local Okies, blistering editorials, the sort of photos that don't go whizzing around the world".

The Internet turned to the task with astounding ease and small-town local newspapers dedicated staff to maintaining Internet sites. Even the rescue and care services started accessing the Internet to gather resources and official statements appeared more quickly than they did in the press or broadcast media.

In South Africa, *The Mail and Guardian* (www.mg.co.za), *ComputerWeek* (www.computerweek.co.za) and the *Sunday Times* (www.sundaytimes.co.za) are just some of the publications that have taken advantage of the speed at which information can reach millions of users on the Net, by offering electronic versions of their stories. The Net also allows users to file and index stories for repeated reference with ease.

As Elmer-Dewitt (1994:49) indicated, traditional journalism from the top down (from the editor to the reporters to the masses) has been reversed on the Internet to that of bottom up: news flows from newsgroups when anyone has something to report. While much of it may be riddled with errors, there are writers who report on their area of expertise, and in this case, the Internet carries news that is closer to the source than that found in newspapers. In this paradigm shift lies the seeds of revolutionary change. One should also consider whether the

public can handle the truth after being protected from the harshness of reality for so long. This new form of journalism will thus require some adaptations in the way readers think and assimilate the information disseminated directly from the source.

"Information and disinformation about breaking events are pretty raw on the Net. That's the point. You don't know what to think of any particular bit of information, how to gauge its credibility, and nobody tells you what to think about it, other than what you know from previous encounters, about the reliability of the source. You never really know how to gauge the credibility of the nightly news or the morning paper either, but most of us just accept what we see on television or read in the paper," (Rheingold 1993:267).

The impact of the Internet on traditional journalism

Whether online journalism will supercede traditional journalism remains to be seen. While the reports emanate directly from the witnesses, one is still unable to ascertain how accurate they are. Is this true journalism, or is it merely a new form of agenda-setting? People are unable to be objective, particularly when they are personally involved in a particular event. The onus is thus on the Internet users to seek all accounts and decide for themselves - as is the case with newspaper readers, who should expose themselves to a variety of journals to get a more comprehensive and unbiased view.

Traditional newspapers will need to add value to the electronic versions of their news in the same way that businesses have to invent ways of attracting and rewarding their customers. This may include creating a format that can be sorted by the user to apply to his/her unique needs and using fewer photographs, to reduce the time taken to download the daily news. It also poses a problem for advertisers, who will need to reconsider the presentation of their products in terms of the online format.

In summary, online journalism provides ready access to information from a multitude of sources. Free from the regulations of news agencies, it presents raw news and can transform

any Internet user into a news broadcaster. The consequences of the realisation of freedom of the press remain to be seen, particularly in the case of countries such as China and Zimbabwe where human freedom is suppressed by the ruling parties. The public's right to know versus their capacity to handle the truth is also an area for further investigation.

4.7.2   The Internet tackles radio

Internet Relay Chat

Internet Relay Chat (IRC) is the Internet equivalent of Citizen Band (CB) radio. Like CB radio, not all conversations on IRC are interesting and chat can get wild and offensive, particularly when someone takes on a female persona and is harassed. Some users also engage in devious acts, such as telling newcomers to type in commands that cause problems on their computers. However, there is also meaningful, intellectual conversation on IRC and many lasting relationships have been formed via this channel. The best way of avoiding unpleasantries is to be wary of people giving one instructions on software or arranging a face-to-face meeting.

Unlike radio, which is widely available and easily accessible, Internet Relay Chat requires the user to master a few basic commands before he or she becomes proficient with the software. Most service providers have their own IRC servers, but if they do not offer this service, users can connect up to an alternative IRC server.

Once access to IRC has been achieved, the user has to select a nickname, which is used in all correspondence on the channels. Most of the channels are permanent, but some appear and disappear in a fairly short period of time. By invoking the LIST command, users can access details of all public channels, the number of users on each channel and a topic description for those that provide it. Several conversations can occur simultaneously on a particular channel, which may be overwhelming for newcomers. Finding a person who is able to guide or assist the user is a good starting point.

IRC can be treated as a spectator sport, because it allows the user to watch the conversation moving up his/her computer screen. If the user wishes to participate in the discussion, he/she can intercept it at any time – much like tuning into a radio station and participating in a talk show.

"IRC does not fit well with conventional theories of human communication because CMC technology makes possible something that human communicators could not do previously - geographically dispersed groups of people now can use the written word as a conversation medium. So much of what scientists and scholars know about human communication involves physical presence or even potential physical presence, both totally absent from IRC. The telephone has more physical presence, more of a direct sense of the living being behind the words. Words, and the elegance of expression and timing that accompany their use, exist in a purely disembodied state in IRC," (Rheingold 1993:180).

Chat rooms provide a variety of settings, from libraries to social clubs and hot tubs, which provide some insight into the quality of conversation one can expect. Once a venue has been selected, the user assumes an identity and enters the room. The virtual inhabitants of the location are informed that a newcomer has arrived and may initiate conversation.

The discussions on IRC often contain descriptions of actions, such as "Sylvester blushes deeply" and this is an attempt to compensate for the lack of visual, non-verbal communication on electronic media. A private channel can be created for users who wish to have an intimate or confidential discussion. This expands the use of IRC to include conferencing and tutoring, not merely socialising.

Electronic discussion can be enhanced by acquiring sophisticated computer software, which allows chatters to create audiovisual screen images, called Avatars, which they use to communicate with one another. "Picking from a Mr. Potato Head smorgasbord of hundreds of

heads, bodies and costumes, users can transform themselves into a dragon, a buxom blonde or a macho stud," (Brickman 1995:73).

Point and click commands, which are menu-driven, enable subscribers to move across a room, use gestures to indicate emotions or create thought balloons in which to express their ideas. Some packages, such as CompuServe's WorldsAway, offer a variety of settings, ranging from a Middle Eastern desert to a town square. Each environment has its own social structure and economy in which tokens are exchanged for goods.

Whether these new graphically-orientated chat services will replace old fashioned text-based chat remains to be seen. According to Brickman (1995:75), Randy Farmer, co-creator of WorldsAway believes that "both flavours will always have a place. It's like the difference between radio and television," he says. "Good radio is bad television. Television removes a little of your imagination but replaces it with vivid imagery." Mike Rinzel, an analyst at New York's Jupiter Communications adds: "People might be resentful about being restrained to a sort of stick-figure representation...Then again...too much imagery could end up destroying the anonymous appeal of the basic chat experience," (Brickman 1995:75).

IRC is therefore an entirely new form of online broadcasting, operating in a similar way to MUDs, where people can assume an identity and engage in social interaction, fantasy, discussion or debate with people around the world. While this forum presents an alternative form of socialisation, entertainment and interaction, it could result in people losing track between their real selves and the virtual personalities they assume in the safety of cyberspace. Conversely, it brings people together and allows new relationships to be explored and nurtured.

The impact of the Internet on traditional radio

Traditional radio is a blind medium, which relies purely on auditory codes consisting of speech, music, sounds and silence. It appeals to the imagination of its listeners (recipients)

and creates a sense of intimacy by creating a "relationship" between the presenter and the anonymous listener. The radio is also the only form of mass media that allows the recipient to engage in other activities while he/she is listening. Television requires the constant, undivided attention of the recipient, as does the print media and this is still the advantage radio has over the Internet: one cannot become involved in other activities or travel with one's computer and modem with ease, although WAP technology may change this in the future.

Like other forms of mass media, radio is not conducive to recipient participation or feedback. The only time the recipient is able to air his views is on talk shows (such as those conducted by Radio 702, which encourages audience participation). However, he or she is confronted with engaged telephone lines and often has to conform to the topic which has been selected for discussion. On the Internet, the recipients are both listeners and communicators. But this form of online, text-based "radio" requires computer literacy and expensive equipment and it is therefore unlikely that IRC will replace existing forms of traditional radio communication.

Like television, some radio broadcasters have adapted to the Internet and broadcast live shows online. International radio stations such as the British Broadcasting Corporation (www.bbc.co.uk) have online news broadcasts that can be listened to by users around the world and Radio Five (www.5fm.co.za) has live webcasts and a web camera that allows listeners to watch and "join" them in the studio. Deejays from some radio stations encourage their listeners to e-mail their requests and comments, rather than phoning in. The "World Chart Show" on Radio Five is a prime example. E-mail messages from listeners around the globe are read aloud by the presenters, providing an international communications link to the studio and the local audience.

Pop artists such as Edward Kowalczyk from the band Live offer their fans real-time interview sessions online, transforming Internet users into radio interviewers. Live's web site (www.friendsoflive.com) also offers clips of their latest releases so that fans can preview new albums – before the deejays, in some cases! This presents a whole new range of copyright issues, which has caused concern among record companies.

What has evolved through the Internet is selective listening and a special type of broadcast. It brings international radio stations to local users, serves the interactive needs of the online audience and provides a closer companionship. But, as mentioned earlier, it has its limitations due to the mobility of traditional radio and the strains audio transmissions place on bandwidth.

Knoch (1998) proposes that some people actually enjoy the poor quality, short-wave type of audio transmissions on the web. "As a kid, I had a shortwave radio and remember spending a formative two years or so as a serious radio nut. Apart from giving me access to content I would never have come across without it, the radio also rekindled my interest in learning different languages. It was a special feeling when I could follow my first news bulletin in French. Perhaps some of that spirit is rekindled in the poor-quality streaming Internet radio transmissions. As with shortwave radio, there's loads of content that can be accessed on the web that South Africans don't usually receive".

Radio broadcasts on the Internet therefore bring audiences closer to the broadcasters, allowing a higher degree of participation and opening more channels for feedback. Listeners can chat directly to their favourite pop stars, transforming their passive role into that of interviewers. As is the case with online publishing, it makes a wider variety of programmes and stations available to listeners. The Internet is thus changing the face of broadcasting institutions by giving the mass audience access to a domain that was previously reserved for the privileged minority of broadcasters. As bandwidth limitations and lack of mobility are overcome, the Internet may evolve into the favoured medium of radio audiences.

4.7.3 Television and the Internet

British producer John Wyver, and his production company Illuminations produced the first British television programme about the Internet and digital technology called "The Net". The project caused a confrontation between the two technologies and received an unprecedented

response. "Whatever the programme did, the online old school was probably bound not to like the way old-style one-way broadcasters treated their two-way narrowcast Utopia and they had the technology to make their opinions known," (McClellan, 1995:65).

The producers received 600 e-mails the night following the broadcast of the first episode, and approximately 800 over the course of the series. In his twelve years of producing television programmes, this was the first time Wyver had had any real engagement with his audience. Netizens (Internet citizens) put forward suggestions for future programmes and offered criticisms of the content. The researchers for the series responded to many of the communications and made adaptations based on some of the suggestions. The feedback received via e-mail indicated the perceived strengths and weaknesses of the series, offering a free market survey to Wyver and giving mass audiences a vehicle to air their views and participate in the communication process.

This incident illustrated the opportunity for television broadcasters to identify and interact with their audiences and highlighted the need for greater sensitivity, responsibility and accountability to viewers - something which mass media communicators have never had to face before.

"Sitting before a PC has different consequences from sitting before a TV. On the Internet, the notion of office disappears. People do what they know how to do, not their assigned roles. This is an enormously liberating force working against hierarchies of all kinds. This is democracy citizens in advanced nations always dreamed of. What people are creating on the Internet is a controversial, demassified, non-representational democracy that transcends the nation-state," (Shields 1996:111).

Broadcasters have, however, harnessed the power of the Internet and the ease with which they can target millions of users with advertising. Programme schedules, interviews with TV personalities and previews of forthcoming attractions are just some examples of the content of broadcaster's websites (see for example, www.sabc.co.za and www.etv.co.za).

Organisations such as DStv have taken the communication lessons learned from the Internet and applied them to the TV screen too. Interactive channels guide users through programmes, text messages bring viewers up to date by summarising what has previously occurred on series and in features and they offer the opportunity to preview weekly schedules and plan viewing. In this way they are assisting viewers in selectively exposing themselves to the medium.

"Television is one of many sociocultural experiences [or determinants] that helps to define what the individual believes to be reality, whether in terms of values, meanings, events ideas or opinion," (Du Plooy 1989:36). It does this through the presentation of stereotypes, the immediacy of the medium and the mimetic nature of its image. While viewers are geographically, culturally, intellectually and linguistically diverse, television requires very little literacy (i.e.. the encoding of visual signs and camera techniques) in order for its message to be understood. Like the television set, the computer screen presents a mosaic image to the recipient, but for interactive television to be achieved on the Internet, expensive software and hardware is required, and the user must acquire the skills for operating the technology. A greater effort is thus required to access this form of mass communication on the Internet.

There are critics who maintain that television will become more interactive and avoid being seconded to the PC. The reason for this is that television and PC audiences are very different. For television viewers, there is no dead time - things happen quickly and change every few seconds, otherwise they switch channels. PC users are accustomed to waiting for something to appear on the screen while they think, although this patience is showing signs of waning, evident in references made to the WWW as the "world wide wait". There are also more televisions in homes than there are PCs.

While watching television over the Internet may never become a widely-adopted reality due to the massive demands of bandwidth-hungry audio and video transmissions, which require

users to spend vast amounts of money in upgrading their technology, current technological innovations have presented a new vision: Web TV.

Using a standard television set and a Web TV Internet unit, users can connect to the Internet, send e-mail and interact with new forms of entertainment, such as participating in game shows, polls and chatting with other viewers.

The global nature of the Internet would allow much greater flexibility for broadcasting. For example, the South African Broadcasting Corporation screens programmes predominantly in English and has decreased the number of Afrikaans programmes broadcast, while increasing the programmes broadcast in vernacular languages. The computer networks that comprise the Internet are far less dependent on English than television. People are able to correspond in German, French, Chinese, Russian or virtually any other language and thus the medium is not restricted to a particular language.

Video-on-demand is already available on the Internet. Users can order a video from an online video supplier and have it "downloaded" to their PCs for viewing at leisure - provided they have the right software and sufficient memory. Graphics and audio require large bandwidth for successful transmission and South Africa is currently restricted by bandwidth limitations, which result in slower reception and delays. The result is that access is possible, but not in real-time and thus information has to be stored first before it can be viewed. Internet connectivity via satellite may provide a solution. This does, however, pose a serious threat to video stores, that may have to make the transformation to virtual stores, offering online shopping in order to survive.

The Internet has encroached on the broadcasting domain for specific events. For example, during 1999, the NetAid concert (a charity concert including performances from some of the world's top musicians) was broadcast live on the Internet, instead of on television. Users around the world dialled in and watched the show from their PC screens. And NASA (www.nasa.gov) has taken Netizens into outer space by enabling them to view experiments

and excursions such as those which involved placing a robot on the planet Mars. A video camera placed at a waterhole in a nature reserve in South Africa allows users to "view through the eye of the camera" the wildlife that comes to quench its thirst, making virtual travel a reality (www.africam.co.za).

The impact of the Internet on television

Perhaps the Internet will not replace television in the future, but it has had, and will continue to have, an impact on the nature of communication via this medium as it hinges on interactivity and feedback - two elements which are not part of the culture of traditional mass communication. As the Internet community becomes increasingly familiar with interactive entertainment, it could begin to expect it from other applications and wish to participate in all processes of communication – in much the same way that radio audiences started to request specific programme content in the early days of radio broadcasting. Media corporations can incorporate this new technology and use it to their advantage, as is the case with John Wyver and DStv. If they choose to ignore it (as the SABC has done to date) they may end up losing the race in the Information Age.

"When it comes to delivering mass audiences, TV is always going to be around. But the web, which can carry video, audio and text, might nurture a new form of TV: online multimedia. While media corporations have been pushing their 500-channel video-on-demand, something much closer to 'interactive TV' has bootstrapped itself into existence on the web - a more open vision, not of 500 channels, but 500 000 home pages," (McClellan 1995:65).

The result is a merging of old media companies with new media organisations. When Time Warner announced its decision to hand over 55% of its shares to America On Line (AOL) in January 2000, it appeared to be an "astonishing admission by old media of the power of the new," (The Internet gets real...2000). The merging of the old with the new arose from the recognition that the two companies needed each other. Traditional media organisations have been desperate to make waves in the new-media business for some time. The problem has

been their ability to react rapidly to change. "The Internet's perceived significance is constantly changing and Internet companies need to be able to change along with perceptions. AOL has prospered because it has reinvented itself so often," (The Internet gets real...2000).

Cable offers a solution to broadband Internet services, which is why media companies who have cable assets have been rebuilding them for the digital age. Traditional media companies have been restructuring their organisations to adapt their content for a number of platforms – broadcast TV, cable and print. The Internet is the next platform.

"The rush of companies onto the Internet has turned into a crush of businesses trying to get noticed. Those who fail are trampled under foot. Marketing is what differentiates the winners from the losers, and advertising is therefore by far the biggest item in the budget of new-media companies...New-media companies' desperate need for promotion has been the basis of many old-and-new media alliances, with old media companies acquiring a slice of an Internet company in return for promotion," (The Internet gets real...2000).

In terms of distribution, the Internet has not fulfilled expectations. Slow Internet access from standard telephone lines has resulted in many unsuccessful attempts at broadcasting. Broadband distribution offers high-speed access that will enable users to view high quality images and receive as much data as they can use. To make this possible, telephone companies are testing digital subscriber line technology which converts their wires into broadband channels.

As transmission speeds and bandwidth limitations are overcome, media content will improve and competition will increase. That's where traditional media come into play. The old adage "content is king" will prevail and the traditional media have it. The merging of old with new is a merging of technologically competent new media companies with the creativity content of older media. The strain on financial resources to create content that has mass appeal has

been overcome by the larger players who have established themselves and who have the financial backing. In this case, the Internet may not lower the barriers for smaller players.

"Time Warner can take a brand - say Batman – from a comic and turn it into a movie, a TV series, books, clothes, toys, with each of those outlets generating revenue and promoting the brand. A little company can't do that...In the crush of companies and products struggling to be noticed, those that survive will be those with the sort of scale and organisation of the big media houses. That is why AOL needed Time Warner, rather than a couple of guys with good ideas in a garage," (The Internet gets real...2000). The danger lies in monopoly of the Internet by those who have the money to buy it.

In summary, it would appear that WebTV may result in the merging of these two media and provide an answer to the bandwidth limitations currently suffered by Internet broadcasters. The act of watching television and watching an Internet broadcast are very similar, although the latter allows the viewer to participate in the communication process.

As in the case of radio broadcasting, the Internet has impacted on television through its timeous delivery of news. Television programmes have to be filmed, edited and then they are broadcast. The Internet can deliver information to people instantly. A case in point is the 2000 Olympic Games which were held in Sydney. The Official Olympic Games web site attracted an estimated 6.5 billion hits, threatening the International Olympic Committee's broadcasting deals. According to Penstone (2000) the Committee "banned all live broadcasts until 2008 and refused to allow contestants to speak of their Olympic experiences on the web". The reason the Internet became the favoured medium was that it transcended the time differences between broadcasting and countries, bringing news to Netizens twenty hours before television could.

Anyone who has a video camera and the required software to load and view online broadcasts can broadcast on the Internet. What they may lack, however, is the skill and creativity to produce something people want to watch or are willing to pay for. Like online

publishing and radio broadcasts, the Internet could bring a wider range of television programmes to its audience, capitalising on its ability to draw them in as active participants in the mass communication process. Aspiring actors and actresses, directors, scriptwriters and producers may be able to use this forum to catapult themselves into a virtual Hollywood that does not impose the same restrictions (financial and censorship) as the real industry.

4.8 Summary

From the above discussion, it is clear that the Internet has already had an impact on traditional mass media – from the way in which they deliver information to the way they regard and treat their audiences. The extent to which the Internet will attract audiences from these media remains to be seen. If, as technology trends indicate, the Internet evolves into a single medium that combines print, radio and television, it could become a powerful communication tool that creates and caters for an audience that demands rapid information, a high degree of interactivity and a wide range of programmes and content.

The impact of the Internet is difficult to predict, due to the fact that this is a relatively new medium. However, if the growth of this medium continues at its present rate, it will have a far-reaching impact on public communication. One has merely to consider the impact of the print, radio and television media and to combine these into one medium to realise the extent of the potential impact of the Internet. Selective exposure to the mass media is something that must be propagated to educate the public about the positive and negative effects of media exposure and to generate a sense of personal responsibility which is a prerequisite for unrestricted personal freedom. Traditional mass media treat their audiences as anonymous beings: on the Internet they can also remain anonymous, but they have the ability to reveal and broadcast their identities, thoughts, feelings and views.

In the next chapter, the researcher makes some predictions about the impact of the Internet on interpersonal communication, politics and the way humans interact with each other. As discussed in the preceding chapters, it is beyond the scope of this dissertation to explore the

issues of pornography, legislation or electronic commerce, for example. However, the Internet is a vast and potentially powerful medium that offers diverse content. It is therefore imperative that researchers start studying this new medium and take advantage of the ability to do so while it is still evolving. It is hoped that this chapter will highlight some of the issues regarding the impact of the Internet and encourage further debate and investigation.

5. CHAPTER FIVE: THE PREDICTED IMPACT OF THE INTERNET

The researcher has already acknowledged the idealistic view of the Internet that is presented in this dissertation (see chapter one) and the other internal and external factors affecting Internet use and the gratification sought. Certain assumptions are made in this chapter regarding Internet use and gratification. Some of these will be discussed in the conclusions in part B of the dissertation.

5.1 Introduction

The Internet is a unique form of communication in that it offers both one-to-one and many-to-many communication. It is the dominant mode of communication in the Digital Age and allows users to exercise choice and freedom of expression on a scale which has never been achieved by any other technology to date. Diverse cultures and opinions can confront one another openly and transcend the man-made boundaries which have divided our world and distanced man from himself and his environment. From e-mail to newsgroups, Internet users can participate on an equal basis and are able to engage in meaningful dialogue. In this way, the Internet has created a virtual global village, opening the world to its users.

While the Internet is still emerging and should thus be treated with caution, one has only to consider the ease with which society adopted new technology such as print, radio and television to see how easily and quickly humans adjust to, and embrace, innovations. Computers have become an integral part of everyday life: we draw money from ATMs (Automatic Teller Machines), conduct business using software packages, cellular phones and laptop computers, use touch-screen kiosks in shopping centres to find out where a particular supplier is located and even consume products manufactured by computers. Computer literacy and a basic knowledge of computer technology are becoming crucial to survival in the twenty-first century.

Electronic commerce (e-commerce) is dramatically changing the way the world does business. Virtual stores such as Amazon.Com (www.amazon.com) and Woolworths (www.inthebag.co.za) make it possible for consumers to view and purchase goods online without leaving their computer. This is made possible by online order processing, invoicing and distribution and will see a far wider variety of services available over the Internet in the near future. Booking holidays, buying food, getting an education and doing personal or business online banking are all possible on the Internet. With the rapid advancement of technology, life on the Internet will be limited only by our imagination and bandwidth.

With the world moving towards open economies and democratic freedom, mankind is becoming more aware, more demanding and more determined to seek his own destiny and satisfy an insatiable hunger for knowledge. The dramatic growth rate of Internet subscribers is testimony to this enthusiasm. But as Stoll (1995:18) cautions, the computer networks may offer little more than the dreck sold on television home-shopping channels. "There's an old bookstore in Dundas, Ontario, in an old house with a water garden in the front and three resident felines. Like all real bookstores, you can browse for free and the staff won't complain. This store's atmosphere isn't available over the Internet...Electronic communication is an instantaneous and illusory contact that creates a sense of intimacy without the emotional investment that leads to close friendships."

5.2 Interpersonal communication

Interpersonal communication is rich with non-verbal cues such as facial expressions, gestures and voice intonations. In typewritten computer messages, these signs are not available (unless audiovisual software and hardware is in place). In an attempt to increase the information intensity of electronic messages, Net citizens have devised codes of expression, which are read side-on:

:) smiling

;) winking

B-) smiling face from a person wearing glasses

<arching eyebrows>.

One must bear in mind, however, that although this medium is devoid of human contact outside of text-based communication, words on a screen have as great an impact on people. On-line conversation might be as informal and ephemeral as a telephone conversation, but it has the reach and permanence of a publication.

The downside is that e-mail has reduced the interpersonal, face-to-face communication between people. Instead of the warmth of a human voice or physical contact, communication via the Internet consists of impersonal computer text on a screen. Handwritten letters (now referred to as "snail mail"), birthday cards and personal greetings are increasingly done electronically. This anonymity reduces the responsibility of the sender which can lead to superficial social interaction as humans lose touch with their inner selves and become more like machines. In addition, users have to subjugate their thought patterns to those of the computer – the medium impacts on the quality of interpersonal communication.

As Shields (1996:1) comments: "Likened to a world of data and computerised interaction, the Internet has been called the first true 'cyberspace'. With this, it has raised questions concerning the nature of social interaction. The neglect of face-to-face communities has also raised fears about the decline of the public sphere into a virtual world controlled by telecommunications corporations where only the privileged have access and the body is disdained as an embarrassing and imperfect support for minds infatuated with virtual, representational bodies". This is not an environment which encourages reasoned, reflective judgement.

The popularity of the Internet suggests that it satisfies certain human needs. What these are and how they are satisfied will be the focus of the survey in chapter six of this dissertation. Does the Internet provide a form of companionship through e-mail and newsgroups, is it primarily used as a source of information and news, or do people seek an escape into the virtual worlds of MUDs and chat rooms? Whatever their motivation, the freedom of

communication on the Internet may result in alienation from the real world. Conversely, it may foster greater freedom of speech and human rights, bringing diverse nations together and uniting countries. The thousands of people accessing the Internet has broken barriers between countries and opened them up to the world for scrutinisation.

5.3 The impact of the Internet on politics

The diversity of users on the Internet threatens cultural identity and the sovereignty of the state. This has positive and negative consequences. In politically turbulent states, society can reveal to the world the injustices that are taking place and put pressure on governments to intervene or to avoid intervening. When relations between Iraq and the United States of America soured in 1999, threatening a second Gulf War, those who sympathised with Iraq started spamming US government websites in protest, starting a war of words in cyberspace.

Autocratic governments may find their supporters starting to question their tactics due to the fact that they have gained exposure via the Internet to the way people in democratic countries are reaping the rewards of freedom. The problem is that when the protests and riots start, they don't have support on the ground to defend themselves, unless a coup is staged.

As far as cultural identity is concerned, the Internet presents a common medium and a global community in which open debate and discussion can occur. There are no fast rules for tolerance and the freedom to communicate can be detrimental, particularly where pornographic websites and sexual perversion is concerned.

5.4 The virtual world: losing touch with reality

"Technology is often viewed as a source of separation. In allowing interaction at a distance, first the telegraph, then the telephone and now the computer have negated the limitations of physical presence. Conversations are held with distant and absent others...Like language which allows us to envision within our mind's eye abstract and invisible concepts, technology

makes the distant and foreign present and tangible. The simple technology of text on a computer screen has allowed Internet to become a medium in which users may develop a palpable sense of others' bodies, even engaging in forms of public sex over the computer wires, elaborating sexual fantasies and sexual dialogues in 'hotchats' and 'cybersex'," (Shields 1996:5)

From this quotation it is clear that the Internet allows people to relinquish their responsibilities, their humanity, values and culture and to act without consequences: to become like machines. The danger lies in the transferral of this behaviour and attitude to the real world. The result could be the degradation of human interaction and communication – an alienation of the human race. Will we live in a world where people work, socialise, shop, bank, trade and communicate through their computers, devoid of human contact? While these threats are real, the Internet also has many positive attributes. It brings global communication to the public, linking families, friends, businesses, researchers and students and it does allow for meaningful communication, although it cannot replace the bodily contact and warmth of face-to-face interaction. The Internet has given humans the freedom to explore themselves and their world. Whether this will have dire consequences depends on how we use or abuse Internet technology.

The hazard of the virtual world is that it lacks the physical contact that is the determining factor of reality. Unless one has video-conferencing facilities which include a small camera on the top of a computer and a microphone, one has no means of identifying who one is communicating with and of ascertaining the true intentions of that person. Like traditional mass media, the communicator is anonymous and there is only the printed word from which to ascertain credibility. The loss of bodily contact and the blurring of distinction between body and machine threatens to alter the notions of actions and norms. Knowledge and wisdom are traditionally grounded in physical experience: the Internet challenges this. The lack of physical presence coupled with unrestricted freedom of expression relinquishes the responsibility that goes with bodily presence and reduces the quality of human encounters.

"With cyberspace...you can literally wrap yourself in media and not have to see what's really going on around you," (Shields 1996:89).

The attraction of networking is that the user is invisible. Whether he is ugly, good-looking, club-footed or a quadriplegic, everyone converses as an equal. "Because we cannot see one another in cyberspace, gender, age, national origin, and physical appearance are not apparent unless a person wants to make such characteristics public. People whose physical handicaps make it difficult to form new friendships find that virtual communities treat them as they always wanted to be treated - as thinkers and transmitters of ideas and feeling beings, not carnal vessels with a certain appearance and way of walking and talking," (Rheingold 1993:26). In this way, the Internet offers a new means of gratification for those seeking companionship, love and acceptance.

Virtual reality has the potential to allow users to transcend the material world to a greater extent than the escapism and fantasy offered by soap operas on television. The user can assume any identity and is an actor in a world he/she has created. MUDs provide companionship for isolated individuals, allowing them to engage in erotic fantasy in a world where their actions do not have material consequences. The activities and dialogue of the cyber communities determine whether they are beneficial or detrimental.

"Cyberspace can be seen as an extension of our age-old capacity and need to dwell in fiction, to dwell empowered or enlightened on other, mythical places...Further, networked virtual reality, though it operates through the interface of a computer terminal and is often operated by people oceans apart, is nevertheless a form of communication that is seductive; it is adequately reminiscent (at least in our most nostalgic virtual imaginations) of the kind of interactive, immersive stories that were told around the hearth with one's kin group," (Shields 1996:146).

While some may argue that the Internet will return what was lost from our oral tradition, this virtual world is potentially also an anti-social one in which users can be drawn into a timeless

cyberspace in which the lack of control allows malicious intent to roam freely. Hackers (highly skilled computer technicians) have become one of the scourges of this new medium, roaming the Internet for sites they can tap into using sophisticated computer programming techniques. Once they've cracked the code and entered a corporate network, they have virtually free reign to deface web sites in the form of cyber graffiti. The South African Statistics web site, Internet Service Providers such as Global Internet Access, NASA, the US government and several financial institutions have all been victims of such attacks. In some cases, hackers have threatened the demise of massive organisations by exposing confidential files and information on their customers to the entire online world. This is the price we're paying for global access and freedom.

Deadly computer viruses such as Melissa and WormZip went on the rampage in 1999, infecting millions of computers with malicious code as they penetrated networks, multiplying like a cyber plague, deleting information, wiping hard drives and wreaking havoc. Both viruses were transmitted via e-mail and in both cases users were unaware that their computers had been infected. The Melissa virus was programmed to send e-mail messages automatically to the first 50 addresses in a user's e-mail address book, multiplying itself with rapid speed and invading privacy. Microsoft Corporation was forced to shut down its mail server due to bottlenecks in its network traffic and to prevent the Melissa virus from spreading. Wormzip also appeared as an attached e-mail file, which activated the minute the user opened the file, deleting specific electronic documents and financial spreadsheets.

While anti-virus software and Internet security software has been developed to counter these attacks, the culprits seem to continue finding loopholes in their mission to achieve notoriety in the cyber world.

E-mail spamming (unsolicited mass-mailing of information to millions of users) has filled users' e-mailboxes with junk mail ranging in content from pornographic web sites to special holiday offers, pleas for financial aid, electronic chain letters and numerous scams. Many companies make their fortunes selling e-mail address databases to spammers, without first

obtaining the consent of the people on the database. There is currently little a user can do to prevent this onslaught.

5.5 The personal impact of the Internet

The long-term effects of Internet technology remain to be seen. Experiments have already been conducted to prove that the Internet allows people to live without ever leaving their homes. The South African Dotcoza project was a 90-day experiment (run from April to June 2000) to test how easy it actually is to live off the Internet. The subject, a male whose identity was kept secret, was house-bound for the entire period and had to order everything he required online. From opening a bank account to purchasing pizza, getting it delivered and buying underwear, the experiment revealed that South Africa lags behind in some vital Internet service areas, according to Lankester (2000).

Even if it was possible to live entirely off the Internet, is this the life humans want to live? Virtual travel can never replace the sounds and smells of new sights. It can only provide a simulation of reality, which results in a superficial experience of the world. The massive amounts of information available over the Internet have caused an information overload which forces users to be selective in their utilisation and may even result in a revolt against technology. Selective use of the Internet is critical. We must take advantage of this new tool and allow it to enrich, not dominate our lives. As Mulgan (1997:8) cautions: "We need the warmth of human connectedness, but the warmth often comes with the pains of intimacies and emotions, and of being trapped in unhappy situations and that is why we need a balance between individuality and commonality, what pulls us apart and what brings us together."

The expectations raised by the inventors of computer and Internet technology were that technology would enhance human lives, assuming more of the mundane functions thereby generating more free time for leisure activities. To date, the reality appears to be that this technology has speeded up the pace of life, placing greater demands on humans by reducing

delivery times and enabling more work to be done in a shorter space of time: we're working even harder and longer.

As Nguyen and Alexander (1996:104) state: "The contained, the distinct, the separate – are being replaced by the flowing, the unified, the fused. Under power's endless refraction with the new electronic dispensation, old assumptions about the nature of identity have quietly vanished. Our individual concreteness dissolves in favour of the fluid, the homogenous and the universal. Once the palpable particularity of individual identity is lost, we become relational feedback units among endless arrays of refracted power".

If humans allow technology to dictate how they live, to replace the warmth of human interaction and swamp society in a maze of meaningless information and superficial interaction, they will lose their sense of identity and self. If however, they harness the power of the Internet and use it selectively and wisely as a tool to expand their knowledge and discover the world, it will become another tool for surviving on a constantly changing planet.

What the Internet has done is to create a truly global village. Humans can communicate with one another cost-effectively over vast distances at the push of a button. From the safety of their homes, people can explore the world, learn more about each other and benefit from automated processes that make life easier and create more leisure time. "In simultaneously bringing back lost arts of chatting and letter writing, the Internet is fusing the oral and the written. People must judge you solely on the words you write," (Shields 1996:104).

Like the conventional mass media discussed earlier, the Internet has transformed society and traditional modes of interpersonal – and mass – communication. What it has not done is entirely replaced these forms of communication. We live in a real world and, while we can escape into cyberspace, it cannot replace the real communities and power of interpersonal communication. If we allow it to dominate these primary activities, we face the consequences of alienation and dehumanisation.

"On the Internet...the individual is part of a larger group that spreads further than the single user can imagine. Everywhere we rub shoulders with each other. Everywhere users present themselves to each other, freely saying and doing what they choose. This freedom is the cornerstone of the carnivalesque and where there is carnivalesque there is transformation. This community extends beyond Internet into face-to-face communities, inextricably linking the Net into local communities and struggles, Conversely, such struggles and perceptions are bound into a network which is mediated through the Internet, through other mass media such as television and through individual social dialogue. The Net itself is mediated by everyday life," (Shields 1996:8).

5.6   Summary

The Internet has penetrated society in a similar way, and as rapidly as, print, radio and television. It appears to serve diverse needs in multiple ways – from the need for company (e-mail, MUDs and IRC) to the need for self-expression, self-actualisation, connectivity, escapism and fantasy, as well as information (news and online publishing) and entertainment. Like print, radio and television, it uses technology in a unique way and offers different content with different effects.

Selective exposure to - and the use of - the Internet are difficult to ascertain due to the millions of users that access this global network from countries all over the world. It also transcends the boundaries of interpersonal and mass communication, addressing both types of communication and offering greater freedom by removing control of the medium from a particular organisation or person.

This chapter has provided a brief insight into the myriad services and nature of communication on the Internet and the impact it has had on users and on traditional media – all of which warrant further investigation. While interpersonal communication is not the focus of this dissertation, a description of the types of interpersonal interaction was provided to explain some of the ways in which communication is addressed by the Internet and to look at

how some of the boundaries between interpersonal and mass communication can be blurred and how the two can influence each other.

What has become evident is that each mass medium serves specific needs in specific ways and the extent to which media satisfy these needs determines media usage. The prevalence of radio, print and television in the face of new technologies suggests that they will survive in the immediate future and will continue to offer gratification in a unique way. The evolution of the Internet is ongoing and it remains to be seen whether it will have a positive or negative impact on society. For now, it is a medium which many are exploring and which is being used in diverse ways. The novelty may wear off, although this has not been the case with its predecessors.

In the next part and chapter of this dissertation the researcher will describe the survey that was conducted among a group of professionals in South Africa to identify how they use the Internet and what gratification they seek from it.

PART B : SURVEY

6. CHAPTER SIX: A SURVEY ON INTERNET USAGE IN SOUTH AFRICA

6.1 Introduction

As a relatively new communication medium, the Internet opens many opportunities for media studies and warrants extensive research in order to understand, classify and form theories about the impact and nature of the Internet's diverse forms of communication.

While many studies tend to focus on the business benefits of the Internet (namely, electronic commerce), there appears to be scarce local research into the nature of Internet use and gratification. Perhaps this is due to funding (which influences the focus of the research), as well as the rapid appearance and disappearance of new web sites and the dynamics of the medium, which makes it difficult to research. Nothing remains constant on the Internet, except change.

A survey of South African web users conducted by Media Africa in 1998 (The 1998 South African Web...1998) provides one of the clearest profiles of Internet users. The survey was conducted among over 1 400 South Africans and provided some interesting data that both confirmed and refuted assumptions about Internet users. Females accounted for a mere 19% of users and the average age group was identified as 35.

Although the key findings state that the medium is not primarily used as a substitute for lonely singles, the justification of this assumption is open to debate. The reason given is that 56% of the respondents were married or living together. This, however, does not automatically mean that loneliness is not a motivating factor in Internet usage.

What the survey did confirm is that users are highly educated (an average of one year of post-matric education), that online purchases are increasing (43% of users had already made a purchase online) and that 81% of respondents access the Internet every day.

The third edition of Media Africa's South African Internet Services Industry Survey 1999 (Growth in Internet usage...1999) classified Internet users into dial-up users, corporate users and academic users, which together accounted for 1266 000 Internet users in South Africa at the end of December 1998.

MSN.co.za, a South African Internet portal, conducted the largest online survey on South African Internet users to date during July and August 2000. According to De Wet (2000), a total of 12 633 Internet users (56% male and 44% female) completed the survey, representing 0.63% of the estimated 2 million users in South Africa. The results echoed Media Africa's findings. The average respondent was aged between 18 and 35, earned R10 000 per month or more and had a disposable income as high as R5 000. Male users tended to do more searching on the Internet, whereas their female counterparts sent more e-mails. Some 18% of respondents said they had had an online relationship and 36% of the respondents had made an online purchase. The most popular activities were e-mail and searching for information, with 53% of the respondents using the Internet more than once per day and a further 25% saying they used it daily.

It is evident that none of these studies focuses on the gratification of Internet usage, tending to describe, in broad terms, the types of Internet usage and the characteristic Internet user. It is important to understand the reasons for specific use and gratification derived from the Internet in order to understand its impact on traditional media and society. On the basis of such research, one can make assumptions regarding long-term effects, the role the Internet will play and how this will shape traditional mass media. One can also identify how (and whether) the Internet satisfies needs in unique ways and make assumptions regarding the impact this will have on traditional mass media and their audiences.

6.2   Survey research : A brief overview

Survey research is one of the most frequently used methods of observation in the social sciences. According to Babbie (1995:257), surveys are primarily used for "descriptive,

explanatory and exploratory purposes. They are chiefly used in studies that have individual people as the units of analysis". The benefits of survey research, as identified by Wimmer and Dominick (1987:103) are that it allows problems to be investigated in realistic settings; expenses can be controlled by selecting a particular type of survey (mail, telephone, personal interview or group administration) and it facilitates the collection of large amounts of data from a variety of people and a sample that would be too large for personal observation.

Critical to the success of the survey, however, is the wording of questions to avoid misinterpretation and bias. This is particularly important in the case of a mail survey (self-administered questionnaire), where the researcher is not present to address queries the respondents may have.

One of the main problems with self-administered questionnaires is how to motivate respondents to complete and return the questionnaire. Various tactics, including making it easy to answer the questions, presenting the information in a format that is easily read and comprehended and providing a return envelope, have been developed to address this problem. Follow-up mailings, which include another copy of the questionnaire, can increase the response rate of this type of survey.

In comparison with other methods, such as interview surveys and telephone surveys, the self-administered questionnaire is generally cheaper and more suited to dealing with topics of a sensitive nature, if it offers complete anonymity. The disadvantage of this type of survey is that respondents may skip questions, which will have a negative impact on the analysis of the survey results. Self-administered questionnaires are also less effective than interview surveys in dealing with complicated issues and situations where personal observation can contribute significantly to the survey. As Babbie (1995:274) notes: "Standardised questionnaire items often represent the least common denominator in assessing people's attitudes, orientations, circumstances and experiences. By designing questions that willl be at least minimally appropriate to all respondents, you may miss what is most appropriate to

many respondents...Similarly, social research can seldom deal with the context of social life," and this is an important factor in understanding media use and gratification.

Despite its shortcomings, survey research is appropriate for making descriptive studies of large populations (such as that of the Internet) and it is more economical and faster than other methods of research. It is for these reasons that this method was selected for a study of Internet use and gratification among a group of professionals in South Africa. When enquiring into the use and gratification of the Internet, certain questions (such as the type of newsgroups and chat rooms visited, whether or not the respondent sought companionship from the Internet and the type of goods they purchased) are of a personal nature and the self-administered questionnaire made allowance for the confidentiality of responses (although no respondents requested this).

6.3   Methodology

The survey in this dissertation is a descriptive survey (documenting existing conditions and attitudes) that aims to identify the nature of Internet usage and gratification among a specific group of professionals in South Africa. As discussed earlier, for the purposes of this dissertation professionals are defined as people employed as skilled workers by a registered company. Secondary education is a prerequisite, but tertiary education is not stipulated as certain skills may be acquired through job experience in a particular field. The intention is to use this knowledge to make assumptions about Internet usage in general - given the reality of Internet access amongst privileged groups of people in South African society.

A self-administered questionnaire was designed to be e-mailed to respondents. The format of the questionnaire (a Microsoft Excel spreadsheet) is not the best format for an online survey because it requires respondents to have a basic knowledge of the software and it can become cumbersome when trying to cross or type responses in the spaces provided. However, this format was selected due to the high cost of having an online form designed, which would have required computer programming codes to be written to create the form and

then link it to a central database. The questionnaire was originally designed using Microsoft Word software, but this was too restrictive in presenting the data in a way that would facilitate ease of response to questions (for example, it is not easy to create boxes for respondents to tick and multiple columns for a variety of responses).

Due to the fact that the respondents were known to the researcher and were all computer literate, the researcher was able to offer them assistance (if required) in completing the questionnaire. The respondents also had the option of printing out the questionnaire, manually responding to the questions and returning it by facsimile. None of the respondents required assistance in completing the questionnaire, supporting the assumption that the software used was familiar to all of them.

A qualitative (for example, questions 13, 16 and 17) and quantitative analysis (for example, questions 26C, 30, 31 and 32) was conducted to identify whether e-mail remains the primary use of the Internet and the perceived benefits of the Internet as a new communication medium. A combination of open-ended and close-ended questions was used to provide respondents with an opportunity of giving more in-depth responses (in the case of the former) while also maintaining consistency of response (in the case of the latter). Due to the many types of communication available on the Internet, multiple choices and the Likert scale were used to accommodate a range of responses and gauge attitudes to these different forms of communication. The objective was ultimately to determine which communication tools are used on the Internet, the frequency of each type of communication and the gratification sought and obtained from the Internet by a select group of South African professionals.

Pilot study

The first stage of the research comprised a pilot study involving four respondents. The questionnaire was e-mailed to each respondent and they were requested to add comments where applicable. The objective of this pilot study was to identify any problems with the

research questions, such as misinterpretations, difficulties in completing the questionnaire or issues not covered properly in questions.

All four respondents completed the questionnaire and added their comments regarding specific questions. Telephone interviews were conducted with the respondents to discuss their feedback. Although the pilot study did not indicate any major problems with the questionnaire, some questions were omitted as the respondents unanimously felt they were repetitive and a few new questions were added to address the issues of online shopping and gratification more effectively.

6.4   Final survey

Sampling

Nonprobability (purposive) sampling was employed to select the respondents. The respondents were selected on the basis of the researcher's knowledge of a group of professionals who all had some form of Internet access. The reason for this is that the Internet is accessed by millions of people around the world. Apart from the time and funding required to conduct a more global study of Internet use and gratification, such a study would make the researcher more dependent on the honesty of the respondents (anyone can assume any identity on the Internet) and their ability to assess their usage of the Internet and the gratification they obtain from it. One would also have to trust that their demographic data complies with the guidelines that were set.

A survey of a specific group of professionals in South Africa will therefore serve a general comparative purpose (i.e. for general comparison with Internet users in South Africa) and is not representative of the Internet audience as a whole –particularly when one considers the unique socio-political and economic environment of South Africa (a high level of illiteracy, lack of telecommunications infrastructure, widespread unemployment and poverty) in comparison to First World nations

The sample group selected comprised fifty male and female professionals in South Africa aged between twenty and fifty years. Given the fact that the Internet is a fairly new medium and one that requires computer literacy (itself a relatively new requirement in the workplace), it was decided to limit the respondents to this specific age group. Companies are appointing increasingly younger staff to utilise newer technologies and to assist an older generation who is less familiar with these technologies. The size of the sample was also small for the purposes of making the survey manageable and more reliable and to cater for the time and financial constraints of the researcher. If extensive studies on Internet use and gratification in South Africa had been undertaken, an alternative option would have been to conduct a secondary analysis and share the data for these studies. As mentioned earlier, such studies do not appear to have been conducted in South Africa.

Response Rate

The number of questionnaires received by the closing date totalled twenty five out of fifty questionnaires distributed (50%). Three follow-up e-mails were sent to the respondents who had not yet completed their questionnaires, at intervals of one week, three weeks and one week respectively. A total of twenty eight responses (56%) was finally received out of the total of fifty questionnaires sent to the sample group.

The issue of acceptable response rates is clouded in debate. It is extremely rare for every single respondent to return a questionnaire. Overall response rate is one guideline offered by Babbie (1995:261) in determining the degree of representation of the sample respondents. The higher the response rate, the less chance of significant bias. Babbie (1995:262) considers a response rate of at least 50 percent as "adequate for analysis and reporting". In the case of this particular survey, the respondents did not deviate drastically in their use and gratification of the Internet and it is therefore assumed that this sample of twenty eight South African professionals may be taken to represent a select group of professionals in South Africa.

Problems encountered

Aside from the issues of a small sample group, a relatively low response rate and the format of the questionnaire, the main problem encountered with this survey was loss of data. As is common with self-administered questionnaires, some of the respondents left blank spaces or skipped certain questions. This presented problems in analysing the data.

Judging from the general trend in responses and the fact that these respondents ticked specific items (for example, they only indicated "yes" instead of "yes" and "no"), one could assume that these omissions meant that the respondent did not use a particular communication tool on the Internet or that they thought their omission indicated a negative answer to the question. However, such deductions cannot be made, as this would influence the findings.

Due to the fact that changes were made to the questionnaire after the pilot study, the researcher was also unable to use the four questionnaires received from the respondents to the pilot study. This therefore further decreased the response rate.

Ideally, one would need to establish a monitoring system whereby one could identify the web sites and time spent on the Internet in order to accurately record such data. Issues such as privacy and access to technology that could generate such data could impede such a study, however.

Despite the problems encountered, if one compares some of the results of this survey to those of other surveys conducted on Internet use in South Africa, one can draw similarities, which supports the assumption that they do have relevance. The next stage would be to expand such a study to include a much larger sample group and to include questions regarding gratification as well as use of the Internet by professionals in South Africa.

6.5   Questionnaire

The first part of the questionnaire (see Appendix A) aimed at obtaining demographic information including sex, marital status, age and highest education attained. The intention was to view whether (and if so, how) these demographics influenced Internet use and gratification.

It was also important to ascertain whether the respondents had access to the Internet and how they obtained access. It was hoped that this would identify how many people have Internet access at home and at work (as it was assumed that this would impact on the nature of Internet use) and whether Internet cafés, community centres and cellular phones were used at all for Internet access.

The questionnaire made the distinction between Internet use and gratification for work purposes and for personal purposes. It was believed that this would also have an impact on Internet use and gratification, considering that media use is influenced by socio-economic factors.

As there are numerous services offered on the Internet, the researcher identified specific communication tools (for example, e-mail, MUDs and Newsgroups) and asked questions related to their use and specific gratification. The respondents were asked to identify the frequency with which they used specific services on the Internet in order to distinguish between work and personal use and to establish the extent to which these services are used. The final question refers to overall gratification sought and obtained from the Internet in both a personal and work capacity.

6.6   Survey analysis

Statistical analysis

The SPSS programme was used to analyse the data. Frequencies were calculated for categorical variables, while mean scores were calculated for Likert-type items. It is important to note that in all cases where mean scores were calculated, higher mean scores are indicative of a higher frequency of usage or a more positive evaluation.

In cases where demographics had an influence on Internet use and gratification (for example, educational qualification impacted on Internet use for work purposes and marital status impacted on Internet use for personal purposes), the results were reported in terms of these demographics. For those questions where demographics did not have any noteworthy impact on Internet use and gratification, the mean scores were presented for the sample group as a whole.

Demographics : Questions 1 to 8

The respondents were given the option of omitting their name from the questionnaire due to the fact that they were known to the researcher and this may have influenced their answers. Some of the questions were also of a fairly sensitive nature and it was assumed that they would be more willing to answer personal questions (such as those in question 38) if they did not have to identify themselves. However, none of the respondents chose anonymity. This made it easier to identify which respondents had not completed the questionnaire and to send them follow-ups.

The demographic distribution of the sample group (see table 6.01) indicates a higher percentage of male respondents. This may be due to the fact that the work environment in South Africa remains dominated by males, with females gradually gaining recognition and entry into more senior posts. The majority (57.1%) of the respondents were single, which could impact on the findings regarding use and gratification of the Internet. In line with the results of the surveys conducted by Media Africa and MSN, the respondents were highly educated, with 67.8% having a degree or post-graduate qualification. The dominant age

group was 31 to 35 years. This may be influenced by the fact that this was the closest age group to that of the researcher.

Table 6.01: Demographic distribution of sample group

		Number of respondents	Percentage of sample group
Gender	Male	18	64.3
	Female	10	35.7
Total		28	100.0
Marital Status	Single	16	57.1
	Married	10	35.7
	Divorced	2	7.1
Total		28	99.9
Highest Qualification	Matric	2	7.1
	Matric plus tertiary diploma	5	17.9
	Bachelor's degree	9	32.1
	Post-graduate qualification	10	35.7
	Other	2	7.1
Total		28	99.9
Age	Missing value	1	3.6
	21 to 25 years	3	10.7
	26 to 30 years	7	25.0
	31 to 35 years	8	28.6
	36 to 40 years	6	21.4
	41 to 45 years	3	10.7
Total		28	100.0

The sample group comprised professionals operating in a wide range of industries. The researcher gave consideration to the nature of the industry to ensure the sample group was representative of industries other than the IT (Information Technology) industry, even though the widespread adoption of computer technology has resulted in most industries being IT-driven.

The range of professions is indicated in table 6.02. The high incidence of marketing and sales professionals may be due to the female respondents, many of whom operated in this capacity.

Table 6.02: Professions of sample group

Profession	Number of respondents	Percentage of Sample Group
Accountant	3	10.7
Animal Nutritionist	1	3.6
Consultant	2	7.1
Engineer	4	14.3
Graphic Designer	2	7.1
Lecturer	1	3.6
Managing Director	1	3.6
Marketing	4	14.3
Photographer	2	7.1
Publisher	1	3.6
Project Manager	1	3.6
Sales	4	14.3
Self-employed	2*	7.1
TOTAL	28	100.0

* Business Development Manager and TV Producer

Internet access : Questions 9 to 10

Although the respondents were known to the researcher, it was necessary to confirm that all of the respondents had access to the Internet as this was a prerequisite for answering the rest of the questionnaire. Of the 28 questionnaires returned, all had Internet access.

The question of how the respondents gained access to the Internet posed a problem due to missing data. As discussed above, some of the respondents left blank spaces and deductions could not be made regarding their intentions. What was evident from the responses indicated (see table 6.03) is that most (82%) of the respondents had Internet access via their computers at work. This supports the assumption that most industries today appear to be driven by computer technology.

An interesting finding is that three quarters of the respondents gained Internet access from their computers at home. This could be an indication of how computers have become an integral part of human lives. Only two of the respondents were self-employed, which suggests that computers in the home environment are not being used for work purposes. The high incidence of missing values for other types of access (friend's computer, Internet cafés, community centres and cellphones) could mean that these are not popular means of gaining

access to the Internet, although this is pure speculation. None of the respondents listed

anything under "other" access.

Table 6.03: How the respondents gained Internet access

		Number of respondents	Percentage of Sample Group
Computer at work	Missing values	4	14.3
	Yes	23	82.1
	No	1	3.6
Total		28	100.0
Computer at home	Missing values	4	14.3
	Yes	21	75.0
	No	3	10.7
Total		28	100.0
Friend's computer	Missing values	20	71.4
	Yes	4	14.3
	No	4	14.3
Total		28	100.0
Internet Café	Missing values	19	67.8
	Yes	4	14.3
	No	5	17.9
Total		28	100.0
Community Centre	Missing values	21	75.0
	Yes	0	0
	No	7	25.0
Total		28	100.0
Cellphone	Missing values	20	71.4
	Yes	4	14.3
	No	4	14.3
Total		28	100.0

Internet Usage for Work Purposes: Questions 11 to 13

All except three (10.7%) of the respondents used the Internet for work purposes. Of these

three respondents, all of them stated that they do not use the Internet for work purposes

because they do not have Internet access at their workplace.

The frequency with which people used the Internet at work varied according to the type of

Internet use and is also influenced by their qualifications (see table 6.04 and graph 6.01). It is

clear, however, that they used the Internet at work for a variety of reasons, ranging from

communication with customers and colleagues, to obtaining business and competitor

information and for advertising, buying and/or selling products and/or services. All respondents indicated that they used the Internet at work frequently for communicating with their customers and colleagues. Their use of the Internet for contacting professional organisations or to buy products was relatively infrequent in comparison.

The respondents with a Matric certificate also frequently used the Internet at work for visiting the company web site. With the exception of those whose qualifications fell into the "Other" category, the respondents used the Internet frequently to obtain information related to their work and information regarding industry trends. The "Other" respondents indicated the most frequent use of the Internet to buy and sell products.

Table 6.04: Various ways in which the Internet is used at work – highest qualification: Mean Scores

Reason for use	Matric	Matric plus tertiary diploma	Bachelor's Degree	Post-graduate qualification	Other
Obtain business info	4.00	4.75	4.33	4.14	4.00
Keep updated on industry trends	3.50	4.50	4.11	4.00	3.00
Find competitor information	2.00	4.00	3.22	3.33	2.00
Obtain work-related information	4.00	4.25	4.22	4.00	2.50
Visit company website	5.00	2.50	3.22	3.40	3.00
Communicate with colleagues	4.50	4.75	4.67	4.83	3.50
Communicate with customers/clients	5.00	4.75	4.67	4.43	4.50
Contact professional orgs.	3.00	3.25	3.56	2.67	2.50
Buy products for business	2.50	1.75	2.78	2.17	3.50
Sell products and/or services	3.00	2.00	2.78	2.33	4.00
Advertise products and/or services	2.00	1.33	2.57	2.50	4.00
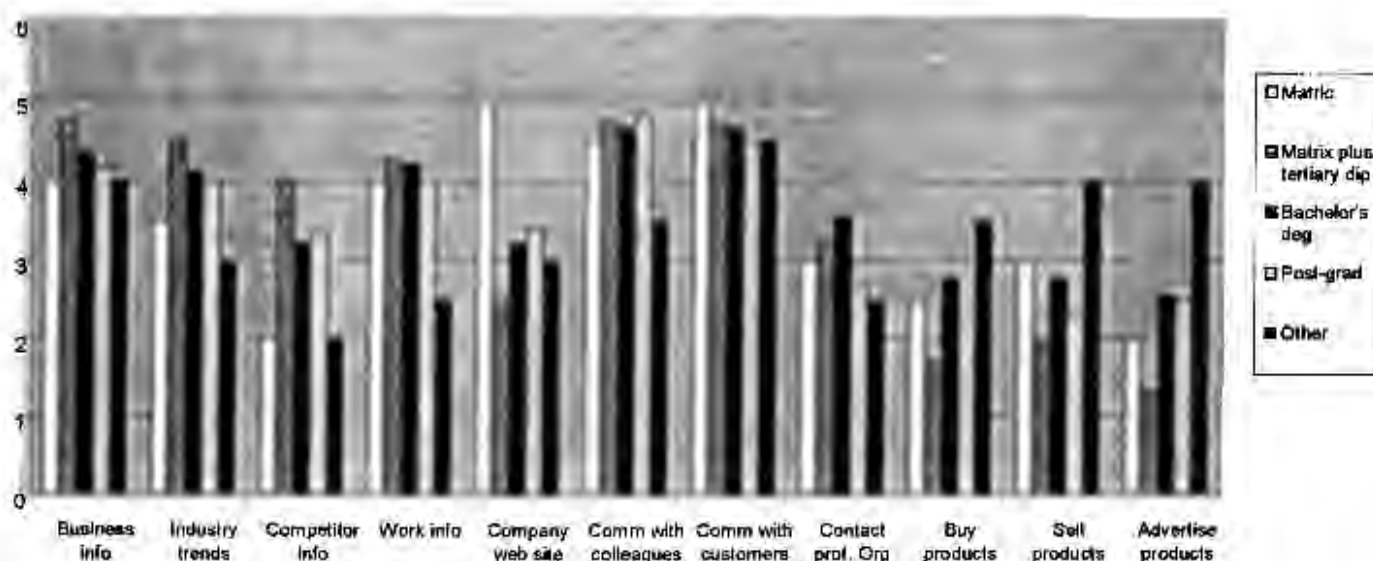
Graph 6.01: Various ways in which the Internet is used at work – highest qualification (mean scores)

From this discussion regarding the nature and frequency of Internet use at work, it appears that the selected group of South African professionals finds the Internet a useful tool for communicating with their colleagues and customers, obtaining business information and keeping updated on industry trends. This may also be influenced by the nature of their work and company policies regarding Internet use at work.

Three of the respondents noted under the "other" option in question 13 that they used the Internet to obtain access to provision-related matters, to get daily news and market updates and to retrieve e-mail from their personal *Hotmail* account (a free e-mail service offered on the Internet).

Internet Usage for Personal Purposes : Questions 14 to16

Twenty-seven (96.4%) of the respondents indicated that they used the Internet for personal purposes. The only respondent who did not use the Internet for personal purposes stated that she had only recently obtained access to the Internet at home and had not yet had the opportunity to use it.

Table 6.05 provides a summary of the mean scores for the frequency of Internet usage for a variety of personal purposes.

Table 6.05: Mean scores for the frequency of Internet usage for a variety of personal purposes.

Reason for use	Mean Score
Companionship	1.04
Meet new people	1.38
Watch Web TV broadcasts	1.54
Communicate with people I would not normally have access to	1.63
Debate on particular topic	1.70
Listen to radio broadcasts on line	1.71
Pass time	1.88
Relaxation	1.92
Seek personal advice	1.92
Interact with people or groups	1.96
Obtain medical information	2.12
Escape from reality	2.17
On-line shopping	2.44
Read e-zines	2.54
Communicate with colleagues	2.79
Personal Studies	3.08
Obtain entertainment information	3.28
To do research on a particular subject	3.69
Expand personal knowledge	3.76
Communicate with friends/family living in South Africa	3.77
Personal banking	3.88
To obtain information on any topic about which I want to learn more	3.88
Communicate with friends/family living outside South Africa	4.46

It is evident that the most frequent personal use of the Internet was to communicate with friends and family living outside of South Africa, followed by information needs, personal banking and communication with friends and/or family living in South Africa. The Internet was also used fairly frequently for conducting research on a particular topic, obtaining entertainment information and for personal studies. It was seldom used as an escape from

reality or to communicate with colleagues, for online shopping, to read e-zines or to obtain medical information. The use of the Internet for seeking personal advice, passing the time, relaxation, watching Web TV, to meet new people and to seek companionship received the lowest mean scores. Two respondents indicated under the option "other" in question 16 that they used the Internet to download MP3 music files and to obtain technical information.

These results suggest that the Internet is successful in satisfying cognitive and social integrative needs, although in the case of the latter, there appears to be a trend towards integrating with one's personal social circle, rather than the global, anonymous Internet audience. The Internet does not, however, appear successful in satisfying escapist and personal integrative needs.

A comparison of Internet use for personal purposes using marital status as a variable produced the following results:

Table 6.06: Mean scores for the frequency the Internet is used in various ways for personal purposes – marital status groups

Reason for use	Single	Married	Divorced
Personal studies	3.13	3.33	2.00
Research on particular subject	3.75	3.63	3.50
Obtain info on topic	3.75	4.00	4.50
Personal banking	3.69	4.57	3.00
Online shopping	2.56	2.00	3.00
Debate on topic	1.56	2.00	2.00
Expand knowledge	3.69	4.14	3.00
Seek advice	1.88	2.17	1.50
Obtain medical info	2.31	2.00	1.00
Obtain entertainment information	3.25	3.43	3.00
Escape from reality	2.13	2.50	1.50
Read e-zines	2.50	3.17	1.00
Listen to radio broadcasts	1.81	1.33	2.00
Watch Web TV	1.63	1.33	1.50
Interact with people with similar interests	1.69	2.67	2.00
Communicate with colleagues on personal matters	3.00	2.43	2.50
Communicate with friends/family in SA	3.94	3.38	4.00
Communicate with friends/family abroad	4.56	4.25	4.50
Communicate with heads of state/film stars	1.75	1.50	1.00
Pass time	1.75	2.43	1.00
Relaxation	2.00	2.00	1.00
Meet new people	1.44	1.33	1.00
Companionship	1.00	1.17	1.00
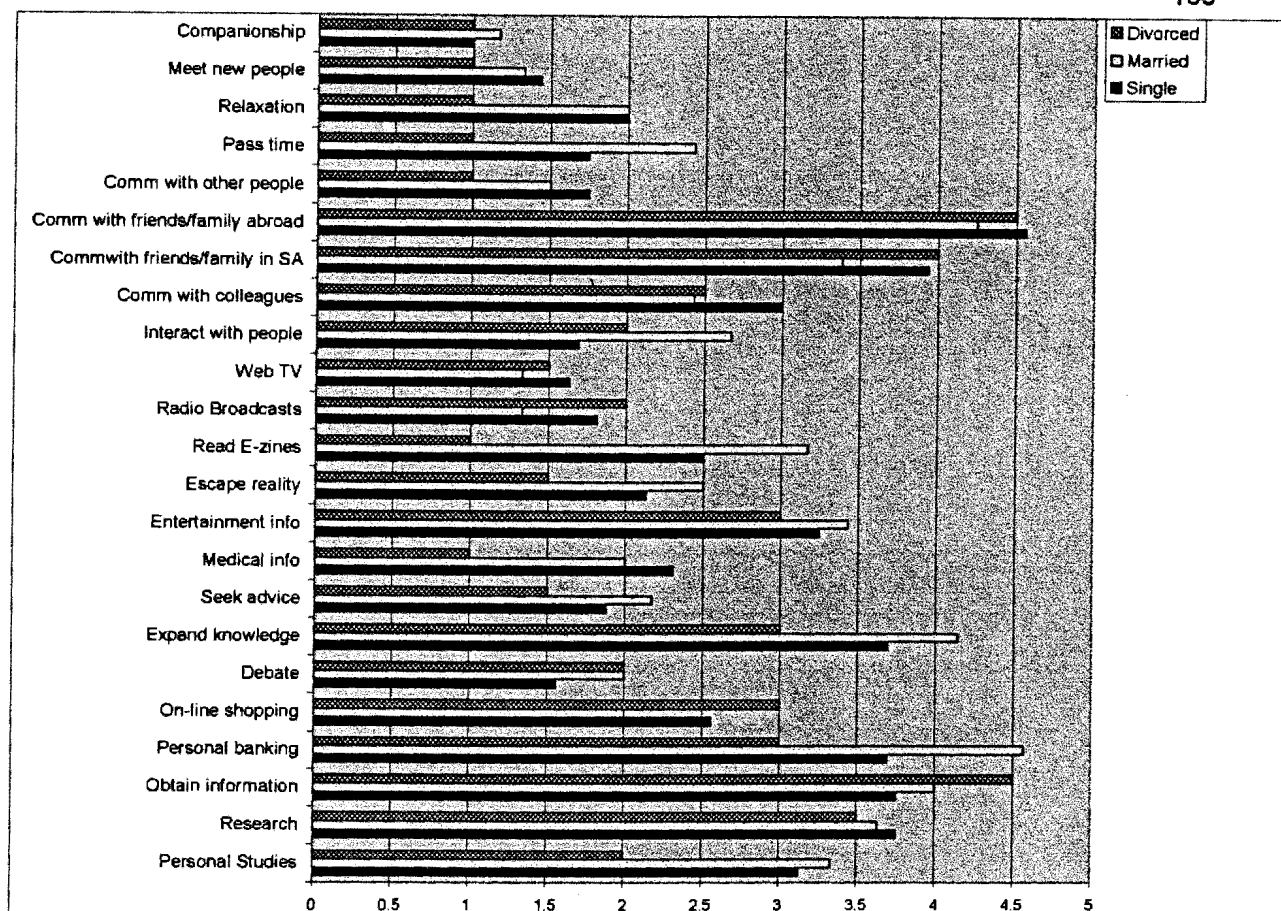
Graph 6.02: Mean scores for the frequency the Internet is used in various ways for personal purposes – marital status groups

All three marital status groups indicated a large amount of time spent communicating with friends and family abroad and the least amount of time seeking companionship from the Internet. The respondents who were divorced spent the most amount of time using the Internet for obtaining information on topics of interest and communicating with friends and/or family in South Africa. The married respondents spent the most amount of time using the Internet for personal banking and to expand their knowledge. This group also indicated the most frequent use of the Internet for obtaining entertainment information, reading e-zines, interacting with people or groups with similar interests and passing the time. The single respondents spent most of their time on the Internet obtaining information on topics of interest to them, conducting research, expanding their knowledge and obtaining entertainment information.

It is apparent from these results that marital status had a direct effect on Internet use for personal purposes, although the primary use of the Internet for personal purposes was to communicate with friends and/or family living outside of South Africa. Compared to the use of the Internet for work purposes, where the primary use was to communicate with colleagues and customers, the indication is that the Internet is widely used as a tool for interpersonal communication in both the workplace and at home.

Internet services used for personal and/or work reasons: Question 17

Table 6.07: Percentage of respondents using various Internet services for work and/or personal reasons

	Work	Personal
MUDs	0	3.6
Internet Relay Chat	3.6	17.9
Internet radio broadcasts	3.6	17.9
Web TV	10.7	14.3
Newsgroups	14.3	14.3
E-Business	17.9	14.3
Web Shopping	25.0	57.1
Internet banking	28.6	67.8
E-zines	35.7	25.0
Email	78.6	85.7

Although this question had a high quantity of missing data due to blank spaces left by the respondents, the findings are in line with those of questions 16 and 13. The major Internet service used for both personal and work reasons was e-mail and personal banking was the second highest service used for personal purposes. E-zines were used mostly for work purposes, while online shopping was used mostly for personal purposes. Multi-User dungeons were the least used service for both work and personal purposes. Only one respondent completed the "other" section of question 17, stating that he used the Internet to download MP3 music files.

It is interesting to note that 17.9% of the respondents used the Internet for e-business (work purposes), considering the recent disasters with dot.com initiatives and the fact that e-business is a very new phenomenon to the local (and international) business community. The low rate of use of the Internet at work for Internet Relay Chat and radio broadcasts may be

due to the limitations of the computer hardware provided to users at work or by company policy regarding Internet use at work.

Frequency of e-mail use: Questions 18 to 19

The average number of work-related e-mails sent was 105.96 per week, with a standard deviation of 131.74 and the number of work-related e-mails received was 110.74, with a standard deviation of 123.53. These scores are much higher than the average number of personal e-mails sent and received, which was 27.15 (standard deviation of 38.05) and 37.48 (standard deviation of 55.57) respectively.

The reason may be that if users send and receive personal e-mails from their computer at home, they pay for the cost of this communication themselves, whereas at work the company would generally cover such costs. One has also to consider that the user's personal social circle may be much smaller than the people he/she interacts with in the work environment, hence the lower number of e-mails sent and received in a personal capacity.

It would appear that e-mail is an important tool in the workplace and one which people use to perform certain duties. The personal use of e-mail could be due to the primary use of the Internet for keeping in contact with friends and family living in South Africa and abroad.

Newsgroups: Questions 20 to 21

Only six (21.4%) of the respondents indicated that they belonged to a newsgroup, although this question also had a high percentage of missing data (78.6% of respondents did not complete the question). The question as to why the other respondents did not belong to a newsgroup should have been included, in order to identify their reasons and perceptions of newsgroups.

The newsgroups to which the respondents belonged ranged from user groups (news.hp.corp.com, Mircosoft, Oracle and Cisco user groups) to business and finance (Yahoo finance, PR Comms newsletter, World online) and the arts (Artslink, news.mp3.com). There were a greater number of business-related newsgroups listed, although the response to question 17 indicated that newsgroups were used at the same frequency for work and personal purposes (14.3%).

The frequency of visits to newsgroups was once or more per week (17.9% of respondents), with only 3.6% stating that they visited newsgroups every day. The average duration of these visits was determined as less than one hour by most respondents (17.9%), with 3.6% of them stating that they visited the newsgroup from one to two hours on average. These results may indicate that newsgroups are not one of the most popular services offered by the Internet, which is supported by the results of question 17.

Internet Relay Chat: Questions 22 to 23

Internet Relay Chat (IRC) also did not appear to be widely used by the sample group, as most respondents (78.6%) stated that they do not engage in IRC. It would therefore have been advisable to include a question as to why the respondents did not use this service on the Internet. Of the three respondents who did engage in IRC, two used chat rooms on Internet portal sites (Yahoo and MSN) and one respondent stated that he visited the BBC's newsroom. The amount of time spent visiting a chat room was indicated as less than once a month for the Yahoo and MSN chat rooms and once or more per week for the BBC news room.

It seems that Internet Relay Chat is used more for personal purposes (as supported by the results in question 17), although the respondents used e-mail more than chat rooms and newsgroups.

On-line publications: Questions 24 to 26

Ten respondents (35.7%) subscribed to online publications and, of the sixteen respondents

(57.1%) who stated that they don't subscribe to online publications, ten said they would

consider it in the future. This suggests that the number of people reading online publications

may increase in the future. The types of online publications subscribed to are mostly

business and trade publications:

- SAICA news
- British Journal of Photography
- Apple E-news
- Business Day
- ITWeb
- Herald Tribune
- Computerweek
- PC Magazine
- Interactive week
- Economist
- Mbendi Energy
- Wall Street Journal
- Screen Africa

Two respondents listed Travel News and one respondent listed Napster (music publication).

Only 17.9% of the respondents who subscribed to online publications preferred them to

traditional print media. Their reasons were that online publications made it easier to share

and store information, were quicker to access and easy to read. One respondent remarked

that she is able to read things online that she would not normally see when browsing through

a magazine.

In support of the findings listed in table 6.07, e-zines were more popular among the sample

group than IRC or newsgroups. The respondents appear to use them for obtaining

information related to their work, which may be the reason they preferred the online medium.

One respondent commented that he preferred the traditional print medium for reading novels,

as it is more relaxing.

On-line shopping: Questions 27 to 32

The section on online shopping includes more questions than the other sections of the questionnaire as a result of input received from the pilot survey. The respondents felt that there were numerous issues regarding Internet shopping and that these should be addressed in the questionnaire.

The survey conducted by MSN on Internet users in South Africa indicated that 36% of the 12633 users who responded had purchased something online. While the sample group selected for this dissertation is far smaller than that of MSN, there was a fairly high number of respondents (75%) who said that they had made an online purchase. Of the seven respondents who had not yet made an online purchase, three of them said they would consider it in the future.

Most (60.7%) of the respondents who had purchased online did not prefer Internet shopping to ordinary shopping. Unfortunately, the questionnaire only included a question as to why the respondents preferred Internet shopping, so it was not possible to identify the reasons for their preference of ordinary shopping.

The reasons given by the respondents for their preference of Internet shopping were as follows:

- It's convenient because you don't have to drive to a shopping mall, although it is preferable if you know exactly what you're looking for.
- It's easier and quicker and gives me instant access to the latest products
- There is a greater range of goods and it is more up to date with international trends.
- It's less hassle – there are no queues or bad service
- There is less pressure to get your shopping done and get out.

The most frequently purchased item was books, with more than half (52%) the respondents including this in their list of items purchased online. Music (CDs) and videos (DVDs) were the second most popular items. Other goods purchased included health products, a car, clothing, computer games, concert and movie tickets, flowers and disk jockey accessories.

Opinions of Internet shopping varied, although the respondents agreed that Internet shopping was convenient and fast. Some of the respondents preferred to touch, feel and smell what they bought before purchasing it, which is not possible on the Internet. They suggested that the Internet is suitable for purchasing specific items (such as CDs and books) or goods that are not available in South Africa. Security and credit card fraud were clearly a concern to Internet shoppers.

The respondents' rating of shopping on the Internet is summarised in tables 6.08 to 6.11 and illustrated in graphs 6.03 to 6.06.

Table 6.08: Relative speed of Internet shopping

	Frequency	Percent	Valid percent	Cumulative percent
Much quicker than ordinary shopping	5	17.9	20.0	20.0
Quicker than ordinary shopping	10	35.7	40.0	60.0
Not quicker or slower than ordinary shopping	8	28.6	32.0	92.0
Slower than ordinary shopping	2	7.1	8.0	100.0
Total	25	89.3	100.0	
Missing value	3	10.7		
Total	28	100.0		
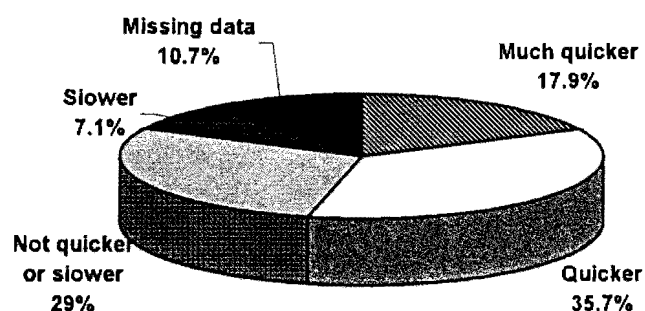
Graph 6.03 Relative speed of Internet shopping

Table 6.09: Relative price of goods purchased online

	Frequency	Percent	Valid percent	Cumulative percent
Cheaper than other outlets	6	21.4	23.1	23.1
Not cheaper than other outlets	18	64.3	69.2	92.3
More expensive than other outlets	2	7.1	7.7	100.0
Total	26	92.9	100.0	
Missing value	2	7.1		
Total	28	100.0		
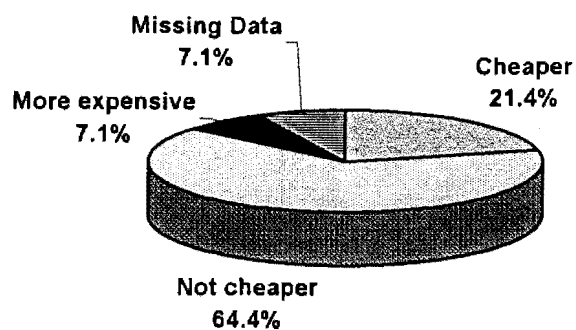
Graph 6.04: Relative price of goods on the Internet

Table 6.10: Relative variety of goods available on the Internet

	Frequency	Percent	Valid percent	Cumulative percent
Much greater variety	8	28.6	29.6	29.6
Greater variety	8	28.6	29.6	59.3
No greater variety	6	21.4	22.2	81.5
Smaller variety	5	17.9	18.5	100.0
Total	27	96.4	99.9	
Missing value	1	3.6		
Total	28	100.0		
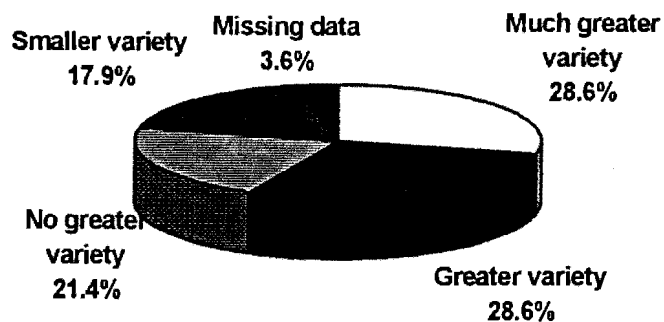
Graph 6.05: Relative variety of available goods on the Internet

Table 6.11 Relative ease of purchasing goods on the Internet

	Frequency	Percent	Valid percent	Cumulative percent
Much easier	3	10.7	11.1	11.1
Easier	13	46.4	48.1	59.3
Not easier	8	28.6	29.6	88.9
More difficult	3	10.7	11.1	100.0
Total	27	96.4	99.9	
Missing value	1	3.6		
Total	28	100.0		
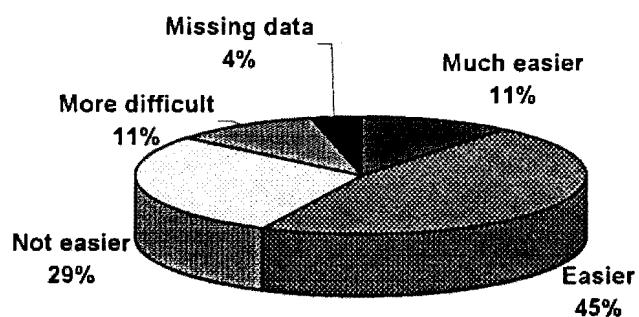
Graph 6.06: Relative ease of purchasing goods on the Internet

From these results, it is evident that the majority of the respondents found Internet shopping easier and quicker and believed that it offered them a greater variety of goods. The general perception was that the price of goods on the Internet was not cheaper than goods from other outlets.

Some of the other benefits of Internet shopping were listed as follows:

- It's easier to find scarce products
- You can choose products in your own time and shop around as much as you like.
- It's easier and faster to make travel arrangements
- There are no crowds
- You can shop 24 hours a day, 7 days a week

The most common disadvantages of Internet shopping were security and fraud issues. It is clear that the respondents were still wary of providing their credit card details and purchasing online. Other disadvantages listed were:

- Poor delivery time
- What you see is not always what you get
- Your PC can hang and you have to start the entire process again
- High delivery and shipping fees
- You don't get out to go shopping

In the section "other comments" some of the respondents said that they believed online shopping was poorly implemented and misunderstood in South Africa as many companies viewed it in the same light as conventional business. Others believed that the teething problems would be overcome and that, once the issues of security had been properly addressed, online shopping would continue to grow.

Internet broadcasts : Questions 34 to 36

Only 14.3% of the respondents indicated that they listened to Internet broadcasts, with 14 (50%) of those who don't saying they would consider doing so in the future. This question also had a high number (89.3%) of respondents who omitted data, which presented problems in analysing the results as the deduction could not be made that their omissions represented

negative answers, although this was likely to be the case. Table 6.12 shows the frequency with which respondents watched particular broadcasts.

Table 6.12 Frequency of watching/listening to Internet broadcasts (percentage of sample group)

	Very Often	Often	Sometimes	Seldom	Never
South African Radio Stations	0%	0%	3.6%	3.6%	3.6%
International Radio Stations	0%	3.6%	17.9%	0%	3.6%
Web TV	0%	0%	7.1%	0%	3.6%

According to this table, international radio stations was the Internet broadcast category most frequently listened to, although only 3.6% of the respondents listened to them often. Web TV scored the second highest percentage, with two respondents stating that they watch Web TV sometimes. The fact that very few people in the sample group listened to or watched Internet broadcasts suggests that the Internet does not widely cater for escapist or affective needs.

It may be that online broadcasting is still in its infancy and that the cost of listening to a radio station online is fairly prohibitive when one compares this to the free broadcasts available from one's radio. The same applies to television, although in the case of international broadcasts, these programmes or stations are not easily accessible without the Internet or satellite television and pay-TV such as DStv and M-Net. Broadband Internet services may provide a solution to the problems of bandwidth, which is why mergers between the likes of AOL and Time Warner are attracting such interest.

Other Internet use : Question 37

Only four respondents listed Internet use other than that discussed above:

- To research new products
- All our internal company systems are web-enabled, including Human Resources (pay rolls, leave application forms) and it is a prerequisite for all employees to access it.
- On-line process control, plant reporting and computer games
- We have developed solutions that can be accessed from anywhere and which allow our clients to manage content and media packs of their own using our scripts and technology.

These uses appear to be unique to the respondents' job requirements and work environment.

Gratification: Question 38

The preceding questions focused on the different uses of the Internet by a select group of

professionals in South Africa. Having identified their primary use of the Internet and the

frequency with which they use specific services on the Internet, it is important to try to identify

what gratification they seek and obtain from this medium. Table 6.13 provides a summary of

the mean scores for needs and gratification served by the Internet. The following graphs

(graphs 6.7 to 6.12) indicate the mean scores for different categories of need gratification.

Table 6.13: Mean scores for needs and gratification served by the Internet

	Mean Score
The Internet provides companionship	1.59
The Internet keeps me in contact with friends/family abroad	4.29
I make new friends via the Internet	1.52
I use the Internet to expand my knowledge	4.25
On the Internet I can be anyone I want to be	2.07
I use the Internet to relieve boredom	1.74
I explore fantasies on the Internet	1.37
The Internet provides entertainment for me	2.89
The Internet offers me new experiences	2.88
I use the Internet to escape from reality	1.52
I seek advice on the Internet	1.56
I acquire an identity by associating with groups on the Internet	1.48
I have the freedom to communicate with people all over the world	3.64
The Internet gives me quick access to information	4.19
I enjoy the anonymity of Internet communication	2.48
I experiment with social interaction on the Internet	1.22
Communication via the Internet carries less responsibility	2.04
I travel virtually to other countries via the Internet	2.52
I learn life skills from the Internet	1.63
Internet support groups help me to cope with life	1.41
I use the Internet to make my opinions heard	1.54
I can express my feelings on the Internet like nowhere else	1.26
The Internet gives me a sense of community	1.37
The Internet gives me the opportunity to meet potential partners	1.62
I become a world citizen by surfing the Internet	2.52
The Internet enhances my work performance	3.82
The Internet makes my competitiveness in my work	3.71
The Internet makes my business more competitive	3.26
I learn from other companies via the Internet	3.41
The Internet enables me to network nationally	3.41
The Internet enables me to expand my business worldwide	3.04
The Internet is the great leveler	3.12
The Internet enables me to network internationally	3.39

Graph 6.07 Social integrative need gratification : Mean Scores
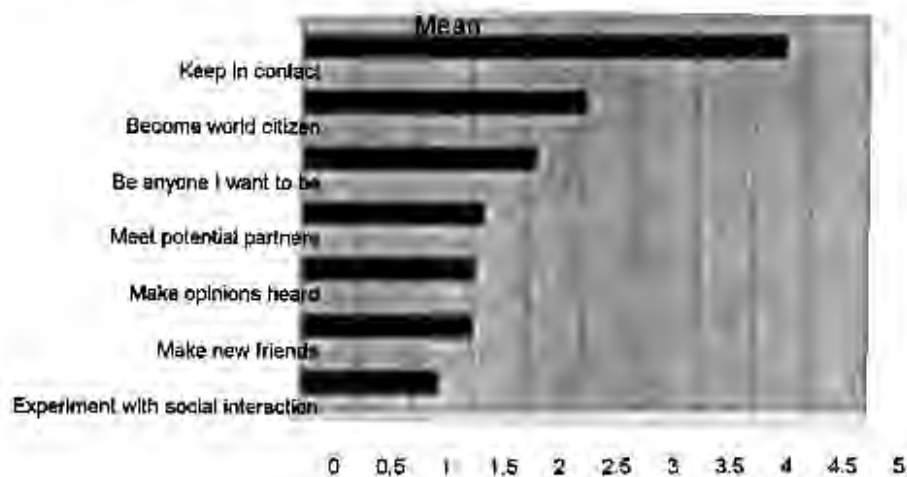
The primary social integrative need satisfied by the Internet was helping people keep in contact with their friends and families, particularly in cases where their social circle extended beyond the immediate environment and families were spread across the globe. The Internet has opened the world to users, although the average respondent did not give a high score to the Internet's ability to enable them to become a world citizen. Perhaps this is due to the fact that the respondents did not use the Internet to meet potential partners or make new friends and therefore did not expand their social group by using the Internet.

Graph 6.08: Affective need gratification : Mean Scores
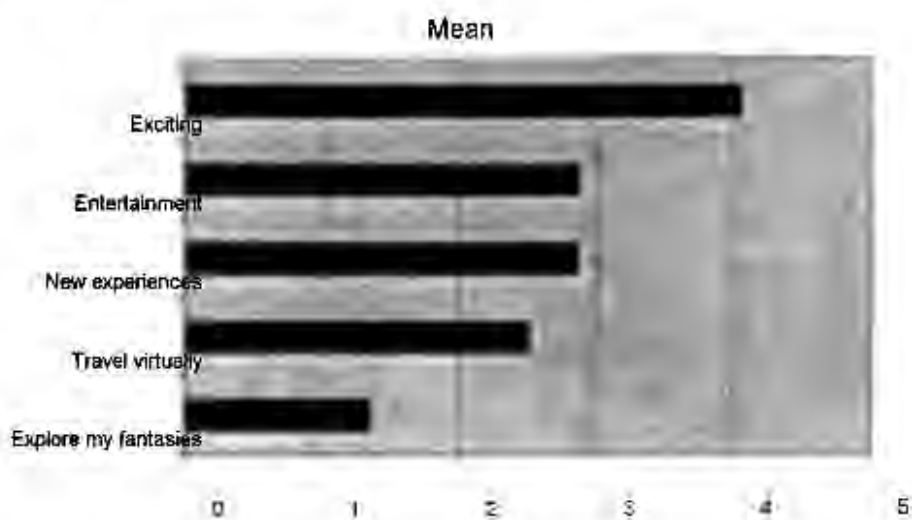
The Internet was viewed as an exciting new technology by the respondents and one which offered them new experiences, although it did not appear to have a high entertainment factor. It was also not a medium which the respondents used to explore their fantasies. While this finding may be influenced by the age of the sample group (see table 6.14), it does call into question assumptions made in Part A regarding the loss of identity and superficial nature of the virtual worlds on the Internet.

Graph 6.09: Cognitive need gratification: Mean scores
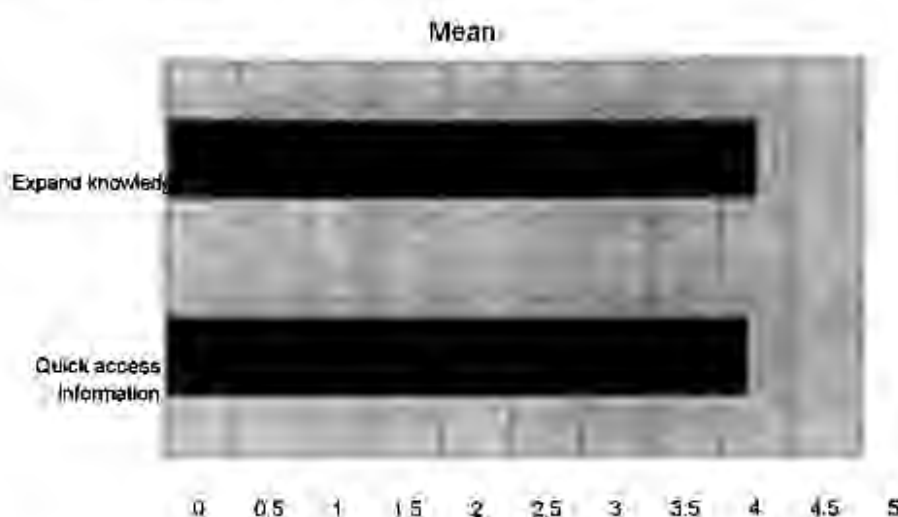
It is evident from the above graph that the Internet definitely satisfies cognitive needs such as the need to expand one's knowledge and to have quick and easy access to information. This applies to Internet use in the workplace and in a personal capacity (see table 6.05 and graph 6.01).

Graph 6.10: Personal integrative need gratification: Mean scores

Mean
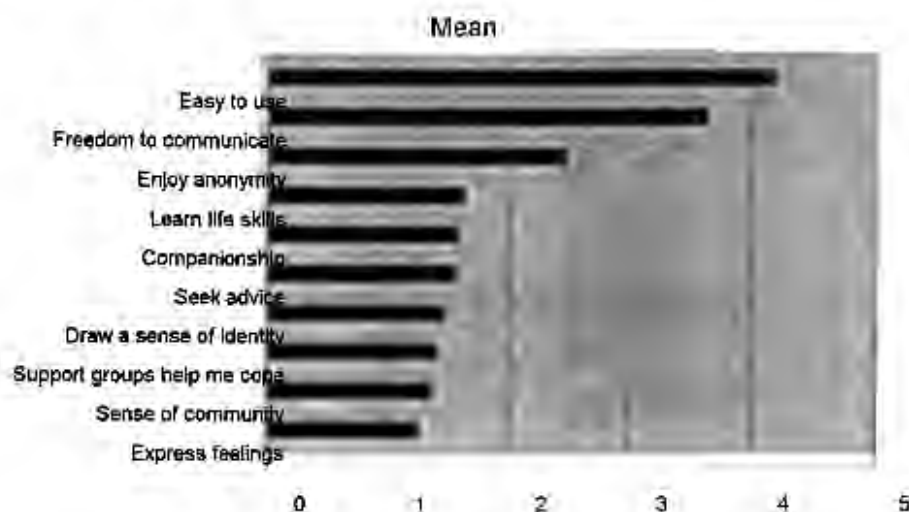
The ease-of-use of the Internet is arguably an important factor in the widespread adoption of this new technology. As far as its ability to satisfy personal integrative needs is concerned, the results indicate that respondents enjoyed the ease with which they could communicate across boundaries and on a global basis. This is interesting to note considering the fact that the respondents tended to communicate with the people and family they knew and trusted, rather than extending this to unknown recipients. This may be due to the fact that the respondents did not use the Internet to seek advice from support groups, associate with virtual communities or to express their personal feelings.

Graph 6.11 Escapist need gratification: Mean scores

Mean
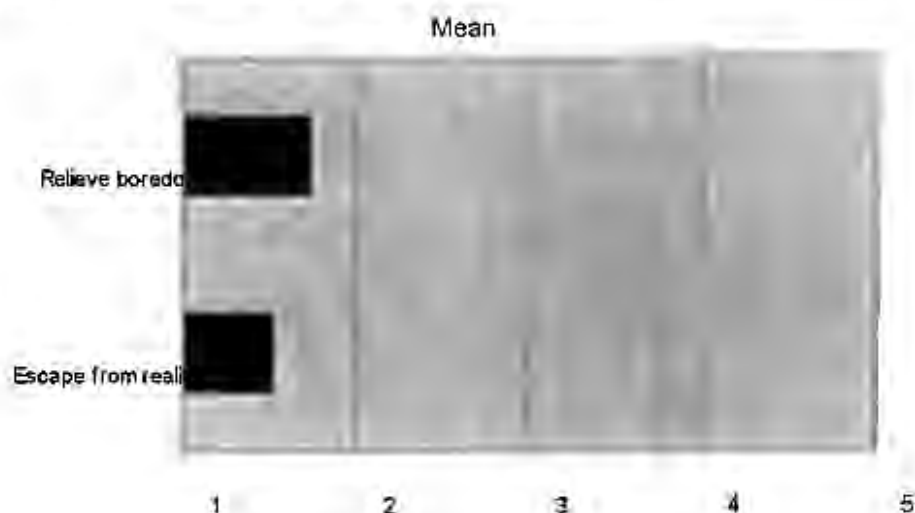
The category of needs least satisfied by the Internet appears to be that of escapism and to relieve boredom. None of the respondents indicated frequent use or gratification of the Internet for diversion or to relieve boredom. This suggests that they seek gratification of these kinds of needs from another medium or source.

Graph 6.12 Work gratification: Mean scores
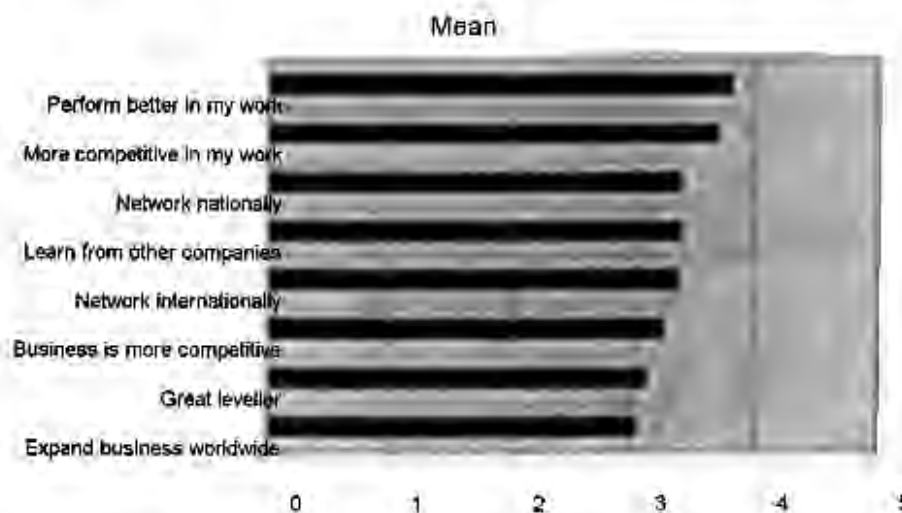
If one considers gratification offered by the Internet from a work perspective, it is clear that the respondents believed the Internet improved their performance at work and enabled them to become more competitive in the workplace. The mean scores for this question were all relatively high, which suggests that the Internet is an important communication medium in the workplace. When one compares this to the results of question 13 (see graph 6.01), this appears to be due to the ease with which the Internet allowed them to communicate with their colleagues and customers and their use of the Internet at work to obtain business information and keep updated on industry trends. The respondents also used the Internet to learn from other companies and to network nationally and internationally.

Table 6.14: Mean scores for needs and gratifications served by the Internet – age groups of final sample

	Missing value	21 to 25 years	26 to 30 years	31 to 35 years	36 to 40 years	41 to 45 years
Companionship	1.00	1.67	1.00	2.00	2.00	1.00
Keep in contact	5.00	3.67	4.29	4.75	3.67	4.67
Make new friends	1.00	1.33	1.57	1.63	1.67	1.00
Expand knowledge	5.00	4.33	4.43	4.00	4.00	4.67
Be anyone I want to	4.00	1.67	1.29	2.50	2.33	2.00
Relieve boredom	1.00	3.67	1.00	1.50	1.83	2.50
Explore fantasies	1.00	2.00	1.00	1.63	1.17	1.50
Entertainment	2.00	4.33	2.57	3.13	2.33	3.00
New experiences	1.00	4.00	2.00	3.43	2.67	4.00
Escape from reality	1.00	2.00	1.00	1.38	1.83	2.50
Seek advice	1.00	2.00	1.14	1.88	1.67	1.00
Associate with groups	1.00	1.00	1.29	1.63	2.00	1.00
Freedom to communicate	3.00	4.67	2.71	4.75	2.50	4.33
Quick access to information	5.00	3.67	4.71	4.50	3.17	4.50
Enjoy anonymity	3.00	1.33	2.86	2.63	2.17	3.00
Experiment with social interaction	1.00	1.33	1.14	1.38	1.17	1.00
Less responsibility	4.00	1.67	2.00	2.00	2.00	2.00
Travel virtually	1.00	2.33	1.71	3.00	2.50	4.50
Learn life skills	1.00	1.67	1.43	1.50	2.17	1.50
Support groups help me cope	1.00	1.33	1.57	1.38	1.50	1.00
Make opinions heard	1.00	1.67	1.50	1.88	1.33	1.00
Express feelings	1.00	1.37	1.29	1.38	1.00	1.00
Sense of community	1.00	1.33	1.57	1.63	1.00	1.00
Meet partners	1.00	1.5	1.71	2.13	1.17	1.00
Become world citizen	4.00	3.00	1.14	3.38	2.17	3.50
Enhances work performance	5.00	3.67	3.57	4.38	3.17	4.00
Enhances work competitiveness	5.00	3.33	3.57	4.25	3.00	4.00
Business more competitive	5.00	3.33	2.57	4.00	2.83	3.00
Learn from other companies	5.00	3.33	3.00	3.63	3.33	3.50
Network nationally	5.00	3.33	3.14	4.00	2.67	3.50
Expand my business	4.00	3.33	2.14	3.88	2.50	3.50
Great leveler	3.00	3.00	2.33	3.75	3.17	3.00
Network internationally	5.00	3.33	2.71	4.13	2.67	4.00

This table indicates how the age of the sample group influenced the gratification offered by the Internet. In the youngest age category (21 to 25 years), the most common gratification was the freedom to communicate with anyone anywhere in the world. These respondents also agreed that the Internet expanded their knowledge and provided entertainment. The Internet was not successful in gratifying their personal integrative needs, such as acquiring a sense of identity by associating with certain groups on the Internet, making new friends, experimenting with social interaction and turning to support groups to help them cope with life.

The next age category (26 to 30 years) identified the primary gratification offered by the Internet as being quick access to information, followed by expanding their knowledge and

keeping in contact with friends and/or family abroad. They did not seek gratification from the Internet in the form of companionship, to relieve boredom to explore their fantasies or escape from reality

As was the case with the youngest age group, the respondents aged from 31 to 35 years indicated that the Internet kept them in contact with friends and/or family abroad and they enjoyed the freedom the Internet gave them to communicate with anyone anywhere in the world. They also valued the ability to access information quickly on the Internet and the way in which it enhanced their performance at work. This age group also had a relatively low mean rating (1.38) on the Internet's ability to offer escape from reality, the ability to experiment with social interaction, the use of support groups and expression of their feelings.

The main gratification the next age group (36 to 40 years) derived from the Internet was the expansion of knowledge. They too did not rate the Internet as a medium through which they could uniquely express their feelings or gain a sense of community.

The oldest age group (41 to 45 years) also highlighted the expansion of knowledge as one of the primary gratifications obtained from the Internet. This was followed by quick access to information and the ability to travel virtually to other countries. It is noted that this is the only age group which scored a relatively high mean rating for virtual travel. The freedom to communicate on a global basis and the ability to keep in contact with friends and/or family abroad were also identified as some of the main gratifications achieved. As was the case with all the other age groups, the gratification of personal integrative needs received the lowest rating.

It is therefore apparent that age does have an effect on gratification sought and obtained, although there is a definite trend across all age sectors of the sample group in the lack of personal integrative needs gratification. The primary gratification across all age groups is the use of the Internet to expand knowledge.

Graph 6.13 Negative views of the Internet: Mean scores
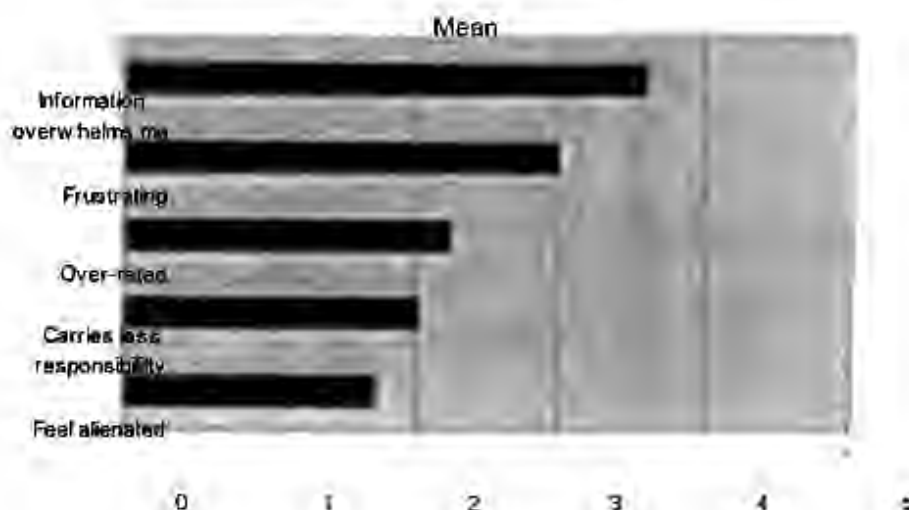
On average, the respondents did feel overwhelmed at times by the amount of information on the Internet and got frustrated when they used the Internet. Having said this, they did not appear to find the Internet alienating. As a mature sample group, they appeared to be aware of the responsibility they have when using the Internet and did not have any misperceptions about the consequences of their actions on line. While a few of the qualitative responses indicated that certain respondents believed the Internet was over-rated, the mean score for this item was relatively low.

One respondent remarked that the Internet is both an exciting part of his life and a frustration at the same time. He believes the Internet is over-hyped and under-appreciated and that it is dominated by businesses with pockets that reach far deeper than those of individuals. The issue of trust was also raised, with the claim that people will only visit the web sites they trust and that trust is still a problem with Internet use.

Another respondent cautioned that the Internet is a great tool, but it should not become a way of life. He expressed concern that many people see the Internet as a source of knowledge, to the detriment of the printed word and he believes that books have retained their supremacy in this regard. The absence of interpersonal interaction was also mentioned as a limitation of the Internet.

6.7   In summary

It is evident from the analysis of the survey results that the Internet is used for a wide range of purposes by the sample group. This investigation of how a specific group of professionals in South Africa uses the Internet and what gratification they derive from it demonstrates that people's use of a medium (i.e.. the Internet) is influenced by socio-economic factors such as age, marital status and educational qualification, as stated in chapter two of this dissertation. It also supports the assumption that each new medium is used and experienced by people in different ways.

In the closing chapter, (chapter seven) the researcher reviews these results according to assumptions made in part A of the dissertation and the use and gratification of traditional media versus the Internet.

7.   CHAPTER SEVEN: CONCLUSION

7.1 Internet use and gratification among a group of professionals in South Africa

As far as Internet gratification among a group of professionals in South Africa is concerned the Internet does not appear to draw these respondents into virtual worlds where they lose their sense of identity and lose touch with reality. This conclusion is supported by the fact that the respondents indicated a relatively low mean score for escapist uses of the Internet such as chatrooms, MUDs and newsgroups (for personal purposes)

It must be noted, however, that the age of the sample group influenced the use and gratification of the Internet. A similar survey of a younger audience (teenagers, for example) may result in entirely different findings. One should therefore not disregard the warnings and cautionary words of those who see the Internet in a less positive light. What the Internet does achieve is a "bringing together" of friends and families across the world. It also provides a wealth of information that enables users to explore virtually any topic they can think of, opening up new avenues for the expansion of knowledge.

It is evident that the Internet is primarily used for interpersonal communication which occurs via e-mail. The Internet therefore satisfies the social integrative and personal integrative needs of the sample group by connecting them to the world and enabling them to communicate with friends, family and work colleagues across the globe. Contrary to predictions that the Internet will result in a fractured and fragmented society, it appears to be having the opposite effect and linking people at home and in the workplace.

The impact of e-mail communication, which is less personal than the human voice or a hand-written letter remains to be seen. It appears from the sample group that the respondents are aware of the responsibility inherent in communicating via the Internet, although this may vary according to the demographics of specific user groups. Perhaps the less personal nature of

e-mail communication has encouraged greater interpersonal communication and enabled people who seek comfort in hiding behind the impersonal computer screen to communicate more frequently and in a manner that was previously not possible. The ease and speed of e-mail communication may be a contributing factor to the widespread use of the Internet for interpersonal communication.

The Internet is also a valuable medium for gaining information (from web sites to newsgroups and e-zines) for both work and personal needs. From providing information on topics of interest to research, work-related information and entertainment information, the Internet satisfies a wide range of cognitive needs. In fact, much of the information contained in this dissertation was sourced from the Internet. As stated in chapter one, information is the basis for economic growth and a new source of power. The widespread adoption of the Internet, particularly in the workplace, supports this statement.

Internet use for work and personal purposes differs, suggesting that people use this new medium for particular purposes and to achieve gratification related to that use. The impact of the Internet in the workplace suggests that this may be the first area where we will see significant change. In fact, this is already taking place. The impact of the Internet on society may take a lot longer to take effect and to ascertain.

The relatively high number of e-mails sent and received at work may be due to trends towards the paperless office, online trade and the computerisation of company processes, both internal (such as human resource functions) and external (such as customer liaison and order processing). The fact that some of the respondents used the Internet for e-business, which is relatively new and is fraught with teething problems, suggests that companies realise the potential power of the Internet and are keen to capitalise on it.

The same applies to Internet banking and Internet shopping, which appear to be growing markets that will boom in the near future, if they manage to overcome the hurdles of poor service and security, which is turning users away. The fact that many of the respondents

preferred the personal interaction of ordinary shopping - to be able to touch, feel and smell what they buy - may present a challenge to virtual shopping malls. Internet shopping may attract visitors seeking specific items or goods they cannot obtain from local stores, rather than those browsing or shopping for goods such as perishables and clothing.

Online publishing appears to have potential for growth as an industry, due to the quick access to information and news it provides users in the work environment. The extent to which this will impact on traditional print media remains to be seen. It would seem that users have very specific needs related to online publications and will subscribe to them according to their particular requirements. This supports the assumption made in Part A, chapter three of the dissertation that users will identify specific needs and seek specific gratifications from the print media and the Internet.

Newsgroups did not receive particularly high ratings, although those respondents who do belong to newsgroups do so mainly for work-related purposes or to satisfy their need for general news and information. The low frequency with which they visit newsgroups and the short period of time spent online indicates that this is not a major activity with regard to Internet usage.

The same applies to Internet Relay Chat, which was primarily used for personal purposes. None of the respondents spent large amounts of their time visiting chat rooms. The low level of adoption of Web TV and online radio broadcasts may be as a result of inadequate computer hardware and software or it could be due to the fact that these are still relatively new services on the Internet. It is still far easier to switch on one's television set or radio than it is to sit waiting for something to download from the Internet. It therefore seems unlikely that the Internet will have a significant impact on these media in the near future. Cable television and the resolution of bandwidth issues may change this, however.

As mentioned, the sample group was extremely small and as such the results are in no way representative of the population of South African Internet users. However, given the fact that specific trends in Internet use and gratification have been identified, and the fact that some of these trends concur with the findings of much larger research projects, the researcher has made certain conclusions regarding Internet use among professionals in South Africa. These findings will hopefully encourage further research into the use and gratification of the Internet. For example, studies could be conducted to identify the use and gratification of traditional media and the use and gratification derived from the Internet for the purposes of comparison and to ascertain how the Internet has impacted on traditional media.

The effect the Internet has had (and will have) on the nature and impact of public communication remains to be seen, due to the small size of the sample group. It does not appear that the Internet poses a threat to radio and television in the near future. As for the print media, the impact of the Internet is becoming evident, but only for specific kinds of publications.

The sample group was not asked to identify their use and gratification of traditional media, which would have enabled the researcher to draw comparisons and make predictions regarding future use of these media. However, if one compares some of the media uses and gratifications identified in Part A, chapter three of this dissertation with those identified by the respondents with regard to the Internet, the most glaring confrontation appears to be between the ability of the print media to satisfy the need for information and the ability of the Internet to satisfy the same need, albeit in a slightly different way.

Radio was also identified as a primary source of information, although it also provides a sense of community and entertainment, neither of which IRC or online radio broadcasts appear to gratify particularly well. What the Internet can do is bring international radio stations to users, which may serve a social integrative need with people living abroad. For example, Radio 5 often interviews South Africans who have emigrated and who listen to the

station over the Internet. The increasing mobility of the Internet (as a result of WAP technology) may also make the Internet more competitive with radio.

Television satisfies escapist needs and social integrative needs fairly well. One of the gratifications identified in Part A, chapter three was the ability of television to bring communities together across the globe. However, this is with regard to programme content, rather than on an interpersonal level. Whether the Internet provides any competition to the use and gratification of television may only become evident if one conducts a survey that targets the age group comprising the majority of the television audience and compares their use of the Internet with their use of television.

The impact of the Internet on traditional mass media may take longer to ascertain, due to the fact that these services are still emerging on the Internet. What can be deduced is that the Internet has had an impact on public communication and that this impact may still change the way people use the medium and the gratification they seek from it. This in turn may impact on traditional forms of communication and revolutionise the way in which people interact on a one-to-one and one-to-many basis.

Another interesting point for consideration is the fact that the Internet has the ability to incorporate all the traditional media into one extremely powerful multimedia package. What will the impact of this be on public communication as we know it today?

It is evident from this discussion that there are numerous issues surrounding Internet use and gratification that warrant extensive research. It is only by closely monitoring the penetration of the Internet into human lives and constantly studying this new medium that we can gain a true understanding of how it is used and what impact it will ultimately have.

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SURVEY QUESTIONNAIRE: INTERNET USAGE & GRATIFICATION

I am a student at the University of South Africa and am working towards a Master's degree in Communication. My dissertation examines the different ways in which people in South Africa use the Internet and the gratification they receive from it
As it is a new mass communication medium, the impact of the Internet on society remains to be seen. In the meantime, we can try to understand and predict some of these effects by studying the Internet against the background of the evolution of information and communication technologies.

This questionnaire is an important part of my dissertation. It has been designed to investigate Internet usage among professional people in South Africa. By taking your time to fill in the questions below, you will be contributing to a dissertation that aims to provide existing and future knowledge about Internet usage and a better understanding of the ways in which people use - and benefit from - the Internet.

Your input as an Internet user is extremely important and highly valued. I appreciate your time and co-operation and your honesty in responding to the questions below.

There are no right or wrong answers to any of these questions, but please read all the questions carefully so you understand exactly what they're asking and try to complete every question.

You may remain anonymous if you wish, however, all responses will be kept strictly confidential.

Once you have completed the questionnaire, please e-mail it to julie@3rdwave.co.za. The cut-off date is 10 February 2001.

I appreciate your assistance.

Yours sincerely

Julie Gilbert

SURVEY QUESTIONNAIRE: INTERNET USAGE & GRATIFICATION

1   Name: _____

2   Gender (please tick one of the following boxes):

Male | 1 | |
Female | 2 | |

3   Marital status (please tick one of the following boxes):

Single | 1 | |
Married | 2 | |
Divorced | 3 | |
Widowed | 4 | |

4   Age: _____

5   Occupation: _____

6   Job title: _____

7   Highest educational qualification (please tick one of the following boxes):

Lower than Standard 8 | 1 | |
Standard 8 - Standard 9 | 2 | |
Matric | 3 | |
Matric plus a tertiary diploma | 4 | |
Bachelor's degree | 5 | |
Post-graduate qualification | 6 | |
Other | 7 | |

8   IF YOU TICKED "OTHER" IN QUESTION 7, please describe your highest
educational qualification:

_____
_____
_____
_____

9   Do you have access to the Internet (please tick one of the following boxes):

Yes | 1 | |
No | 2 | |

10 IF YOU ANSWERED YES TO QUESTION 9, how did you gain access to the
Internet (please tick YES or NO to indicate your response)? You may indicate
a response to more than one of the following categories:

	YES		NO	
computer at work	1		2	
computer at home	1		2	
friend's computer	1		2	
Internet café	1		2	
Community Centre	1		2	
Cellphone	1		2	

Other: If none of the options above apply, how did you gain access
to the Internet?

_____
_____
_____
_____

11 Do you use the Internet for WORK purposes?
Please tick one of the following boxes:

Yes | 1 | |
No | 2 | |

12 IF YOU ANSWERED NO IN QUESTION 11, why do you not use the Internet for work purposes (please tick whichever box applies?)

I don't have Internet access at work

I don't have time to access the Internet at work

I don't need to access the Internet at work

Other: If your reason for not using the Internet at work is not one of those listed above, please explain why you don't use the Internet at work?

1	
2	
3	

_____

_____

_____

_____

13 IF YOU ANSWERED YES IN QUESTION 11, how often do you use the Internet at work for the following reasons (please tick the box/boxes that apply)?

	Very Often		Often		Sometimes		Seldom		Never	
To obtain business information	5		4		3		2		1	
To keep updated on industry trends	5		4		3		2		1	
To find competitor information	5		4		3		2		1	
To obtain information related to my work	5		4		3		2		1	
To visit our company web site	5		4		3		2		1	
To communicate with colleagues on work-related matters	5		4		3		2		1	
To communicate with my customers/clients	5		4		3		2		1	
To make contact with professional organisations	5		4		3		2		1	
To buy products I need for my business	5		4		3		2		1	
To sell my products and/or services	5		4		3		2		1	
To advertise my products and/or services	5		4		3		2		1	

Other: If there are other reasons you use the Internet at work, please list them in the space provided below:

_____

_____

_____

_____

14 Do you use the Internet for PERSONAL purposes?

Yes

No

1	
2	

15 IF YOU ANSWERED NO IN QUESTION 14, why do you not use the Internet for personal purposes (please tick the box that best matches your answer):

I don't have Internet access for personal use

I don't know how to use the Internet

I don't have time to use the Internet for personal purposes

I don't like using the Internet

Other: If your reason for not using the Internet for personal purposes is not one of those listed above, please explain why you don't use the Internet for personal purposes:

1	
2	
3	
4	

_____

_____

_____

_____

| 16 | IF YOU ANSWERED YES IN QUESTION 14, how often do you use the Internet for personal purposes for the following items (you may tick more than one item)? |

	Very Often		Often		Sometimes		Seldom		Never	
For personal studies	5		4		3		2		1	
To do research on a particular subject	5		4		3		2		1	
To obtain information on any topic about which I want to learn more	5		4		3		2		1	
For personal banking	5		4		3		2		1	
For on-line shopping	5		4		3		2		1	
For debate on a particular topic	5		4		3		2		1	
To expand my personal knowledge	5		4		3		2		1	
To seek personal advice	5		4		3		2		1	
To obtain medical information	5		4		3		2		1	
To obtain entertainment information	5		4		3		2		1	
To escape from reality	5		4		3		2		1	
To read e-zines (on-line magazines)	5		4		3		2		1	
To listen to radio broadcasts on line	5		4		3		2		1	
To watch Web TV broadcasts	5		4		3		2		1	
To interact with people or groups with similar interests to mine	5		4		3		2		1	
To communicate with my colleagues on personal matters	5		4		3		2		1	
To communicate with my friends and/or family living in South Africa	5		4		3		2		1	
To communicate with my friends and/or family living outside of South Africa	5		4		3		2		1	
To communicate with people I would not normally have access to (for example, heads of state, film or music stars)	5		4		3		2		1	
To pass the time	5		4		3		2		1	
For relaxation	5		4		3		2		1	
To meet new people	5		4		3		2		1	
For companionship	5		4		3		2		1	

Other" : If there are other reasons you use the Internet for personal purposes, please list them in the space provided below:

_____

_____

_____

_____

_____

| 17 | Which of the following Internet services do you use for PERSONAL AND/OR WORK purposes? Please tick the boxes that apply to either/both category. You may tick more than one box. |

	Work	Personal
E-mail	1	0
Newsgroups (electronic discussion groups that deal with a particular topic. Users "post their articles or comments to the newsgroup and can read articles posted by others)	1	0
Web shopping (purchasing goods via the Internet)	1	0
Internet Relay Chat (IRC - Users convene on a virtual "channel" to participate in real-time conversations regarding set or open topics)	1	0
E-zines (on-line publications)	1	0
Internet radio broadcasts	1	0
Web TV	1	0
Internet banking (conducting banking transactions on the Internet)	1	0
E-Business (on-line trading between companies and customers)	1	0
Multi-User Dungeons (imaginary worlds in which users can create their own identities and gather in virtual meeting places to chat in real-time)	1	0

Other: If you use services on the Internet other than those listed above, please
list these services in the space provided below and indicate whether these are
for personal or work-related purposes:)

	1			0	
	1			0	
	1			0	
	1			0	

18   If you use e-mail for WORK purposes:

A   How many work-related e-mails do you SEND on average per week?

B   How many work-related e-mails do you RECEIVE on average per week?

19   If you use e-mail for PERSONAL purposes

A   How many personal e-mails do you SEND on average per week?

B   How many personal e-mails do you RECEIVE on average per week?

20   Do you belong to any newsgroups (these are defined as electronic discussion
groups that deal with a particular topic . Users post articles and comments to a
particular group on the Internet)?
Yes   1
No   2

21   IF YOU ANSWERED YES TO QUESTION 20:

A   To which newsgroups do you belong?
List the newsgroups in the space provided

B   What are the benefits of belonging to a newsgroup(s) for your personally?
List your reasons in the space provided

C   How often on average do you visit a newsgroup? Please tick the box
that best matches your response:

Every day   1
Once or more per week   2
Once or more per month   3
Less than once per month   4

D   How much time on average do you spend when you visit a newsgroup?
Please tick the relevant box

Less than one hour   1
From one to two hours   2
More than two hours   3

22   Do you engage in Internet Relay Chat?

Yes   1
No   2

23	IF YOU ANSWERED YES IN QUESTION 22:
A	Which chatrooms do you visit from time to time?

_____
_____
_____
_____
_____

| B | How often on average do you visit a chatroom (please tick the box that best matches your answer)? |

Every day   1 ☐
Once or more per week   2 ☐
Once or more per month   3 ☐
Less than once per month   4 ☐

| C | How much time on average do you spend when you visit a chatroom please tick the relevant box)? |

Less than one hour   1 ☐
From one to two hours   2 ☐
More than two hours   3 ☐

| 24 | Do you subscribe to any on-line publications? (These are publications that are published on the Internet. For example, Business Day On-line, ITWeb, Computer Reseller News) |

Yes   1 ☐
No   2 ☐

| 25 | IF YOU ANSWERED NO TO QUESTION 24, would you consider subscribing to any on-line publications in the future? |

Yes   1 ☐
No   2 ☐

26	IF YOU ANSWERED YES TO QUESTION 24:
A	Which on-line publications do you subscribe to? Please list them below:

_____
_____
_____
_____

| B | Do you prefer on-line publications to traditional print media? |

Yes   1 ☐
No   2 ☐

| C | IF YOU ANWERED YES TO QUESTION 26 B, why do you prefer on-line publications to traditional print media? |

_____
_____
_____
_____
_____
_____
_____

| 27 | Have you ever purchased anything on-line (ie. on the Internet)? |

Yes   1 ☐
No   2 ☐

| 28 | IF YOU ANSWERED NO TO QUESTION 27, would you consider purchasing anything on-line in the future? |

Yes   1 ☐
No   2 ☐

| 29 | IF YOU ANSWERED YES TO QUESTION 27, do you prefer Internet shopping to ordinary shopping? |

Yes   1 ☐
No   2 ☐

30   IF YOU ANSWERED YES TO QUESTION 29, why do you prefer Internet shopping to ordinary shopping?

_____

31   IF YOU ANSWERED YES TO QUESTION 27, what types of products or services have you purchased over the Internet?

_____

32   IF YOU ANSWERED YES OR NO TO QUESTION 27, what is your opinion of Internet shopping?

_____

33   Please tick the box next to the statement you most agree with:

A   In my opinion, shopping on the Internet is:

Much quicker than ordinary shopping	1
Quicker than ordinary shopping	2
Not quicker or slower than ordinary shopping	3
Slower than ordinary shopping	4
Much slower than ordinary shopping	5

B   I believe that the prices of goods on the Internet are:

Much cheaper than goods purchased through other outlets	1
Cheaper than goods purchased through other outlets	2
Not cheaper than goods purchased through other outlets	3
More expensive than goods purchased through other outlets	4
Much more expensive than goods purchased through other outlets	5

C   In my opinion:

There is a much greater variety of goods available on the Internet	1
There is a greater variety of goods available on the Internet	2
There is not a greater variety of goods available on the Internet	3
There is a smaller variety of goods available on the Internet	4
There is a much smaller variety of goods available on the Internet	5

D   In my opinion, buying goods over the Internet is:

Much easier than buying goods from other outlets	1
Easier than buying goods from other outlets	2
Not easier than buying goods from other outlets	3
More difficult than buying goods from other outlets	4
Much more difficult than buying goods from other outlets	5

E   What other benefits does Internet shopping offer you?

_____

F   What are the disadvantages of Internet shopping?

_____

G   Do you have any other comments regarding Internet shopping?

_____
_____
_____
_____

34 Do you watch/listen to any Internet broadcasts (these are defined as television or radio shows that are broadcast over the Internet. For example, Live at Five, Basement, the BBC)

Yes   `1` ☐
No   `2`

35 IF YOU ANSWERED NO TO QUESTION 34, would you consider listening to any Internet broadcasts in the future?

Yes   `1` ☐
No   `2`

36 IF YOU ANSWERED YES TO QUESTION 34, how often on average do you listen to or watch Internet broadcasts? You may tick more than one category:

	Very Often	Often	Sometimes	Seldom	Never
South African radio stations	5	4	3	2	1
International radio stations	5	4	3	2	1
Web TV	5	4	3	2	1

Other: If none or only some of the selections above apply, please list the other type of Internet broadcases you tune in to:

_____
_____
_____
_____

37 If there are ways in which you use the Internet that are not listed above, please describe them in the space provided below and indicate whether you use the Internet in these cases in a work or personal capacity

	Work	Personal
_____	1	0
_____	1	0
_____	1	0
_____	1	0
_____	1	0
_____	1	0

Gratification: To what extent do the following statements hold true for you as a person:

	To a large extent	To a reasonable extent	Neutral / Cannot say	To a little extent	Not at all
I find the Internet exciting	5	4	3	2	1
The Internet frustrates me	5	4	3	2	1
The Internet provides companionship for me	5	4	3	2	1
I use the Internet to keep in contact with my family and/or friends living abroad	5	4	3	2	1
I make new friends via the Internet	5	4	3	2	1
I use the Internet to expand my knowledge	5	4	3	2	1
The amount of information available on the Internet overwhelms me	5	4	3	2	1
On the Internet, I can be anyone I want to be	5	4	3	2	1
I use the Internet to relieve boredom	5	4	3	2	1
I explore my fantasies on the Internet	5	4	3	2	1
The Internet provides entertainment for me	5	4	3	2	1
The Internet offers me new experiences	5	4	3	2	1
I use the Internet to escape from reality	5	4	3	2	1
I seek advice from people on the Internet	5	4	3	2	1
I draw a sense of identity by associating with certain groups on the Internet	5	4	3	2	1
The Internet gives me freedom to communicate with anyone anywhere in the world	5	4	3	2	1
I have quick access to information through the Internet	5	4	3	2	1
I enjoy the anonymity of communicating on the Internet	5	4	3	2	1
Communicating via the Internet makes me feel alienated	5	4	3	2	1
I experiment with social interaction on the Internet	5	4	3	2	1
Communication on the Internet carries less responsibility	5	4	3	2	1
I travel virtually to other countries on the Internet	5	4	3	2	1
I learn life skills from the Internet	5	4	3	2	1
Support groups on the Internet help me cope with life	5	4	3	2	1
I can use the Internet to make my opinions heard	5	4	3	2	1
I can express feelings on the Internet that I cannot express anywhere else	5	4	3	2	1
The Internet gives me a sense of community	5	4	3	2	1
The Internet gives me the opportunity to meet potential partners	5	4	3	2	1
I become a world citizen whem I surf the Internet	5	4	3	2	1
The Internet is easy to use	5	4	3	2	1
The Internet enables me to perform better in my work	5	4	3	2	1
The Internet enables me to be more competitive in my work	5	4	3	2	1
My business is more competitive thanks to the Internet	5	4	3	2	1
I learn from other companies on the Internet	5	4	3	2	1
The Internet enables me to network nationally with people working in the same field as me	5	4	3	2	1
The Internet enables me to network internationally with people working in the same field as me	5	4	3	2	1
The Internet enables me to expand my business worldwide	5	4	3	2	1
I think the Internet is over-rated	5	4	3	2	1
I see the Internet as the great leveller	5	4	3	2	1

Other comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____