

# Chapter 1

## Context and Background

### 1.1. Introduction

Numerous academic writers debate the validity of the commonly accepted relationship between service quality, customer satisfaction and relationship quality. The following research model have been defined in order to investigate these constructs and their relationships in more detail:

Literature Study	Internet Services
	The Marketing of Services Relationship Marketing Interrelationships between constructs
Methodology	Survey and Analysis
Qualitative Findings	Visualisation of Internet Service provision Service breakpoints (Fail Points)
Quantitative Findings	SERVQUAL Interrelationships between constructs
Recommendations	Defining a portfolio of projects Academic recommendations

This chapter will cover the following topics in order to enlighten the concept of Internet services and the challenges for the Internet service provider:

- (1) The Internet–history of the Internet internationally.
- (2) The Internet in South Africa – origins and growth of the Internet industry in South Africa, Internet churn, and consumer Internet services.
- (3) Classification of consumer Internet services as a continuous service.

Attention will then turn to a discussion around the scope of the study:

- (1) The problem of customer retention, value added services as well as service quality improvements as proposed initiatives.
- (2) The flow construct as a potential customer satisfaction profiling construct within the Internet industry.
- (3) Operational definitions of the constructs within the study.
- (4) And an overview of the chapters to follow.

Why a relationship marketing perspective?

Both manufacturing and service firms are finding it harder to establish sustainable technology-based advantages. To avoid commodity status, they must focus on strengthening the value-added features of their products and services. In the long run, competitors may copy tangible augmented product

features. Relationship marketing can provide a more intangible, but stronger, long-term customer benefit that may be difficult to match (Evans and Laskin, 1994:439-452).

As markets mature, customer retention becomes increasingly important, taking priority over strategies to increase market share. Relationship marketing provides a framework for achieving the essential co-ordination between marketing, customer service, and quality programs. Moving customers up the loyalty ladder is not simple. Organisations need in-depth knowledge of what each individual customer wants and how value can continuously be added to the customer offering (Payne, 1995:29-31). A further advantage of Relationship Marketing is that it can assist a firm to escape commodity-like status (Evans and Laskin, 1994:439-452).

## **1.2. The Internet**

The best way to understand the Internet is to understand its origins. In 1969, the United States Department of Defence decided to create a computer network that would be independent of normal communications systems, as well as of its individual components. Each component would be connected to every other component through numerous alternative routes, so that communications in the system would not depend on any one connection being up and running.

An example of the usefulness of this network would be that in the event of a nuclear war any part of the network could be taken out and the rest of the system would keep on functioning. The prototype network was called ARPANET (Advanced Research Project Agency Network) and consisted of only four computers, situated at four American educational and research institutions (University of Utah, University of California at Santa Barbara, University of California at Los Angeles and Stanford Research Institute).

By 1972, the number had risen to 50 computers that were connected in what had become a broader experiment, both to show how networks could function over a wide area, as well as to provide a bomb-proof communications system between research facilities involved in military projects.

The most spectacular success of this principle was revealed in rather unfortunate circumstances 20 years later, during the Gulf War. The Americans found it impossible to destroy Iraq's command network because it operated on the same principle as the original ARPANET and ran on commercially available network software.

From the end of the 1970's, numerous networks based on similar principles began emerging still connecting mainly educational and research institutions. One of these was called USENET (User's Network), created in 1980 by Tom Truscott and Jim Ellis, two students at Duke University, North Carolina.

Their idea was to create an electronic Bulletin Board System (BBS) in which users could 'post' letters, comments or articles that could be read by anyone else on the system, and that would encourage ongoing discussion. The first version connected just two computers. By 1983, 500 USENET sites were in existence on a network owned by no single person or body.

In 1995 USENET consisted of more than 8 000 separate newsgroups or discussion forums on any topic for which there appeared to be a need for discussion. Users still posted messages into these newsgroups and all messages were 'open' for all users of a group to read.

Before the explosion of the World Wide Web, USENET was the most widely used part of the Internet and a popular newsgroup, like the humour forum, could find itself being accessed regularly by half a million users. Meanwhile, ARPANET was given a sidekick, the US Department of Defence's MILNET, which could be accessed through ARPANET. MILNET became the network for military sites and ARPANET for non-military sites. In effect, the first nation-wide network of networks. This combination was initially called DARPANET. Due to a communication software system called the Internet Protocol, which enabled the two inter-networks to understand each other's language, it finally came to be known as the Internet—but not the Internet that we are familiar with today.

Then there was the government-funded National Science Foundation, which was in charge of five hugely expensive supercomputer centres. Because of the cost, all borne by the taxpayer, the National Science Foundation wanted to make its system available to the entire research community. To do that, they needed to put the computers on a network and so NSFNET was born.

This was the key breakthrough.

It was faster than the previous networks were and it was connected to regional networks set up by the National Science Foundation to link users locally across as much of the United States as possible. If a university agreed to make the service available to all its students, the National Science Foundation agreed to fund its connection. So, following the guiding principle of the original ARPANET, a student at a computer linked to any sub-network could make a connection with any other computer in the inter-network. Due to its greater efficiency, more and more sites moved off the ARPANET and on to the NSFNET.

In 1990 ARPANET closed down, its functions were taken over by NSFNET and almost every publicly and privately funded network in the United States joined the regional networks of the NSFNET. The network of networks became formally known as the Internet, with the NSFNET at its core.

Until 1995, the National Science Foundation remained a crucial element in the Internet. When the explosion of world-wide connections and on-line services began making it less relevant, the National Science Foundation went back to basics. It is now focussing on a new high-speed network for its supercomputers.

On the Internet, the initiative has been taken by Sprint, the world's largest network, which is developing a global communications backbone. The National Science Foundation's Backbone, once the single most substantial element of the Internet, is now one of many in the United States.

The National Science Foundation's policies have been enormously influential. Its *Acceptable Use Policy* states that "NSFNET Backbone services are provided to support open research and education in and among US research and instructional institutions, plus research arms of for-profit firms when engaged in open scholarly communication and research".

The National Science Foundation's is quite happy for networks connected to the Backbone to formulate their own rules. In 1991 it allowed commercial service providers to link up for the first time, through the regional networks rather than directly to the Backbone, so that the *Acceptable Use Policy* was not violated (Goldstuck, 1995).

### **1.3. The Internet in South Africa**

South Africa has been connected to the Internet since April 1989, when a research network called Uninet-ZA was set up by the Council for Scientific and Industrial Research (CSIR) to link all universities and educational and research institutions in the country. Administered by the Foundation for Research and Development (FRD), it has its own backbone, which connects regional 'hubs' at the CSIR, the University of the Witwatersrand, the University of Cape Town, Rhodes University and the University of Natal in Durban, via high speed circuits. As with the American model, other universities and educational institutions are connected to the backbone via sub-networks. In 1995, about 50 institutions across southern Africa were connected to this network.

South Africans are described as the most active academic network users in Africa, and it should be no surprise that efforts were quickly made to link Uninet-ZA to the Internet, mainly through the efforts of researchers at Rhodes University in Grahamstown, the first South African onramp to the information highway.

Initially, Uninet-ZA was connected to the Internet through a satellite link-up, but on February 18, 1994, Uninet gained its own fibre-optic cable that connected Rhodes University to the ICMnet-Atlantic Sprint network in Washington DC. The CSIR Commercial Internet Services division also has a

direct link to the NSFNET Backbone via a Telkom leased-line on the SAT-2 cable (Goldstuck, 1995).

For the first few years, the Internet in South Africa was an open secret shared by students and lecturers. For ordinary folk, it simply did not exist. The Dial-up Electronic Bulletin Board Systems (BBS) run by hobbyists had allowed users to send and receive e-mail through international, privately operated BBS networks. The most extensive of these networks, FidoNet, is a world-wide network that links up BBS networks run by hobbyists, many of them offering free access to any member of the public who wants to dial in. Universities in Malawi, Mauritius and Zambia, which cannot justify the cost of an Internet connection, are also linked to FidoNet.

A South African equivalent of USENET, called RSANet, provided dozens of newsgroups aimed at technical, recreational (such as humour, lonely hearts and marathon running) and political discussion.

But Internet services themselves were restricted. Up to July 1993, when BBS networks were given access to USENET. Then the floodgates opened and the media began paying attention. A little more than two years later it was nearly impossible to mention computers without talking about the Internet (Goldstuck, 1995).

#### **1.4. The Internet Industry in South Africa**

The Internet in South Africa can be said to have come of age on the second of May, 1995, when the annual Computer Faire opened at Nasrec outside Johannesburg. On show were at least a dozen Internet service providers, three specialist Internet software distributors and hundreds of Internet manuals and software packages on sale by book and software vendors.

The first commercial link to the Internet was provided by a co-operative outfit called The Internetworking Company of Southern Africa (Ticsa), which set up a Cape Town hub connected by an undersea cable to Altnet, an American network with its hub in Falls Church, Virginia. The amount of companies providing Internet services has grown rapidly (Figure 1.1).

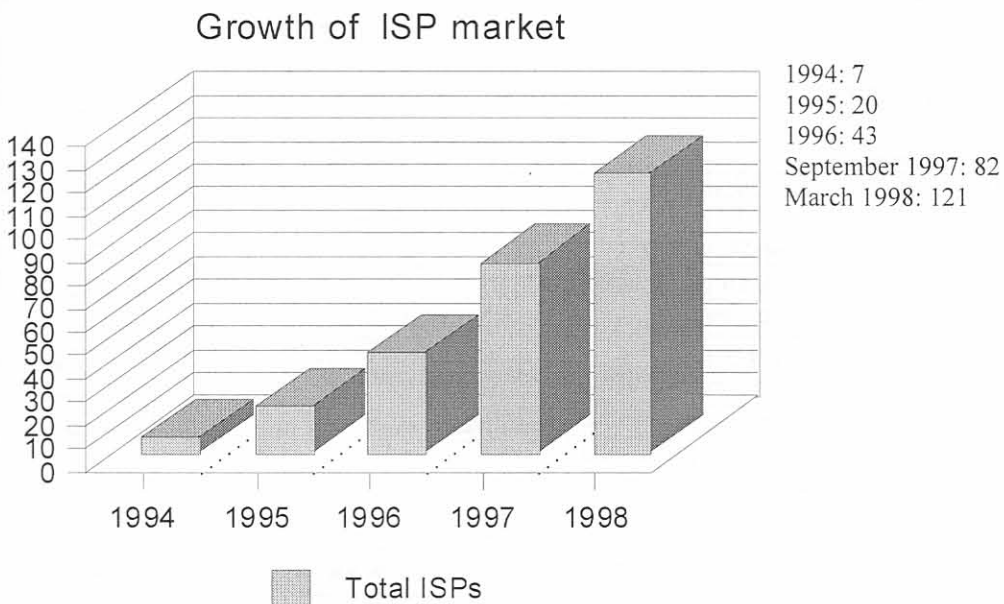
Ticsa's goal was to extend Internet services to commercial organisations and other non-academic bodies, as well as to neighbouring countries, operating with a voluntary, not-for-profit philosophy.

On 1 November 1993, Ticsa gave four commercial companies live access to the Internet, with another six following a week later. Ticsa and Uninet had entirely independent connections so that, ironically, any communications between a Ticsa site and a Uninet site had to cross the Atlantic via one cable, traverse a few networks and then come back via satellite (Goldstuck, 1995).

The steady and powerful growth that had been assumed for the industry from 1994 to 1997 continued undiminished into 1998. The approximate number of service providers starting up in each year since 1994 are based both on launch dates provided by Internet Service Providers and archival material maintained by the Media Africa researchers since 1994 (Figure 1.1). (Media Africa Research Report, 1998. South African Internet Industry)

The size of the industry at the end of each successive year, as measured by the number of 'semi-virtual' Internet Service Providers (those using both their own Points of Presence and SAIX dial-in nodes) and 'virtual' Internet Service Providers (those using only SAIX dial-in nodes).

**Figure 1.1. Growth of the ISP market in South Africa.**

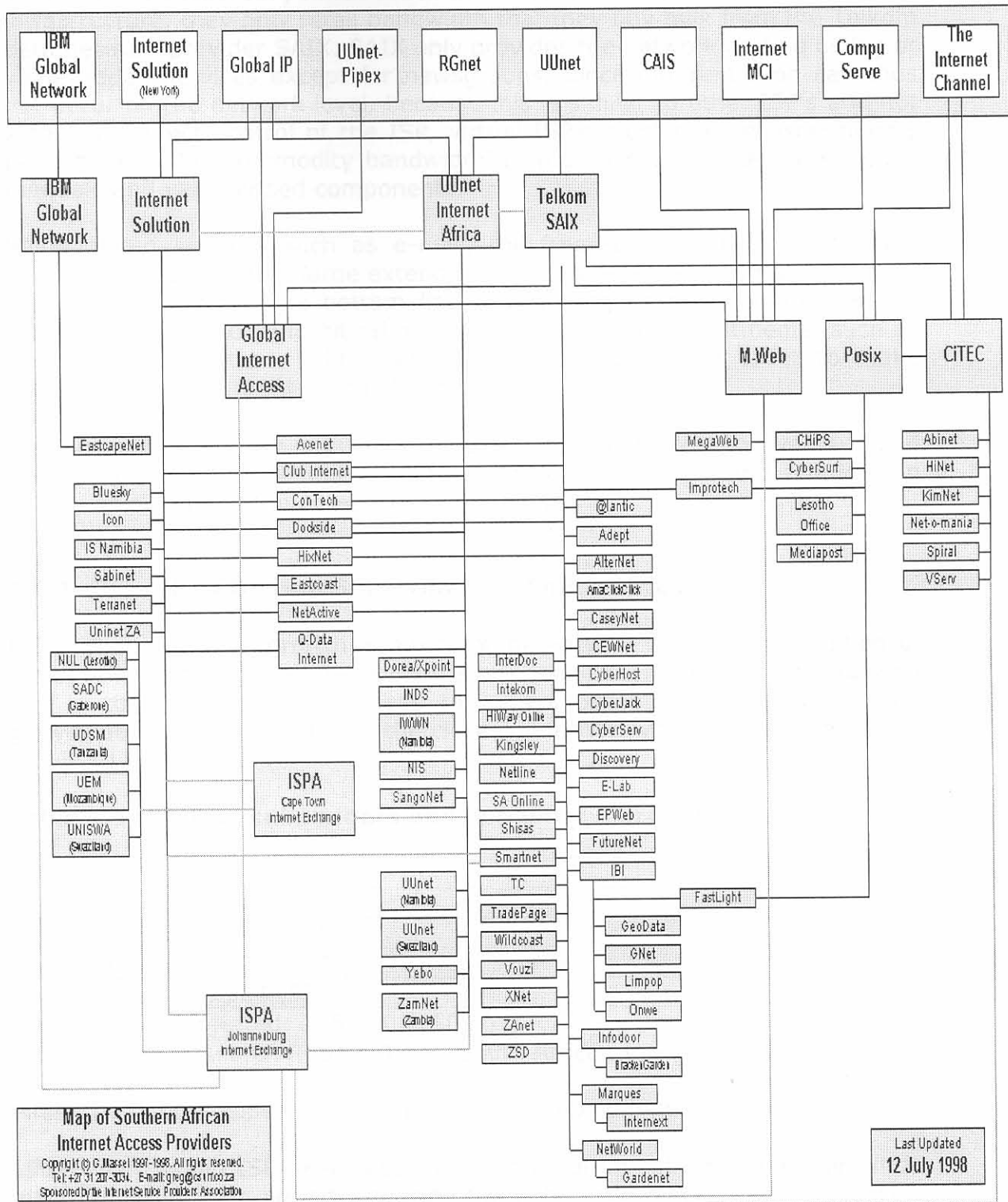


(Media Africa Research Report, 1998. South African Internet Industry.)

Because most users are dialling up Internet providers in their local areas, the telephone costs are restricted to the normal local call charges for the time they are on-line. The service provider usually has a permanent link to the Internet through high-speed cables, so someone dialling up a computer in Boulder, Colorado through their Internet provider in Bloemfontein, will still pay the cost of a local call only.

That is the bottom line to the immense potential of the Internet and why most of the hype surrounding it is hype, not due to exaggeration of the possibilities, but because it generates so much noise among true believers (Goldstuck, 1995).

Figure 1.2. The South African Internet Service Providers Map.



Explanation of virtual ISP's:

Intekom is a virtual ISP, which mean that they do not own their own network infrastructure, they only retail bandwidth that they buy bulk from the Telkom data network provider SAIX. SAIX only provides the network and no billing or value added services except for newsgroups. Since differentiation can thus not occur on the network level, because this is similar to other ISP's and not within the direct control of the ISP, virtual ISP's must rely on user friendly packaging of the 'commodity bandwidth' in the form of call centre support, manuals and value added components.

Value added services such as e-mail, toll free support and user friendly starter packs define to a large extend the space where ISP's compete for new and existing clients. The bottom line is acquiring as many subscribers as possible, in order to gain critical mass on infrastructure investments, such as call centres, and then holding on to these subscribers in order to make subscription based profits in the future.

From here the interest is in measuring the contribution of the value-added services provided on service quality, customer satisfaction and relationship quality as defined in the objectives of the study.

#### 1.4.1. Growth of Dial-up Subscribers in South Africa

Internet subscription growth is often compared with the growth/adoption of radio, television and other technologies or channels. The researcher's view on this is that it additionally needs to be compared to telecommunication growth/adoption figures due to the close connection with network technology (Table1.1).

**Table 1.1. Dial-up subscribers and percentage growth year on year.**

1994:	5 300
1995:	33 600 (534%)
1996:	79 700 (137%)
Sep. 1997:	154 276 (93%)
Mar. 1998:	238 964 (55%)
Dec. 1998 -	Projected: 366 000 (110%)

(Media Africa Research Report, 1998. South African Internet Industry.)

While the figures appear very dramatic, they should be put in context:

1994—Only seven ISPs were actively selling dial-up subscriptions, very little marketing had been undertaken, and the public and media were still largely ignorant of the Internet.

1995—The number of ISPs more than doubled, and media attention increased dramatically during the year. By September of that year, Internet-



related stories continually made for the key technology coverage in all mainstream publications.

1996—Professionally packaged starter kits made their first appearance from a number of ISPs, and the number of ISPs again more than doubled. The Internet continued to dominate media coverage of technology. A large number of 'mega-ISPs' began to appear, with heavy capital investment flowing in from the traditional corporate market. Telkom entered the market with beta testing of its SAIX network, further raising awareness of the Internet and issues surrounding it. For the first time the Internet was regarded as an essential service by its users. The Internet Service Providers' Association was formed.

1997—Corporate investment in ISPs continued at a rapid pace, and intensive marketing drives were launched to capture 'mind share'. The launch of SAIX's service to 'virtual ISPs', enabling the creation of both niche services and larger ISPs without the need for investment in the level of infrastructure maintained by existing large ISPs, made a significant impact on the dial-up market.

1998—The period from September, 1997 to March, 1998, was characterised by huge growth from two ISPs, namely M-Web and GIA, largely as a result of M-Web's aggressive TV marketing campaign, which introduced the Internet to a large new audience. At the same time, UIA and Icon achieved significant growth as a result of their marketing responses to the M-Web campaign. While the major consequence of this ISP war was the brand leadership achieved by M-Web, it was the key factor in the sustained growth of the industry as a whole. (Media Africa Research Report, 1998. South African Internet Industry.)

#### **1.4.2. Internet Churn**

As service providers eye the cost of bringing new customers on board, they're beginning to take an even closer look at those who decided to end their subscription.

As a result, established ISP's are beginning to learn what publishers have known for a long time—it is cheaper to keep an existing customer than it is to find a new one.

"As the saturation of the Internet grows, customers aren't going to be as readily available in the future as they are today. We have to be in that mindset." These are the words of Greg Falconer, manager of subscriber retention for GTE Internet Solutions.

The main reason users are taking their browsers elsewhere is because they're getting what they perceive to be substandard service. Some customers are simply leapfrogging from provider to provider, one 30-day trail

at a time. But constant busy signals and disconnects are not the only reasons for churn. "For whatever reason, some customers are just going away altogether. Some are finding the Internet is not for them and they tune out completely. Others get enough access at work that they decide a home account isn't needed." This is according to Mark Snowden, analysts for consumer technology research group Inteco, of Redmond, Washington. In a recent study, Inteco reported churn rates ranging from one percent per month to more than four percent per month for some providers. On the low end, which translates to an acceptable 12 percent annual rate, climbing to a dizziness-inducing 48 percent annualised churn rate.

Concerned by such numbers, many providers are exploring new ways to keep their current share of the market. Erol's Internet Inc. in Springfield, VA., has set up a combination of technological support and customer service personnel as a last line of defence to save those who wish to cancel (Hulme, 1997).

These alarming churn forecasts, as well as the high cost associated with client acquisition drives the investigation of relationship quality as discussed in this study.

## **1.5. Consumer Internet Services**

In order to understand the scope of consumer Internet services it is important to outline certain service components. Dial-up connectivity is the core of consumer Internet services with various applications of bandwidth 'packaged' in by the service provider in order to sell an Internet experience.

### **1.5.1. Dial-up IP connectivity (PPP)**

By installing the appropriate software, subscribers can connect to an ISP using a TCP/IP based (Transmission Control Protocol/Internet Protocol – the original ARPANET communications protocol) connection like SLIP (Serial Line Internet Protocol) and PPP (Point to Point Protocol). These connections enable the subscriber's computer to speak in the TCP/IP language of the Internet. That means subscribers can forget about commands and use the point-and-click interface in Windows and Mac programs, streamline the downloading of files and get access to the World Wide Web (Goldstuck, 1995).

### **1.5.2. POPMail (e-mail)**

Once the subscriber has a dial-up IP connection, they can have the service provider's system store their e-mail until the next time a connection is made. POPMail goes hand in hand with World Wide Web access, but additional software is needed (Goldstuck, 1995). An example of software that can be used for e-mail is Microsoft Outlook Express.

### **1.5.3. Browsing the Web (Surfing)**

It is no longer possible to talk about the Internet without mentioning the World Wide Web.

The World Wide Web was developed at the European Centre for Nuclear Research (CERN) in Geneva as a result of scientists needing to communicate more efficiently with researchers throughout the world. The first proposal for a new system was put out in March, 1989 and the first Web prototype was unveiled in November, 1990. It went more or less public in 1993, when the first Windows-based Web browser, NCSA Mosaic, was released to the world at no charge.

The first public access to the Web in South Africa was made available in June, 1994 and the first reasonably fast software program for accessing the Web, Netscape Navigator, was made available on the Internet at no cost in November, 1994. That was the beginning of the end of the Internet as a specialist pursuit in South Africa.

The World Wide Web is the Internet in camouflage, disguised as a user-friendly information service that is as easy as reading a book. That would be true, if books had no starting points, no endings and no complete index.

If subscribers want to search for files or software on the Internet, they need to have live access. To use the Web a program called a Web browser is needed.

There are two styles of Web browser. The first version is text only. The most common is called Lynx, build on top of the UNIX operating system. It is a powerful but complex and inordinately difficult program. Lynx hides UNIX away and appears to be a user-friendly interface. It enables you to call up text pages from any computer linked to the Web and to make connections with related pages or files through hypertext links. These take the form of highlighted words or phrases on which the subscriber place the cursor, press Enter, and find themselves connected to another computer, site, page or file.

The problem with the Lynx approach is that subscribers can get no further than text. Graphics are beyond the reach of these browsers, unless the files are downloaded on to a disk without knowing what the content is. The second version is a Web browser such as Microsoft Internet Explorer that supports multimedia applications or a Windows-style browser (Goldstuck, 1995).

### **1.5.4. Internet transacting (e-commerce)**

Consumers can do various types of transactions by utilising the Internet. Examples of these transactions range from buying a book at

http://www.amazon.com, to doing home banking at  
http://www.standard.co.za.

Commercial Internet transacting functionality ranges from:

- (1) Placing an order button on a web page that sends an order request through to a vendor via e-mail, fax or other communication channels.
- (2) Renting a commerce enabled web page within a 'retail-mall' hosted at an Internet service provider. Services provided usually include marketing the mall on Internet search engines and in other media. Some ISP's will also do credit card transaction processing at a fee.
- (3) Hosting a web-server on the vendor's premise with transaction and stock level functionalities.

### 1.6. Continuous service delivery

The nature of consumer Internet services is a 'membership'/subscription relationship similar to insurance, banking services and pay television (Table 1.2).

**Table 1.2. Type of relationship between the service organisation and its customers.**

Nature of Service Delivery	Membership Relationship	No Formal Relationship
<b>Continuous Delivery of Service</b>	Insurance Cable TV subscriptions College enrolment Banking Automobile Association <b>Internet connectivity</b>	Radio station Police protection Lighthouse Public highway
<b>Discrete Transactions</b>	Long-distance calls from subscriber phone Theatre series subscription Travel on commuter ticket Repair under warranty	Car rental Mail Service Toll Highway Pay phone Movie theatre Public transportation Restaurant

(Lovelock, 1991:28.)

This relationship lends itself to high levels of segmentation feasibility and a single periodic charge, monthly or yearly covers the subscription charges. This model is simple, but can be unfair to people with lower usage patterns. Membership relationships usually result in customer loyalty to a particular service supplier.

The supply of Internet connectivity is similar to the supply of telecommunications, utilities and a financial services, that is continuous subscription based and focuses on maximising the customer lifetime value.

In these industries, lifetime revenues from an individual customer firstly depend on the duration of the provider-customer relationship and secondly, on the average monetary amount of the customer's purchases of services across billing cycles, which reflect both price structure and usage characteristics.

The duration of the provider and customer relationship is postulated to depend on the customer's subjective expected value of the relationship, which he/she updates according to an anchoring and adjustment process. It is hypothesised that cumulative satisfaction serves as an anchor that is updated with new information obtained during service experiences.

### **1.7. Problem Statement**

Internet Service Providers spend a substantial amount of money every year on service improvements and value-added services in order to increase service quality, customer satisfaction and relationship quality ultimately seeking customer retention. It has not yet been investigated what the relationship between these constructs is in the Internet industry. Validation of these relationships is thus the core management requirement.

Storbacka *et al.* (1994) argues that there are a number of assumptions made in the service quality literature about how quality leads to profitability. These should be verified in empirical research. The premise of this study is investigating the empirical validity of the proposed conceptual model within the Internet industry. The flow construct as behavioural construct will additionally be investigated in order to test the feasibility of behavioural profiling in the Internet industry.

Literature Objectives:

- (1) Investigating the construct service quality and customer satisfaction as described in service marketing literature. Service quality and customer satisfaction is reviewed in order to establish an understanding of the measurement and management of service delivery.
- (2) Investigating relationship strategy and management as described in relationship marketing literature. An overview of key strategic and operational issues of relationship management is given to introduce the concept of proactive customer retention or defensive marketing.
- (3) Investigating relationship quality/relationship strength as described in relationship marketing literature. The commitment of a customer (intention) and customer loyalty (behavioural) is an important component of the model. The best scenario for a service provider is when a client is both committed and loyal to the provider.

- (4) Investigating the relationship between service quality, customer satisfaction and relationship quality as described in the literature. An overview is given of the different relationships covered in the proposed model.

#### Qualitative objectives:

- (1) To develop a visual representation of an Internet service providers service design by utilising service blueprinting. Visualisation of service design is important in order to gain an objective understanding of the service delivery process. A picture is worth a thousand words.
- (2) To determine the fail-points in service delivery from the subscribers point of view. Looking from the subscriber's point of view insures that the experience of the subscriber receives paramount attention.
- (3) To prioritise fail-points to be addressed within the ISP. Because resources are scarce it is important to prioritise the areas that should receive attention in service delivery improvement initiatives.

#### Empirical Objectives:

- (1) Testing the reliability and validity of the SERVQUAL instrument for the measurement of service quality in the Internet industry. The SERVQUAL instrument is tested to see if it should be used in future tracking studies and primary research within the Internet industry.
- (2) Empirically confirming interrelationships between service quality, customer satisfaction and relationship quality. Understanding if service quality improvements really lead to customer satisfaction within the Internet industry. Thereafter establishing if these satisfied customers do in fact relate to stronger relationships. Stronger relationships are proven to lead to financially positive outcomes based on relationship marketing literature.
- (3) Testing hypothesis around different flow clusters with respect to customer satisfaction. If the different flow clusters does differentiate among different clusters of customer satisfaction, a concise flow questionnaire can be used to profile these clusters and different 'Internet Literacy' packages can be created in order to assure that as many as possible subscribers are moved to a satisfaction related cluster.
- (4) Testing hypothesis around a proposed association between value added services and respectively service quality, customer satisfaction and relationship quality. If it is proven that strong associations exists between value added services (which costs money to the service provider to deliver) and these constructs a business case can easily be prepared to substantiate the existence of these services.
- (5) Testing hypothesis around a proposed association between Internet satisfaction and respectively service quality, customer satisfaction and relationship quality. Because the Internet service provider does not have direct control over the Internet satisfaction of the subscriber it is important to assess which construct can be strongly affected by Internet satisfaction and dissatisfaction. An understanding of this

would enable the service provider to make informed decisions around counter measures and service recoveries.

- (6) Testing the relationship between relationship quality and customer retention. This objective translates to the business justification of relationship quality building initiatives.

Overview of methodology:

- (1) Primary research was conducted through an Internet based questionnaire. A questionnaire was hosted on an Internet page and invites e-mailed to the sample.
- (2) Service blueprinting was done to determine fail-points in service delivery. A visual representation of Internet service delivery assisted in the understanding of service delivery.

The resulting data was analysed with the appropriate multivariate techniques:

- (1) Reliability/Item analysis was used to determine the reliability of the SERVQUAL scale for usage in the Internet industry.
- (2) Confirmatory factor analysis was used to test the validity of the SERVQUAL scale for service quality measurement within the Internet industry.
- (3) Confirmatory factor analysis was used to determine the importance of the different SERVQUAL dimensions towards the overall service quality construct.
- (4) Structural equation modelling was used to confirm the causal relationships inherent to the proposed model.
- (5) ANOVA was used to analyse the differentiation of customer satisfaction on the premise of different flow clusters.
- (6) Multiple regression analysis was used to investigate the relationship between value added service satisfaction and the other constructs within the model.
- (7) Multiple regression analysis was done to investigate the relationship between relationship quality and customer retention.

### **1.7.1. Context**

The study was conducted at Intekom, a wholly owned subsidiary of Telkom SA. Intekom deliver both consumer and corporate Internet services. The scope of the empirical testing will be limited to consumer Internet services as supplied by Intekom.

In the Internet industry, where the cost of acquiring new subscribers is very high, margins low and future value accounting is an accepted business practice, subscriber retention is key to a profitable business model and thus an excellent experimental case.

## 1.7.2 Operational definitions as theoretical foundation of the study

### Service quality:

Service quality is the measure of service performance required versus service performance delivered to a subscriber. Service quality is not easy to measure due to the intangible nature of services. Other characteristics of services are also discussed in order to position service quality within the services marketing literature. A brief overview of total quality management and total quality of service management is given in order to differentiate 'quality management' for products and services. (See Chapter 2 for more detail)

### Service blueprinting:

Blueprinting provides an objective, visual and quantitative method for describing service systems down to the lowest level of detail. Through blueprinting, all parties involved in services marketing, management and planning can gain greater awareness of the complexities of service systems. Common ground for communication and a mechanism for capturing and sharing information across functional and organisational lines on an ongoing basis can help improve decisions and actions. One of the most difficult aspects of dealing with a service is describing it. (See Chapter 2 for more detail)

### Customer satisfaction:

Customer satisfaction is a holistic judgement of the total service experience that a subscriber has with the service provider. Customer satisfaction is the combined measure of various service engagements across multiple timeframes. It thus provides for a more stable construct over time than service quality, which is more incident driven. (See Chapter 2 for more detail)

### Internet satisfaction:

During the service blueprinting process, three main constructs were defined as the core of Internet utilisation. These constructs are:

- (1) Communicating on the Internet: Interacting or sharing meaning directly with an identifiable human interface.
- (2) Surfing on the Internet: Interacting directly with an automated response interface based on server software architecture.
- (3) Transacting on the Internet: Conducting a monetary transaction using the Internet as transaction channel and/or delivery mechanism. (See Chapter 1 for more detail)

### Relationship quality:

Services researchers from the early 1980's have drawn attention to the need to retain, as well as attract, customers. Relationship marketing recognises the value of current customers and the need to provide continuing services to existing customers so that they will remain loyal. Since the late 1980's, even



more research has been directed at customer retention issues. It seems to be very difficult to create service encounters in which customers perceive gains relative to their current satisfaction levels—thereby inducing them to stay longer with their service provider. Instead, service encounters seem to act as ‘triggers’ that can lead to the termination of a provider-customer relationship (Fisk *et al.*, 1993:61-103). (See Chapter 4 for more detail)

Core and value added services:

The core service of a company is the core deliverable that a subscriber buys. In the case of an Internet Service Provider, the core is the retailing bandwidth. Bandwidth is the ‘carrier’ of Internet traffic. The value added services enables a ‘Internet experience’, a cluster of services, around the bandwidth core.

Examples of value added services are telephonic customer support assisting in configuring an Internet connection and an e-mail account in order to utilise the Internet as an effective communication tool. Value added services will be investigated as a potential driver of service quality, customer satisfaction and relationship quality. (See Chapters 3 and 4 for more detail)

The Flow construct:

In the relationship marketing literature, mention is made of psychological bonds that people develop with a service. These bonds are ‘healthy’ ways of building loyalty with subscribers. In this study the ‘FLOW’ construct will be investigated as a potential profiling construct related to customer satisfaction. In other words, is higher Internet literacy associated with customer satisfaction?

The Flow construct enables the classification of subscribers according to different psychological states. Examples of these states include boredom, anxiety, indifference and flow. Flow is associated in the literature with a high level of positive affect. The classification occurs on two axes, namely challenge and skill level, that the subscriber experiences while engaging in the service. (See Chapter 2 for more detail)

## **1.8. Overview of the chapters to follow**

Chapter Two provides a literature synopsis around the marketing of services in order to enlighten the service quality and customer satisfaction constructs. The service quality discussion begins by defining service quality, then contrasting service quality and goods quality, thereafter investigating the GAPS model in order to create context for the SERVQUAL instrument that is utilised for the measurement of perceived service quality.

Customer satisfaction measurement is then further explored as well as the Flow construct, continuous service delivery and service blueprinting.

In Chapter Three, the focus turns to relationship issues. An investigation of relationship marketing constitutes an introduction for issues pertaining to loyalty and relationship building. Special attention will be given to the role of technology in relationship marketing.

Chapter Four focuses on the literature substantiation of the conceptual model – service quality leads to customer satisfaction, which in turn leads to relationship quality. The underlying dynamics of these relationships are also discussed in order to present the dynamic nature of relationship quality.

Chapter Five is the methodology chapter. The instrument as well as sampling and collection are presented in this chapter.

Attention then turns to multivariate analysis. Multiple regression and factor analysis is covered. Structural equation modelling is then investigated as analysis technique for the core relationships proposed in this study.

The selection of techniques for analysis as well as a structured approach to multivariate analysis is presented.

Chapter Six encapsulates findings and recommendations with academic and practical implementation perspectives.

## **1.9. Summary of chapter 1**

The Internet industry in South Africa is an extremely fast growing industry. As the cost of acquiring new customers becomes higher, competition intensifies and as the market becomes more saturated the focus moves towards future revenue from existing customers.

With a base line understanding of the Internet and consumer Internet services attention will now shift towards service marketing/management and relationship marketing/management as potential enablers of customer longevity.

In the next chapter service quality, customer satisfaction and service blueprinting within the domain of services marketing will be discussed.