ELECTRONIC COMMERCE APPLICATIONS AND RESTRICTIONS IN THE LONG TERM INSURANCE INDUSTRY

by

CHANTAL MEYER

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Supervisor : Prof. N. Lessing

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SYNOPSIS

Name	:	MEYER, C.
Degree	:	M Com. (Business Management) (Short Dissertation has a 25% weight)
Title	:	Electronic Commerce Applications and Restrictions in the Long Term Insurance Industry
University	:	Rand Afrikaans University
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This study investigates the use of electronic commerce within the long term insurance industry in South Africa and the related legislative and compliance issues, together with certain restrictions.

To understand the factors for the successful implementation of electronic commerce applications in the long term insurance environment the current internet usage and needs of the market is investigated. It is found that internet usage is growing phenomenally. Electronic commerce is thus a viable business-to-consumer option for insurers and can provide an insurer with a significant competitive advantage.

The study shows that the current legislative environment allows for the increased use of electronic commerce by accepting electronic data as sufficient for evidentiary purposes in courts of law and allowing electronic contracting. This enhances the attractiveness of electronic commerce for long term insurers.

Despite the competitive advantage that electronic commerce can provide an insurer with, there are still restrictions to its widespread use. The study shows that the main factor leading to the failure of long term insurance electronic

commerce initiatives is consumer ignorance in respect of on-line privacy and security.

Investigation reveals that a number of factors do exist that are critical for successful implementation of an electronic commerce initiative in the long term insurance industry. These factors can be summarised as the use of new technology, new views on electronic commerce, empowerment of users and the integration of distribution channels to allow customers a holistic insurance experience.

SINOPSIS

Naam	:	MEYER, C.
Graad	:	M Com. (Ondernemingsbestuur) (Skripsie het 'n 25% gewig)
Titel	:	Elektroniese Handelsgebruike en Beperkings in die Langtermyn Versekeringsbedryf
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Hierdie studie ondersoek die gebruike van elektroniese handel binne die langtermyn versekeringsbedryf in Suid-Afrika en die relevante wetgewing en voldoeningsvereistes, tesame met sekere beperkinge.

Ten einde die faktore te verstaan wat nodig is vir die suksesvolle implementering van elektroniese handelsgebruike in die langtermyn versekeringsbedryf word die huidige internet gebruike en behoeftes van die mark ondersoek. Daar is gevind dat internet gebruik met rasse skrede groei. Elektroniese handel is dus 'n lewensvatbare besigheid-na-gebruiker opsie vir versekeraars en kan 'n versekeraar van 'n wesenlike mededingende voordeel verskaf.

Die studie wys dat die huidige wetgewende omgewing voorsiening maak vir die toename in die gebruik van elektroniese handel deurdat elektroniese data as voldoende vir bewysregtelike gebruik in howe beskou word en elektroniese kontraktering word ook toegelaat. Hierdie verhoog die aantreklikheid van elektroniese handel vir langtermyn versekeraars.

Ten spyte van die mededingende voordeel wat elektroniese handel aan versekeraars verskaf is daar steeds beperkinge op die algemene gebruik daarvan. Die studie dui aan dat die hoof faktor wat lei tot die mislukking van

elektroniese handel inisiatiewe in die langtermyn versekeringsbedryf, verbruikers is wat oningelig is met betrekking tot aan-lyn privaatheid en sekuriteit.

Die studie dui aan dat daar 'n aantal faktore bestaan wat noodsaaklik is vir die suksesvolle implementering van elektroniese handelsgebruike in die langtermyn versekeringsbedryf. Hierdie faktore kan opgesom word as die gebruik van nuwe tegnologie, nuwe sienings oor elektroniese handel, die toerusting van verbruikers met die nodige kennis en die integrasie van verkoopspunte, om sodoende die verbruiker 'n holistiese versekeringservaring te bied.

I would like to dedicate this study to my husband and thank him for his love and support during my studies.

I would also like to thank my dad for inspiring me to study and his love and support.

To our Almighty God, Jesus Christ – all the glory.

Electronic Commerce Applications and Restrictions in the Long Term Insurance Industry

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Chapter 1 : Orientation

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Chapter 1 : Orientation

1.1 BACKGROUND

Electronic commerce can be defined broadly as :
"... any interaction between an organisation and its trading community, undertaken in an electronic manner ..." (Chesher & Kaura 1998 : 94)

This definition encompasses the many kinds of business activities that are being conducted electronically, and conveys the notion that electronic commerce is much more comprehensive than simply the purchasing of goods and services electronically.

Electronic commerce is transforming the global marketplace and its impact is being felt across the full range of business and government. Electronic commerce requires an open, predictable and transparent trading environment, which operates across territorial borders and jurisdictions. To foster such an environment and to realise its full economic potential necessitates international co-operation, which will be instrumental in developing the enabling conditions for its growth.

Countries have to work together to remove barriers or impediments to the free flow of electronic products and services across jurisdictions and by resolving problems that may arise due to its borderless character. Government is shown to be the appropriate vehicle to ensure that this is possible.

The transition of the global economy from an industrial focused one to one based on knowledge and information presents numerous opportunities and challenges to countries, especially those in the developing world. This new paradigm has a significant impact on the way people lead their lives. It is enabled by the use of Information and Communications Technologies (ICTs), which have led to the compression of time and space. However, lack of infrastructure, prohibitive costs of access to infrastructure where it is available, poor quality of infrastructure, shortage of relevant skills, low levels of literacy and inadequate investment in technological development are hindering progress toward exploiting the new generation of ICTs in developing countries.

The main benefits of electronic commerce are demonstrated by the following achievements:

- Improved response time – a quick and cost efficient way through which to communicate and update information;
- Improved competitive positioning - electronic commerce has a potential to level the playing field for small and large entities throughout the world. Small and Medium Enterprises and public sector customers reap the benefits of electronic commerce;
- Ease of concluding deals and financial transactions - click-and-pay technology is gaining popularity as a means through which to transact. Published information, communicating, buying, selling, paying and checking orders occurs 24 hours a day, 365 days a year;
- Extended market reach and thus increased revenue potential - geographic barriers or boundaries are removed. There is an increased number of Internet users to market products and services at lower cost and much faster;
- Increased consumer convenience and choice - consumers can easily locate hard to find goods and services, and also have a wide choice from which to make a purchase anytime, anywhere;
- Reduced prices - increased competition forces organisations to produce better quality products at reduced cost;
- Improved customer service - information is shared more quickly through the use of an electronic medium;

1.2 PROBLEM DEFINITION

Based on the short background above, it is clear that electronic commerce will gain momentum in business activities. Seen against the growing entrepreneurial sector in South Africa, where many business participants still need to be educated and have easy access to business transactions, the question arises how electronic commerce will affect day-to-day long term insurance activities. The researcher must thus determine the attractiveness of electronic commerce for current South African long term insurance activities.

There are no (local) recorded field studies and or research results to give an indication of the effectiveness of electronic commerce in daily business activities.

The problem that this study will investigate is the possible applications and restrictions to the use of electronic commerce in the long term insurance industry. This problem can be broken down into the following manifestations:

1.2.1 Problem 1: The extent of electronic commerce activities

Electronic commerce has become a foundation of many large companies. It is important for companies to know the extent to which potential customers use electronic commerce applications for purchases of goods and services.

1.2.2 Problem 2: The needs and characteristics of the electronic commerce market

Organisational change is needed to bring about improvements in electronic commerce business productivity. In order to achieve this a company must understand the needs and characteristics of its electronic commerce market.

1.2.3 Problem 3: The impact of legislation on electronic commerce business

Legislation can either hinder or improve electronic commerce transactions. In South Africa the legislation has improved the environment for electronic commerce to be more generally applicable. The impact of legislation and rights in respect of security and privacy are investigated.

1.2.4 Problem 4: How to satisfy the electronic commerce needs of the long term insurance industry

Although part of the financial services industry, the long term insurance industry is very much regulated by separate legislation and a voluntary regulator. The needs of this industry in respect of electronic commerce activities are investigated.

1.2.5 Problem 5: Barriers and risks posed to long term insurers by electronic commerce

Even though there might be needs of long term insurers that can be addressed by way of the introduction of electronic commerce activities, there are still barriers and risks to the implementation of everyday electronic commerce. These barriers and risk are investigated and discussed and guidelines provided.

1.3 RESEARCH OBJECTIVES

This study will have as its main objectives to investigate the extent of the electronic commerce market; to identify the needs and characteristics of that market; to investigate the impact of legislation on electronic commerce; to investigate how to satisfy the electronic commerce needs of the long term insurance industry and to identify the

possible risks and barriers of entering into the electronic commerce arena.

1.3.1 Objective 1: Investigate the extent of electronic commerce activities

The primary objective of this study is to explore the desirability of using electronic commerce in the long term insurance industry. In order to understand the need for electronic commerce in this industry, it is necessary to understand the extent of electronic commerce activities in general. In **Chapter 2 – The Extent of Electronic Commerce Activities,** a report is given on a study of current literature to determine the current use of electronic commerce by consumers.

1.3.2 Objective 2: Identify the needs and characteristics of the electronic commerce market

A literature study of the electronic commerce consumer in general was conducted to establish the needs and characteristics of these consumers. **Chapter 3 – Needs and Characteristics of the Electronic Commerce Market** contains the results of the literature study.

1.3.3 Objective 3: Investigate the impact of legislation on electronic commerce business

A study was done on current literature, including legislation, to determine the impact of legislation on electronic commerce. This study is reported in **Chapter 4 – The Impact of Legislation on Electronic Commerce Business.**

1.3.4 Objective 4: Investigate how to satisfy the electronic commerce needs of the long term insurance industry

It is important to understand the electronic commerce needs of the long term insurance industry in order to know how to satisfy these. A study was done on current literature to determine these needs. This study is reported in **Chapter 5 – Satisfying the Electronic Commerce Needs of the Long Term Insurance Industry.**

1.3.5 Objective 5: Determine the barriers and risks to the successful implementation of electronic commerce in the long term insurance industry

A literature study on the successful implementation of electronic commerce initiatives was conducted in order to determine what barriers and risks exist that could hinder successful implementation. **Chapter 6 – Barriers and Risks Posed to Long Term Insurers By Electronic Commerce,** contains the results of this literature study.

1.4 RESEARCH METHODOLOGY

In order to answer the research problems and to achieve the stated research objectives of this short dissertation, the following methodology was followed.

An extended literature study was undertaken on each of the stated objectives. The literature study serves to document current viewpoints and principles on the stated research subjects.

From the literature study the electronic commerce needs of the long term insurance industry are determined and factors for the successful implementation of electronic commerce initiatives listed.

1.5 DEMARCATION OF STUDY

Although it is needed to establish the extent of the generic electronic commerce market, the focus of the study is on the use of electronic commerce in the long term insurance industry.

This study deals exclusively with the needs of long term insurers and the barriers and risks specific to their electronic commerce initiatives.

1.6 CLOSURE

The main objective of this study can be broken down into five sub-objectives:

- to investigate the extent of electronic commerce activities;
- to identify the needs and characteristics of the electronic commerce market;
- to investigate the impact of legislation on electronic commerce business;
- to investigate how to satisfy the electronic commerce needs of the long term insurance industry;
- to determine the barriers and risks to the successful implementation of electronic commerce in the long term insurance industry

The next chapter will discuss the extent of electronic commerce activities.

Chapter 2: The Extent of Electronic Commerce Activities

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Chapter 2: The Extent of Electronic Commerce Activities

SYNOPSIS

This chapter investigates the extent to which consumers use electronic commerce for their daily business transactions. The size of the market is established in accordance with recent surveys undertaken. The purpose of this discussion is to create an understanding of the volumes of electronic commerce a company might expect when expanding its business to include electronic commerce business

When the size of the market is discussed it is important to note the variables of gender, education and income. These factors are mentioned as specific enhancers or inhibitors of the usage of electronic commerce applications. This provides a view of the advantage that can be achieved when these factors are taken into account in implementing an electronic commerce strategy in a company.

The ways in which the affected market uses the internet and electronic commerce is discussed in order to allow a company to understand where it will benefit from introducing electronic commerce applications in its business.

Chapter 2 – The Extent of Electronic Commerce Activities

2.1 INTRODUCTION

In broad outline the debate regarding the influence of electronic commerce on business in general and long term insurance specifically, has highlighted the following:

- Existing laws do not provide an adequate framework for encouraging legitimate use of the technologies that facilitate electronic commerce or to protect against the abuse of such technologies;
- Legislation is required to recognise the basic tenants of electronic commerce, being electronic communication, contracts, and signatures;
- South Africa lags behind many sophisticated electronic commerce jurisdictions and trade partners with regard to data protection and privacy. This will be a deterrent for companies in foreign countries considering e-trade with South Africa;
- It is imperative that South African electronic commerce law evolves in harmony with International Developments. There is a clear need to participate in international forums and give recognition to acceptable international regulatory tools, such as the UNCITRAL Model law on electronic commerce;
- Legislation should be aimed at "light–touch" governance providing a basic framework and structures within which the markets can decide the detail of regulation. Legislation should be limited to removing the uncertainty in existing law and addressing obvious abuses;
- Government control of infrastructure bodies facilitating electronic commerce such as Certification Agencies and Domain Naming Authorities is not seen to be appropriate or advantageous. It might even restrict electronic commerce development. Government's active participation in and support for such private enterprise bodies or infrastructures would be welcomed and, in some instances, be essential;

- The co-operation of the public and private sectors in the provision of necessary and enforceable regulation is essential and government must create structures that encourage this collaborative effort;
- The necessity for finding practical methods of establishing the infrastructure required to meet South Africa's needs for internet access would best be served by "competition within a regulated environment";
- Government's role in providing incentives and subsidisation to address current imbalances in the internet environment and encouraging innovation in the provision of services to under-serviced areas is stressed and deemed of critical importance;
- There is concern that the current mechanisms of law making and governance are not adequate to meet the challenges of the information age and new economy with the necessary urgency. The exploration of regulatory mechanisms that provide the flexibility and collective wisdom of both public and private sectors need to be explored and developed;
- In addressing the tax issues it is important that South Africa follow the lead of major trading partners and international bodies;
- The private sector has to take more responsibility for self-regulation if it wishes to have the benefits of "light touch" government. Greater awareness of the challenges of electronic commerce must be fostered at business and industry levels and self-regulatory mechanisms implemented;

The development of an electronic commerce policy in South Africa is based upon the following set of underlying principles:

- <u>Quality of life</u>: to improve the quality of life of people through the optimal use and the exploitation of electronic commerce, thus ensuring socio-economic development and facilitating equitable development. This is consistent with the constitutional requirements and obligations;
- <u>International Benchmarking</u>: to ensure international consistency, alignment and harmonisation, South Africa needs to be in line with international treaties and develop an electronic commerce policy that is based on

international trends and benchmarks while taking cognisance of South Africa's special requirements;

- Consultative process: to be consultative, transparent and to balance the interests of the broader spectrum of stakeholder through the solicitation of the public to participate in the deliberations. This is an ongoing process and has been taking place via electronic and written submissions by individuals and interest groups;
- Flexibility: to be flexible in establishing rules and regulations for governance. The introduction of new measures and elements into law will take place within the relevant branches of law;
- Technology neutrality: to cause the proposed legal framework be technology neutral;
- Supporting private-sector-led and technology-based solutions and initiatives wherever possible;
- Public-Private partnership: to establish public/private partnerships that will promote and encourage the development and use of electronic commerce. The private sector will remain a critical driving force in the effort to optimise the potential of electronic commerce;
- Supporting small, medium and micro enterprises (SMMEs) and informal sector: to facilitate the promotion and development of SMMEs and the informal sector, and contribute to their speedy adaptation of electronic commerce.

What characterises the digital economy is the pervasiveness of technology in all types of market processes and products, from online grocery shopping to purchasing financial products off the internet.

There is a growing internet presence of market sectors relevant to the long term insurance industry, such as: (Overland Presentation).

- On-line banking;
- On-line access to managed funds;
- On-line securities trading.

Implications for the financial services industry, including the long term insurance industry:

- direct consumer access to the markets;
- disintermediation will increase as clients access the markets directly and the need for financial intermediaries decrease;
- there will be greater consumer access to information;
- the challenge will be to balance consumer protection against consumer freedom.

2.2 DEFINITION OF AN INTERNET USER

Various surveys use different definitions of an internet user. Some surveys define an internet user as an adult or child who has accessed the internet at least once in the prior three months. Nielsen excludes users under the age of 16 and employs a narrower time frame of usage during the last month only (Shaw *et al* 2000 : 107). Although differences in definitions will alter the results, the trends will be consistent across surveys.

2.3 SIZE OF THE MARKET

As of 1998 the worldwide population of internet users is estimated to be in excess of 147 million. Internet usage in Northern America has grown steadily from an estimated 20 million users in 1994 to an estimated 80 million in 1998 (Shaw *et al* 2000 : 108). Surveys done in late 2002 places the worldwide usage at closer to 544 million users (Kok 2003 : 5). Of the estimated 4.15 million African users, in the region of 2.4 million are South Africans.

It is clear that surveys cannot pinpoint the exact number of users. They do however grant guidelines to companies for marketing purposes. It is also important to note that a majority of internet users connect only to the email application of the worldwide web and rarely use the search facilities.

It was found that 36% of users accessed the web from work. In some counties web access are restricted to a few staff members in the work place with access to the full range of internet applications (Shaw *et al* 2000 :103). It does however appear that internet access in most cases are restricted to email applications.

This entails that the success of future electronic commerce ventures will be based on the electronic media skills of consumers. The criteria for electronic market places are therefore to keep computer skills to a minimum allowing access to even lowly skilled users (Shaw *et al* 2000 : 107)

2.3.1 Gender

Internet users have historically been predominantly male. This gender gap is however steadily reducing. Female usage has increased from 5.1% in 1994 to 38.7% in 1998 in the United States. (Shaw *et al* 2000 : 109). In Europe users continue to be primarily male, in the region of 78% of users are male.

The increase in female users is a trend being observed with great interest, since women account for up to 70% of all retails sales. The more the females are connected to the net, the greater the sales opportunity since they are the primary household purchasers. Women like the net because it is convenient, empowering and fun. Marketers that want to target the premier household purchaser must make their site interactive and personal, trying to serve useful content in an easy to access format.

2.3.2 Education

The typical internet user is well educated with nearly 50% of users having obtained at least a bachelor's degree. (Shaw *et al* 2000 : 112). Although there has recently been a decline in usage by people with masters and doctoral degrees, as well as high school graduates and a slight increase in people attaining bachelor degrees. The decline in high school usage cannot be seen as a definite trend reversal. Future surveys will clarify this situation.

It appears that the well-educated contingent of the internet population includes the more established users. This is a reflection on the initial establishment of the internet for research purposes.

2.3.3 Income

Historically the disposable income of internet users has been significantly above the average of the general population. There are barriers to obtaining internet access that would suggest that the mean income of internet users would remain above the average. There are two kinds of barriers to internet access, namely technical and monetary. Internet access requires a computer, which remains a major expense to most households, as well as an account with an internet service provider. The potential internet user also needs to have a minimum proficiency level in computer usage.

The average income of internet users have been declining steadily, reflecting on the access to the internet becoming cheaper (Shaw *et al* 2000 : 113). The percentage of affluent users has begun to rise again, perhaps reflecting the increased availability of web-based tools for managing personal finances.

2.4 HOW THE AFFECTED MARKET USES THE INTERNET

During a 1997 survey it was found that 87.8% of people connecting to the internet do so in order to gather information; 83.2% connect to send email and 80.5% conduct research on the internet. (Shaw *et al* 2000 : 103). Online users find information on companies and products, but also look for news, weather, recipes and similar information. Knowing your customers and what they look for in an internet experience is very important in product positioning and in ensuring repeat visits to your site.

2.5 HOW TO ATTRACT ELECTRONIC COMMERCE CUSTOMERS

More than 1.6 million commercial sites currently operate on the internet, all in fierce competition for the attention of potential buyers (Hoffman & Novak 2000 : 179). Electronic commerce companies find that it takes enormous marketing expenditures to set themselves out from the crowd. For most their average customer acquisition cost is higher than the average lifetime value of their customers.

Those companies that have been able to bring their customer acquisition cost down will have the best chance to thrive. It appears that affiliate marketing might be a solution to saving costs and acquiring new customers (Hoffman & Novak 2000 : 183). Hereby a company motivates other companies to put up links on their sites to its own.

Once proven to be effective and attracting increasing numbers of customers to its own site via its affiliates, for example like Amazon.com, the company can launch a revenue-sharing arrangement. When a customer clicks through from an affiliate's website to its own and actually concludes a purchase, the company can revert a set percentage of the sale revenue back to the affiliate. The company can also pay varying percentages of sale revenue to its affiliates using a sliding scale based on volume when visitors click through and make a purchase.

This method allows a company to acquire new customers, allowing the company to advertise to potential customers it would otherwise not be able to reach. It also saves on the administrative burden of buying advertising on all the affiliate sites and cuts costs of advertising on the various affiliate's websites.

Most important about these revenue-sharing programs is that they build on the interconnections intrinsic on the internet and on the internet's ability to track and monitor transactions in real time. A company can now establish exactly how many visitors arrive from each affiliate's site and how many buyers are converted into customers. Armed with the number of new customers, the number of repeat customers referred from each affiliate's site and its own data on the average profit of each customer a company can now establish the lifetime value of a customer. This figure is a yardstick for the effectiveness of its internet presence.

2.6 CLOSURE

Clicks-and-mortar businesses are here to stay. Whether a company establishes a separate or integrated electronic commerce presence will be determined by the company's ability to manage the trade-offs between integration and separation.

By avoiding an either-or choice and considering each aspect of its business on its own, a company can strike a balance between the freedom, flexibility and creativity that come with separation and the operating, marketing and information economies that come with integration.

The number of internet related statistics and companies that produce research on the subject has increased dramatically in the past few years. It is therefore essential to identify reliable sources of information and dependable data. In the first instance it is difficult to define internet users. They can either be people using all applications available on the net regularly or people merely using e-mail facilities. Whatever definition is used may influence the statistics but at least the trends will be similar.

This is what is needed by companies to establish a proper electronic commerce strategy. They need to know who will be reached; whether they will fall within the company's target market in respect of demographics and income and whether it will be a viable option of extending trading into the electronic commerce realm.

The next chapter discusses the needs and characteristics of the electronic commerce market.

Chapter 3 – Needs and Characteristics of the Electronic Commerce Customer Market

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Chapter 3 – Needs and Characteristics of the Electronic Commerce Market

SYNOPSIS

This chapter investigates the needs and characteristics of the market that uses electronic commerce.

Within the chapter the concept of need recognition is discussed as a basis for the successful introduction of electronic commerce into a company.

The needs of the markets as discussed in this chapter are:

- problem definition;
- information collection;
- alternative evaluation;
- choice;
- transaction and post-sales service;
- personal effectiveness;
- competitive edge.

The criteria for the successful transition to electronic commerce in the financial services industry, inclusive of the long term insurance industry is investigated

Chapter 3 – Needs and Characteristics of the Electronic Commerce Market

3.1 INTRODUCTION

The financial services sector has energetically embraced information technology electronic commerce, causing dramatic changes in the way that some of these services now operate. Traditional trading floors have been replaced by screens and keyboards to enable electronic trading to take place. Insurance companies investing in foreign markets for themselves or on behalf of customers need to have a complete picture of their investments worldwide, in order to set limits to such holdings to minimise risk and potential exposure by adverse fluctuations.

Organisational change is needed to bring about improvements in business productivity. Many industries, like the long term insurance industry, command a uniqueness reflected in specific business processes. Electronic commerce has since the mid 1980's been seen as an important management tool in the fight to achieve business productivity improvements (Chesher & Kaura 1998 : 15).

Assuming parity of product or service, the ability or organisations to achieve and edge over the competition, combining a compelling marketing mix with the innovative use of electronic commerce, will not continue indefinitely. The challenge is to extend the window of competitive edge for as long as possible, since over time competition will move to adopt the new practice and it then becomes the benchmark. Those organisations not adopting will suffer competitive disadvantage and for the market leaders the search for new forms of competitive differentiation will continue.

3.2 NEED RECOGNITION

A key difference with use of the internet as a marketing medium is that the consumer has more control of the information. Television commercials and other marketing material is chosen by the seller and presented to the potential buyer as and when the buyer believes it to be most effective, for example just before month end or on peak time television.

Web pages on the other hand are accessed only at the discretion of the user. Unless the user experiences a felt need, the consumer will not necessarily access various pages to learn about new products the way he may notice them on store shelves or television. Therefore, marketing tools traditionally used to arouse a sense of interest or need amongst consumers must be reconsidered.

3.3 THE NEEDS OF THE MARKET

When people purchase at an electronic store, they may have different considerations. A well-designed website must support the following customer needs.

3.3.1 Problem Recognition

It is helpful if the system can generate an environment to help customers recognise problems. (Shaw *et al* 2000 : 219). Consumers therefore prefer well-designed sites with well-organised contents. Products must be organised in a creative way to stimulate customer imagination.

A customer will believe that his needs have been satisfied if he logs onto the website and can in a logical and clear way get his questions answered or access the product he is interested in. An indication on the website of the current number of visitors will give the customer an indication of whether it is worthwhile to continue interacting on that website.

3.3.2 Information Collection

Customers collect useful information during their decision process. This information helps them to evaluate products and eventually influences their decision. (Shaw *et al* 2000 : 220). A well-designed website should therefore allow customers to collect as much information as possible at a glance, without clients having to phone the call centre to finalise their purchases.

A customer wants to find information quickly. A good mechanism for finding a particular product or service is essential. In addition value-adding information, for example current share prices on a financial website, will be useful to customers.

3.3.3 Alternative Evaluation

The customer still needs to compare his potential purchase with other products or services just as if he was in a real store. This evaluation process will also allow him to decide whether to purchase electronically or traditionally (Shaw *et al* 2000 : 220).

Price and product attributes on a comparison scale can at glance influence the customer's decision. In addition it is good to provide on-line customer support where customers can e-mail queries to or support in the form of frequently asked questions and answers.

To reduce the uncertainty for new electronic commerce consumers, it will be helpful if a call centre is available to answer further queries.

3.3.4 Choice

It appears that customers like having choices, but also not too many. They prefer the company to pre-screen alternatives geared to their needs. For example, on an insurer's website the possible portfolio selections on investments can run into the hundreds. Rather tone this down to the twenty best-performing portfolios over short, medium and long term. A customer wants to state his preferences once and get a suggestion as to the best product or service to fulfil their needs. He does not want to re-enter his preferences time and again until the search facility on the website comes up with a possible matched product or service.

The customer needs tools to assist him in making a choice at the time that he needs to make a trade-off among all the criteria (Shaw *et al* 2000 : 221). The website can provide support and even recommend more purchases with the provision on shopping trolleys.

The system can also assist customers by providing choice models to choose the proper product for each customer. In the case of budget restraints tools that recommend substitute products or more choice may also be helpful.

3.3.5 Transaction and Post-Sales Service

Customers need friendly and easy transaction processes together with post-sales service to ensure a worthwhile online shopping experience (Shaw *et al* 2000 : 218). Repeat visits to the site can only be ensured if these criteria are met.

Electronic commerce customers need the following services while transacting and post-sale:

- on-line purchasing facilities;
- alternative delivery vehicles, for example express mail;
- different payment method, for example credit card and money order facilities;
- inquiring about the status of their order and tracking delivery;
- time frames for product returns or cooling-off periods during which products can be returned without the contract coming into existence, thereby creating no further obligations for the customer.

3.3.6 *Personal Effectiveness*

Dramatic price/performance improvements in computer technology now offers increased processing power and information storage on the desktop never thought possible fifteen years ago. This has given birth to a complete new industry in software products that aims to service corporate information requirements at the desktop, including e-mail, spreadsheets and bulletin boards.

These improvements satisfy the very need of the insurance salesman to be effective in his job. The conventional way of doing business was centred around finding customers either by mailings, the telephone or face-to-face meetings, where the salesperson sought to match the latent needs of the customer with the insurance product or service from the insurer. The salesperson no longer has to revert back to his office to do calculations and confirm quotes. These actions are now being done at the client's premises on a laptop connecting to the insurer's website or using the quotation-program specifically developed for that insurer, for example the Blueprint system used by Liberty Group Limited.[1]

3.3.7 Competitive Edge

Computer-based applications supporting electronic commerce initiatives are becoming progressively more critical to business success as the emphasis swings even more to the customer and the emergence of electronic market places. Electronic market places allow the organisation to establish an electronic presence that its customers may prefer using rather than the conventional approach by intermediaries.

[1] Liberty introduced this system during the 1990's granting its intermediaries instant access to a quote system based on the specific client's financial needs based on an analysis also incorporated into this system.

The interactive capabilities, availability and abundance of "live" information are all unique to electronic commerce, inclusive of internet trading. This allows a consumer access to a wide range of sales materials, giving the buyer and unprecedented level of control in sales situations, with virtually no pressure to purchase.

It is a combination of computing power and data communications via electronic commerce that allows a company to develop new business applications that provide an edge over competition. This is typically achieved by incorporating information technology, inclusive of electronic commerce, into their products and services, offering the opportunity for improved customer service (Chesher & Kaura 1998 : 27).

3.4 THE SUCCESSFUL TRANSITION TO ELECTRONIC COMMERCE IN THE FINANCIAL SERVICES INDUSTRY

The successful transition can only take place if the following factors are taken into account: (Overland Presentation):

- a single licensing regime for all financial service providers, including long term insurers, should be established;
- all financial products and services should be regulated uniformly; and
- there should be uniform conduct and disclosure requirements for all financial service providers.

3.5 THE RIGHT MIXTURE OF BRICKS AND CLICKS

Companies are recognising that success in the new economy will go to those who can combine electronic commerce strategies and traditional commerce strategies that bridge the physical and virtual worlds. The ultimate executive strategy question will be whether to integrate internet business with traditional business or whether to keep the two separate (Gulati & Garino 2000 : 107). Integration can offer various benefits such as cross-promotion and, distribution economies.

A company should examine four business dimensions – brand, management, operations and equity – and then determine the degree of integration that makes sense along each.

3.5.1 Brand

The choice to integrate brands or keep them separate is largely a choice between trust and flexibility. Extending a company's current brand to the internet gives instant credibility to the website. The company's current internet-savvy customers will provide immediate traffic and revenue and new customers will know the site is legitimate. Brand integration can also result in a virtuous circle, sending on-line customers to the company's branches and traditional customers on-line, all the while building the brand (Gulati & Garino 2000 : 113).

3.5.2 Management

Whether a company should integrate or separate its management teams is a subtler question whose answer hinges both on company attitudes an on the company's business model. An integrated team can better align strategic objectives, find and exploit synergies and share knowledge. Separate teams on the other hand can focus more sharply, innovate more freely and avoid contaminating one business model with another (Gulati & Garino 2000 : 113).

3.5.3 Operations

Decision regarding integrating operations should be based on the strength of a company's existing distribution and information systems and their transferability to the internet. Integration can provide costs savings, a more exciting and compelling site and a competitive advantage over competitors trading only in physical ways.

Separation on the other hand allows a company to build state-of-the-art, customised systems without the flaws of legacy systems. It also allows development of sophisticated internet-specific distribution capabilities that could provide a superior customer experience. (Gulati & Garino 2000 : 113).

3.5.4 Equity

Should the physical company own or spin-off its internet interest? Integration allows the parent company to capture the entire value of its internet business. Separation can help attract and retain talented managers and provide access to outside capital. Separate ownership can also offer greater flexibility in partnering with other companies (Gulati & Garino 2000 : 113).

3.6 CLOSURE

To the extent that internet technologies offer an alternative medium to existing business practices, conventional business models could be extended to the digital economy without major modifications. For example, applications that improve and augment established operations and business relationships, such as intranets and extranets, have proven to be a winning strategy. The open and interoperable networking allows market agents to interact as they do in the physical market, but agents in the digital market are devoid of physical constraints and endowed with computing technologies aiding and influencing their decisions (Shaw *et al* 2000 : 27).

It has been widely assumed that the internet is cannibalistic and will replace all traditional ways of doing business and will overturn all the traditional advantages. This has been proven to be a vast exaggeration. Real trade-offs can exist between internet and traditional business activities.

In many cases the internet complements, rather than cannibalises a company's traditional activities. Internet applications address activities that, while necessary, are not decisive in competition, such as informing customers, processing transactions and procuring inputs (Porter 2001 : 73).

In the next chapter the impact of legislation on electronic commerce business will be discussed.

Chapter 4 – The Impact of Legislation on Electronic Commerce Business

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Chapter 4 – The Impact of Legislation on Electronic Commerce Business

SYNOPSIS

This chapter investigates the legal issues surrounding the introduction of electronic commerce into a business. The concepts of privacy and security are discussed in order to show the importance of adhering to these concepts when conducting electronic commerce business.

The Electronic Communications and Transactions Act is discussed as it impacts on the following concepts:

- Maximising Benefits
- Certainty in Law
- E-government
- Security
- Consumer Protection
- Domain Name Registration and Protection of Internet Service Providers

Chapter 4 – The Impact of Legislation on Electronic Commerce Business

4.1 INTRODUCTION

The current legal framework is tailored for paper-based commercial transactions. Therefore a need exists to formulate a new legal framework that also includes those transactions that are concluded electronically. From a policy perspective such a legal framework would have to address all the different factors and challenges that are associated with using an information and communication technology platform for a transaction to be legally valid.

Legal challenges around policy formulation in electronic commerce basically revolve around the following issues to mention but a few:

- the application to electronic communications of statutory provisions which mandate paper or paper-based concepts such as original, writing and signature;
- Electronic formation of contracts;
- Admissibility of electronic evidence;
- Authenticity and integrity of electronic communications;
- Information of material significance to confirm or enforce certain obligations to both dispatcher and recipient of goods or services, such as the time and place of dispatch and receipt of electronic information;
- Protection of the consumer;
- New laws applicable and the relevance of the older ones.

To provide a certain and stable environment for conducting business, consumer protection becomes critical. The reason is that while the new environment provides new opportunities for business, it also brings new types of threats in the form of electronic fraud, cybercrime and new forms of cyber terrorism. The main areas that are cause for concern include privacy, fair trade, copyright protection, access by law enforcement agencies to information, increasing cross border business in consumer trade, computer crime, hacking and other aspects of the current legal framework designed to protect the rights of citizens. Because of the ease of operating across borders in the electronic environment, many of these issues have an international dimension that will be subject to negotiation of agreements, and potentially, to treaties in international forums.

The Internet on which electronic commerce is strongly based makes it easy to operate across conventional country borders and poses new challenges for the laws of the country. This suggests that new laws will have an international perspective that includes negotiating new rules and common standards of practice that are relevant in the global environment. For example some countries have a legal framework that is heavily influenced by its international obligations, either through enacting such obligations in domestic legislation or through the Courts interpreting domestic statute or common law in -terms of such obligations.

It is acknowledged that electronic commerce is not taking place within a legal vacuum for which a totally new legal framework needs to be created. There is a need to adapt existing laws and regulations to accommodate electronic commerce. In this regard the Department of Communications has commissioned Edward Nathan & Friedland to carry out an audit of South African law, by reviewing the law, identifying areas that could constitute barriers to the development of electronic commerce, and suggest options to eliminate such barriers.

Principles that underpin the work of government and stakeholders in shaping the legal framework for electronic commerce basically revolve around the following principles:

- The need for legislation to support the national implementation of electronic commerce transactions within a framework of international standards

- The need to ensure that commercial transactions can be effected either through paper or electronic means without presenting uncertainty about the latter.
- The desire to recommend legislation and limit it to areas where it is likely to increase the overall efficiency of South African commercial transactions. Any proposed legislation should not be cumbersome, but should minimise the regulatory burden on business and government, and keep litigation and costs to a minimum.

Types of electronic transactions to be covered by the proposed legislation are:

- Uniform Commercial code for electronic commerce;
- Intellectual property rights;
- Privacy and security;
- Contracting and trade laws;
- Place of jurisdiction in cross border electronic commerce transactions;
- Electronic commerce and multilateral trading system;
- Electronic payment systems;
- Governance in domain naming;
- Taxation in the electronic commerce environment;
- Consumer protection issues;
- Protection of personal data;
- Institutional and organisational framework

4.2 SECURITY AND PRIVACY

Cyberspace and internet usage is evolving in ways that threaten privacy and other constitutional rights (Shapiro 2000 : 189). The digital revolution has spawned a series of potential laws and regulations that pose novel trade-offs between law enforcement, commercial progress and individual freedom.

Cyberspace can today be designed to permit or prohibit anonymity and to include or exclude freedom of speech.

America Online (AOL), for example, appears to facilitate free speech by permitting multiple pseudonyms, allowing anonymity. But AOL managers can easily trace “anonymous” message. AOL also limits its chat rooms to hold no more than 23 people at once. Only the AOL managers can broadcast messages to all members. AOL, to a considerable degree, controls speech, security and privacy in its domain. These are choices to be made by companies to protect their own business integrity.

The use of customer information is at the heart of all business-to-consumer electronic commerce strategies. As consumers use the internet more and more for purchases, companies will have increasingly rich profiles of shopping and buying patterns (Shapiro 2000 : 194). Companies on their own will have little incentive to respect their customers’ privacy, but in competing for customers they actually have a great deal of incentive to respect privacy.

Some companies will retain the right to sell consumer information or will simply violate their stated policies against selling without consent. A lack of security may allow employees or partners to steal information. All electronic commerce companies must understand that their success depends upon building trust. It is thus critical to state their privacy policies clearly, to adhere to them and to pay close attention to the security of information collected.

Government want to build an environment of trust, by ensuring security and privacy. Major concerns exist in relation to the security of the data transmitted via the Internet, as well as privacy infringements. It is essential that authentication, confidentiality, integrity and non-repudiation issues need to be addressed in an electronic commerce policy.

Public key cryptography appears to be a solution to provide for the secure retention of signature information as well as contractual terms and conditions.

The USA has already begun to introduce digital certificates, via a certification authority. These technologies can be used for further purposes if Certification Authorities become trusted, for instance as escrow agent to whom electronic information is entrusted as proof of terms and conditions of contracts, or to settle issues such as date and time of dispatch and receipt of electronic messages. Cybercrime and hacking are major reasons, which deter commercial enterprises from using the Internet more extensively. Detection and monitoring is essential.

Privacy of individuals' private information is also important to the government. The current Promotion of Access to Information Act emphasises publicly held information concerning individuals, but the ambit of SA law has to be extended further.

4.3 INTELLECTUAL PROPERTY RIGHTS

The internet seems to be a vast, out-of-control copying machine churning out unlimited numbers of copies regardless of copyrights. But because of emerging encryption technology copyright is much more effectively protected today than at any time since the invention of the printing press. Copyright holders will eventually be able to monitor and charge users for any use whatsoever of the original material (Shapiro 2000 : 191).

Intellectual property rights have traditionally balanced the interest of the authors, who should be rewarded for their creative efforts, with those of society, which benefits from the easy and widespread dissemination of ideas. Courts have effectively limited authors' copyrights by holding that individuals may freely make a few copies for personal use.

The main reason for this fair use policy has always been technological – publishers could not afford to stake out all photocopy machines to prevent unauthorised copying. Publishers could soon charge a fee each time an electronic file is viewed, printed or copies to another device – if cyberspace is allowed to evolve that way.

Speech has become so free on the internet that society is actually suffering from information overload (Shapiro 2000 : 192). What is really needed now are devices that will screen, edit and certify the accuracy of all information available on-line. That spells a great opportunity for established publishers on the internet.

Excessive regulation will affect the ability for new ideas to be shared and developed. Distinguishing between the original owner of an idea and its development becomes very confusing in the Internet environment. Protection of SA intellectual property outside the borders of SA is a problem.

Although the Copyrights and Trademarks Acts have been brought up to date in SA, there are still infringements. One of the largest areas still creating violations is that of domain naming and cybersquatting.

4.4 ELECTRONIC COMMUNICATIONS AND TRANSACTIONS ACT (ECTA) 25 OF 2002

The ECT Act will go a long way in spurring electronic commerce. It attempts to bring South African law into the digital era by making electronic documents and contracts with digital signatures legal in a court of law, as opposed to previously when only paper based signed documents were accepted as the originals (Planting & Bidoli 2002 : 42). Digital signatures are now legal and transform an e-mail into a legally binding document. The possibilities of transacting in cyberspace are now endless.

Government departments and businesses can now rely on e-mail when transacting with the public, doing away with mountains of records. Long term insurance companies can now transact electronically with their clients, doing away with face-to-face consultation with clients.

In addition the act provides on-line shoppers with protection – electronic retailers must publicise legal and privacy policies, conditions of use, disclaimers and security policies. Those selling on-line must also offer consumers cooling-off periods during which consumers can change their minds about the purchase.

The act addresses seven categories of relevant issues : (Mostert 2002)

4.4.1 Maximising benefits of electronic commerce

The government must develop a national framework and infrastructure to optimise the benefits of the internet and electronic commerce in order to allow universal access to electronic communication and transacting.

4.4.2 Certainty in law

The act allows the judicial acceptance of electronic transactions, documents, digital signatures, electronic evidence and the facilitating of record retention. This section also allows opportunities for companies, regulators and the government to enter paperless environments, where the full ability of the internet can be use for company management and administration

4.4.3 E-government

The use of electronic communication, filing, reporting and payments between the government and citizens will be encouraged. The government should be exemplary in its use of information technology.

4.4.4 Security

The providers of encryption technology must register with the government before they start operating. A voluntary accreditation system will be developed whereby the providers of digital signature technology could provide digital signatures with a higher evidentiary value than normal digital signatures.

4.4.5 Consumer protection

The biggest obstacle in the way of successful business-to-consumer electronic commerce is the lack of consumer confidence when it comes to the protection of user rights on the internet. The act now demands that on-line vendors disclose certain information regarding themselves, their products and services and that consumers may in certain circumstances withdraw from transactions.

4.4.6 Domain name administration and protection of internet service providers

An independent representative body will be established to manage the South African domain name sphere. This section also allows for affordable dispute resolution methods. The act protects internet service providers and other on-line intermediaries against abuse of their infrastructures by users.

4.4.7 Prevention of unlawful transactions

For the first time in South Africa, specific statutory crimes have been established for cyberspace offences like hacking, snooping, spoofing and the distribution of computer viruses. Cyber inspectors will administrate these provisions of the act and identify, investigate and report on unlawful transactions.

4.5 CLOSURE

In the early days of the internet people were willing to risk their privacy on the internet, for example by listing their book preferences on Amazon.com. They were willing to sacrifice the property rights of authors for the joys of downloading songs.

But people began to realise that property rights and privacy were not to be discarded lightly. Therefore people began to push for rules, for some kind of order to be imposed upon the unruly reaches of cyberspace.

The technologies underlying the internet economy will continue to affect the way we work and play and organise our societies. Governments in the meanwhile, have resisted the lure of inaction and are beginning to regulate internet usage through legislation. This is not easy as the internet is still a slippery medium and crosses borders easily. The task before government now is to step back into the once-new economy and establish the regulations to allow it to prosper (Spar 2002 : 35). The first step in South Africa in this direction has been the promulgation of the Electronic Communications and Transaction Act.

The following chapter will discuss how to satisfy the needs of the long term insurance industry's electronic commerce needs.

Chapter 5 : Satisfying the Electronic Commerce Needs of the Long Term Insurance Industry

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Chapter 5 : Satisfying the Electronic Commerce Needs of the Long Term Insurance Industry

SYNOPSIS

This chapter discusses the electronic commerce needs of the long term insurance industry. These needs are specific to this industry.

It is shown that there still remains a need for financial intermediaries. It was found that business-to-business initiatives are still more successful than business-to-consumer projects.

The metamorphosis in the long term insurance industry towards electronic commerce is discussed. The main factors that will influence the success of failure of electronic commerce initiatives in this industry are:

- new technology;
- new views on electronic commerce;
- empowerment of users;
- total integration of the distribution channels.

Chapter 5 – Satisfying the Electronic Commerce Needs of the Long Term Insurance

5.1 INTRODUCTION

Business-to-business electronic commerce is projected to constitute the largest portion of the whole electronic commerce market for the next five years (Shaw & others 2000 : 12). It is currently estimated at 78% of the overall electronic market. There are two types of B2B electronic commerce markets. One is related to the management of material flows in production-oriented supply-chain networks. The other is related to the procurement of more indirect items such as maintenance or other services. For either the direct or indirect procurement processes, electronic data interchange (EDI) has been used to forge automated linkages the buyer and supplier to transmit orders, receipts and payments electronically.

Companies, especially those in the financial services industry, have for years now been aware of the advantages of electronic commerce, especially a presence on the internet.

5.2 THE ASTUTE MODEL

It has long been an objective of the Life Office Association (LOA), the voluntary supervisory body of long term insurers in South Africa, to have a data exchange that links a financial intermediary to multiple life offices simultaneously. Astute has the specific purpose of being the preferred electronic information exchange service for the financial services industry.

Financial intermediaries register onto the system via the internet and can then obtain a full portfolio of their client's existing financial status by accessing all life offices' data relating to the client's life cover, retirement planning and investment planning. The transaction is processed within seconds. Data will be returned to the website electronically and presented to the intermediary in a consolidated report. The intermediary can then immediately do an accurate financial needs analysis for his client based on the information obtained.

Astute's success can be measured by the number of life offices contracted to provide information, the number of registered users and transactions being processed. At present Astute has seven life offices providing information, with a user base of over 11 000 registered users, processing more than 60 000 transactions per month. The success of Astute can be ascribed to the fact that it's a B2B (business-to-business) initiative.

5.3 THE MYLIFE PROJECT

During January 2000 the Liberty Group Limited launched an electronic commerce initiative call MyLife. It was intended to provide a service through which the general public could obtain financial advice and purchase investment products from Liberty. The goal was to establish a paperless environment wherein financial advice was given and financial products sold. Although the project started out with only Liberty products, the intention was to offer access to a full range of financial services products, sourced not only from Liberty but also from external product suppliers.

The law at that stage was not clear as to whether transactions in a paperless environment, with no other proof of originality than perhaps an audit trail of the transaction would be valid in a court of law. The debate was whether electronic messages or data sent between computers were sufficient to form and validate a contract in South African law. It was suggested that hard copies of all transactions be kept.

The project was based on a three-year breakeven assumption. It was however terminated in the first quarter of 2002 due to a lack of consumer participation. Consumers were not yet fully literate in electronic commerce. There were a lot of ungrounded fears, for example paying for your investment on-line per credit card. The perception was that it was risky, whereas in truth it was the safest payment method at the time as all transaction were logged and audit trails were kept. Transactions were also encrypted to safeguard personal information.

Potential customers were also not yet ready to take the responsibility of performing their own financial needs analyses on-line and purchasing life cover or investment policies accordingly. The long term insurance industry has since its inception been linked to financial intermediaries who perform financial needs analyses and give advice accordingly. Consumers were not yet ready to take responsibility for their own financial security. It was still easier to appoint a financial intermediary who could in the end be sued if his advice could be construed as having been bad or grossly negligent. The MyLife project failed because the consumer public was still ignorant as to the security of on-line transactions, the protection of their privacy and the benefits of instant transactions. The reason why MyLife did not succeed was that B2C (business-to-consumer) electronic commerce is still in its infancy in South Africa.

The electronic commerce infrastructure created for the MyLife project is still available internally in Liberty and has been claimed to be an exemplary way of using Microsoft applications. The legal constraints regarding legality of on-line transactions has now been resolved by the Electronic Communications and Transaction Act, which allows for the legal validity of all on-line transactions. As soon as the public has been educated as to the benefits of electronic commerce in their daily routine, the MyLife project might be hauled out again and presented to the public again who should then appreciate the innovativeness of the concept. The growth in internet banking usage over the past few years will definitely assist in making this concept more acceptable.

5.4 THE NEED FOR FINANCIAL INTERMEDIARIES

It appears that the South African insurance customer is not yet ready to take full responsibility for his financial affairs. Brokers and insurance company agents have for years now sold policies to people by focusing on the financial needs of their customers.

The insurance customer have not yet realised the need himself and is therefore not ready to venture into electronic insurance to satisfy this need. It is still far easier to have a financial intermediary visit you at your convenience and taking full responsibility for the advice furnished. All changes and amendments to policies are also done via the intermediary. The customer can rest assured that his needs are catered for and that the financial intermediary will be responsible for any bad advice given.

5.5 THE METAMORPHOSIS OF ELECTRONIC INSURANCE

It will become more and more important to bridge the digital divide between those with access to the internet and electronic commerce and those who have never been exposed to it. Electronic commerce will be influenced by various factors in the future which insurer will have to take into account when deciding on their electronic commerce strategy (Kok 2003 : 5):

5.5.1 New technology

New software allowing insurers to track the patterns of usage and preferences of their users will allow electronic commerce to become more user-friendly. Users will be able to personalise their usage of insurer's electronic services in order to serve their needs (Kok 2003 : 5).

5.5.2 New views on electronic commerce

Users will insist on more functions to allow them to get value for their money when using the websites of insurers. The website and electronic commerce interaction taking place via it will diminish the role of financial intermediaries.

The individual user will therefore demand clear and concise functions to allow him to do his own financial needs analysis and choose his own policies accordingly (Kok 2003 : 5)

5.5.3 Empowerment of users

Electronic insurance users want full control over their electronic commerce experience. It will therefore have to be adapted to allow users maximum value for time spend on the insurer's website.

The steps to follow to ensure that customers are still well-served on the internet are:

- Deconstruct the entire transaction process with a customer, from the identification of the customer need to order fulfilment;
- Distinguish between those functions that are currently performed by the company and those performed by the customer;
- Pinpoint which of the customer functions the company should take responsibility for and assess the costs and benefits of each task;
- Find ways to reach beyond a single transaction to create more value for customers, for example e-mail alerts when a policy anniversary is approaching (Moon & Frei 2000 : 27)

5.5.4 Total integration

Electronic commerce has allowed the distribution channels of insurance to be broadened. Where it used to be handled mainly by personal visits from financial intermediaries, insurance can now be bought via the websites of insurers or with the partial help of financial intermediaries or at banks. New technology will allow all these channels to be integrated in order to allow the user a holistic insurance experience.

5.6 CLOSURE

This chapter investigated the electronic commerce needs of the long term insurance industry. It was found that there will always be a need for financial intermediaries, even though an attempt was made through the MyLife project to transfer this responsibility to the consumer. The investigation showed that business-to-business initiatives, such as the Astute model, still remain more successful than business-to-consumer projects.

The long term insurance industry is slowly moving towards acceptance of electronic commerce activities, but the following factors will influence the success or failure rate of these projects:

- embracing new technology;
- embracing new views on electronic commerce;
- empowerment of users;
- and total integration of distribution channels.

The barriers and risks posed to long term insurers when using electronic commerce is addressed in the next chapter.

Chapter 6 : Barriers and Risks Posed to Long Term Insurers by Electronic Commerce

Contents

Chapter 6 : Barriers and Risks Posed to Long Term Insurers by Electronic Commerce

SYNOPSIS

In this chapter the barriers and risks posed to long term insurers when embarking on an electronic commerce strategy are investigated.

It is found that the most common risks are:

- legal risks;
- strategic risks;
- operational risks;
- transaction risks;
- data security risks;
- connectivity risks;
- conduct of business risks.

Chapter 6 : Barriers and Risks Posed to Long Term Insurers by Electronic Commerce

6.1 INTRODUCTION

Firms are quickly developing strategies for business-to-consumer commerce. An insurance consumer can, through the internet, already

- Obtain information about insurance products and insurance coverage;
- Perform product comparisons;
- Have contracts serviced and claims handled.

The internet provides a system that is both efficient and constantly available. Companies can, through the internet, market and provide information to more people in more locations. Customers can also be serviced after insurance contracts have been drawn up. The cost of implementing this technology is significant, however it will in the long run save costs, resulting in lower premiums for consumers. The problem is that insurance companies are not always aware of the risks associated with electronic commerce. These barriers and risks can be defined as below: (International Association of Insurance Supervisors : 2002)

6.2 BARRIERS TO ELECTRONIC COMMERCE

Electronic commerce is currently mainly supported by web-based electronic catalogues. There is no standard definition for an electronic catalogue but at minimum it should support listings of products and/or services, price information and transactions (Shaw & others 2000 : 314). One of the most obvious problems of these catalogues is their lack of interoperability. Interoperability at the level of a common business language is a critical enabler for widespread electronic commerce.

Another barrier for wide-spread adoption of electronic commerce is the high implementation costs for electronic commerce systems. A large portion of electronic commerce applications is custom-developed which is risky and expensive. Although most of the big software vendors developed solutions to facilitate searches, order entries and payments on the net at cheaper rates, it is difficult to extend the functionality of these solutions or to adapt them to legacy systems.

The lack of reusability in current electronic commerce applications and the lack of interoperability standards are some of the great obstacles insurers have to overcome to ensure their electronic commerce presence.

6.2.1 Challenges

When insurers embark on an electronic commerce strategy they should take the following challenges into account when planning their infrastructure:

- telecommunication infrastructure gaps;
- the need to develop more local sites;
- adapting existing laws to this new medium;
- costs of installation and access;
- limited access by potential customers due to internet illiteracy.

(International Trade Centre 2000 : 20).

6.3 RISKS ASSOCIATED WITH ELECTRONIC COMMERCE STRATEGY

New insurance products designed specifically for sale on the internet will be developed and competition will intensify. Commerce carried out on the internet relies on the support of a solid technological framework. Processing and transferring information is accomplished at great speed. Data security must be assured and systems must be in place to identify computer viruses. Companies need to build or acquire the appropriate hardware and software and the cost involved is great. Some companies rely on outsourcing to acquire these technologies and this leads to more risks (International Association of Insurance Supervisors 2002 : 1)

6.3.1 Legal Risks

Usage on the internet raises many legal questions. For example, which country's legislation should apply and which supervisory authority has jurisdiction. Consumers' identities can be difficult to authenticate over the internet. This increases the opportunity for criminal activity, such as money laundering. Computer hacking is also of concern as insurers have to pay a lot to ensure secure commerce for their consumers.

6.3.2 Strategic Risks

Strategic risks arise when a company does not think through the implications that the use of electronic commerce will have on other parts of the company or the organisation as a whole. Without a clear strategic plan the occurrence of mistakes and possible failure increase.

Insurers enter into electronic commerce as a result of customer or market place demand and in order to retain their competitive edge. The decision to engage in electronic commerce requires a precise analysis and the following should be considered:

- What are the distinctive features of electronic commerce and what are the associated operational risks;
- Whether electronic commerce fits into the strategic company plan;
- Whether electronic commerce fits the company's image;
- Who will be the target group for this channel of distribution;
- What information will be supplied to the consumer.

The insurer should also take the following into account:

- the global nature and rapid growth and development of electronic commerce will put pressure on its planning and implementation of online operations;
- the internet may be an efficient way of conducting insurance business, but it is far from cost-free. In addition to systems costs, establishing and maintaining customer awareness of the website may involve significant advertising costs;
- brand loyalty may evaporate in the face of price competition and a significant number of consumers may move their business between insurers;
- some customers that are not used to these new sales channels may be neglected;
- while internet technology enables a greater amount of speed in processing and transfer of information, it complicates the management of information.

6.3.3 Operational Risks

Operational risks in an electronic commerce environment relate to risks that arise as a result of a failure or default in the information technology infrastructure. An insurance company is prone to operational risks when the application and use of internet technology is not well managed. The need for expertise in this field is crucial.

A proper information technology structure can only be efficient if:

- it has the capacity to handle increased traffic and process transaction volumes;
- it has the ability to expand or scale down;
- it is accessible at all times;
- it is secure from internal and external disruptions;
- if it is compatible in every market.

Insurance companies may need to outsource some of these operations, but will then need the appropriate policies and controls in place to deal with procurement, contract negotiation and management and specification. Companies need skilled staff to support the business processes used by internet consumers.

6.3.4 Transaction Risks

A transaction risk is considered to be the risk of any unauthorised alteration or modification to text, information or data transmitted over computer networks between an insurer and its client. This type of risks arises where the source and responsibility for the problem lies in the technology and not with the insurer or client.

The terms of an insurance contract must be invariable for the parties to it. When marketing insurance over the internet, companies must be able to guarantee that, once agreed to, the terms of the insurance contract will not change unless by mutual consent.

Companies must also have sufficiently reliable technical resources to guarantee the integrity of the information and data transmitted over the internet. Both parties also need to be assured that they will receive all information and data transmitted by the other party in a timely manner. Both parties must have agreed to and have the same information regarding the terms of the contract and the subsequent amendments.

Transaction risks are closely related to data security risks and legal risks of insurance companies. If uncontrolled they can damage both the marketing image of the company and the reputation when legal conflicts arise between the company and policyholders.

6.3.5 Data Security Risks

Data security risks are considered to be the risks of losses, unintentional changes or leaks of information or data in computer systems. A data security risk can be identified within an insurance company's own system. It could be caused by technical flaws, such as, the incompatibility of the data system, information leaks or information loss. Data security risks may also be caused by errors in external links to systems.

Data security risk also arises from intentional or negligent external data breaks. A customer's personal data could be accessed illegally by, for example, "hacking"[1], "sniffing"[2], or denial of service attacks.[3]

Such security risks may cause problems in identifying external and internal users of the system. They complicate the company's ability to authenticate information and data. Information concerning an insurance contract may be changed within the system without authorisation after the system has been broken into. Relations with the affected customer, as well as the reputation of the insurance company will suffer. Because of the scope of internet technology application and their many effects, an insurance company must take data security risks into account when preparing its operational and strategic plans. Several different security levels may be necessary to minimise data security risks.

6.3.6 Connectivity Risks

Connectivity risk is the risk that a failure in one part of the system may impact on all other parts of the system. It is particularly acute in the electronic commerce environment because the underlying systems are extensive and data are processed rapidly.

[1] Usually the practice of breaking into the system without authorisation.
[2] Usually the use of software programs that are illegally inserted on the net to capture user passwords as they are being use on the system.
[3] Overwhelming a server with such a large number of requests that it will not be able to proceed with ordinary requests and the system may fail.

If any part of the internet's operational system or that of the insurance company is damaged or modified as a result of negligent or intentional actions, the effect on the insurer's systems can be devastating. The insurer may fail to service existing clients and potential clients and will eventually suffer reputational damage.

Companies can implement a number of measures, such as contingency, recovery and disaster planning and establishing back-up facilities to minimise these risks. These measures are however complex and need to be executed with care.

6.3.7 Conduct of Business Risks

Most of the current insurance laws and regulations have been developed with the view that business will be conducted on a person-to-person basis with paper documentation. Electronic commerce poses many new issues with attendant risks, such as:

- authenticating the identity of the customer;
- verifying and maintaining the security of electronic documents and signatures;
- assuring electronic notification of contract-related information treats the interest of the insurance company and the client fully and fairly;
- meeting record retention requirements through electronic means, including personal information protection measures.

In addition, many jurisdictional queries arise because business is conducted across many borders on the internet. As a result, insurance companies may face the reputation, legal and other risks caused by the problems regarding jurisdictional questions.

Insurance consumers may have problems in determining:

- if an undertaking that is active on the internet has a legitimate right to provide insurance services – for example, is the company or its agent licensed to sell insurance;
- the location of the company and therefore whether, by whom and how it is regulated;
- what legislation would be applied to the insurance products offered;
- whether consumer redress in the event of a dispute is available and on what terms and
- what legal measures can be taken against a company in another jurisdiction.

6.4 CLOSURE

The expansion of electronic commerce, especially via the internet results in important new challenges for the regulation and supervision of insurance. To ensure that the insurance consumer is protected, insurance companies must:

- identify the risks posed by electronic commerce;
- ensure that these risks are being well managed and
- develop appropriate supervisory strategies.

The lessons learnt from this chapter are:

- The internet usage by a company should be linked to the company's main business goals. Senior management should drive the electronic business rather than delegate it to information technology technicians;
- The company must have the marketing and maintenance resources in addition to the resources for the installation and initial design of the site;
- Some enterprises are more suited to sales and delivery via the internet, for example books, music, travel services and financial services.

If used properly, the internet can reduce communication costs, store business information and contacts and streamline purchasing and supply management. (Interntaional Trade Centre : 2000).

The next chapter concludes this study.

Chapter 7 : Successful Implementation of Electronic Commerce in the Long Term Insurance Industry

Contents

Chapter 7 : Successful Implementation of Electronic Commerce in the Long Term Insurance Industry

SYNOPSIS

This chapter concludes the study. The research done is compared to the objectives to ensure that the objectives have been met.

Electronic commerce can provide long term insurers with a competitive advantage in the form of cost advantage, speed advantage and differentiation advantage. The advantage that can be obtained is dependent on how the insurer wants to position itself.

An electronic commerce initiative will succeed if the insurer adapts new views on electronic commerce, embraces new technology and most important empower its clients as users of the electronic commerce applications.

In South Africa there are currently two examples of the implementation of electronic commerce initiatives in the long term insurance industry. The one initiative, being a business-to-business project is still running effectively and usage is growing.

The other project, being a business-to-consumer initiative, failed because of a lack of growth and consumer education.

There are barriers and risks posed to long term insurers when entering the electronic commerce market. If properly managed and risks are contained, electronic commerce will allow an insurer a competitive advantage because of the speed and convenience of transactions and the differentiation of the offering in the eye of the public.

Chapter 7 : Successful Implementation of Electronic Commerce in the Long Term Insurance Industry

7.1 INTRODUCTION

The question of how to sell has always been a big one for insurers, because in choosing one way insurers almost always foreclose other possibilities. Insurers know that by limiting themselves to one main selling mechanism they sacrifice a lot of potential customers. Up to now they had no other choice. Selling insurance in a way other than via financial intermediaries, has traditionally been too complex and required radically different physical environments.

All that has changed in the age if the internet, where business is increasingly unconstrained by the laws of and limitations of the physical world. Insurers realised that customers may want different transaction mechanisms under different circumstances. Being able to offer multiple transaction approaches allows insurers to win a larger share of existing customers' business as well as bring new types of customers into the fold.

It also costs less to conduct business on the internet. During 2000 on-line banking transactions in the United States cost 2 cents compared to the 36 cents for ATM transactions and $1.15 for a teller-assisted transaction (Moon & Frei 2000 : 26). So it is clear that companies are desperately trying to attract consumers to their websites on the internet. The numbers of visitors however remain low, because many companies have bought into the myth that that the internet is a self-service channel. They assume they should let their on-line customers help themselves to whatever product or service they need. The problem is that when a company does less, the customer ends up doing more and most customers do not want to do more. Complete self-service sites will just leave customers frustrated and annoyed.

The internet promises not only to reduce corporate transaction costs but also to enhance customer convenience. Companies however need to move beyond the self-service myth, making it easy and enjoyable for customers to use the site, translating into more customers with greater loyalty.

This chapter concludes the study and summarises the outcome of the research. The Research objectives are reviewed to ensure that they have been met.

7.2 RESEARCH OBJECTIVES

This section will review the objectives of the study to ensure they have been met.

7.2.1 Objective 1: Investigate the extent of electronic commerce activities

There is a growing internet presence of market sectors relevant to the long term insurance industry, such as on-line banking, on-line access to managed funds and on-line securities trading.

Surveys done in late 2002 place the worldwide usage at close to 544 million users. There are an estimated 2.4 million users in South Africa. It is clear that surveys cannot pinpoint the exact number of users. They do however grant guidelines to companies for marketing purposes.

Implications for the financial services industry when using electronic commerce mediums will include the following:

- direct consumer access to the markets;
- disintermediation will increase as clients access the markets directly and the need for financial intermediaries decrease;
- there will be greater consumer access to information;

- the challenge will be to balance consumer protection against consumer freedom.

Companies can attract consumer to their websites by placing links on affiliates' sites. Once proven to be effective and attracting increasing numbers of customers to its own site via its affiliates, the company can launch a revenue-sharing arrangement. When a customer clicks through from an affiliate's website to its own and actually concludes a purchase, the company can revert a set percentage of the sale revenue back to the affiliate.

Companies need to know who will be reached, whether they will fall within the company's target market in respect of demographics and income and whether it will be a viable option of extending trading into the electronic commerce realm.

7.2.2 Objective 2: Identify the needs and characteristics of the electronic commerce market

A key difference with use of the internet as a marketing medium is that the consumer has more control of the information. Unless the user experiences a felt need, the consumer will not necessarily access various pages to learn about new products the way he may notice them on store shelves or television.

A well-designed website must therefore support the following customer needs:
- problem definition;
- information collection;
- alternative evaluation;
- choice;
- transaction and post-sales service;
- personal effectiveness;
- competitive edge.

The successful transition to electronic commerce within the long term insurance industry can only take place if the following factors are taken into account:

- a single licensing regime for all financial service providers, including long term insurers, should be established;
- all financial products and services should be regulated uniformly; and
- there should be uniform conduct and disclosure requirements for all financial service providers

Companies are recognising that success in the new economy will go to those who can combine electronic commerce strategies and traditional commerce strategies that will bridge the physical and virtual worlds

7.2.3 Objective 3: Investigate the impact of legislation on electronic commerce business

Cyberspace and internet usage is evolving in ways that threaten privacy and other constitutional rights. Cyberspace can today be designed to permit or prohibit anonymity and to include or exclude freedom of speech.

Major concerns exist in relation to the security of the data transmitted via the Internet, as well as privacy infringements. Government wants to build an environment of trust, by ensuring security and privacy. It is essential that authentication, confidentiality, integrity and non-repudiation issues need to be addressed in an electronic commerce policy.

The Electronic Communications and Transactions Act attempts to address these issues by focusing on the following concepts:

- Maximising Benefits;
- Certainty in Law;
- E-government;
- Security;

- Consumer Protection;
- Domain Name Registration and Protection of Internet Service Providers.

7.2.4 Objective 4: Investigate how to satisfy the electronic commerce needs of the long term insurance industry

The insurance customer have not yet realised the need for financial security himself and is therefore not ready to venture into electronic insurance to satisfy this need. It is still far easier to have a financial intermediary visit you at your convenience and taking full responsibility for the advice furnished. All changes and amendments to policies are also done via the intermediary. The customer can rest assured that his needs are catered for and that the financial intermediary will be responsible for any bad advice given.

There is a metamorphosis taking place in the long term insurance industry towards electronic commerce. The main factors that will influence the success of failure of electronic commerce initiatives in this industry are:
- new technology;
- new views on electronic commerce;
- empowerment of users;
- and total integration of the distribution channels.

The steps to follow to ensure that customers are still well-served on the internet and their needs are met are:
- Deconstruct the entire transaction process with a customer, from the identification of the customer need to order fulfilment;
- Distinguish between those functions that are currently performed by the company and those performed by the customer;
- Pinpoint which of the customer functions the company should take responsibility for and assess the costs and benefits of each task;

- Find ways to reach beyond a single transaction to create more value for customers, for example e-mail alerts when a policy anniversary is approaching.

7.2.5 Objective 5: Determine the barriers and risks to the successful implementation of electronic commerce in the long term insurance industry

One of the most obvious problems of electronic commerce systems is their lack of interoperability. Interoperability at the level of a common business language is a critical enabler for widespread electronic commerce. Another barrier for wide-spread adoption of electronic commerce is the high implementation costs for electronic commerce systems.

Other challenges that local insurers will have to overcome to fully participate in electronic commerce are:

- telecommunication infrastructure gaps
- the need to develop more local sites
- adapting existing laws to this new medium
- costs of installation and access
- limited access by potential customers due to internet illiteracy

It was found that the most common risks that insurers should be aware of when embarking on an electronic commerce initiative are:

- legal risks;
- strategic risks;
- operational risks;
- transaction risks;
- data security risks;
- connectivity risks;
- conduct of business risks.

The expansion of electronic commerce, especially via the internet results in important new challenges for the regulation and supervision of insurance. To ensure that the insurance consumer is protected, insurance companies must:

- identify the risks posed by electronic commerce;
- ensure that these risks are being well managed and
- develop appropriate supervisory strategies.

7.3 CONCLUSION

The use of electronic commerce can ensure a competitive advantage to an insurer. As long as the risks and possible barriers are taken into account and the insurer embraces the new technology available, the electronic commerce initiative will be successful. Consumer ignorance in the use of electronic commerce applications in the long term insurance industry need to be addressed in order to avoid future failures. Consumer education and empowerment are powerful tools for the successful implementation of electronic commerce in the long term insurance industry.

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