MBA 2006/7

Credibility in an E-Retailer: A South African Perspective

Rodger Williams

A research report submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration

November 2007
ABSTRACT

South Africa appears to lag behind the international community in transacting online (B2C) e-retailers with only certain industries performing very well online. The evidence of lack of online spending was experienced by the author when creating an online retail travel company www.travesphere.co.za. Initial research conducted indicated that the problem could perhaps lie in the credibility of the website and hence the poor enquiry level and turnover amounts. This forms the basis of the study.

An electronic survey was conducted amongst internet users with a sample of 383 respondents who completed the survey in full. The survey was constructed utilising questions adapted from previous studies in international markets and from own questions adapted for a South African Market to test the credibility in an e-retailer from a South African perspective. Regression analysis was utilised to analyse the results.

The major findings of the research project were that the South African consumers appear to be very naïve when transacting online and give a lot of credence to content placed on a website by webmasters. Consumers believe that the appearance of a website makes it appear trustworthy. Thus a massive potential fraud threat exists due to consumers’ lack of concern over personal details and protection of credit card details.
DECLARATION

I declare that this research project is my own, unaided work. It is submitted in partial fulfilment of the requirements of the degree of Master of Business Administration for the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university.

Date: 14 November 2007

Rodger Williams
ACKNOWLEDGEMENTS

I would like to thank the following people who were instrumental in assisting me with the completion of the research, namely:

My supervisor, Helena Barnard, for your invaluable advice, patience, assistance and exceptional insights into this research project. Without your support this would have been a very difficult obstacle to overcome. Your energy and enthusiasm is inspiring.

To my family who assisted me with the preparations of this project, in particular my mother, Colleen Bowie for her support and long hours of reading.

Finally, to my fiancée, Karen Barnard, for her support throughout the programme and for this report. You deserve a medal, thank you!
# TABLE OF CONTENTS

## CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM ...... 1

- Purpose of this study .................................................................. 2
- Relevance to SA ....................................................................... 4

## CHAPTER 2: LITERATURE REVIEW ............................................ 5

- Perceptions of the buyer with the existence of Third Party Organisations present ............................................................... 5
- Feedback mechanisms .............................................................11
- Privacy and security perceptions................................................15
- Institution affiliated names .......................................................22

## CHAPTER 3: HYPOTHESES ...................................................... 24

## CHAPTER 4: RESEARCH METHODOLOGY ................................. 26

- Details of methodology.............................................................26
- Defence of methodology...........................................................34
- Definition of unit of analysis......................................................37
- Population ..............................................................................37
- Sample size ............................................................................38
- Sampling method .................................................................38
- Details of how data was collected ..............................................39
- Measurement ..........................................................................40

## CHAPTER 5: RESULTS ............................................................. 44

- Significance ............................................................................44
- Multi-colinearity and variance inflation factor ..............................47
- Control factors ........................................................................47
  - Age .....................................................................................47
  - Hours spent on the web..........................................................49
Frequency of online purchases .................................................. 50
Independent variables .............................................................. 51
Seal enhances credibility ........................................................... 51
Customer comments ............................................................... 53
Privacy statements ................................................................. 55
Graphics and appearance ....................................................... 56
Branding .............................................................................. 57
Website extensions ............................................................... 58

CHAPTER 6: DISCUSSION OF RESULTS .................................. 60
Social Exchange Theory ............................................................ 60
Third Party Organisations (TPO Seals) ..................................... 61
Feedback mechanisms ............................................................ 64
Privacy and security perceptions ............................................. 67
Institution affiliated names ..................................................... 72
Potential for fraud ................................................................. 73
Managerial implications ....................................................... 75

CHAPTER 7: CONCLUSION ..................................................... 77
REFERENCES ........................................................................ 81
LIST OF TABLES

Table 1: Framework of trust inducing features (adapted from Wang et al 2005) .................................................................................................................18
Table 2: Survey: Dependent and Independent Variables ......................41
Table 3: Statistical Model Summary .........................................................45
Table 4: Regression Analysis.....................................................................46
Table 5: Table of Response Count to TPO seals ..................................51
Table 6: TPO Seal Recollection ..............................................................53
Table 7: URL Rankings ...........................................................................59

List of Figures

Figure 1: LaptopMania Website ...............................................................29
Figure 2: Age Distribution.......................................................................48
Figure 3: Hours Spent on the Web .........................................................49
Figure 4: Frequency of Online Purchases .............................................50
Figure 5: Online Purchases Prior Month ..............................................50
Chapter 1: Introduction to the Research Problem

South Africa appears to lag behind the international community in transacting online (B2C) e-retailers. Only certain industries are performing very well online. In 2006, online spending accounted for R668 million, which was almost a 30% increase year on year (Saalie IOL 2006). According to the Goldstuck Report 2006, airline spending online accounted for R1,8 billion, dwarfing other retail sales (Goldstuck 2006). In the USA, online spending had increased 22% in 2001 to 26% in 2003 off a very high base, indicating an acceleration of pace in online spending in the USA (Saalie IOL 2004), while South Africa was only able to increase spend by 30% off a low base.

The evidence of lack of local online spending was experienced by the author when creating an online retail travel company www.travesphere.co.za. The concept of the company was based on models of international retail travel companies. From October 2006 to May 2007, the website had 13,664 unique visitors and 238,000 page views. Sales for the same period amounted to R18,756, which was an appalling figure. Additionally, enquiries were received at an average rate of 3 per day, which was equally dismal. It is appreciated that conversion rates on the internet are very low in comparison to
traditional brick and mortar retailers. Conversion rates from the USA’s top 100 internet retailers was 4.9% (Nielsen/NetRatings 2005).

Initial research conducted indicated that the problem could perhaps lie in the credibility of the website and hence the poor enquiry level and turnover amounts. There was the perception that perhaps this was a South African specific problem and hence was the primary reason for investigation into this research project.

**Purpose of this study**

Research has repeatedly identified trust as a crucial factor in consumers’ purchase decisions online (Ang & Lee, 2000). Perception of an unknown degree of loss is more stressful for consumers than that of a more predictable degree of loss (Simon 2003). As a lack of trust is one of the main barriers to adoption of internet shopping, trust has been characterised as the most precious asset any business can possess (Kimery and McCord 2002). Over 4 in 5 users say that being able to trust a web site is very important for them in making a decision to transact with that website (Princeton Survey Research Associates 2002).
Unfortunately, e-commerce websites have to a considerable extent failed to inspire trust in the user (Holsapple 2005). A survey of adult internet users in the USA (Princeton Survey Research Associates 2002) has indicated that only 29% trust e-commerce websites either “just about always” or “most of the time” while 64% trust the websites “only some of the time” or “never”. The report also indicates that 58% of internet users trust newspapers and television news and only 47% trust the USA government. Thus e-retailers have significant ground to cover when it comes to engendering trust in the user.

What this study will do is to revisit international tests conducted on international consumers pertaining to online trust and credibility and apply those tests in a South African context. The study will attempt to ascertain if the South African consumer shows the same characteristics as the international consumer in terms of:

- Trust perceptions
- Trust determination
- Antipathy to transact online
- Inclination to transact online
This study will focus on visual representations made on the website which enhance the user’s perception of trust.

Relevance to SA

South Africa is an emerging market and transacting on the internet is beginning to increase year on year (Goldstuck 2006). Given the key role of trust in e-commerce success (Holsapple 2005) and in view of the Nielsen NetRatings (2005) for conversion rations in e-retailers, it is in the e-retailers interest to ensure that they portray the correct image online and inspire trust in the consumer.

A study in this field will assist the e-retailers on the perceptions of the users from a South African perspective and will aid them in identifying key areas for consideration when designing their web sites.
Chapter 2: Literature Review

Trust is defined as a consumer’s willingness to accept vulnerability in an online transaction based on their positive expectations regarding the e-retailers future behaviours (Kimery, McCord 2002). This therefore places trust in the context of the social exchange theory (SET), which states that people make decisions about social relationships based on predicted future behaviours of others, the expected rewards and costs, perceived dependence and control in the relationships (Blau 1964). This theory then suggests that one’s behaviours are predicted by another’s previous behaviour and that person will make decisions based on that behaviour, taking into account social cues, capabilities and values of the parties.

*Perceptions of the buyer with the existence of Third Party Organisations present*

Trust online is an important issue for consumers and credibility should be of major concern to e-retailers (Wakefield and Whitten 2006).

In an attempt to establish trust, many e-retailers use the trust mechanisms of assurance service providers or third party organizations (TPO) such as BBB Online or TRUSTe in the United
States (Wakefield 2006, Kimery 2002). These are used to convey legitimacy of the company to the user of the website and a seal of approval is placed prominently on the site for users to see.

Some research shows that shoppers rarely consult the privacy statement of the assurance provider or differentiate among the providers (Odom, Kumar & Saunders 2002). However it has been shown that TPO’s are shown to promote trust in the electronic environment (Wakefield, Whitten 2006). That being said, the specific attributes of the assurance providers that convey trust are generally unknown and unexamined. This has a significant impact on the e-retailers and the assurance provider they prefer to choose.

It is proposed that TPO credibility is an important factor in the value that users assign to a particular website. Credibility factors are important antecedents of trust in traditional buyer-seller exchanges (Harmon & Coney 1982, Sternthal, Dholakia & Leavitt, 1978, Moore, Hausknecht & Thamadoran 1988)

In recent years, a variety of e-commerce assurance services have emerged whereby an applicant has to comply with specific criteria and standards where after the assurance service provider will vouch for the
credibility of that party by allowing their seal or logo to be displayed on the requesting party’s website. This seal is designed to communicate with the consumer that the standards and requirements have been met and that it is safe to transact with this party (Kimery, McCord 2002). There are three general assurance categories which can be defined to clarify the underlying content of most seals:

1. Privacy assurance: Assures consumers that the website complies with privacy policies and will not disclose information to a third party.


3. Technology assurance: Assures the consumer that specific technologies are employed by the provider to enable or facilitate the secure transfer of information.

In a South African environment, privacy assurance providers are not readily encountered. Process assurance providers can be in the form of ASATA (Association of South African Travel Agents) or SAICA (South African Institute of Chartered Accountants). Technological assurance providers would be Verisign or Thawte. Verisign and Thawte both provide digital certificates ensuring that data transmitted over the
internet is securely transmitted utilising the highest level of data encryption techniques. From a South African perspective, all the above providers provide a form of protection against possible fraudulent transactions. ASATA and SAICA endorse a membership to their institution, while Verisign and Thawte are a subscription based protection mechanism.

Some assurance providers will allow for complaint handling or resolution in the case of consumer dissatisfaction. Accepting a perceived vulnerability in an exchange is easier for a consumer when processes are in place to remedy any possible future behaviour that might be deemed untrustworthy.

In online transactions, the information each party has about each other relating to the transaction differs (information asymmetry). Specifically where one party lacks the information that the other party may have, the first party makes inferences from the information provided by the second party. This inference information should play a role in whether the first party decides to purchase or not (Kirmani & Rao, 2000). Therefore this information disparity encourages the use of institution based assurances (i.e. TPO) because they send a signal that this should be a credible institution to transact with based on a certain
set of criteria (Kirmani & Rao). Firms will decide to use these TPO seals to minimize the information disparity and reveal their “true type or self” and minimize the uncertainty for the parties’ privy to the transaction. Therefore since a TPO’s web seal is the only indication of an institution-based assurance structure, it is an important marketing signal for online consumers.

A “consumers” intention to purchase will be far greater if they view the seal rather than do not (Kovar, Burke and Kovar 2000). This supports the theory above in that the seal provides the consumer with assurance that the website is credible and will be more willing to purchase should the seal be present.

Consumers will also transfer their perceptions of trust from an endorser of a product on to that product, company or service being rendered (Hawkins, Best & Coney 1998). Therefore it is important to consider endorser credibility too. Endorsers are believed to hold credible information and to be unbiased communicators (Dean and Biswas 2001). Therefore a message delivered by a highly credible endorser will be accepted to a far greater degree and lead to a change in attitude.
In a South African context, companies such as BBB Online, WebTrust, Truste or similar companies would not be appropriate, as they are specifically geared towards the USA market. For the purposes of this study TPO’s, from a South African context would be limited to VeriSign and Thawte (for transactional security) as well as SAICA, ASATA and other similar institutions which regulate membership and the financial worthiness of their members. These TPO’s address user security by affiliation with the company. In consumer behaviour literature, endorser credibility influences both consumer attitudes and behavioural intentions (Wakefield 2006), since endorser credibility is related to trustworthiness and expertise. Consumers then pass the perception of trust and expertise on to the product or the organization that is being recommended.

Interestingly, studies conducted by Kimery (2002) noted that 20% of respondents did not even notice the TPO seal on the test web site. They found further that the TPO seal was not correlated to the credibility of the website. This may have been an issue around convenience for the consumer. Wakefield (2006) again tested the assurance services and confirmed that institution based assurances enhanced trust perceptions.
Feedback mechanisms

Feedback mechanisms are widely used in online auctions, for example on eBay or BidorBuy.co.za, where users leave comments about their buying or selling experiences on the website and about the buyers or sellers with whom they interact (Ba and Pavlou 2002). This forum is a market signalling mechanism in a world of uncertainty and risk. To promote trust and reduce opportunistic behaviour in the electronic market, credible signals should be provided amongst sellers to differentiate them from unscrupulous operators (Ba and Pavlou 2002).

Not all websites operate as web auction sites and therefore feedback mechanisms pertaining to each seller and buyer would be case specific to the industry. It is feasible for a website to post comments regarding service, from customers, on either a blog or a dedicated customer comments page. Additionally in a South African context these feedback mechanisms can also be in the form of websites such as www.hellopeter.co.za where consumers are able to express opinions regarding their particular experience with a company.

Marketing literature argues that there are two forms of trust: benevolence and credibility (Doney and Cannon 1997). Those who form credibility based on trust will have expectations by the other
party that they can perform the job effectively and reliably and will instil a lesser degree of purchase risk in the buyer. This is also referred to as goodwill trust (Sako 1992). Benevolence is then seen as a target of trust (Doney 1997).

Therefore it is proposed that goodwill trust can be inferred upon a company if the third party endorsements are positive.

In a traditional environment, customers get to know the quality of the products by “kicking the tires”. In an online environment, particularly an auction environment, buyers have to rely on the feedback of related parties (Ba and Pavlou 2002). To promote trust and reduce opportunism in the electronic market, credible signals should be provided to differentiate among sellers and give them incentives to be trustworthy. While trust would greatly improve the market (Adler 2001), a lack of trust in a market, particularly one characterised by dishonesty and cheating, could lead to failure (Granovetter 1985). Online feedback mechanisms allow buyers to publicise their transaction experiences with sellers by posting comments and rating the quality of the service provided by the sellers. These services and mechanisms help build trust among the potential trading parties in an online community (Walden 2000).
The majority of feedback mechanisms occur in an auction environment, whereby the buyer rates the seller’s service and sellers can rate buyer’s services. Results have shown that the final auction price is dependent on the number of negative feedback scores (Lee, Im and Lee 2000). Their study also suggests that the number of negative feedback scores is a more important indicator of trustworthiness of sellers than the percentage of negative feedback scores. Sundaram and Webster (1998) also found that negative feedback has a detrimental effect on unfamiliar brands. Potential customers are also more sensitive to prices when considering the purchase of less reliable products given a larger number of negative feedback scores.

Therefore it is evident that feedback mechanisms are important in an auction environment, however no study appears to have been done on the effect of customer comments on the owner’s website. Without proper security measures (e.g. seller authentication) it is very easy for a dishonest seller to masquerade as an honest one and lure an unsuspecting buyer into a fraudulent transaction (Neumann 1997). In a tourism environment, customer comments regarding service are often posted on websites, and these comments might or might not be at the discretion of the webmaster. This study therefore wishes to
analyse the effect of customer comments on a website to ascertain whether these comments in fact do have a material affect in the buyers perception of credibility of the website or not. It is noted that the possibility exists that webmasters may post “fraudulent” comments to lure customers into transacting with the company and this study wishes to test the buyers perception of the comments and if the buyer would suspect that these comments are in fact fraudulent or not.

The internet has also created a “global village” where globalised customers transact throughout the world. This study will also attempt to test whether the South African consumer will identify comments from international customers and whether they perceive the website to be more credible as a result of transactions with international customers. Local consumers are more likely to have similar values and priorities when purchasing online. International customers are considered to be more “internet savvy” and would be a more mature market in terms of purchasing habits online. They would therefore have more experience than the average South African online consumer would have.
Privacy and security perceptions

Security and privacy are vital components of effective commercial websites (Wang 2000). Consumers are concerned about issues such as spam, financial or time cost and perceived loss of privacy. 65% of research respondents from the Princeton Survey Research (2002) on consumer concerns about credibility stated that a privacy policy should be disclosed on the web site. Consumers want to know how their funds and information are being handled and that they are handled with discretion (Princeton 2002).

Issues involving privacy and security have made consumers hesitant to shop online and about 61% of American survey respondents would transact over the internet only if assured that the security and privacy of their personal information would be adequately protected. Due to customers’ previous experience with invasion of privacy of information submitted over the internet, consumers rate privacy issues highest of all issues pertaining to credibility (Yang 2003). Additional to security is the perception to the consumer that the organisation physically exists. 81% of respondents to the Princeton Survey (2002) expected the physical address and telephone numbers of the organisation to be displayed on the web site. According to Holsapple 2003, consumers
are more prone to trust a website more if they have the confidence that a money back guarantee is offered.

Crime in South Africa is a problem and the issue of security is potentially crucial. It is necessary to test this from a South African consumer perspective. In a national survey in the USA of 1017 internet users conducted by the Pew Internet and American Life Project (PIP), 68% expressed concern about revealing financial information, 48% had made a purchase online with a credit card and almost 3% reported being cheated by an online merchant or have had a credit card number stolen (Fox 2000). In a more recent survey of 1677 internet users in October 2002 it was estimated that only 3% of 64 million internet users in the USA purchased a product online on an average day (Madden 2003). In another survey of 1500 internet users conducted by Princeton Survey Research Associates (2002) for Consumer Web Watch, 64% of users expressed concerns about trusting e-commerce sites. Taking these comments into account, the future of internet transactions appears to be directed towards trust issues online (The Economist 2001). Online merchants are facing an enormous task of creating credible websites. As stated by Ang & Lee (2000) “if this does not lead the consumer to believe that the merchant is trustworthy, no purchase decision will result”. 
Three proposed dimensions of trust are identified by Ang, Dubelaar and Lee 200:

1. Liability of an online merchant to deliver a product or service that performs as promised.
2. The willingness of the online merchant to rectify should the purchase not meet the customer’s satisfaction
3. The presence of a privacy policy or statement on the website

Wang and Emurian adopted a framework of trust inducing features which include the following:
Table 1: Framework of trust inducing features (adapted from Wang et al 2005)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Explanation</th>
<th>Features</th>
<th>Literature Sources</th>
</tr>
</thead>
</table>
| Graphics design | Refers to the graphical design factors of the website that normally give consumers a first impression | • Use of three dimensional and half-screen size clipart  
  • Symmetric use of moderate pastel colour of low brightness and cool tone  
  • Use of well chosen, good-shot photographs | Karvonen and Parkinnen (2001); Kim and Moon (1998). |
| Content design  | Refers to the informational components that can be included on the Web site, either textual or graphical. | • Display of brand promoting information.  
  • Up-front disclosure of all aspects of the customer relationship.  
  • Display of seals of approval of third party certificate  
  • Use of relevant domain name | Belanger, Hiller and Smith (2002); Egger (2001); Hu Lin and Zhang (2001); Nielsen (1999); Schneidermann (2000) |
| Social-Cue design | Relates to imbedding social cues, such as face to face interaction and social presence, into Web interface via different communication media. | • Inclusion of representative photographs or video clip  
  • Use of synchronous communication media | Basso, Goldberg, Greenspan and Weimer (2001); Reigelsberger and Sasse (2001); Steinbruck, Schaumberg, Duda and Kruger (2002) |
**Graphic design**

This refers to the graphical design features that normally give the users their first impression. The main colour of the web page and the overall clipart affected the overall trustworthiness of the website (Kim and Moon 1998). They concluded that the tone should be cool and the main interface colour should be a moderate pastel colour.

The use of high quality photographs was found to have significant impact on the perceived credibility of the website (Karvonen and Parkkinen 2001). Generally well chosen images enhanced the customers’ perception of the website and these could be transferred to other portions of the site. Eye catching graphics, especially with the increased use of broadband, facilitate catching the user’s attention and conveys competence and professionalism (Basso et al 2001).

**Content design**

This refers to the informational contents that can be included on the website, either textual or graphical. Several researchers stress the importance of ”branding“ in e-commerce, which is to promote the
brand reputation of the company online. Two ways to do this are (Egger 2001):

1. Display prominent logo and slogan to facilitate the easy identification of the company
2. Presenting the companies’ main selling points to arouse people’s curiosity

The upfront disclosure of all aspects of the customer relationship was also considered important by numerous researchers (Egger 2001, Schneidermann 2000) to build trust online in the relationship. Therefore the company can provide background information to the company, contact details, disclose patterns of past performance and references from past and present customers, to verify competence. To address the remainder of the customer relationship aspects, an online merchant can provide links to security and privacy policies, offer tracking information, state the return policy and explain contractual terms. 65% of the Princeton Survey Research (2002) respondents indicated that it is very important that the site display a privacy policy.

In Wang et al’s study (2005) TPO seals are also addressed as important to the perception of credibility of the website. The other trust-inducing aspects would be providing up to date and
comprehensive product information as well as using a domain name consistent with the brand or the company name.

**Social Cue Design**

This refers to the informational components that can be included on the website, such as face-to-face interaction and social presence into web site interfaces via different communication media. Due to lack of personal touch, this could constitute a barrier between the potential consumer and the online merchant (Riegelsberger & Sasse 2002).

An experiment was conducted in Germany, where 45 user’s responses to three versions of a bank website were studied (Steinbruck et al 2002). The research found that websites displaying a photograph of the company’s representative produced higher trust reports than did the websites lacking the photograph. Therefore including a photograph of the person (customer agent or other) may be a simple way of inducing trust online.
Institution affiliated names

Numerous research has been conducted into the effects of structural features of websites enhancing the credibility of the website (Hong 2004, Wakefield 2001, Ba et al 2002, Yang 2003, Princeton Survey 2002). These include privacy statements, good looking graphics, TPO seals and more. These structural features constitute the elements fundamental to the composition of websites.

More recent research has indicated that navigation tools such as site maps (Fogg et al 2001) and uniform resource locators (URL’s) containing an .org or .edu domain name (Rieh & Belkin 1998, Rieh & Belkin 2000) enhance online credibility perceptions (Hong 2004). Hong (2004) conducted research regarding which URL’s would be most regarded as credible. These included .edu, .org and .gov as the research was specifically testing institution affiliated names. It was found that institution affiliated domain names are more credible than websites with commercial domain names (Hong 2004).

In a commercial environment in South Africa, a .org or a .edu URL would not be utilized for commercial transactions. Most websites would include URL’s of .co.za, .com, .net, .info or .biz.
There appears to be no evidence of the South African consumer’s perspective that any of these URL’s enhance credibility and which of these URL’s would be the preferred.
Chapter 3: Hypotheses

Based on the literature in Chapter 2, these are the hypotheses to be tested:

**H1:** The consumer will perceive the website as more credible if there is evidence of an endorsement or affiliation to a Third Party Organisation (TPO)

**H2:** Customer ratings on the website induce stronger buyer trust
   - **H2a:** Customers perceive customer comments on the website as credible sources
   - **H2b:** Customers in a South African environment prefer comments from South African customers

**H3:** Customers prefer to shop on a website where they feel their information will be protected (Privacy perceptions are positively related to consumers’ willingness to do internet shopping)

**H4:** Good looking graphic design increases the customers’ perception of credibility of the website
   - **H4a:** A strong display of branding increases the customers’ perception of credibility of the website
**H4b:** Photos of company representatives increase the customers’ perception of credibility of the website.

**H5:** Websites with country affiliated names are perceived as more credible than websites with commercial domain names.
Chapter 4: Research Methodology

The objective of the research methodology is to collect data to enable the writer to assess the credibility of certain pre-placed items on a website and to understand the thought processes of the user viewing the website. Particular emphasis was placed on assessing the credibility of the website and specific questions were therefore strategically asked to test the response to different website elements.

Details of methodology

The research design is a quantitative approach utilizing a survey to test the hypotheses as set out in Chapter 3.

A webpage for a fictitious company called LaptopMania (see Figure 1) was designed by a professional web design company. The following items were specifically placed on the page to assist in the gathering of the data:

1. Professional logo. This was to create the impression of a credible company.
2. Recognition of brand name laptops on the left hand menu. Brand named items were placed on the website to create the impression of an affiliation between the known companies and LaptopMania, the “unknown company”.

3. Picture of an attractive call centre agent on the top right hand menu. This was placed on the page to create the impression that LaptopMania is a professional company.

4. Comments from "customers" who had purchased previously from LaptopMania on the right hand side menu. These specifically included comments from clients in Cape Town, Johannesburg, Port Elizabeth and London. It was intended to create a spread of clients from all areas of South Africa as well as international clients.

5. A money back guarantee statement was placed above the laptop brands. The intention was to test the reaction of users to the agreement of a money-back guarantee.

6. Logos of the top laptop brands were placed below the main content to give the appearance that they were preferred suppliers to LaptopMania

7. A newsletter subscription block was placed on the bottom left hand corner for the appearance of ongoing special deals for customers. Many current websites offer visitors the option of
subscribing to a newsletter and this was merely placed to appear in line with current market trends and with the intention of creating further credibility.

8. Situated on the left hand menu were the weeks “special deals”. This section relates to point 7 above and was placed with the intention of gaining credibility and allowing visitors to see that best deals may be offered on the website.

9. A Verisign Logo was placed below the special deals section. The logo was specifically placed on the page to test if the consumer actually identifies the logo and to test if the consumer places a higher credibility on the website due to the presence of this logo.

10. Details on how the company ensures the confidentiality of customer’s credit card details were placed below the special deals. Pew Internet and American Life Project (2000) found that 68% of respondents feared computer hackers getting their credit card numbers.

11. A privacy statement, contact details, terms and conditions and about us links were placed in small text at the foot of the page.
Figure 1: LaptopMania Website
The following procedures were adopted to ensure that the survey measured what it was supposed to measure:

1. Adoption of previously tested questions from prior research where possible

2. Pilot survey to test for errors

3. Amendment of questionnaire post pilot survey

A questionnaire was designed to test the hypotheses as stated in section 3. A pilot email with an initial questionnaire was sent out to 10 respondents to ascertain the following:

1. Whether the respondents understood questions posed to them in the questionnaire.

2. Whether the respondents regarded the survey as too lengthy.

3. Whether they identified any other problems in the survey and their recommended improvements
The results of the pilot survey yielded the following changes to the questionnaire:

1. Duplicate questions were identified and deleted

2. Personal details were removed from the beginning of the survey to the end of the survey to reduce the possibility of respondents opting out of the survey early.

3. Questions were placed on individual pages rather than all appearing on one single page. This was done to eliminate the possibility of respondents perceiving the questionnaire as too long.

4. Ages were declassified from ranges into specific age figures. This was to more accurately collect data of the actual age of respondents.

5. Hours on the web were changed from ranges to actual hours spent in an attempt to gauge exact hours spent on the web by respondents.
6. Online banking was identified as a possible “shopping” experience for respondents and a note was inserted in the questionnaire to specifically ignore online banking as a shopping experience.

7. Actual online purchases per month were changed from categories to actual numbers to facilitate measuring actual purchases online.

8. The “back button” on the user's web browser was disallowed through a Java Script to help facilitate the recognition question 2 (Third Party Organisation Seal).

9. The Third Party Organisation (TPO) Seal was defined to respondents in question 2 as pilot respondents were uncertain what TPO seals were. The definition was described as “A company that either ensures that your data is encrypted and transmitted securely over the internet or an affiliation to a company that shows this website is credible.”

10. The sequencing of questions were changed to facilitate a consistent flow of recognition process.
Certain questions were shortened to assist the reader and to attempt to maintain the interest of the respondent.

**Defence of methodology**

A sample survey was utilized as it is a quick, inexpensive, efficient and accurate means of assessing a population (Zikmund 2003). The survey was a self administered electronic questionnaire utilizing the internet as a medium.

A self administered questionnaire was utilized for the following reasons:

1. Due to time constraints it was far quicker for respondents to complete the questionnaire without an interviewer.

2. The questionnaire could be administered in large volumes all in one place and at the same time.

3. The respondents were allowed anonymity thus attempting to encourage honest responses

4. The survey helps minimise interviewer bias
5. Respondents could complete the questionnaire at their own leisure

6. Data capturing was done electronically thus speeding up the process

The internet provided a speedy and effective way of communication with respondents especially because the nature of the research required respondents to physically view a website and respond to certain attributes. Because the research is concerned with the nature of the online experience, the concern that internet-based data gathering may exclude certain populations is not relevant. By utilising an email to communicate the request to participate in the survey allowed us to reach a large population in a short period of time. As per H4, visual appearance was one of the aspects being tested in the questionnaire and utilizing the internet facilitated the testing of the aspect more appropriately.

A quantitative approach was adopted to enable the gathering of empirical evidence to support or disprove the hypotheses discussed in chapter 3. A qualitative approach would not have allowed for hypothesis testing in as rigorous a way. Additionally through a
quantitative approach, a larger volume of respondents could be tested in a far shorter period of time utilizing an email and internet survey. A survey was also utilized as it was flexible in the sense that a wide range of information could be collected and could be easily amended after the pilot survey was distributed. The survey was the preferred method of data collection as this facilitated the precise measurement of the hypothesized constructs. Results of the survey were empirically tested and statistical techniques used to determine validity, reliability, and statistical significance.

There were some negative elements of the survey which were noted and observed as follows:

1. If respondents were unsure (especially relating to TPO) they could not ask for clarification

2. Certain respondents did not complete the entire questionnaire. Unfortunately reasons could not be obtained

3. Acquiescence bias and extremity bias may have resulted without an interviewer. The respondents may have felt inclined to agree with statements where they felt this was what the data collector of the survey may have wanted. Additionally as it was an electronic survey
respondents may have felt inclined to continually answered in the extreme (1 or 5) and not to a less extreme (2 or 4) which may have been more appropriate. Unfortunately in the absence of an interviewer to explain these phenomena, there may have been a possibility of these biases appearing. In a technological environment, respondents do however tend to be more negative in responses than in a non-technological environment (Kurtzberg, Naquin & Belkin 2005).

**Definition of unit of analysis**

The unit of analysis was defined as individual internet users with the ability to legally transact online.

**Population**

Surveys were sent out to an initial population consisting of a database of a total of 5943 people who had previously enquired online with a travel company. Of the emails sent 269 were rejected as a result of email recipients no longer being available, spam servers rejecting the email as spam and communication problems with the server. Out of office returns amounted to 112. This resulted in a total of 5562 surveys being delivered. In order to not abuse the database, only one reminder was sent for the completion of the survey.
Sample size

An initial response of 383 respondents to the survey from the initial email was obtained. A reminder email was sent one week later and a further 206 respondents completed the survey. Of the 5562 surveys delivered, 589 individuals responded to the call for completing the survey, yielding a response rate of 10.5%. Given the limited communication with the database members, and because it yielded a statistically adequate number of responses, the response rate was deemed adequate. Omitting partially or incorrectly completed surveys, 459 completed surveys were obtained.

Sampling method

It is almost impossible to obtain a representative sample directly from the internet (Princeton Research 2002).

A sample was chosen that comprised of individuals who had previously made enquiries with a travel company via the internet. This indicated that the users had access to the internet, which was essential for the collection of data. Because they had demonstrated intent in utilizing the internet for shopping, they were also deemed a relevant
population for testing how the commercial credibility of a website is established.

**Details of how data was collected**

The data was collected utilizing the services of a website [www.surveymonkey.com](http://www.surveymonkey.com) a professional data collection website. Services were charged for at US$200 as an annual charge.

Respondents viewed the selected website and were then directed to the link:

http://www.surveymonkey.com/s.aspx?sm=rEKv6TJm6nvggGodb_2bx1eA_3d_3d where they could complete the survey. SurveyMonkey collected the responses from the respondents. Each individual respondent’s answers were available to be downloaded for data to be captured into the statistical model.

The following items were additionally recorded:

1. Time response started
2. Time response ended
3. IP Address of respondent
The survey had a default setting not allowing respondents to return so that answers could not be manipulated after completion. This protected against deliberate falsification.

**Measurement**

What was set out to measure is defined in terms of Table 2 below. The categories are divided into dependent variables, independent variables and control elements.
## Table 2: Survey: Dependent and Independent Variables

<table>
<thead>
<tr>
<th>Question/measurable</th>
<th>Dependent Variables</th>
<th>Literature</th>
</tr>
</thead>
</table>
| 1 Assume that you were going to purchase a laptop online, how do you feel about the website you have just seen? | Select the option that best indicates how you feel.  
I am prepared to spend some time looking at the website to see what options are available.  
I would consider the company a credible business.  
I am likely to consider this website for my purchase.  
I would prefer to buy a laptop from a retail shop | Own Item |
| 2 The website contained a seal of a Third Party Organisation (TPO). A TPO is a company that either ensures that your data is encrypted and transmitted securely over the internet or an affiliation to a company that shows this website is credible. The name of the organisation was: (Please do not go back to the website and look)  
Thawte  
Verisign  
BBB: Better Business Bureau  
Don't know  
TRUST e  
Trustwatch  
Can't remember | Wakefield 2006 |
| 3 Which one of the following statements best describes your recollection of the Third Party Organisation seal: | Select the best option  
I do not recall seeing a seal on the website  
I recall seeing one of the seals but did not recognise it or read the labelling  
I read the labelling, clicked on it, but did not read the information that was displayed  
I clicked on the seal, read the information that was displayed about the seal and the retailer | Wakefield 2006 |
| 4 Which one of the statements best describes how you feel about the Third Party Organisation. Select the option that best indicates how you feel. | The seal is important  
The seal shows that the website is credible  
The seal should be displayed on the website  
The seal does not add any value to the website | Wakefield 2006 |
5. How do you feel about customer comments? Select the option that best indicates how you feel.
   - The presence of customer comments on the website indicate that the website is credible
   - I trust the website because previous customers have bought from the company
   - I would prefer to see both positive and negative customer comments
   - Comments are placed on the website by the webmaster to enhance credibility
   - Comments help me to see if orders have been placed with this company before
   - Only the good comments are posted
   - The comments are those of genuine customers

6. How do you feel about the demographics of the customer comments? Select the option that best indicates how you feel.
   - I prefer to see where the customer is from
   - I do not mind where the customer comes from
   - I feel comments from international customers enhance the credibility of the website
   - I place more value in the comments of South African customers

7. How do you feel about privacy and online transactions? Select the option that best indicates how you feel.
   - I want to see a privacy statement on the website
   - I actively read the privacy statement
   - I am concerned about what happens to my credit card details once the transaction has been completed
   - I am concerned about the webmaster selling my details to spam marketers
   - I do not have time to read the privacy statement
   - I do not think privacy statements are worth much
   - I am confident that this website has adequate safety precautions.

8. What do you feel about the look of the website? Select the option that best indicates how you feel.
   - Good-looking graphics on a website communicate the professionalism of the service I am likely to get
   - Good-looking graphics enhance the credibility of the website
   - My first impression makes me decide whether or not to buy from this website
   - Good-looking photos are important on a website

9. Branding of the website. Select the option that best indicates how you feel.
   - I will not purchase from LaptopMania because it is not a recognised brand.
   - I will consider purchasing from LaptopMania because the website looks credible
   - The presence of recognised brands (e.g. BenQ and Acer) on the LaptopMania website matters to me
   - I did not notice the brands on the LaptopMania website
<table>
<thead>
<tr>
<th>10</th>
<th>How do you feel about photos of company representatives on a website? Select the option that best indicates how you feel.</th>
<th>Own Item</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pictures of key people appearing on the home page are important to me</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Details about the staff of the company are not important</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I like to see a page dedicated to the staff member I will be dealing with.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The presence of photos of key people will make me more likely to purchase from this website</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11</th>
<th>If you were to purchase a laptop online, please rank the following domain name endings which indicate which you would be most inclined to purchase from. 1 Being most important and 6 being least important</th>
<th>Hong 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.net</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.org</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.info</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.co.za</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.com</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.biz</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 5: Results

590 Respondents undertook the survey with n=361 due to missing values and incomplete surveys. Regression analysis was utilized to analyse the results. The advantage of regression analysis is that each independent variable can be measured against the dependent variable. The results of the regression can be seen below:

**Significance**

The model yielded a significance value of 0.000 and an F value of 7.893 thus making the entire model significant for the study undertaken. To test for robustness, the dependent variable was changed between variables and settled on ”I am likely to consider this website for my purchase”. The results were substantively the same.

The adjusted R² value of 0.339 indicated 33.9% of the drivers necessary for the customer’s intention to purchase online were present in the model. Therefore it was accepted that the degree of fit of the model was acceptable.
### Table 3: Statistical Model Summary

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.623</td>
<td>0.388</td>
<td>0.339</td>
<td>0.903</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>180.178</td>
<td>28.000</td>
<td>6.435</td>
<td>7.893</td>
</tr>
<tr>
<td>Residual</td>
<td>284.542</td>
<td>349.000</td>
<td>0.815</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>464.720</td>
<td>377.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4: Regression Analysis

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>( \beta )</th>
<th>( t )</th>
<th>Sig.</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-0.300</td>
<td>-0.493</td>
<td>0.622</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.038</td>
<td>0.365</td>
<td>0.715</td>
<td>1.140</td>
</tr>
<tr>
<td>Age</td>
<td>0.002</td>
<td>0.457</td>
<td>0.648</td>
<td>1.136</td>
</tr>
<tr>
<td>Hours spent on the web</td>
<td>-0.007</td>
<td>-0.971</td>
<td>0.332</td>
<td>1.138</td>
</tr>
<tr>
<td>Online purchases</td>
<td>-0.007</td>
<td>-0.971</td>
<td>0.332</td>
<td>1.138</td>
</tr>
<tr>
<td>The seal shows that the website is credible</td>
<td>0.179</td>
<td>1.899</td>
<td>0.058</td>
<td>1.152</td>
</tr>
<tr>
<td>The seal should be displayed on the website</td>
<td>0.127</td>
<td>1.976</td>
<td>0.049</td>
<td>2.089</td>
</tr>
<tr>
<td>I trust the website because previous customers have bought from the company</td>
<td>0.175</td>
<td>3.273</td>
<td>0.001</td>
<td>2.116</td>
</tr>
<tr>
<td>Comments are placed on the website by the webmaster to enhance credibility</td>
<td>0.175</td>
<td>3.273</td>
<td>0.001</td>
<td>2.116</td>
</tr>
<tr>
<td>Comments help me to see if orders have been placed with this company before</td>
<td>-0.062</td>
<td>-1.231</td>
<td>0.219</td>
<td>1.938</td>
</tr>
<tr>
<td>Only the good comments are posted</td>
<td>0.044</td>
<td>1.031</td>
<td>0.303</td>
<td>1.311</td>
</tr>
<tr>
<td>The comments are those of genuine customers.</td>
<td>0.083</td>
<td>1.410</td>
<td>0.159</td>
<td>1.892</td>
</tr>
<tr>
<td>I prefer to see where the customer is from</td>
<td>-0.059</td>
<td>-1.355</td>
<td>0.176</td>
<td>1.242</td>
</tr>
<tr>
<td>I feel comments from international customers enhance the credibility of the website</td>
<td>-0.058</td>
<td>-1.111</td>
<td>0.267</td>
<td>1.365</td>
</tr>
<tr>
<td>I want to see a privacy statement on the website</td>
<td>0.075</td>
<td>0.949</td>
<td>0.343</td>
<td>1.229</td>
</tr>
<tr>
<td>I am concerned about what happens to my credit card details once the transaction has been completed</td>
<td>-0.056</td>
<td>-0.728</td>
<td>0.467</td>
<td>1.165</td>
</tr>
<tr>
<td>I do not have time to read the privacy statement</td>
<td>0.034</td>
<td>0.858</td>
<td>0.392</td>
<td>1.499</td>
</tr>
<tr>
<td>I do not think privacy statements are worth much</td>
<td>0.016</td>
<td>0.352</td>
<td>0.725</td>
<td>1.666</td>
</tr>
<tr>
<td>I am confident that this website has adequate safety precautions.</td>
<td>0.088</td>
<td>1.501</td>
<td>0.134</td>
<td>1.678</td>
</tr>
<tr>
<td>Good-looking graphics on a website communicate the professionalism of the service I am likely to get</td>
<td>0.060</td>
<td>1.012</td>
<td>0.312</td>
<td>1.479</td>
</tr>
<tr>
<td>My first impression makes me decide whether or not to buy from this website</td>
<td>-0.073</td>
<td>-1.506</td>
<td>0.133</td>
<td>1.355</td>
</tr>
<tr>
<td>Good-looking photos are important on a website</td>
<td>0.095</td>
<td>1.550</td>
<td>0.122</td>
<td>1.512</td>
</tr>
<tr>
<td>I will consider purchasing from LaptopMania because the website looks credible.</td>
<td>0.306</td>
<td>5.782</td>
<td>0.000</td>
<td>1.666</td>
</tr>
<tr>
<td>The presence of recognised brands (e.g. BenQ and Acer) on the LaptopMania website matters to me.</td>
<td>0.074</td>
<td>1.617</td>
<td>0.244</td>
<td>1.398</td>
</tr>
<tr>
<td>Pictures of key people appearing on the home page are important to me</td>
<td>-0.033</td>
<td>-0.742</td>
<td>0.458</td>
<td>1.620</td>
</tr>
<tr>
<td>Details about the staff of the company are not important</td>
<td>-0.118</td>
<td>-3.042</td>
<td>0.003</td>
<td>1.357</td>
</tr>
<tr>
<td>I like to see a page dedicated to the staff member I will be dealing with.</td>
<td>-0.080</td>
<td>-1.833</td>
<td>0.068</td>
<td>1.580</td>
</tr>
<tr>
<td>Third Party Organisation - - 1</td>
<td>0.036</td>
<td>0.354</td>
<td>0.723</td>
<td>1.176</td>
</tr>
</tbody>
</table>

Dependent Variable: I am likely to consider this website for my purchase.
**Multi-collinearity and variance inflation factor**

The Variance Inflation Factor (VIF) for the entire model never exceeded 2.1160, which was significantly below the generally accepted cut-off value for multi-collinearity of 10 (Hair et al 1998), identifying that no multi-collinearity exists. Therefore it can be deduced that the degree of collinearity among the predictors did not degrade the precision of the estimates.

**Control factors**

**Age**

Of the 463 people who completed the age question of the survey, 312 were female and 151 were male. This represented 67.39% female and 31.61% male. Gender was regarded as a non-significant factor with a non-significant value of 0.501.
As expected the majority of persons completing the survey were between ages 21 and 43, representing 66.31%. The second highest set of respondents was between ages 42 and 53 representing 24.62%. The long tail of ages 53 and over represented 9.94%.

The age group with the highest number of respondents was 32 with a total of 28 respondents. The youngest person responding to the survey was 10 and the oldest person to complete the survey was in the age category 71+.
Hours spent on the web

Figure 3: Hours Spent on the Web

The majority of the respondents spent between 1-5 hours a week on the internet searching and shopping for goods. Most people fell into the “1 hour per week” category with 14.47% of the respondents in this bracket. Second was 10 hours a week with 11.02%.

Interestingly, the category 31 hours plus ranked 10th out of 31 indicating that certain individuals spent significant hours a week shopping for goods online.
Frequency of online purchases

Figure 4: Frequency of Online Purchases

The majority of respondents shopped for goods on the internet on a monthly basis with 73.26% falling within this category. 17.83% of the respondents had never made an online purchase.

Figure 5: Online Purchases Prior Month
73.81% of the respondents made at least 1 purchase the previous month with only 26.19% having made zero purchases the previous month. The majority of respondents fell within the 0-3 purchases range.

**Independent variables**

**Seal enhances credibility**

**Table 5: Table of Response Count to TPO seals**

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>%</th>
<th></th>
<th>Count</th>
<th>%</th>
<th></th>
<th>Count</th>
<th>%</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thawte</td>
<td>20</td>
<td>3.53%</td>
<td>Verisign</td>
<td>254</td>
<td>44.80%</td>
<td>BBB: Better Business Bureau</td>
<td>8</td>
<td>1.41%</td>
<td>Don't know</td>
</tr>
</tbody>
</table>

575 Respondents answered the questions under this section of the survey. Interestingly, only 44.8% of the respondents actually identified the correct seal and 27.7% of the respondents could neither remember the seal and 20.8% did not know what the seal was. This
represented a total of 48.5% of respondents who did not identify the seal at all.

With the above noted, the statement “The seal shows that the website is credible” showed a high significance of 0.049 and t value = 1.976. Additionally the statement “the seal should be displayed on the website” showed a high significance value of 0.074 and t value = 1.795. Both of these statements were highly significant to the respondents.

The beta values for these two statements were ranked no. 3 and no. 4 of all the beta values shown on the statistical results. This indicates that even though 48.5% of the respondents were totally unaware of the seal, still held the seal in high regard and wanted the seal to be displayed on the website.

The statement “The seal does not add any value to the website” displayed a significance value of 0.233 therefore making it non significant.
The above clearly supports H1 = The Consumer will perceive the website as more credible if there is evidence of an endorsement or an affiliation to a TPO. Therefore H1 is accepted.

Table 6: TPO Seal Recollection

<table>
<thead>
<tr>
<th>Statement</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not recall seeing a seal on the website</td>
<td>246</td>
<td>43%</td>
</tr>
<tr>
<td>I recall seeing one of the seals but did not recognise it or read the labelling</td>
<td>189</td>
<td>33%</td>
</tr>
<tr>
<td>I read the labelling, clicked on it, but did not read the information that was displayed</td>
<td>89</td>
<td>16%</td>
</tr>
<tr>
<td>I clicked on the seal, read the information that was displayed about the seal and the retailer</td>
<td>48</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>572</td>
<td>100%</td>
</tr>
</tbody>
</table>

Customer comments

7 Independent variables were identified in this section of which 3 showed significance values.

The statement “I trust the website because previous customers have bought from the company” was highly significant with a t value of 3.273 and a corresponding significance value of 0.001. The beta value for this statement was ranked 2\textsuperscript{nd} highest in the results with a value of 0.176. Customers appear to be very trusting so if a webmaster was dishonest these comments could be placed fictitiously to induce customers to purchase from the website.
Based on the above results, $H_2= \text{Customer ratings on the website induce stronger buyer trust, is accepted.}$

Other marginally significant statements in this section were “The comments were those of genuine customers” reflecting a $t$ value of 1.410 and corresponding significance value of 0.159. This statement ties in with the above analogy that customers believe what the webmaster places on the website to be true.

Therefore, $H_{2a}= \text{Customers perceive customer comments on the website as credible sources, is accepted.}$

The statement “I prefer to see where the customer is from” showed a significance value of 0.176 and $t$ value of -1.354 and a beta = -0.059 thus indicating that it is non-significant.

Therefore, $H_{2b}= \text{Customers in a South African environment prefer comments from South African customers, is rejected.}$
Privacy statements

Interestingly privacy statements did not feature strongly as a consideration factor in the survey. Of the 5 independent variables, only the statement “I am confident this website has adequate safety precautions” had a marginally significant value of 0.134 and t value = 1.501.

Privacy rated low in terms of significance, but was ranked 2 out of 18 items tested in an Asian environment (Yang 2003). The statement “I want to see a privacy statement on the website” showed a significance level of 0.343 and t value = 0.949 indicating that privacy statements were non-significant.

“I am concerned about what happens to my credit card details once the transaction has been completed” was non-significant with a t value of -0.728 and significance level of 0.467. The beta value = -0.056 indicating that the converse is non-significantly true. Therefore customers appear not to worry about what happens to their credit cards, however this statement is non-significant.
Reading the privacy statement is also non-significant with a t value of 0.858 and significance value of 0.398. This indicates that customers do not read privacy statements or see them as insignificant. This is evident from the statement “I do not think privacy statements are worth much” with a non-significant value of 0.725 and t-value of 0.352.

The above supports that H3= Customers prefer to shop on a website where they feel their information will be protected. (Privacy perceptions are positively related to consumers willingness to do internet shopping), is therefore rejected. The privacy statement does not play a pivotal role in the consumer’s intention to purchase in spite of the high crime rate in South Africa.

**Graphics and appearance**

Only two statements in this section were marginally significant. Respondents felt that good looking graphics are important on a website with a marginally significant value of 0.129 and t value of 1.550. Therefore H4= Good looking graphic design increases the customers perception of credibility of the website, is accepted.
Also rated marginally significant was the statement that “first impression makes me decide whether or not to buy from this website” with a t value of -1.506 and significance value of 0.133. The negative t value indicates that the first impression does not make the customer consider purchasing from a website.

Customers did not perceive that good looking graphics would indicate the level of service they would receive. This statement yielded a non significant value of 0.312.

**Branding**

Branding appears to be one of the most crucial items pertaining to credibility on a website. People considered purchasing from the website as it looked credible and this statement yielded the most highly significant value of the entire study at 0.000, the highest corresponding t value = 5.782 and highest beta of 0.305.

Unfortunately there are two constructs in the question and which one was being referred to is not evident. Therefore the encompassing variable does not distinguish between elements of “looking credible” or “will consider buying from”.

---

57
Therefore it is felt that $H_{4a}=$ A strong display of branding increases the customers perception of credibility of the website, is accepted.

The presence of branded companies’ logos on the website did not feature and was non-significant with a significance value of 0.243.

Customers appeared to want good looking graphics and photos on the website, with this statement yielding a marginally significant value of 0.121 and $t$ value = 1.550. However they did not see it necessary to see a page dedicated to a staff member they would be dealing with on the website. This statement showed a negative $t$ value = -1.833 and highly significance value of 0.068. This supports us rejecting hypothesis $H_{4b}=$ Photos of company representatives increase the customer’s perception of credibility of the website.

**Website extensions**

The respondents were requested to rank the extensions of websites according to their order of importance. This was not included in the regression analysis. Table 9 reveals the results. The .co.za domain was regarded as the most important domain with an average rating of 1.66
on a 5 point Likert scale. .Info was regarded as least important with an average rating of 4.99 on a 5 point Likert scale.

**Table 7: URL Rankings**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>.co.za</td>
<td>1</td>
</tr>
<tr>
<td>.com</td>
<td>2</td>
</tr>
<tr>
<td>.net</td>
<td>3</td>
</tr>
<tr>
<td>.org</td>
<td>4</td>
</tr>
<tr>
<td>.biz</td>
<td>5</td>
</tr>
<tr>
<td>.info</td>
<td>6</td>
</tr>
</tbody>
</table>

In light of the above, it is evident that customers attach far greater value to a .co.za domain than an .info or .biz domain. It is suspected that this is not about credibility, but rather more about familiarity. The customer feels far more familiar with the .co.za domain than a .info domain. Therefore H5= Websites with country affiliated names are perceived as more credible than websites with commercial domain names, is accepted.
Chapter 6: Discussion of results

Social Exchange Theory

Referring back to social exchange theory (Blau 1964), consumers purchase based on the predicted behaviours of others, the expected rewards and costs, perceived dependence and control in the relationships.

In the South African environment, there appears to be little reference to the social exchange theory (SET). Consumers are exceptionally trusting of websites (or too lazy to investigate thoroughly if they are credible or not). In line SET’s theory that a person’s behaviours are predicted by another’s previous behaviour, South African consumers may be assuming that the presence of customer comments indicates that prior customers have purchased from this website and therefore an honest transaction will result. The social cues, capabilities and values of the parties are determined by the website and not by an interaction between both parties. Therefore the possibility for fraud exists even further as consumers are not taking cognisance of their own social cues and values and not heeding possible warning signs.
The results are discussed below under the major headings and hypotheses:

**Third Party Organisations (TPO Seals)**

As part of the study, a question was posed to the respondents to see if they actually recognized the seal or had a recollection of the seal on the website.

44.8% of the respondents did recognize the seal, however a total of 55.2% of the respondents failed to identify the seal correctly. This indicates that the majority of persons visiting the website were not aware of the seal and that they were not consciously seeking out the seal as a form of protection for their potential purpose or to provide a visual clue that the website is credible. In Kimery and McCord’s study of 2002, they noted that 20% of respondents did not notice the seal in the USA. South African statistics appear to be significantly more, with 43% not noticing the seal at all (see table 7). This figure should in essence be increased by a further 8%.

Table 8 contains a question “I clicked on the seal, read the information that was displayed about the seal and the retailer”. This was a false
statement, as the possibility did not exist for the respondents to click on the seal and read about the retailer. Therefore these respondents could not identify the seal. Kimery further noted that the TPO seal was not correlated to the credibility of the website, which is consistent with the South African perspective.

However regression analysis revealed that respondents found that the presence of the seal meant that the website was credible and that respondents wanted the seal to be displayed on the website. In essence, this is contradictory, as respondents do not notice the seal, however want it to be displayed. Wakefield & Whitten 2006, confirmed in their study that the TPO definitely increases the respondent’s intention to purchase thus enhancing the credibility of that website. Kimery & McCord 2002 also found that the presence of the TPO enhanced the credibility of the website. The South African study results are similar to that of Odom et al 2002, where they found that shoppers rarely consult the privacy statement of assurance providers or even differentiate amongst the providers.

What this study has found is that the presence of the seal does increase the credibility of the website, however this applies to a minority of people. If the respondent is not aware of the seal, then the
presence or absence of the seal would be irrelevant to that respondent.

Ideally future research should include actual purchase transactions where the seal is present and the respondents’ put through the motions of completing a transaction. The tests should then attempt to identify whether the respondent looked for and identified the seal before providing credit card details or transacting, and the significance the seal played. In this study, a simulated environment, the appearance of respondent bias may be present in that the respondent may feel they ought to be able to identify the seal and that this is supposed to protect the consumer, and then answer in the affirmative.

Unfortunately what this study does not identify is the possibility that the placement of the seal on a website may materially influence whether the user sees the seal or not. In this study, the seal was placed at the bottom left hand corner of the website. The seal was not overtly visible and the respondents would have had to seek out the seal to identify it. This was purposefully done to ascertain whether the respondents would identify the seal and if they sought out the seal. Further studies should be conducted on whether the placement or
location of a seal on a website would affect the identification of the seal and the extent to which respondents would seek out the seal.

**Feedback mechanisms**

Feedback mechanisms yielded a high significance in terms of credibility online. Respondents felt the website was credible due to the fact that previous persons had purchased from the website before. The only means respondents had of determining whether or not transactions had taken place was by the presence of these comments on the website.

This statement agrees with the findings by Ba and Pavlou 2002, where a premium could be charged by the seller in an auction environment and more positive statements were levied against the seller, the more of a premium that seller would be able to charge. Whilst the positive statements do identify that the seller has transacted before, the positive statements minimize the information asymmetry. The respondents felt safer purchasing from LaptopMania due to the existence of prior customer activity. Interestingly, the respondents did not feel the comments identified that the company had engaged in business online before, which is contradictory, as the comments on the
website are the only means by which the respondents would be able to determine if there was commercial activity. Nowhere else on the website is there evidence of sales or any other commercial activity.

This has important implications from a web design perspective. Should a start-up company wish to gain credibility from the onset, this would be possible by posting positive comments on the website from “customers”. Buyers will believe that these are genuine comments regardless or not if these comments are in fact real. Respondents were not concerned that the comments were real or not.

Current websites would be able to increase their current credibility by posting comments from customers. Buyers in a South African environment appear to be very credulous and will be prepared to accept comments regardless of their validity or not. This can be seen as a loophole in website credibility, as any fraudulent individual or company may utilise this as a tactic to induce fraudulent customer purchases. Potentially this could be hazardous to the development of online businesses in South Africa.

The respondents preferred to see the location of the prior customers and the comments of international customers yielded a non-significant
result. It is therefore uncertain for what reason the respondents wish
to see the location of existing customers. It is purported that
comments by South African customers may be more important as the
same values are shared between South African customers. Foreign
customers do not support the same values and priorities in this
environment, however they could be regarded as more seasoned
online shoppers. It is recommended that further studies are conducted
on the comments posted on websites to determine the extent
customers will perceive South African comments as credible and
international comments to be credible. Additionally this may answer
questions surrounding whether South African online companies should
be transacting on a global basis or if it would be better to only transact
in the domestic environment.

Ultimately the customer comments yielded the desired effect and
respondents identified these comments and agreed that the website
was more credible as a result of the comments.
Privacy and security perceptions

Considering the South African environment, it was presumed that privacy and security would have been one of the major concerns for the respondents.

In a comparison between respondents globally and those in a South African environment, the South African respondents are very lax with their privacy and security expectations and awareness. The results showed that the respondents were not concerned about privacy statements on websites. They were even less concerned about what happened to their credit card details once a transaction had been completed.

These findings are in stark contrast to the Pew Internet and American Life Project 2002 where 68% of respondents were concerned about revealing financial information online. The Princeton Survey (2002) also revealed that respondents in the USA were concerned about what happened to their credit card details once a transaction had been completed. Once again, this evidence supports the fact that either South African consumers are very trusting when performing online transactions, or are naïve in presuming their information is kept safe.
LaptopMania was a hypothetical company where respondents felt that the company was credible and that there were adequate safety precautions. Respondents were not privy to anything else other than what was displayed on the website. This aligns with the previous section, where customers believe all comments on a website are true and will trust the website as a result. There is a massive potential for fraud in a South African environment.

Ironically, the respondents were confident that the website had adequate safety precautions, yet did not pay much attention to the privacy items placed on the website to test their awareness thereof. These included a privacy statement, a privacy policy clearly stating that credit card details would not be kept after the purchase had been initiated, and a standard privacy policy. The terms and conditions of the sale were also available for customers to see. Possible reasons for respondents not paying attention to the privacy statements, again, could be acquiescence bias, with respondents identifying that it was a survey and therefore had to be secure. Alternatively, respondent bias may have resulted with respondents feeling they should answer in the affirmative.
In terms of the graphical interface, Wang and Emurian’s (2005) findings are supported by this study in that good looking graphics on a website lead to enhanced credibility. Good looking graphics were used on the website, together with a cool blue tone. Graphics were sharp and crisp adding to the feel of the website. A model was used as the “company representative” adding to the good looking features. The pictures of the laptops were strategically positioned in the middle of the page and were the most up to date models, however most shoppers would not be aware of this. Good looking fonts were used as well as well rounded lines on the outline of the page. There was a symmetric use of moderate pastel colours of low brightness and low tones added to the appeal of the website. All these aspects were well chosen to enhance the appearance of the website and to attempt to increase the credibility in terms of the studies conducted by Wang et al 2005. Respondents agreed that good looking graphics were necessary on the website and enhanced the credibility.

Therefore it is recommended for web designers to ensure that the look of the website is professional and good looking when considering the design of their websites. Customers felt that good looking graphics would not be representative of the level of service that would be
encountered from the website, however they would be more inclined to purchase from the company.

Contextual design was regarded as significant in this study, however not all aspects of Wang et al’s study were included. Brand promoting material was included in the content of the website and the respondents found this aspect to be non significant. The brands were prominently displayed at the base of the webpage utilising the actual logos from the brand companies. Included amongst these brands were HP, Lenovo, Acer and Mecer. These brand names were also displayed prominently on the left hand menu of the website. This is the most commonly used menu and therefore would have been very visible to the respondents. The company logo was displayed very prominently at the top of the website and was designed to look professional.

Hawkins, Best & Coney’s 1998 study found that consumers will pass their perceptions of trust from an endorser of a product on to that product, company or service being provided. The attempts of this study to pass the credibility of external brands on to the current brand were unsuccessful and could not confirm Hawkins et al’s 1998 study.
The respondents did not see any value in the endorsement of the website by recognized brands. This is contrary to the findings of Egger 2001, where the display of prominent logos and presentation of the companies’ main selling points were found to enhance the credibility. Therefore, the existence of brand on the website was not found to increase credibility and H4a was not supported by this study.

Social cue design was regarded highly significant, with respondents very keen to identify who they were dealing with in a company and to be able to read up about them on a dedicated page. This supports Steinbruck et al’s research of 2002, where the existence of a photograph of the companies’ representative induced higher trust. A model was utilised as the picture for the call centre agent, which was purposefully placed in an attempt to increase the credibility.

Therefore from a design perspective it is important for the website to contain information on the staff members and to include photographs on the website of those individuals.
Institution affiliated names

The institution affiliated names were not included in the statistical model, however the ranking of the names clearly indicated the thought process of the South African consumer.

Interestingly, the .co.za domain was regarded as the most credible and thereafter .com. This indicates a relatively sophisticated online consumer, who identifies that a .com domain is predominantly used by USA firms and a .co.za domain would be used by a South African firm.

This study does not identify if the .co.za domain is recognised as the most credible due to similar values shared by the South African online consumers and if the possibility exists that .com domains are regarded as credible due to the fact that these are used by predominantly USA firms. Further study would be recommended to determine the reasons why the South African consumer reacts in a positive manner to a .co.za domain and why the .info domain is regarded as the least credible of the domains.
**Potential for fraud**

The potential for fraud in an online environment in South Africa is very significant. Consumers are unaware of the potential to be manipulated online.

The study shows just how trusting consumers are and are prepared to accept anything placed on the website as being correct and valid. They are naïve in assuming that websites are credible due to the fact that they only look credible or comments have been placed on a website by a webmaster. Customers need to take a proactive role in assuring that companies actually exist and that their details are adequately protected.

Possibilities for fraud exist as follows:

1. Webmasters place fictitious comments on websites from fictitious customers thus luring unsuspecting buyers. With customer comments featuring so significantly in the regression analysis, it would be very easy to strategically place these comments and pose as a legitimate company. Should the webmaster be particularly dishonest, they may place targeted comments from “previous customers”. The significance of this statement had a t
value = 3.273. Therefore due to the high significance according to this study, the potential customers will be inclined to believe that these comments are genuine (t value = 1.410) and not suspect that they are fraudulent.

2. Privacy statements are ignored and appear not to be significant. Regression analysis showed that customers are not concerned about what happened to their credit card details post transaction (t value = -0.728). This statement was non-significant and therefore proves that customers will provide credit card details and not consider the consequences. The potential for fraud here are twofold:

   a. The customer is lured onto a “fictitious” website, provides their credit card details and buys a product. The product is never delivered.

   b. The customer’s credit card details are sold to criminals who then fraudulently purchase on the internet utilising their card.

The customer presumes the website is credible as it appears to have adequate safety precautions (t value = 1.501) and will
therefore not consider the implications of providing credit card details.

**Managerial implications**

The objectives of this research have been met in terms of the research problems, the tests conducted and the results obtained. Below is a summary of the managerial implications of this study from an online credibility perspective:

1. It is important to display an online seal on a website even though a consumer may not notice the seal. The possibility exists that consumers may search for it. If it has been omitted from the site, the consumers’ intention to purchase may be lost.

2. Web designers should show prior customer comments prominently on the homepage and if possible include a page dedicated to customer comments. The location of the customer posing the comments should also be displayed. South African consumers prefer to see comments from South African customers.
3. Whilst there exists a wealth of research on privacy statements on a website, from a South African perspective, a privacy statement need not exist on a website.

4. Be sure to include good looking photos and graphics on the website. Appearances are important.

5. Include details of staff and pictures of staff members on the website.

6. Make sure that the domain is a .co.za domain

7. South Africans are very naïve when purchasing online and appear to be more interested in convenience. From a management perspective, there exists a huge possibility to manipulate customers into believing something that does not exist. Management should be very aware of the existence of this naivety and not attempt to breach the trust relationship.

This list is not exhaustive and is not final. It should be used in conjunction with logic and good business practices.
Chapter 7: Conclusion

This study reveals some important information concerning online consumer habits online in a South African environment.

From the study it is evident that South African consumers are not particularly concerned about security issues and are prepared to place the responsibility of security solely on the website. It is evident that privacy is of little concern and consumers will naively trust the website to ensure that their particulars are kept confidential.

The lack of awareness of encryption software, like Thawte or Verisign, or TPO seals, reflects sufficient evidence of how consumers’ details may be manipulated when purchasing online. Consumers were not even concerned about what happened to their credit card details once a transaction had been completed.

A further study appears to be necessary to establish to what extent consumers will take responsibility in ensuring that the information they provide is kept secure. Additional studies may be necessary to identify credibility aspects on a website in a real purchasing environment and not in a simulated environment. The possibility exists that in the
simulated environment, purchasing is far easier, and would the respondent really present their credit card to purchase online in a real time environment?

One of the interesting points of the study was the extent to which respondents felt that the customer comments added to the credibility of the website. These comments support the naivety of the consumer, particularly with the possibility existing that the clients did not ever exist. Once again, customers may be manipulated without even being aware of the underlying issues of the website. From a management perspective, this presents a great opportunity, as legitimate customer comments can be posted on the companies’ website, and these comments will induce a higher sense of trust from the potential customer.

Webmasters would be mindful to ensure that good looking graphics feature prominently on all pages of the website to ensure that customers perceive the company as credible. Additionally, the use of cool tones on the website will also influence the customer’s perceptions. Whilst first impressions will not influence the customer’s decision to purchase, the use of good graphics throughout should entrench the credibility to the customer.
Branding does not feature as significantly as was expected in enhancing the credibility of the website. The existence of a prominent brand name and the brand names of existing supplier companies did not enhance the credibility of the website at all.

Finally, a .co.za domain was regarded as most credible and thereafter a .com domain. Unusual URL’s like .info and .biz were regarded as the least credible of the domain names.

The South African consumer still lags behind the international community in online purchasing habits. This is evident from the lack of concern over security issues therefore indicating a lack of significant fraud or lack of perception of significant fraud in the South African e-commerce environment. This study has revealed that South African consumers are very trusting in an online environment. This could indicate that the South African e-commerce environment may be ready for a significant boost.

The international tests conducted in the South African environment revealed that the South African online consumer is different from that of the international consumer in many aspects, but share similar
concerns in certain areas. The effects of how trusting the South African consumer will continue to be into the future remains to be seen.


Doney, P.M. & Cannon P (1997) *An Examination of the Nature of Trust in Buyer-Seller Relationships* Journal of Marketing (61) April pp.35-51

Asean Academic press.


