

INTERNET BANKING- AN EMPIRICAL INVESTIGATION OF A TRUST AND LOYALTY MODEL FOR NEW ZEALAND BANKS

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ABSTRACT

The development of Internet Banking (I-Banking) requires a new recognition of customers' values for building long-term organization-customer relationships in the E-era. A Structural Equation Model was developed and tested in this paper for identifying the determinants that influence customers' trust and loyalty to I-Banking in New Zealand. The results indicated that shared value was the most critical factor impacting customers' trust in I-Banking, compared with two other important factors; communication and opportunistic behaviour control. As regarding improving loyalty among I-Bank customers, findings suggest that I-Banking needs to take satisfaction, trust, brand reputation and switching cost seriously, especially satisfaction, because it is the most important factor that influences customers' loyalty. Based on these findings, the implications culminate in recommendations to improve I-Banking services for customers.

INTRODUCTION

“Electronic commerce is transforming the marketplace by changing firms' business models by shaping relationships amongst market actors and by contributing to changes in market structure” (OECD, 1998). The emergence of Internet Banking (I-Banking) not only changed the way we do banking in all main areas: distribution, production, payment and trading (Llewellyn, 1997), but also created new customer values in content, infrastructure, and context (Methlie, 1998). Understanding customers' new values in electronic markets is a requisite for the growth of I-Banking. The increased competitive environment in the financial services market has led to increased pressure to reinforce customers' loyalty. Because loyal customers can lead to increased revenues for the firm (Reichheld, 1993, 1996; Schlesinger and Heskett, 1991), low customer turnover (Reichheld and Sasser, 1990), decreased costs (Jarvis and Wilcox, 1977; Reichheld, 1993), and often generate new business for a firm via word-of-mouth recommendations (Reichheld, 1996; Schlesinger and Heskett, 1991). Studies on factors that determine customer trust and loyalty in I-Banking are becoming extremely important in the E-commerce era.

New Zealand customers are accustomed to use a safe and secure ‘electronic information and money transfer systems’ (Boer et al, 2000). The use of the Internet has been strengthened by decreasing charges in New Zealand Internet Service Providers (ISPs), which provide optimistic prospects for penetration by I-Banking providers. Increasing numbers of institutions have been introducing and expanding their I-Banking products into the New Zealand market, such as Australia and New Zealand Bank, Bank of New Zealand, ASB Bank, National Bank of New Zealand, WestpacTrust Bank and TSB Bank. Along with the sustainable explorations of the market since 1996, the number of customers registered for I-Banking is growing, but I-Banking still has the lowest usage amongst all banking facilities in New Zealand (Chung and Paynter, 2002). However, little research has been done on I-Banking in New Zealand and “the research mostly lends qualitative insights, exploring I-Banking as a phenomenon and logical process rather than as a model with a set of determinable inputs and outputs” (Aladwani, 2001; Mukherjee and Nath, 2003). This research investigates the determinants of trust and loyalty of I-banking by using a structural equation model, which can be utilized in I-Banking service improvement in New Zealand.

2. THE LITERATURE REVIEW

Trust has always been an important factor in influencing consumer behaviour and has been shown to be critical in uncertain environments (Gefen and Straub, 2002; Jarvenpaa and Tractinsky, 1999). Customer loyalty has been regarded as an important source of sustainable competitive advantage and the main determinant for the success of companies (Zeithaml et al, 1996). The forthcoming literature review focuses on these two issues concerning trust and loyalty.

2.1 Trust in I-banking

Because trust is regarded as a catalyst in consumer-marketer relationships (Schurr and Ozanne, 1985), there have been numerous attempts to define and provide meaning to conceptions of trust. It is defined as “a willingness to rely on an exchange partner in whom one has confidence” (Moorman et al, 1993, p.82). “When one party has

confidence in an exchange partner's reliability and integrity", trust occurs (Morgan and Hunt 1994, p.23). Competence, benevolence, and integrity, are revealed as three characteristics of trust (Suh and Han 2003, p.137).

Being "the cornerstone of the strategic partnership"(Spekman, 1988), trust performs a vertical role in building long-term exchanges between firms and ultimate customers in the services marketing area (Berry, 1980). Morgan and Hunt (1994) treated trust as a multi-dimensional construct in the research of "The commitment-trust theory of relationship marketing". On the basis of Morgan and Hunt's research, Mukherjee and Nath (2003) conducted research about "online relationship marketing" and further developed the dimensional constructs of trust, which provided valuable insights for I-banking research. Based on previous research, we also conceptualise consumer trust as a multi-dimensional construct and identify three main antecedents to trust: shared values, communication and opportunistic behaviour control.

Based upon the above review of studies, we hypothesize three hypotheses for shared value, communication and opportunistic behaviour control that will lead to increased trust (H1, H2 and H3 respectively)in I-Banking

2.2 Loyalty to I-banking

Customer loyalty is indicated as an intention to perform a diverse set of behaviours that signify a motivation to uphold a relationship with the focal firm, including allocating a higher share of the category wallet to the specific service provider (Zeithaml et al, 1996). Oliver (1997, p.392) defined customers' loyalty as "a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour". Reichheld and Schefter (2000) first used the term 'e-loyalty'. Sohn and Lee (2002, p.657) noted "e-loyalty indicates customers' behaviour to visit and revisit the specific website and make transactions comfortably". Based on these studies, in this paper, we define loyalty as customers' intention to revisit the I-Bank again based on their prior experience and expectations. Among the various factors that have been suggested as important factors for retaining customer loyalty,

this study selected 'trust', 'brand reputation', 'satisfaction' and 'switching cost' as four important variables for their close relation to I-Banking.

Based upon the above review of studies, we hypothesize four hypotheses for trust, brand reputation, satisfaction, and switching cost that will lead to increased customer loyalty (H4, H5, H6 and H7 respectively) in I-Banking.

Thus far, we have presented determinants of importance for trust and loyalty in I-Banking. However, not many models exploring customers' trust and loyalty to I-Banking were found in New Zealand. This kind of research done by overseas researchers had contributed useful construction frameworks to I-Banking for improving the relationship with customers. As the Internet provides an evolving channel for customers to gain service from banks in New Zealand, research in this field is necessary, which can also fill the gap between academic research and reality practice. Based upon the literature review, a proposed model comprising seven constructs (Figure 1) was designed to understand the essence of customers' values in regards to I-Banking.

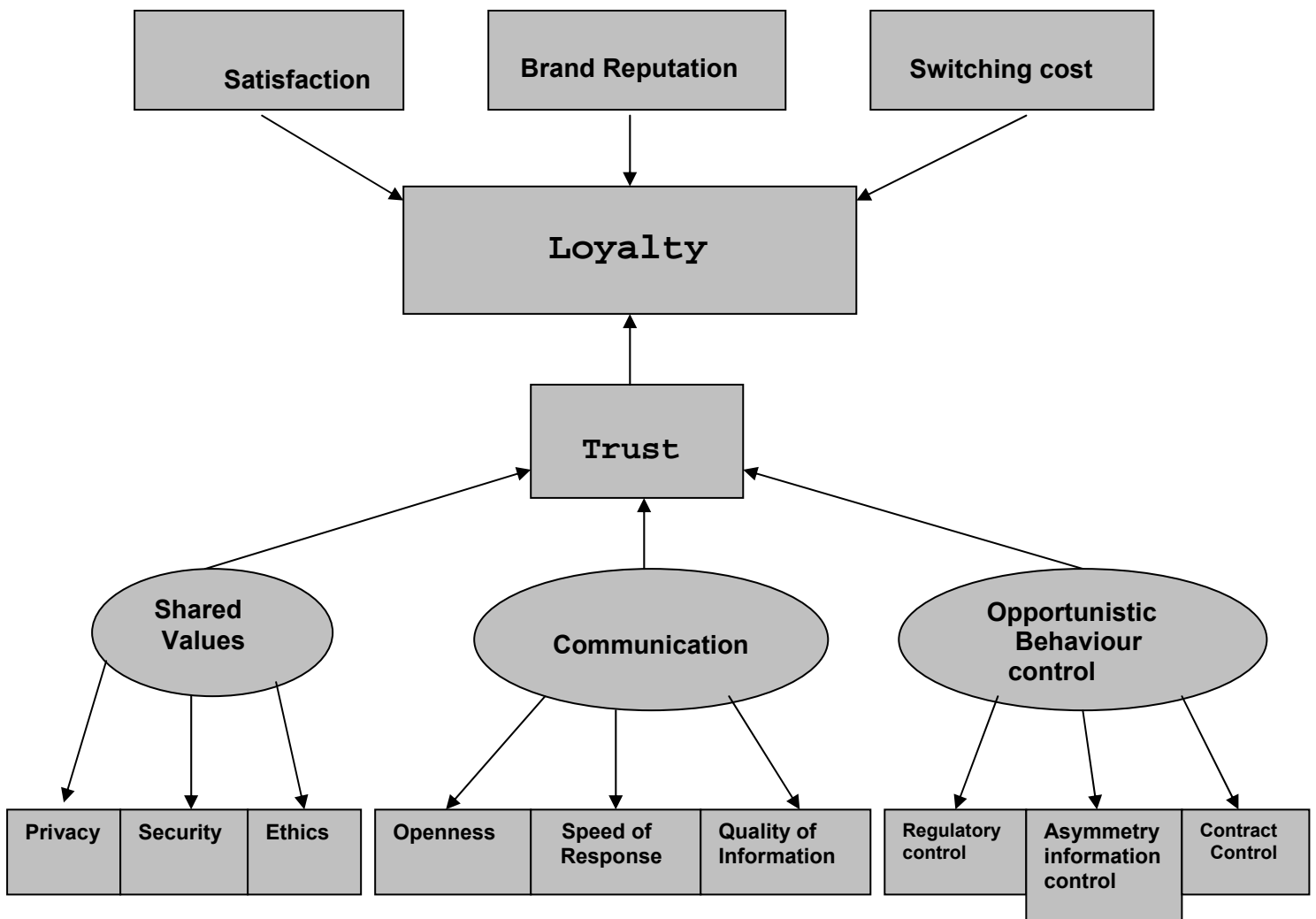
Figure 1 shows the structural equation model for 'Trust' and 'Loyalty' with causal linkages indicated by the arrows. The model assumes that 'Trust' is determined by shared value, communication and opportunistic behaviour control and 'Loyalty' is determined by trust, satisfaction, brand reputation and switching cost. The potential influence of privacy, security and ethics to shared values; the influence of openness, speediness of response and quality of information to communication; the influences of regulatory controls, asymmetry information control, and contract control to opportunistic behaviour control are also included in the model.

Following the literature review we have formed the following 7 hypotheses- the first three relate to trust and the remaining four relate to loyalty. These seven hypotheses will be tested in the model.

H1: There is a positive relationship between shared values and trust.

- H2: There is a positive relationship between communication and trust.
- H3: There is a positive relationship between opportunistic behaviour control and trust.
- H4: There is a positive relationship between trust and loyalty.
- H5: There is a positive relationship between satisfaction and loyalty.
- H6: There is a positive relationship between brand reputation and loyalty.
- H7: There is a positive relationship between switching cost and loyalty.

Figure 1: Structural Equation Model



3. OBJECTIVES OF THIS RESEARCH

Not many models exploring customers' trust and loyalty to I-Banking were found in New Zealand from the literature review. However, I-Banking is fundamentally changing the way New Zealand customers use the service provided by banks and is shaping relations between banks and customers. Under such circumstances it is timely

to explore new business models for I-Banking providers, to understand what factors affect customers' trust and loyalty to I-Banking, and which factors could explain differences in I-Banking preferences among different customers and if there is any relationship that exists between these factors. The purpose of this research is to develop a model and then test it empirically for exploring the determinants of New Zealand customers' trust and loyalty to Internet Banking which can help the I-Banking industry to cultivate a long-term, mutually beneficial relationship with its customers. The specific objectives of the study are as follows:

1. To identify factors that motivate New Zealand customers to trust I-Banking.
2. To identify factors that influence New Zealand customer's loyalty to I-Banking.

4. RESEARCH METHODOLOGY

4.1 Populations and Sample

The target population consisted of customers who have experienced I-Banking. Auckland is the main economic city in New Zealand with a population of 1.07 million in the main urban areas, which is 28.7 percent of the whole population in the country (Statistics NZ, 2001). Banks such as Australia and New Zealand Bank (ANZ), Bank of New Zealand (BNZ), ASB, BankDirect (BD), National Bank of New Zealand (NBNZ), and WestpacTrust (WPT) all offer advanced Internet banking facilities to customers in Auckland city. AC Nielsen research (2001) showed that households in Auckland city have the highest rate of Internet access, at around 43 per cent. These factors indicate that a large percentage of the target population exists in Auckland and a representative sample can be drawn from it. Therefore, Auckland city was chosen for this research.

4.2 Data Collection Methods

Many data collection methods were considered. Because of constraints in terms of time, costs and human resources, a random sample from the whole population of Internet banking users in New Zealand could not be obtained and the non-probability convenience sampling procedure was employed in this research. We intercepted banking customers at banking premises and other public areas, such as community

centres, car parks, shopping malls, university campuses and acquaintances. A total of 219 questionnaires were distributed personally in this way, and 203 completed usable questionnaires were collected.

4.3 The Questionnaire

A self-administered questionnaire was used in the data collection method. The initial survey questions were created to span the domain of the constructs and were worded in such a way as to be easily understood by respondents. The statements were presented to two research experts to weed out those items least connected to the constructs and to improve sentence wording. The questionnaire was divided into various sections. In the first section, questions were asked to gain information about how customers used I- Banking and how frequently they used it. They were designed as fixed-alternative questions, from which the respondents could choose the answers. In section two and three, items proposed to influence customers' trust in, and loyalty to I- Banking were listed respectively. All these items were required to be rated by respondents on an eleven-point rating scale anchored by 0= "not at all important", 5= "average important" and 10 = "most important". Trust was measured using nine items while loyalty was measured using five items.

4.4 Pilot Survey

A pilot survey was conducted after the questionnaire was designed. It helped to uncover any remaining problems and issues with the time taken to complete the questionnaire. Fifteen respondents, I-Banking customers, were chosen by convenience sampling method to participate. The results of the pilot survey showed that the questionnaire was easy to understand. It could be completed within 5-10 minutes. However, during the pilot survey, it was found that the format of the questionnaire consisting of 4 single sided pages was not appropriate for the survey which gave respondents the impression that it would take a long time to answer it. As a result, some people could have potentially been deterred from participating for reasons of time committal. Therefore, the questionnaire was edited and printed on two double sided pages to make it look shorter.

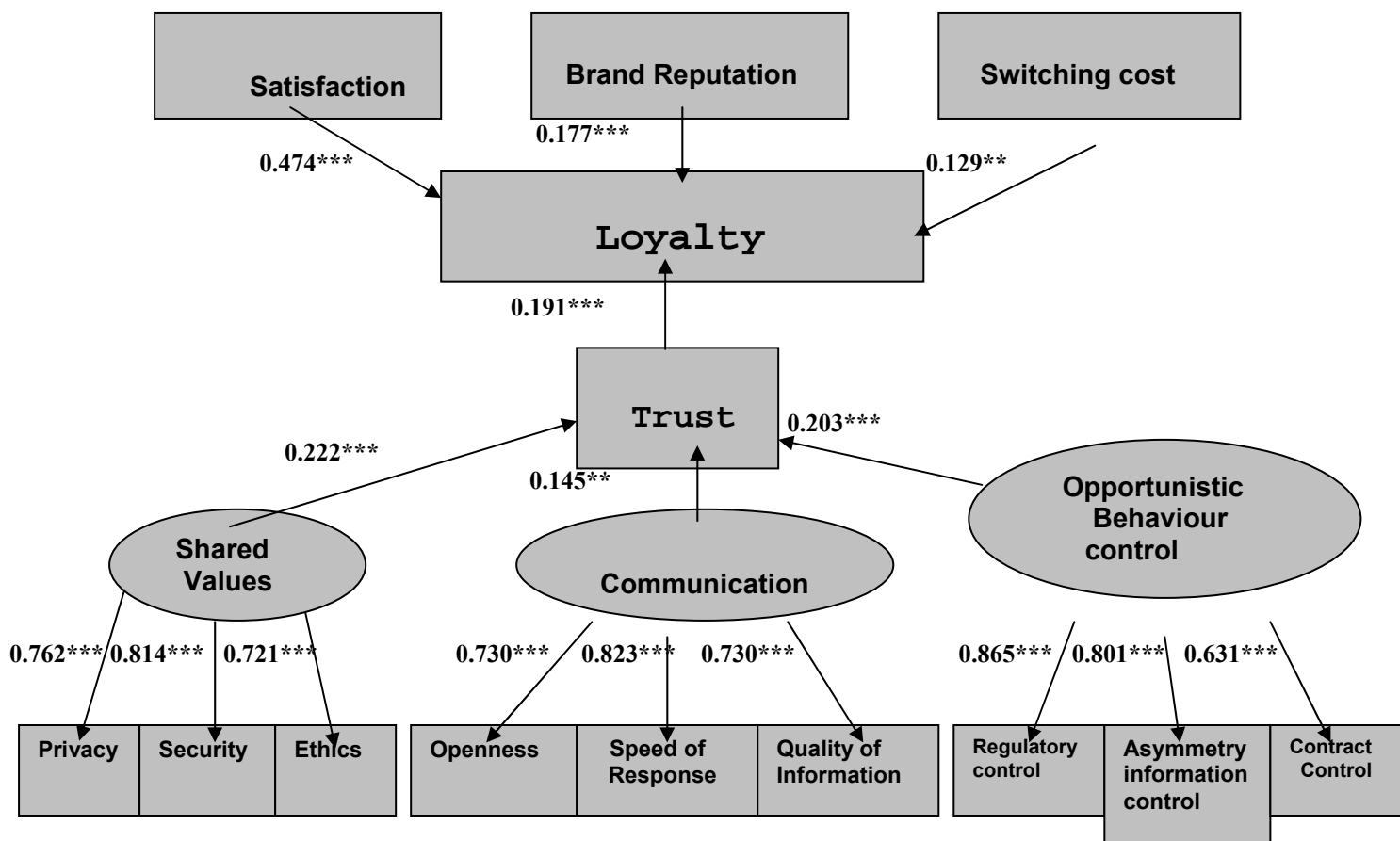
5. DATA ANALYSIS AND RESULTS

5.1 Data Analysis

Three questions each were asked for analysing customers' perception to shared value, communication and opportunistic behaviour control respectively, resulting in Cronbach alpha values of 0.8016, 0.8039 and 0.8045. These results suggest sufficient scale reliability for further analysis. We tested the model using the AMOS 4.0 © structural modelling software package and calculated standardized estimates for each of the hypothesized relationship paths. We fixed a number of parameters according to documented procedures. For instance a weight of 1 was assigned to the most important factor variables. The structural model parameters were estimated for all hypothesized paths.

Results of data analysis for the model test were very good and supportive of our all hypotheses. RMSEA was 0.067 lower than 0.08 indicating a good support for the model. NFI, RFI, IFI, TLI and CFI were all bigger than 0.98 closing to 1. These results provide further evidence that data support the model. We are therefore confident that our model can be used as a clear diagnostic aid that can help I-Banking recognize the factors that influence customer trust and loyalty in New Zealand. This is despite the (significant) results of the Chi-square test which effectively rejects the model as a result of the large sample size (>200)

Figure 2: Results of Structural Equation Model Test



The model test results are shown in (Figure 2, Table 1 and 2) with loadings shown on each arrow. The sign and strength of the loadings for the seven hypothesized paths provide clear empirical substantiation for the importance of each of these constructs to New Zealand I-Banking customers. All these loadings are significant. Although the T-ratio shown for the relation between Trust and Communication is 1.937, we would definitely regard it as significant because for a 2 sided-tailed test the p-value is 0.052 which is so close to 0.05 that it cannot be ignored.

Table 1: Path Analysis for the Model

No. of significant paths	Path			Standardized Regression Weights	T-ratio
Trust	Shared value	→	Trust	0.222	2.938 ***
	Communication	→	Trust	0.145	1.937 **
	Opportunistic Behaviour control	→	Trust	0.203	2.748 ***
Loyalty	Satisfaction	→	Loyalty	0.474	8.098 ***
	Reputation	→	Loyalty	0.177	3.034 ***
	Switching Cost	→	Loyalty	0.129	2.199 **
	Trust	→	Loyalty	0.191	3.261 ***

Note: *** Significant at 99% level; ** Significant at 95% level; * Significant at 90% level.

Findings on trust and I-Banking

Table 1 shows that of the three variables that were hypothesized to be related to trust, all were found to have significant positive relationships with trust; shared values (0.222, $p < 0.01$), communication (0.145, $p \approx 0.05$) and opportunistic behaviour control (0.203, $p < 0.01$). Thus, H1, H2 and H3 are proved. Shared value is the most important determinant of trust with the highest standardized regression weights (0.222).

A weight of one was assigned to the most important factor variables, namely security, responding speed and regulatory control. The test results shown in Table 2 indicated that these factors were correctly identified. As we can see, security is the most significant variable within shared values showing the highest standardized regression weights (0.814), followed by privacy and ethical standard. Regulatory control plays the most important role with the highest standardized regression weights (0.865) within controlling opportunistic behaviour, followed by asymmetry information control and contract execution control. Speed of response is most critical to communication with the highest standardized regression weights (0.823) within communication, followed by openness and quality of information.

Table 2: Results on trust and I-Banking

Trust values	Indicator	Standardized Regression Weights	T-ratio
Shared value	Privacy	0.762	9.335***
	Security	0.814	--- ***
	Ethical standard	0.721	9.119***
Communication	Openness	0.730	8.962***
	Responding speed	0.823	--- ***
	Quality of information	0.730	8.958***
Opportunistic behaviour control	Regulatory control	0.865	--- ***
	Asymmetry information control	0.801	9.658***
	Contract execution control	0.631	8.430***

Note: *** Significant at 99% level; ** Significant at 95% level; * Significant at 90% level.

Findings on loyalty and I-Banking

Table 1 also showed that all factors hypothesized to be related to loyalty were found to be in significant positive relationships with loyalty; satisfaction (0.474, $p < 0.01$), reputation (0.177, $p < 0.01$), switching cost (0.129, $p < 0.05$) and trust (0.191, $p < 0.01$). So, H4, H5, H6 and H7 were proved. Among these factors, satisfaction is the most important factor to loyalty with the highest standardized regression weights (0.474), followed by trust, reputation and switching cost.

5.2 Discussion of Results

This research further enhances and supports the notion that trust directly influences the degree and length of association and the sense of belonging between a bank and a customer. In the I-Banking context, trust-based marketing is the key to success; therefore trust should be placed at the centre of I-Banking strategies (Urban et al, 2000). To achieve customers' trust, Novak and Hoffman (1998) suggested, "allowing the balance of power to shift towards a more cooperative interaction between the online business and its customers".

Not only this research, but also the research by Chung and Paynter (2002) found that security is the most important determinant of trust in I-Banking for New Zealand bank customers. Therefore adoption of effective methods to protect customers' rights are

becoming especially important. Suh and Han (2003) indicated authentication, non-repudiation, confidentiality, privacy protection, and data integrity as five categories of basic security-controls that are required for I-Banking. Privacy issues are connected closely with security issues. Banks not only need to ensure that private information will not be intruded by illegal hacking, but also need to guarantee that private information will not be used in ways the customer did not anticipate or expect. Li et al (2001) indicated that a consumer would have more trust towards a web site with privacy policy programs than a web site without privacy policy programs when initially going to an unknown web site.

The ethical performance of I-Banking is driven strongly by its code of ethics that reflects the core values a corporation possesses. In order to lead to a reduction of integrity risks, I-Banking providers need to take their ethics seriously and respect the individual's rights. Steps must be taken to firmly establish ethics, for instance by including them in training courses and monitoring the use and relevance of the codes of ethics on a regular basis (Webley, 2003).

Opportunistic behaviour control acts as the important determinant of trust. Regulatory controls and information asymmetry controls also play important roles in customers' evaluation of I-Banking. Because the rapid development of I-Banking capabilities carries risks as well as benefits, regulatory controls perform the function of identifying, measuring, monitoring and controlling the operational risks for confirming a secure environment for financial activities through the Internet.

Without using appropriate communication styles, I-Banking can't build good relationships with its customers. Results show that customers take speed of response seriously when communicating with I-Banking providers. In fact, the speed of response reflects the efficiency of I-Banking in responding to user needs (Austin, 1991), which is an important sign of service quality from the consumers' perceptions (Zeithaml et al, 1990). Web waiting time negatively affects consumer evaluation of website content and slow speeds indicate that a service is not well managed (Dellaert and Kahn, 1999). Respect for a user's time by delivering information in a fast, accurate and appropriate manner is the basic requirement for a successful I- Banking

operation (Bernstel, 2002). Because New Zealand customers treat download time as an important factor, improvement in this area is necessary (Chung and Payner, 2002). Meanwhile, the I-Banking industry also needs to be open and provide high quality information to customers. It is important for customers to understand the work practices of I-Banking and consolidates the perception that I-Banking shares similar, not conflicting goals with them (Hart and Saunders, 1997).

Customer satisfaction has shown the strongest positive relationship with customers' loyalty in this research. Satisfaction strengthens the customer's decision to participate in a service process and results in a more committed customer (Tax et al, 1998; Rexha et al, 2003). It means a long-term customer-organization relationship must be built on customer satisfaction. Regarding online satisfaction, Meuter et al (2000) indicated that the impact of customisation could be much stronger for Internet-based service satisfaction. As electronic banking becomes more prevalent, a bank's service quality may well be measured in terms of personal support (Urban and Hauser, 1993).

Trust influencing customer's loyalty to I-Banking is confirmed in this research. The consequences of perceived trust for outcomes such as loyalty and cooperation have been studied by researchers (Garbarino and Johnson 1999; Tax et al, 1998). They found that once a customer trusts a firm, there is perceived similarity in values between them and the firm; the customer's establishment in a relationship is enhanced. Gwinner et al (1998) demonstrate that such value congruence is significantly related to a consumer's loyalty and satisfaction. In addition, when service providers' behaviours and practices reduce relational risk, consumers are likely to act cooperatively toward such a trustworthy service provider to maintain trust by demonstrating behavioural evidence of their loyalty (Gassenheimer et al, 1998).

This research shows that brand reputation has a positive relationship with loyalty. Seven dimensions drive a Bank's reputation: financial stability, customer focus, marketing effectiveness, ethical behaviour, social responsibility, workforce policy and global capabilities (Resnick, 2003). "For many users, brands (reputation) acts as a trusted 'consumer guide' on the Internet" (Lindstrom and Andersen 2000, p.127).

From a consumer's perspective, firms with a good reputation are perceived to be reluctant to jeopardize their reputation assets by acting opportunistically (Chiles and McMackin, 1996).

Switching cost has confirmed its influence on customer loyalty in our research. When customers decide to switch providers, they may perceive impediments ranging from "economic risk costs, evaluation costs, learning costs, set-up costs, benefit loss costs, monetary loss costs, personal relationship loss costs and brand relationship loss costs" (Burnham et al 2003, pp.111-112). Therefore switching costs can reduce customers' desire to leave an incumbent provider (Burnham et al, 2003). From a customer's perspective, customers like to reduce choices by engaging in an ongoing loyalty relationship with marketers (Sheth and Parvatiyar, 1995). Zeithaml (1981) argues that consumers often recognize that by staying in a relationship with a service provider, it may be possible to obtain optimum satisfaction. However, we cannot overstate switching costs. It must be managed judiciously, reducing them for potential new customers and increasing them in ways that add value for existing consumers' experiences (Burnham et al., 2003).

6. CONCLUSIONS

This paper provides an insight into customers' preferences in I- Banking in New Zealand. The Structural Equation Model developed assisted us in further identifying the variables influencing customers' trust and loyalty to I-Banking. Shared values, communication and opportunistic behaviour control were identified as critical factors influencing customers' trust. To improve customers' trust, security, regulatory controls and speed of response should be considered seriously by the I-Banking industry as they are the most important variables within every factor studied. In addition, trust, brand reputation and switching cost are important constituents of loyalty, but satisfaction plays the most important role in influencing customers' loyalty to I-Banking.

7. IMPLICATIONS

The findings of this research highlighted the recognition of customers' values to I-Banking performance and provide a guide for cultivating long-term, mutually beneficial relationships between I-Banking providers and customers. It has some implications for banks in terms of improving trust and loyalty which are discussed in the following paragraphs.

7.1 Improving customers' trust in I-Banking

As the research findings indicate higher customers' perceptions of security control, banks should (1) hire good encryption services and endeavour to strengthen the security control of their sites to ensure that security for online financial transactions is high; (2) sign a trust seal, such as 'Cyber Process Certifications', 'Identrus Certification', and display it on the home page of the site to increase the confidence of customers; (3) promote security features on the site to ensure customers can learn about the site's safety at any point (Bernstel, 2002; Suh and Han, 2003). An unambiguous security policy must be developed at the same time to address customers' secrecy, integrity, necessity and intellectual property rights (Schneider, 2002).

Respecting customers' privacy rights is the foundation for protecting customers' privacy, so a more consumer-oriented information privacy model is recommended for practice because it allows customers to control their personal information (Wang et al, 1998; Hoffman et al, 1999). A privacy statement verified by a third party, such as WebTrust and Trust-e, can help customers to recognize that the bank site is sufficiently secure, but the privacy statements should be clear and easy to read (Bernstel, 2002).

To ensure putting opportunistic behaviour control into practice, banks should define an operational risk policy and strengthen monitoring and control self-assessments in regular management (Li, 2002). Related to regulatory control, improving information asymmetry control also requires I-Banking providers to set up internal and external supervision systems to ensure that I-Banking is providing true and integral

information to customers. Moreover, to transfer management concepts from only focusing on pursuing economic benefit to building long-term organization-customer relationships is an important step that must be taken by I-Banking providers. Driven by a 'relationship marketing' orientation, customers' rights can gain the respect and focus of bank staff.

7.2 Improving customers' loyalty to I-Banking

This research found satisfaction as the most important factor influencing customers' loyalty to I-Banking. Therefore, keeping and increasing customers' satisfaction with I-Banking is becoming important. Because customers not only pursue economic benefits from the service, but also social and psychological benefits (Gwinner et al., 1998), the I-Banking industry could analyse the personal and situational aspects of clients, and focus on one or more of these benefits to provide tailored services to customers (Seal, 1998). Some scholars refer to this as the 'core benefit proposition' (Urban and Hauser, 1993), which can also differentiate a specific I-Banking from their competitors. For example, in August 2000, when the real estate market was at a very lean and uncertain time, ASB BANK introduced a home loan campaign called 'Take Our 60 Minute Challenge', which provides 'fast and efficient service' to customers. It differentiated ASB BANK from all other banks that had been making similar offers based on reductions in fees and/or interest. As a result, the bank improved its home loan bookings at a very lean and uncertain time in the real estate market (www.asb.co.nz).

To improve customer satisfaction I-Banking providers cannot ignore the reputation of banks. Consumers prefer to visit sites that represent a firm with which the consumer is already familiar from traditional channels (Quelch and Klein, 1996), because the reputation of the physical branch will influence customers' attitude towards an online site (Spiller & Lohse, 1997). Therefore, improving the physical branch's reputation can improve customers' trust in its Internet site. For example, for the third year in a row from 2000, ASB BANK was rated No 1 among New Zealand's major banks in a study of customer satisfaction (www.asb.co.nz). It confirmed its position as leader in the area of I- Banking in New Zealand (Chung and Payner, 2002).

Switching costs act as a factor influencing customer's loyalty to I-Banking, so an I-Banking provider might strategically promote relational benefits as reasons to build relationships with customers or help customers quantify the value of relationship benefits and related costs (dollars, time and psychological costs) of switching (Gwinner et al, 1998). If customers better understood the actual economic, time, psychological and energy-saving value of staying in a relationship, they might be less likely to switch (Keaveney, 1995). At the same time, an I-Banking provider needs to take care of 'core service failures', as mentioned above, not only do they damage customers' satisfaction, but also cause switching behaviour (Keaveney, 1995).

8. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This study has some limitations suggesting opportunities for future research. Because of the non-probability sampling method used in this study, the results of the collected data cannot be generalized to the entire population. Therefore, further research could be carried out on a broader cross-city random sample base.

Variables which influence satisfaction, brand reputation and switching cost were not identified in this model, Further, research could be done to further improve the structural model to obtain a more comprehensive view of customers' loyalty to I-Banking.

This model was developed highlighting only customers' trust and loyalty to I-Banking- it may not cover the entire view of the issues surrounding customer values. Subsequent research could address the issue from different angles, such as investigating customers' views and I-Banking managers' views together in the same research project, which may provide more valuable information from an expanded view.

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