# The Influence Of Internet Banking And Teller Service Quality On Customer Retention: A Comparison Study

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### **Abstract**

While customers have historically used bank branches for transactions, internet banking has become an increasingly important technique to retain customers in today's dynamic banking environment. This study empirically investigates the relative importance of bank tellers and internet banking services in influencing retail customer retention. The study is significant as it provides a practical insight into the differences between traditional and new internet banking service delivery channels for retaining customers in Australia. Therefore, bankers can identify the best strategies to maximise their competitive advantage. The results of this research show that delivering service through the traditional service channels (branches) has a stronger influence on increasing bank retention rates than internet banking. It is essential for bank mangers to have, as their first priority, the improvement of personal interactions with bank customers. Banks can then move forward to the quality issues of internet services.

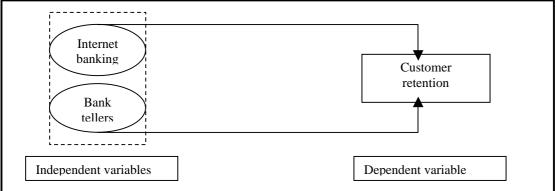
Keywords: tellers, internet banking, customer retention, quality, bank

#### Introduction

The main aim of this research is to examine the relative importance of bank tellers and internet banking services on the retention of retail customers. Customer perceptions and preferences have a significant impact on a bank's success (Yavas, Benkenstein and Stuhldreier, 2004). Analysing markets based on customer perceptions, designing a service delivery system that meets customer needs and enhancing the level of service performance are very important objectives for banks to gain and retain a competitive advantage (Chumpitaz and Paparoidamis, 2004). Thus, the research question is: How does the service quality of internet banking differ from the service quality of bank tellers in influencing retail customer retention?

The literature reveals extensive investigation into the relationship between service quality and customer retention in traditional banking contexts where face-to-face interaction between customer and employee is the focus. Banks now face a situation where tellers and traditional delivery functions are no longer their first interest (Meuter *et al.* 2000). The growth of technology in the delivery of services potentially has a considerable influence on the way organisations conduct business with consumers (Dabholkar and Bagozzi, 2002). New service delivery channels, including internet banking, provide new ways for banks to maintain a good relationship with their customers. The literature does not provide clear evidence about which service context (traditional or automated) is a better motivator to retain customers. This study is therefore justified as it provides practical insights into the differences in the influence of internet banking and bank tellers on retaining bank retail customers. The theoretical arguments that underlie the hypotheses are presented, as well as a research design and methodology for empirical testing. The outline model to be tested (see figure 1), shows the two independent variables of internet banking and bank tellers, and the dependent variable of customer retention.





## **Background**

Shareholder pressure to increase profitability has forced banks to move away from a transaction and 'quick sale' approach to maintaining a good long-term relationship with their customers (Duddy and Kandampully, 1999; Moria, 1997). The relationship between service quality and retention has been extensively investigated both theoretically and empirically over the past few years in the traditional service context (Ranaweera and Neely, 2003; Caruana, 2002). In this context, service quality has usually been considered an important component of establishing and retaining customers (Bei and Chiao, 2001). However, with the rapid diffusion and adoption of information technology, use of automated channels as a medium of interaction, in addition to the traditional banking services has become very popular (Lang and Colgate, 2003). Internet banking as a means of delivering traditional banking services has become an important way to retain customers, increase market share, create a new range of products, and change the cost structure of retail banking (Al-hawari and Ward, 2004; Santos, 2003; Gardener, Howcroft and Williams, 1999). Retention of customers can be accomplished through automated services by providing superior service quality (Reichheld and Schefter, 2000). However, the researchers have found limited empirical research examining the relationship between internet banking service quality and customer retention. A few studies investigating the relationship between web site attributes and customer retention in different contexts found a positive relationship between the two variables (Anderson and Srinivasan, 2003; Yen and Gwinner, 2003; Meuter et al. 2000).

In the banking sector, customers tend to use different service delivery channels in a complementary way; consequently, developing a relationship with the customer can be achieved from any one of these media and more likely, a combination of them (Al-hawari, Hartley and Ward, 2005). Since banks around the world are increasingly utilising internet banking to supplant traditional products and service delivery processes, it was necessary to compare the influence of each service quality context (internet and tellers) on customer retention. Therefore, banks can identify the best strategies to maximise their competitive advantage. A few researchers have investigated similar issues. For example, in a 2004 study conducted by Curry and Penman to investigate the extent of IT use in banking, it was shown that the balance between personal interaction and technologically delivered service must be right. However, the study did not explain how that balance should be maintained. Furthermore, Mols (1998) found that PC users were more satisfied, less price sensitive, had a higher intention to repurchase and provided more positive word-of mouth referrals than nonusers. Conversely, Mohr, Fisher and Nevin (1996) recommended that face-to-face communications might be used to create an atmosphere of mutual support enhancing the relationship between partners.

In general, theoretical and some empirical support have been found in the literature to support the notion that automated services represent a positive experience for users and provide increased value for money to entice customers to continue doing business with their bank (Santos, 2003; Zhu, Jr and Chen, 2002; Meuter et al. 2000). At the same time, the literature has warned that technology could isolate customers, provide a sense of incompetence, and enhance disconnectivity and passivity (Grabner-Krauter and Kalusha, 2003; Anderson and Srinivasan, 2003; Reichhield and Schefter, 2000). Despite inconsistency in the literature, we tend to support the view that traditional service quality is more important than automated service quality in retaining customers. Moreover, technology adoption patterns may differ from country to country. That is, the way in which some organisations utilise technologies in their marketing strategies may differ across cultural boundaries (Phillips, Calantone and Lee, 1994). None of the previous studies have investigated how the quality issues of automated and traditional banking services vary in their impact on customer retention in the Australian banking context. However, this research contributes to knowledge by adding further understanding to the relative importance of internet banking and bank tellers in retaining customers in this context.

# Research question and hypotheses

The research question to be addressed by this research is:

# How does the service quality of internet banking differ from the service quality of bank tellers in influencing retail customer retention?

The hypotheses are:

H1: Bank teller service quality has a positive influence on customer retention.

H2: Internet banking service quality has a positive influence on customer retention.

H3: The teller service quality has a higher influence on customer retention than internet service quality.

# Methodology

A quantitative study was used to gather primary field data using a questionnaire. The questionnaire was divided into 3 main sections. The first 2 sections dealt with customer perceptions of internet banking and teller service quality. The third section focussed on customer behavioural intentions and psychological attachments in order to measure the ability of banks to retain their customers. Teller elements of service quality refer to all aspects of staff/customer physical interaction in service delivery. It was noted from the literature review that teller elements have frequently been included to measure different dimensions of service quality (such as reliability, empathy, assurance, and responsiveness). For this research, it was important to measure as many of the different human elements which might impact on the customer retention as possible. As a result, all the items that related to tellers were extracted from previous service quality models (Jabnoun and Al-Tamimi, 2003; Sureshchandar, Rajendran and Anantharaman, 2002). This led to the extraction of 9 items in the first instance. The questions about customer perceptions of internet banking service quality were represented by seven aspects originally developed by Jun and Cai (2001) and subsequently used by Long and McMellon (2004). These aspects are: availability of information on web sites (content), accuracy of online transactions and bank web sites, ease of use, providing customers with updated information (timeliness), attractiveness of bank web sites (aesthetics), and security.

Customer retention is often seen as synonymous with customer loyalty (Al-hawari and Ward, 2004; Ranaweera and Neely, 2003; Zeithaml, Berry and Parasuraman, 1996). Furthermore, there seems to be a consensus among academics and practitioners that customer retention and customer loyalty are very similar concepts. For this reason, this study treated them as equivalent constructs. Retention is defined in this research as the degree to which a customer exhibits repeat purchasing and price tolerance behaviour to a service provider, and possesses a positive attitudinal and cognitive disposition (Blodgett, Hill and Tax, 1997). To match the above definition, the 13-item battery of Ziethaml, Berry and Parasuraman (1996) was adopted in this research to operationalise the customer retention construct.

Thirty five respondents were interviewed to pilot test the instrument. All questionnaires were subsequently included in the analysis, and the results showed that Cronbach alpha for all scales was above 0.7, indicating acceptable reliability (Nunnally and Bernstein, 1994). However, two items from the customer retention construct and another two items from teller quality constructs were deleted as they had item-to-total correlation values of less than 0.3 (Henryson, 1971). The main field work involved a random sample of the general public. Respondents were asked to give their perception of the quality level of internet banking and teller services and behavioural intention and psychological attachment to their bank, on a seven point Likert scale ranging from 1, indicating the lowest, to 7 indicating the highest. The surveys encompassed evaluations from ten different banks, credit unions and building societies within Queensland, Australia. A mall intercept method in different cities was used to administer the survey.

### **Results**

A total of 442 useable questionnaires were obtained which gave a response rate of 45 per cent. An initial exploratory factor analysis using SPSS verified that internet (7 items) and tellers (7 items) measured the factors theoretically proposed, representing 76% and 65% of the variance respectively. However, as supported in the literature review, customer retention was shown to be represented by 4 dimensions. Exploratory factor analysis for customer retention measurement items yielded only two components for customer retention, representing 65% of the variance. The components of customer retention were labelled as: Complaining and switching behaviour (4 items); and Purchase and word of mouth dimension (6 items). The internal reliability of each variable was then evaluated using Cronbach's alpha with all but one falling in a range from 0.88 to 0.95. The Cronbach's alpha of Complaining and switching behaviours variable was 0.675 which is slightly less than the normally acceptable level.

AMOS 5 was then used to test construct reliability. Squared multiple correlations ( $R^2$ ) for each measurement item, composite reliability, and variance extracted for each factor were assessed (Holmes-Smith 2001; Byrne 2001). The  $R^2$  value for the majority of measurement items was greater than 0.5, which indicated a good reliability level. However, the 4 items in the Complaining and switching behaviours component in the customer retention were deleted as the  $R^2$  values ranged from 0.21 to 0.35. The remaining items met composite reliability, variance extracted, and convergent and discriminant validity requirements. The overall fit indices for the proposed structural model were  $X^2 = 510$  (df=167, p=0.00),  $X^2$ /df ratio of 3, the comparative fit index (CFI) of 0.949, and the root mean square error of approximation

(RMSEA) of 0.068 (Byrne 2001). These values indicate that the model fits the data reasonably well.

Analysing the results showed that internet and teller service quality had a significant relationship with customer retention (refer to table 1). H1 and H2 were thus supported. As the standard regression weights for the relationship between tellers and retention is higher than the relationship between internet and retention, it can be asserted that tellers have a stronger relationship with customer retention (Edvardsson *et al.* 2000). H3 were accordingly supported.

Table 1: Relationship between Independent Variables and Customer Retention

Relationship between constructs	Standardized regression Weights	Critical ratio	Significant level	R <sup>2</sup>
Internet _ retention	0.172*	3.183	0.001	Ret (0.57)
Tellers _ retention	0.665**	11.530	0.000	

<sup>\*</sup> significant at p<0.01; \*\* significant at p=0.00

#### Discussion

Our study examines the relative importance of internet banking and tellers in retaining retail customers. The results of the survey provide strong empirical support for the three hypotheses. In response to H1, we tested how customer perceptions of bank tellers relate to customer retention rates. The results indicate a significant relationship between bank teller service quality and retention rates. This result is consistent with the literature (for example: Ranaweera and Neely, 2003; Caruana, 2002). With regard to H2, the results show that internet banking is also positively related to customer retention, confirming what has been investigated narrowly in different contexts (Anderson and Srinivasan, 2003; Yen and Gwinner, 2003). The data analysis outcomes show that delivering service through traditional service channels (branches) has a stronger relationship with increasing bank retention rates than internet banking. This result empirically adds further understanding to the knowledge and supports the view that automated services could enhance the disconnectivity and passivity in customers

It seems that quality aspects of internet banking are still not as good as traditional service quality aspects due to the familiarity with traditional services and customers' sense of disconnectivity and passivity using the internet. Even though banks have adopted online services mainly to decrease costs, the results indicate that a sole and increasing focus on automated service quality at the expense of traditional services would not build a long term relationship. This, in turn, could increase expenditure of banks to recover and attract new customers (Reichheld and Kenny, 1990). Therefore banks need to improve their ability to understand and listen to customers rather than expect them to use the technology themselves without any human support. To be effective, banks should have as their first priority the improvement of the quality of personal interaction with their customers to minimise risk and uncertainty; then they can move forward to the quality issues of automated services. It is important that banks carry out some actions to make their automated banking services more pleasant and friendly. Thus, the quality issues associated with internet banking should be seen as complementary to the quality issues of traditional service interactions rather than a substitute for them.

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