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Modeling customer satisfaction and loyalty: survey data versus data mining

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Abstract

Purpose – The loyalty literature has investigated the association between customer satisfaction and customer loyalty and revealed mixed results. Some studies have indicated that the relationship is linear, whereas others have found it to be non-linear. This study examines the nature of this association in retail banking, an issue that has not been tested empirically.

Design/methodology/approach – A survey study examined bank customers' attitudes, perceptions, and behavior. Bivariate and multivariate testing was applied to develop two loyalty models: one based only on variables typically known to a bank, such as demographics and recent consumer behavior, and the other based on additional survey data.

Findings – A non-linear relationship between customer satisfaction and customer loyalty was found, and a model explaining 56.9 percent of the variation in customer loyalty was developed. Predictors of loyalty beyond the attitudinal dimensions traditionally tested for their association with loyalty were found to be associated with customers' intentions to remain with their bank. In particular, market conditions such as switching costs and benefits as well as recent consumer behavior were found to add explanatory power. Further, this study contrasted a full model explaining 56.9 percent of the variation in loyalty with a model based only on variables known to banks, which explained only 8.4 percent. Profiling customers based on survey data can thus provide additional explanatory power compared to data mining models

Originality/value – The models can be used by bankers to profile customers who are likely to remain loyal, allowing practitioners to implement proactive marketing action to reward such loyalty. Customers least likely to defect have high satisfaction levels, perceive switching as an unattractive option, and typically have a long-established banking relationship.

Keywords Customer satisfaction, Non-linearity, Customer loyalty, Segmentation, Consumer behaviour, Banking

Paper type Research paper

An executive summary for managers and executive readers can be found at the end of this article.

1. Introduction

This study investigates the factors that help to explain consumers' behavioral intentions in retail banking. In particular, this research examines the associations between customer satisfaction, perceived service quality, recent and current consumer behavior, and a customer's long-term intentions to remain a customer. Two factors, customer satisfaction and perceived service quality, have previously been found to be significantly associated with customer loyalty. To these potential predictors of loyalty in retail banking, this paper adds customers' perceptions of market conditions, such as perceived switching costs and benefits, and customer characteristics, such as demographic factors, thereby extending the customer loyalty literature. The association of market conditions and customer characteristics with customer loyalty measures has received less attention in the marketing literature than the association between customer satisfaction and loyalty, and thus warrants further investigation.

This study measures customer loyalty as customers' behavioral intentions, specifically, intentions to remain long-term customers of their bank. A series of customer loyalty models are generated which include data typically readily available to banks in customer records – for example, demographic data such as age and gender, together with additional data gathered by customer surveys. The resulting models have strong managerial implications for bankers since they allow profiling of customers' intended probability of defection.

2. Literature review

The issue of customer loyalty is becoming increasingly important given that the banking industry in most western markets is suffering from limited growth, high fees, and the substantial costs of winning new customers (Candler, 2005). This situation follows a long period of cost cutting in the

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industry, the merger of some providers, and the focus of banks on their internal processes and activities, which arguably results in "little perceived difference between financial institutions" (Candler, 2005, p. 287). Given this fierce competition, further intensified by the global financial crisis in 2008/2009, bankers need to better understand the drivers of customer loyalty. In addition, there is conclusive evidence that commercial customers and private consumers no longer just bank with one institution but are increasingly using a number of banks at the same time and have thus become "multi-banked" (Nielsen *et al.*, 1998; Rowley and Dawes, 1999, p. 3; Trayler *et al.*, 2000; Lam and Burton, 2005). In this sense, "loyalty" is often directed towards multiple banks and, equally, loyalty to one's "main bank" (as measured in this study) can be regarded as a question of "degree" (rather than "binary"). The motivators for multi-banking may include the desire to spread risk (although in Australia and most other developed countries such as the US, Canada and most European countries, retail bank security is de-facto "government-guaranteed") and opportunism, in addition to a range of structural explanations such as location, family and business relationships. For all financial institutions, better understanding customer loyalty and its indicators, and being able to predict future intentions has arguably become crucial.

The literature has previously established a strong relationship between customer satisfaction and customer loyalty (Oliver, 1980; Oliver and Swan, 1989; Cronin and Taylor, 1992; Levesque and McDougall, 1996; Mooradian and Olver, 1997; McDougall and Levesque, 2000), as well as between service quality and customer loyalty (Bitner, 1990; Taylor and Baker, 1994; Spreng *et al.*, 1995; Zeithaml *et al.*, 1996). Generally, strong associations have been found for both factors, indicating that both customer satisfaction and perceived service quality are important and reliable predictors of customer loyalty. Consequently, a substantial body of literature on the topic of customer satisfaction has emerged. Customer satisfaction has been found to be related to higher levels of profitability (Reichheld and Sasser, 1990; Anderson *et al.*, 1994; Ittner and Larcker, 1996; Heskett *et al.*, 1997; Eklof *et al.*, 1999; Anderson *et al.*, 2004), willingness of customers to pay a premium price for products and services (Reichheld and Teal, 1996; Yu and Dean, 2001), favorable behavioral intentions (Oliver and Linder, 1981; Mooradian and Olver, 1997; Brady and Robertson, 2001), retention (Fornell, 1992; Rust and Zahorik, 1993), repeat visiting behavior (Bloemer and De Ruyter, 1998), and repeat purchasing (Söderlund, 1998; Sivadas and Baker-Prewitt, 2000).

However, there is evidence that satisfaction and loyalty are not always strongly correlated (Cronin and Taylor, 1992; Oliva *et al.*, 1992; Mittal and Lassar, 1998). East and Hammond (1999), in a review of the relationship between satisfaction and retention, found that most studies only revealed weak associations between customer satisfaction and customer loyalty. A landmark study on the association between customer satisfaction and loyalty is Jones and Sasser's (1995) article on "why satisfied customers defect." Jones and Sasser concluded that the only "true loyalists" were the totally satisfied customers, and that the association between satisfaction and loyalty was especially complex. Jones and Sasser (1995) also found that some customers remain with a service provider regardless of their level of satisfaction. The relationship between satisfaction and loyalty was found to be non-linear with high correlations at high satisfaction levels, but low correlations at low satisfaction levels. These findings have led to suggestions of a curvilinear relationship (Heskett *et al.*, 1997) between satisfaction and loyalty. Heskett *et al.* (1997) described the extremes of customer loyalty as ranging from the so-called "evangelists" (i.e. customers in the "zone of affection" who are close to 100 percent satisfied or delighted and near 100 percent loyal) to the "terrorists" (those customers who are very dissatisfied).

The association between customer satisfaction and various measures of loyalty has also been investigated in the retail banking sector; for example, Hallowell (1996) found a positive association between satisfaction and word of mouth; Moutinho and Smith (2000) found a positive relationship between satisfaction and retention, and Methlie and Nysveen (1999) and Veloutsou *et al.* (2004) found a positive relationship between satisfaction and behavioral intentions.

3. Model development

Based on previous research, this study incorporated customer perceptions, such as overall satisfaction, affective attitude, and service quality dimensions, as potential predictors of loyalty. In addition, the study included customers' perceptions of market conditions – that is, switching costs and benefits – and customer characteristics in order to maximize prediction of customer loyalty. Customer characteristics such as demographic variables have been found to play a role in consumer behavior but have rarely been tested for their prediction of loyalty in banking. Recent consumer behavior was also incorporated in this study based on the logic of a Markov model where past behavior is used to predict current and future behavior (Vilcassim and Jain, 1991; Ansari *et al.*, 2000; Shively *et al.*, 2000; Chib *et al.*, 2004; Paas *et al.*, 2004). Moreover, the importance of past behavior as a strong predictor of future behavioral intentions is also indicated in the literature (e.g. Woodside and Bearden, 1977; McQuarrie, 1988; Bagozzi *et al.*, 1991).

Although customer perceptions (i.e. overall satisfaction, affective attitude, and service quality) and customers' perceptions of the market conditions (i.e. switching costs, switching benefits, product perception, and consumer confidence) are not known by bankers (unless they have previously conducted research to evaluate them), banks do have access to customer demographic data. Therefore, it would be helpful for bankers to model loyalty based only on known customer characteristics data rather than having to rely on collecting survey data, which typically only captures a portion of the customer database and where the findings provide no evidence of stability of customers' perceptions.

The importance of using customers' behavioral intentions to predict customer retention has been recognized by many researchers (e.g. Norman and Smith, 1995; Godin *et al.*, 2004; Patterson, 2004; Luarn and Lin, 2005), and consequently, customer loyalty in this study has been measured as a customer's intention to remain with their main bank over the long term. This approach is in line with related studies on intentions to repurchase (e.g. Byrnes, 1964; Bloemer *et al.*, 1999; Lee and Cunningham, 2001). However, since banking is a "subscription-type" business (Garland and

Gendall, 2004, p. 91), repurchase intentions, which are generally used to measure loyalty for physical products, may be more appropriately modeled in the case of retail banking as intentions to remain a customer[1].

4. Methodology

Customer loyalty was investigated using a survey to examine the banking attitudes, perceptions, and behavior of retail banking customers. The study achieved a high response rate (nearly 40 percent), and the subsequent data analyses were based on a sample of 1,951 responses. Females (61 percent) were over-weighted in the sample, reflecting the higher proportion in the sample frame (63 percent females).

Principal component analysis was used for data reduction (Johnson and Wichern, 2002), i.e. single values were obtained for each of the multi-item constructs, following Pritchard *et al.*'s (1992) suggestion that multidimensional measurements are most appropriate for studies based on attitudinal measures. The resulting variables were subsequently used in bivariate and multivariate analyses to model behavioral intentions. The dependent variable (long-term intention to remain loyal) was a factor score resulting from the principal component analyses and was based on two questions from the questionnaire: firstly, the extent to which a customer would resist competing offers, and secondly to what extent they intend to remain a customer for the next five years. Both variables were found to measure the same underlying construct during the data reduction process, and therefore were factor scored into a new construct labeled "long-term behavioral intentions," the dependent variable in this study.

Regression models were estimated using a step-wise method for the behavioral intentions models. This approach revealed the main effects of the model, i.e. the key predictors of the dependent variable after allowing for the effects of the other variables in the model (Derksen and Keselman, 1992). Next, a model of the main effects was created from the above model and was tested for possible significance of the square terms of affective attitude and overall satisfaction since these two independent variables may have a non-linear relationship with the dependent variable – long-term intentions to remain a customer. In order to test the associations between the main effects and the square terms of attitude and satisfaction with the dependent variable, the model with the significant main effects was run again as a "forward addition procedure" as recommended by Hosmer and Lemeshow (2000). The square term of overall satisfaction was significantly associated with the dependent variable (as explained in more detail in the results section below).

Where the quadratic term was found to be significantly associated with the dependent variable, the model with the main effects was once again run in a multiple regression (applying the "enter method"), including the significant square term as recommended by Derksen and Keselman (1992). The model was then once again run based only on the customer characteristics variables such as demographics, length of relationship, and recent consumer behavior – factors typically known to the bank or which can be estimated relatively easily.

5. Results

5.1 Bivariate analysis of long-term behavioral intentions

T-tests were used to test for differences in behavioral intentions according to demographic characteristics, with the results shown in Table I. Four variables revealed significant differences (three at the Bonferroni adjusted $p \leq 0.01$ level and one at the $p \leq 0.05$ level): whether a customer had recently opened an account with a competitor (higher long-term behavioral intentions for customers who had not), whether a customer had recently closed an account with their main bank (higher long-term behavioral intentions for those who had not), a customer's level of education (higher long-term behavioral intentions for non-university educated customers), and residential location (higher long-term behavioral intentions for rural customers). There were, however, no significant differences between males and females in their long-term behavioral intentions to remain with their main bank.

5.2 Multivariate analysis of long-term behavioral intentions

In the modeling and prediction of long-term behavioral intentions, the square term of overall satisfaction was found to be significantly associated with the dependent variable.

Figure 1 is based on the following equation:

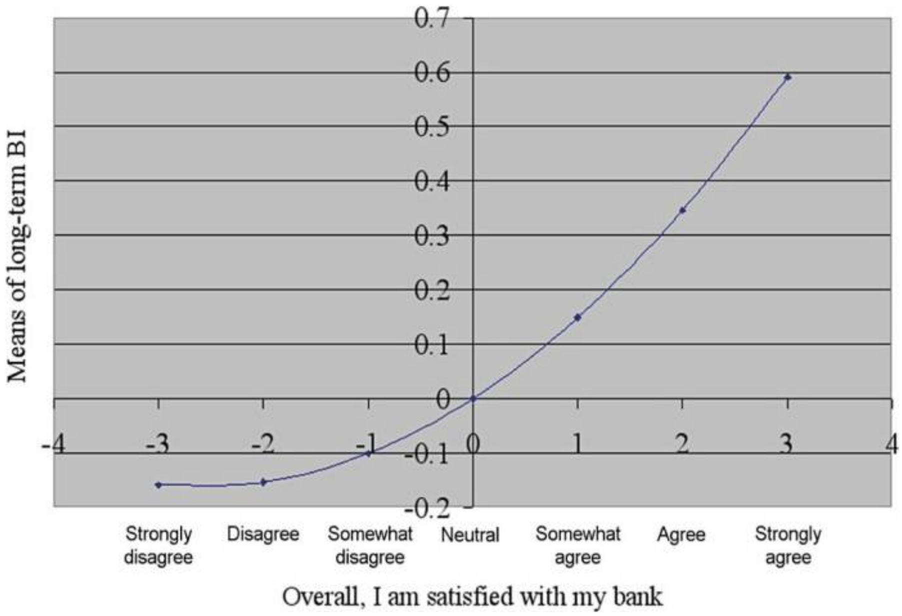
$$\begin{aligned}\text{Long-term BI} = & -0.523 + 0.311 \times \text{affective attitude} + 0.125 \\ & \times \text{overall satisfaction} - 0.219 \times \text{SB} + 0.204 \\ & \times \text{SC} + 0.039 \times \text{length of relationship} \\ & + 0.024 \times \text{overall satisfaction squared}\end{aligned}$$

X values ranging from -3 to $+3$ for satisfaction and satisfaction squared were computed, giving the predicted

Table I T-test analysis of categorical variables and long-term behavioral intentions

Predictors	*n*	Mean	SD	*P*
Recently opened account with competitor				<0.001
Yes	316	-0.41	1.018	
No	1,383	0.09	0.975	
Recently closed account with main bank				<0.001
Yes	169	-0.37	1.032	
No	1,539	0.04	0.990	
Education				<0.001
No university	1,179	0.05	1.005	
University	493	-0.14	0.985	
Residential location				0.003
Urban	796	-0.09	0.969	
Rural	737	0.06	1.020	
Gender				0.227
Female	1,021	0.02	1.014	
Male	692	-0.04	0.979	

Figure 1 Non-linear relationship between overall satisfaction and long-term behavioral intentions (BI)



long-term behavioral intentions values (i.e. the Y values) for each level of satisfaction. The results are shown in Figure 1, which shows the non-linear and additive effect of satisfaction on a customer's long-term behavioral intentions, after allowing for the effects of all the other variables in the model.

This finding raised the issue of how many respondents were in the left-hand side of the chart since this group could represent a problem segment to the bank. An additional test was conducted and found that the number of respondents in this category was low. There were 93 customers (5.4 percent) who rated their level of satisfaction -3, 85 (5.0 percent) who rated it as -2, and 104 (6.1 percent) who rated it as -1. These low numbers are in marked contrast to the satisfied customers who intended to remain with the bank long term, e.g. 582 (or 34 percent) respondents rated their level of satisfaction as $+2$ on the seven point scale of minus three to plus three. Although the dissatisfied segment is small, these customers could still be important to the bank should they belong to a profitable segment, in which case the bank could implement a retention strategy.

The model presented in Table II explained 56.9 percent of the variation in long-term behavioral intentions. The model was tested for model fit and no evidence of lack of fit was found (F value $= 294.436$; df $= 6$).

The strongest single predictor of a customer's long-term intention to remain with the main bank was affective attitude towards the bank, followed by overall satisfaction. Both predictors have a positive association with intentions to remain a customer: the more positive a customer's attitude towards the bank and the more satisfied they are, the more likely they are to report that they will stay for another five years. Switching benefits and switching costs were also found to be strong predictors of long-term behavioral intentions, but unsurprisingly, with opposite directions of association (i.e. the effect of switching benefits was negative and that of switching costs was positive). The negative association ($\beta = -0.220$, $p < 0.001$) for switching benefits indicates that the less benefits that customers see in switching, the more they intend to remain with their main bank in the long run. Switching costs, on the other hand, had a positive association with the dependent variable ($\beta = 0.208$, $p < 0.001$): the higher the perceived switching costs, the more likely that a customer intends to remain with their main bank in the long term.

After allowing for the effects of all the other predictors in the model, length of relationship with the main bank was the

Table II Multivariate predictors of long-term behavioral intentions – multiple regression – based on all potential predictors

Predictor	Unstandardized coefficients	Standard error	Standardized coefficients (Beta)	*t*	*P*
Constant	*− 0.523*	*0.065*		*− 7.993*	*< 0.001*
Affective attitude towards the bank	0.311	0.034	0.319	9.234	<0.001
Overall satisfaction	0.125	0.020	0.214	6.329	<0.001
Switching benefits	−0.219	0.021	−0.220	−10.373	<0.001
Switching costs	0.204	0.018	0.208	11.262	<0.001
Length of relationship	0.039	0.008	0.091	5.036	<0.001
Overall satisfaction squared	0.024	0.006	0.078	4.054	<0.001

Note: $R^2 = 0.571$; Adjusted $R^2 = 0.569$; F-value $= 294.436$; df $= 6$; $n = 1{,}333$

fifth strongest predictor ($\beta = 0.091$, $p < 0.001$). The longer a customer had been banking with their main bank, the higher their intentions to remain a customer for the next five years.

While these results are, perhaps, unsurprising, it does highlight the importance of the customer's emotional connection to the bank. Collectively, variables based on the emotional connection to the bank (affective attitude, satisfaction, empathy and assurance, and trust) overpower all other variables in explaining loyalty. Clearly however, the terms share much common meaning. The second group of factors seems to be the economic costs and benefits (fees, charges, interest rates, and switching costs and benefits) which will need to at least match those provided by competitors. The combination of these two factors – emotional connection and economic benefits – would appear to provide an impregnable "shield" for the customer relationship and would defend against the customer acquisition efforts of competitors.

The second model developed in this study was the one predicting long-term behavioral intentions based only on the factors known to the bank. A model was developed explaining 8.4 percent of long-term behavioral intentions (Table III). The model explained substantially less than the model based on all predictors, which explained 56.9 percent (Table II). There is thus a substantial difference in the predictive power of the two models.

The model presented in Table III shows that the variable "recently opened an account with the competitor" was the strongest predictor of long-term behavioral intentions when only the factors known to the bank were tested for their association with long-term behavioral intentions ($\beta = 0.144$, $p < 0.001$). Customers who had not recently opened an account with a competing financial services provider were found to have higher levels of long-term behavioral intentions to remain loyal. Age also had a positive association with long-term behavioral intentions: the older the customer, the more likely they were to intend to stay with their bank long term ($\beta = 0.140$, $p < 0.001$). Income, however, had a negative association with the dependent variable, indicating that the higher a customer's income, the lower their intention to remain with their main bank long term ($\beta = -0.093$, $p < 0.001$). Even after allowing for the effect of age in this model, the variable "length of relationship" was found to have a significant association with long-term behavioral intentions. The association was positive, i.e. the longer a customer had been with their main bank, the more likely they were to intend to stay with their main bank long term ($\beta = 0.081$, $p = 0.003$). The second of the recent behavior variables, i.e. whether customers had recently closed an account with their main bank, was also significantly associated with the dependent variable ($\beta = 0.067$, $p = 0.011$). Customers who had recently closed an account had lower levels of long-term behavioral intentions. Lastly, residential location also revealed a significant association with long-term behavioral intentions ($\beta = 0.062$, $p = 0.018$). Customers in urban areas have lower levels of long-term behavioral intentions than customers in rural locations.

The results of Table III, when compared and contrasted with those of Table II, highlight an important and difficult challenge for management. Because those factors already known to management (shown in Table III) account for so little variance, the results in Table III highlight how difficult it is to understand, predict and thus manage these relationships. After all, by the time the customer has opened an account with a competitor, it may be too late to preserve the relationship. As the results of Table II demonstrate, loyalty is based overwhelmingly on the emotional connection and not on factors readily known to the bank. At the same time, the "emotional" aspects identified in Table II go to the heart of the relationship which the customer shares with the bank.

6. Discussion

The results presented in the previous section offer an insight into the associations between customer perceptions, perceived service quality, market conditions, and customer characteristics (as independent variables) and a bank customer's intention to remain with their main bank in the long term, defined in this study as a five-year period (as the dependent variable).

During times of increased cost pressures and the financial turmoil as a result of the 2008/2009 global financial crisis, it is crucial for banks to better profile customers in order to improve customer satisfaction, relationship management (CRM) and loyalty. This study finds that modeling based only on customer demographics and account openings and closings explains roughly 8 percent, and thus has very limited explanatory power in illuminating and predicting loyalty in terms of a customer's intention to remain or defect. In comparison, this study finds that, if loyalty is modeled based on survey data, nearly 57 percent of customer intentions can be predicted. While collecting satisfaction and market perception data such as switching costs and switching benefits is expensive, the benefits should outweigh the costs of conducting the survey if the profiling of customers can be substantially improved. It appears from these results that

Table III Multivariate predictors of long-term behavioral intentions – multiple regression – based on predictors known to the bank

Predictor	Unstandardized coefficients	Standard error	Standardized coefficients (Beta)	t	P
Constant	*−1.726*	*0.242*		*−7.134*	*< 0.001*
Recently opened account with competitor	0.358	0.066	0.144	5.453	<0.001
Age	0.087	0.017	0.140	5.164	<0.001
Income	−0.060	0.017	−0.093	−3.545	<0.001
Length of relationship	0.35	0.012	0.081	3.007	0.003
Recently closed account with main bank	0.222	0.087	0.067	2.562	0.011
Residential location	0.122	0.052	0.062	2.370	0.018

Note: $R^2 = 0.088$; Adjusted $R^2 = 0.084$; F-value = 23.134; df = 6; $n = 1{,}427$

profiling can be used to detect customers with an intention to defect, and thus CRM may prove useful in attempting to rescue the relationship. Also, a model explaining 57 percent of loyalty allows a bank to profile "attached" customers who are not likely to defect, and to direct CRM retention strategies to that segment. Personalized customer service can be directed toward those segments determined to be of strategic importance. Cost/benefit analyses of increased customer service can be conducted for specific loyalty segments, and thus the likelihood of their reactions to CRM can be associated with their level of profitability to the bank. Resources can therefore be allocated to segments that are "attached" and profitable (retention) and also to the ones that are likely to defect, but are actually profitable to the bank (rescue strategy). Conversely, less attention and resources should be implemented for segments that are likely to defect, but which are also not profitable to the bank in the first place. This, in turn, will increase the returns on marketing investments.

While this study provides an argument for profiling customers based on survey data as a basis for customer relationship management, the study also models determinants for retention and defection. Both loyalty and disloyalty can be predicted based on a customer's affective attitude, overall satisfaction and perception of switching costs and benefits. This study has found that customer satisfaction, while undoubtedly important, is also quite complex. The association between overall satisfaction and long-term behavioral intentions was found to be non-linear in this study. Customers who are very satisfied with their bank have an over-proportionately high level of intention to remain with their bank in the long run. More dangerously, Figure 1 shows that customers who are very dissatisfied, and those who are mildly dissatisfied are nearly equally likely to defect. Customer care for banks is thus complex and needs to be managed on a case-by-case basis. In this context, regular monitoring of individual customers' satisfaction levels would make abundant sense. In practice, this would have to be conducted in a similar way to the airline industry that has fine-tuned segmenting of their customers by officially categorizing customers into standard, silver, gold and platinum members. The same issues exist in valuing retail banking customers; however, the complexities in measuring banking relationships are not inconsiderable. For airlines, the value of a customer is driven overwhelmingly by ticket revenue over time. In banking, however, valuing a customer relationship will necessarily need to include value of deposits, investments, debts and loans, transaction volumes and costs, credit card value and transactions, collateral relationships and credit-worthiness. For airline customers, their status is routinely communicated to consumers as part of their frequent flyer programs; however, customers are typically not made aware of their standing with their bank, unless they fall into the "privileged" or "preferred" categories. Not communicating the status may be beneficial for customers who have been categorized in a low-tiered (typically the "low value/high cost" segment), but customers in high value/profit tiers may not be aware of their "preferred" status. The clear implication of this process is that banks will seek to match service provision to the value of the relationship and to the customers' needs, which may raise ethical issues that are beyond the scope of this paper. In any case, being part of a loyalty program may be perceived by customers as some form of a two-way relationship with the service supplier. Customers, quite reasonably, will increasingly expect to be rewarded for their loyalty.

7. Conclusion

This study modeled customers' long-term intentions to remain with their main bank, and contrasted the full model with one based only on factors known to the bank. It was shown that the latter model had a much lower explanatory power than the model based on all potential predictors. The full model explained 56.9 percent of the variation in the dependent variable but the model based only on factors known to the bank explained a modest 8.4 percent of the variation in loyalty intentions.

In testing a range of potential determinants of loyalty in retail banking, this study found that customer perceptions such as overall satisfaction and affective attitude have strong associations with behavioral intentions. It was also demonstrated that the association between satisfaction and loyalty is of a non-linear nature.

The study also tested perceived market conditions as potential predictors of loyalty in retail banking. One of these conditions, switching costs, was found to be a unique predictor of long-term intentions to remain a customer. This result suggests that switching costs contribute significantly to customer loyalty. This may be particularly so in cases where switching is complicated, such as with debts, mortgages, loans and some high-yield deposit funds. Further, switching benefits, which also captured perceived market conditions, was a unique negative predictor of long-term intentions to remain with the bank, further supporting the hypothesis that perceived market conditions can be used and managed to predict customer loyalty.

8. Implications for practice

This study has practical implications for bankers and service providers in other industries, especially those based on "membership" or "subscription" relationships, such as insurance products, frequent travelers, churches, charities, and professional associations. In other "non-subscription" businesses such as restaurants, resorts and casinos, the logic of identifying "tiered" loyalty segments and matching "tiered" service offerings is equally relevant, and this study identifies potentially generic drivers of customer loyalty (affective attitude, overall satisfaction, switching benefits and costs, and length of the relationships). While the specifics of the model identified in this study may not be universal, this study delineates a "generic" process for identifying specific drivers of loyalty across a broad range of service industry contexts. Having identified "tiers" of customers in terms of their value or "preferred" status, the challenge for organizations such as restaurants, resorts and casinos next becomes that of delivering matching "tiered" service offerings.

The results of this study provide important justification for the implementation of customer relationship management programs, and have highlighted the drivers of loyalty and switching. The task of "customer acquisition" is typically performed within the marketing function as it relies on attracting non-customers to the bank through the communication of a compelling, competitive product. This task of prospecting for customers typically relies on a

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combination of mass market communications (such as television and press), and with more targeted mechanisms such as targeted online advertising, direct mail and email. The difficulty which this study has identified is that profiling customers based on demographic and limited activity data seems to offer only modest predictive power. Moreover, successful capture of target customers also depends on a bank's offering a competitive package in terms of fees, charges, interest rates, and account conditions. This study provides clear indications of the likely profile of "switchers" who could be attracted to the bank – young, professional, high-income earners who are likely to be concerned with "cost/benefit" considerations. At the same time, it should be recognized that they may also defect from a bank for the same reasons.

In contrast to "acquisition", customer "retention" relies on the quality of the relationship and the experience which the customer has with their bank. This imperative is primarily an operational issue and should be the primary focus of customer service staff, personal bankers and customer relationship managers. Creating satisfied, happy customers is crucial to maintaining their long-term loyalty, provided, of course, that the bank continues to offer competitive account packages. Thus, to segment customers on loyalty and value also implies that service packages can be bundled (and unbundled) to match the relevant customer segments (or even individual customers). Hotels, for example, can almost infinitely vary the level of the service package to match the value of the customer and the expected relationship. Airlines and car rental companies, similarly, can vary service levels although their "degrees of freedom" are less than those available to hotels. By comparison, banks enjoy considerable flexibility in the levels of service, the components of individual products and packages and in the depth of the relationship which they can offer to willing (and "deserving") customers.

This study shows that, if the customer is satisfied and happy, and assuming that banking products and services offer competitive value, then these customers (especially older customers) will remain loyal for the long term. This finding also suggests that the bank needs to work assiduously at ensuring that they continue to offer competitive products; that they continue to closely manage personal relationships and reward valued customers. This goes to the heart of "customer relationship management."

9. Suggested areas for further research

Further research is recommended to extend the findings described in this study. There is only weak support in the marketing literature for the association of actual product perception (measured in terms of the competitiveness of a bank's fees and interest rates in this study) and customer loyalty measures. This area has not yet been extensively researched. In this study, competitiveness of a bank's fees and interest rates were not found to be a unique predictor of customer loyalty. One reason for this may be that customers lack awareness about the true attributes and availability of the bank's products. Customers may also have a natural tendency towards inertia, whereby consumer decisions are made out of habit and not from a consideration of possible alternatives. Additionally, consumers may also assume that there are no significant differences between banks, or at least none which would justify the costs of switching to a competitor. This is almost certainly true for many banking customers around the (developed) world.

In conclusion, this study found that customer perceptions, market conditions, and some customer characteristics were unique predictors of behavioral intentions. The models developed in this study could assist banks to profile customers who are likely to defect or remain long term. While explaining behavior is generally a challenging task, this study demonstrates that nearly 57 percent of behavioral intentions in retail banking can be explained. The challenge for banks is to carefully manage the drivers of customer loyalty better than their competitors. As always, the dividend for those banks which are successful is the long-term loyalty of valuable, and valued, customers.

Note

1 Customers do not typically "repurchase" in retail banking unless they apply for a new product, e.g. a new credit card. Typically, accounts are used on a continuous basis.

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Executive summary and implications for managers and executives

This summary has been provided to allow managers and executives a rapid appreciation of the content of the article. Those with a particular interest in the topic covered may then read the article in toto *to take advantage of the more comprehensive description of the research undertaken and its results to get the full benefit of the material present.*

Deserved or not, banking the world over has a tarnished reputation. All the more reason for retail banks to think about how to persuade existing customers that they are getting competitive services and products combined with service quality and satisfaction essential to earning their loyalty. Deserved or not, it's many people's perception that retail banks and other financial institutions are "all the same" these days. All the more reason to find ways to convince customers to stay loyal and persuade others to defect from rival institutions.

Given the industry's fierce competition, intensified by the global financial crisis, bankers need to better understand the drivers of customer loyalty. In addition, there is conclusive evidence that commercial customers and private consumers no longer just bank with one institution but are increasingly using a number of banks at the same time and direct their "loyalty" towards multiple banks. The motivators for multi-banking may include the desire to spread risk, and opportunism, in addition to a range of structural explanations such as location, family and business relationships. For all financial institutions, a better understanding of customer loyalty and its indicators, and being able to predict future intentions have become crucial.

In "Modeling customer satisfaction and loyalty: survey data vs data mining" Chris Baumann *et al.* investigate the factors that help to explain consumers' behavioral intentions in retail banking. In particular, they examine the associations between customer satisfaction, perceived service quality, recent and current consumer behavior, and a customer's long-term intentions to remain a customer.

They conclude that banks need to work assiduously at ensuring that they continue to offer competitive products and that they continue to closely manage personal relationships and reward valued customers – in other words, that they go to the heart of customer relationship management.

They also note that, while collecting satisfaction and market perception data such as switching costs and switching benefits is expensive, the benefits should outweigh the costs of conducting the survey if the profiling of customers can be substantially improved. Profiling can be used to detect customers with an intention to defect, and thus CRM may prove useful in attempting to rescue the relationship. Also, a bank can profile "attached" customers who are not likely to defect. Personalized customer service can be directed toward the segments determined to be of strategic importance. Cost/benefit analyses of increased customer service can be conducted for specific loyalty segments, and thus the likelihood of their reactions to CRM can be associated with their level of profitability to the bank.

Resources can therefore be allocated to segments that are "attached" and profitable (retention) and also to the ones that are likely to defect, but are actually profitable to the bank (rescue strategy). Conversely, less attention and resources should be implemented for segments that are likely to defect, but which are also not profitable to the bank in the first place. This, in turn, will increase the returns on marketing investments.

The study has practical implications for bankers and service providers in other industries, especially those based on "membership" or "subscription" relationships, such as insurance products, frequent travelers, churches, charities, and professional associations. In other "non-subscription" businesses such as restaurants, resorts and casinos, the logic of identifying "tiered" loyalty segments and matching "tiered" service offerings is equally relevant, and this study identifies potentially generic drivers of customer loyalty (affective attitude, overall satisfaction, switching benefits and costs, and length of the relationships).

While the specifics of the model identified in this study may not be universal, it delineates a "generic" process for identifying specific drivers of loyalty across a broad range of service industry contexts. Having identified "tiers" of customers in terms of their value or "preferred" status, the challenge for organizations such as restaurants, resorts and casinos next becomes that of delivering matching "tiered" service offerings.

The task of "customer acquisition" is typically performed within the marketing function as it relies on attracting non-customers to the bank through the communication of a compelling, competitive product. This task of prospecting for customers typically relies on a combination of mass market communications (such as television and press), and with more targeted mechanisms such as targeted online advertising, direct mail and e-mail.

The difficulty which this study has identified is that profiling customers based on demographic and limited activity data seems to offer only modest predictive power. Moreover, successful capture of target customers also depends on a bank's offering a competitive package in terms of fees, charges, interest rates, and account conditions. This study provides clear indications of the likely profile of "switchers" who could be attracted to the bank – young, professional, high-income earners who are likely to be concerned with "cost/benefit" considerations. At the same time, it should be recognized that they may also defect from a bank for the same reasons.

(A précis of the article "Modeling customer satisfaction and loyalty: survey data versus data mining". Supplied by Marketing Consultants for Emerald.)

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