

DETERMINANTS OF CUSTOMER CHURN BEHAVIOR: THE CASE OF THE LOCAL TELEPHONE SERVICE

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Given the pivotal role of customer retention in long-term profitability and growth of the firm, companies in a wide range of industries are increasingly shifting their resources from new customer acquisition to customer retention. However, implementation of this strategy appears to be seriously flawed as most retention efforts rely on financial incentives. In this paper, we argue that customer churn is multifaceted and financial incentives may be one of a multitude of factors influencing customer churn. We provide evidence to substantiate our claim by identifying determinants of customer churn behavior in the context of local telephone service. Managerial implications are discussed.

INTRODUCTION

The information technology revolution led by the Internet is fundamentally reshaping the marketing landscape. The ability to surf the Internet, from anywhere for anything imaginable, has given consumers unprecedented power. The choice of products and services, communication channels, and distribution outlets are fast multiplying in market after market. Faced with knowledgeable, sophisticated, and savvy customers, firms are scrambling for new business models and tools to survey the new landscape in order to sustain profits and growth. As Kevin Roberts, chief executive of Saatchi & Saatchi, put it, "For the first time the consumer is boss, which is fascinatingly frightening, scary and terrifying, because everything we used to do, everything we used to know, will no longer work" (*The Economist* 2005).

The empowered consumers are willing to flex their newly-found power by rewarding or punishing companies they do business with. Studies have shown that a mere five percent

increase in customer patronage increases customer lifetime value by as high as 95 percent. By the same token, consumer vengeance is taking its toll on companies that fail to satisfy consumers (Bechwati and Morrin 2003). This has created significant challenges for the incumbents in many industries. Even companies that once enjoyed a captive market (regulated industries), are no longer immune to customer defection. Thanks to deregulation and proliferation of choices in the marketplace. The local telephone service is a case in point. The Telecommunication Act of 1996 has triggered an explosion of Competitive Local Exchanges Carriers (CLEC), companies that compete with Incumbent Local Exchange Carriers (ILEC) such as a regional Bell operating company, GTE, and the like. As a result, CLECs' share of the total U.S. local service increased from 5.5 percent in 1999 to approximately 10 percent in 2001. CLECs are expected to control more than 17 percent by the end of 2004 (KPMG). This signals a significant customer defection from the incumbents to the CLECs.

Recognizing the pivotal role of customer retention in long-term profitability and growth, companies in a wide range of industries from telecommunication, to banking, to financial services are increasingly shifting their resources

from new customer acquisition to customer retention and management of customer satisfaction (Evans, 2002). While such a shift makes sense from a conceptual point of view, its implementation appears to be seriously flawed. Most retention efforts rely on financial incentives to minimize customer churn, as evidenced by the proliferation of a variety of reward programs and loyalty schemes. However, customer churn is more likely multifaceted and financial incentives may be just one of a multitude of factors influencing customer churn.

Therefore, a better understanding of factors that influence customer churn is essential before “intervention” strategies aimed at managing customer churn are introduced. The purpose of this research is to develop and test a model that identifies determinants of customer churn behavior in the context of local telephone service.

CONCEPTUAL FRAMEWORK

Increased international competition combined with slow growth and mature markets of the 1980s led many industrialized countries to establish national customer satisfaction indices in an attempt to promote quality and market orientation across their industries. Sweden became the first country to establish the Customer Satisfaction Barometer as a national economic indicator (Fornell 1992). Other countries, including the United States and Japan, soon followed and established their own national indices reflecting customer satisfaction. Today a score of countries in the European Union and Asia, including 11 countries in the EU, China, Malaysia, South Korea, and Hong Kong publish national customer satisfaction indices (*EuroBiz* 2003).

Underlying the national customer satisfaction indices is a model that was first developed in the Swedish customer satisfaction project and later became the basis for the creation of the American Consumer Satisfaction Index (ACSI) at Michigan’s Business School. Since its

inception in 1994, the ACSI has become widely recognized as a major economic indicator providing consumer insights to corporations, industry/trade associations and government agencies.

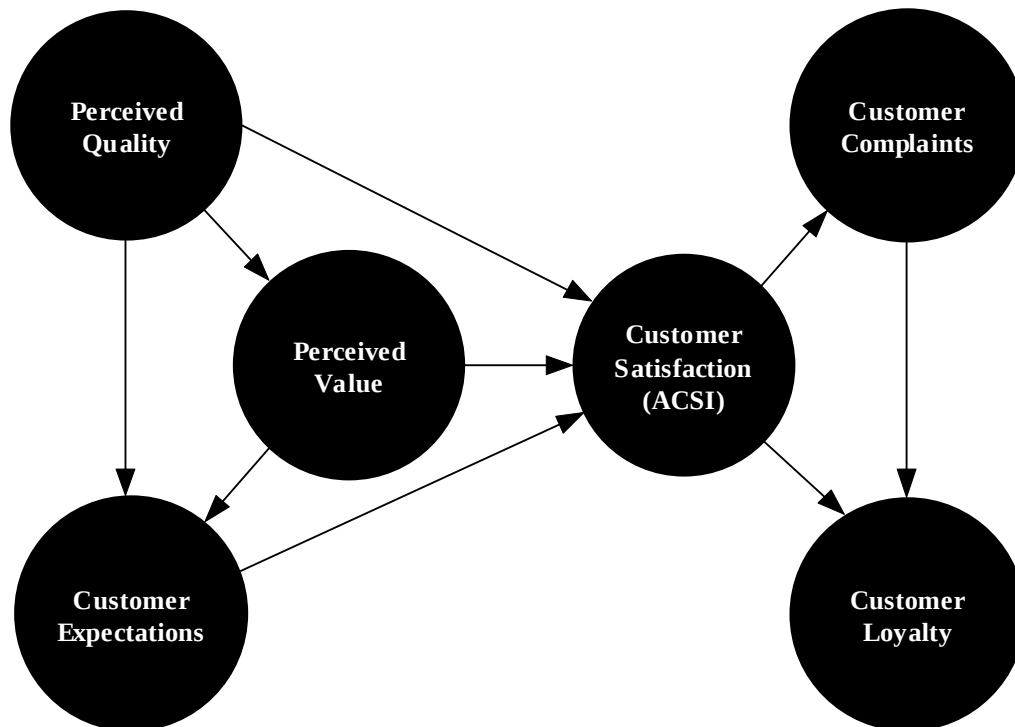
The underlying model has been shown to be very robust and stable across companies, sectors, and countries (Cassel and Eklöf 2001). Given its robustness and widespread acceptance as an economic indicator, we chose to use the ACSI model as the conceptual framework for our research. Below we briefly describe the ACSI model and its components and cite recent research findings that substantiate the model’s components.

The ACSI is grounded in a stream of research aimed at identifying the determinants of customer loyalty. As shown in Figure 1, the ACSI model posits that customer satisfaction plays a key role in determining customer loyalty (churn) behavior. Customer satisfaction, in turn, is influenced by customer expectations, perceived quality, and perceived value. We further describe components of the ACSI model below.

CUSTOMER SATISFACTION

Prior research continually confirms a strong positive linear relationship between customer satisfaction and repeat buying, brand loyalty and ultimately a firm’s profitability and growth (Dubrovski 2001). To cite a few examples, Grønholdt et al. (2000) studied 30 companies in the telecommunication industry in Denmark and found that customer satisfaction has a positive effect on customer loyalty. Edvardsson et al. (2000) used the data from the Swedish Customer Satisfaction Index project and showed that satisfaction has a positive effect on profit and growth, although its effect is relatively greater in service firms than goods producing companies. In a pilot survey within 20 industries in connection with the Swiss Index of Customer Satisfaction, Bruhn and Grund (2000), demonstrated that satisfaction with the company’s core product or service is

FIGURE 1
ACSI Model



crucial in determining switching behavior. More recently, these findings were further supported by Behara et al. (2002).

CUSTOMER EXPECTATIONS

Customer expectations are formed on the basis of customer experience with a product or service and information from a host of sources such as the media, advertising, salespersons, and word-of-mouth. Customer expectations influence the evaluation of quality and serve as hypotheses about how well the product or service will perform.

The linkage between customer satisfaction and customer expectations has been examined in a number of research studies. For example, in a critical incident study conducted among more than 500 service customers, Keaveney (1995) identified 800 critical behaviors of service firms that triggered switching behavior among

customers. The findings indicated that customer experience with service failures, failed service encounters, response to failed service and the like were key determinants of customer switching behavior.

In a more recent study of on-line service customers, Keaveney and Parthasarathy (2001) investigated the impact of selected behavioral, attitudinal, and demographic factors in discriminating between loyal customers and switchers. They found that customers with longer prior experience with the service were more likely to continue to use the service, whereas those with shorter prior experience were more likely to switch. Moreover, they found a strong linkage between service usage and customer satisfaction.

In another research, Erevelles (2003) studied the impact of customer satisfaction on switching behavior among customers of

Internet Service Providers (ISP). The findings indicated that customers' satisfaction with ISP services was low generally, but at the same time customers' expectations of ISPs were also low, reflecting a positive relationship.

PERCEIVED QUALITY AND VALUE

Perceived quality and value are highly interconnected. Perceived quality is a function of overall quality, reliability, and the extent to which a product or service meets the customer's needs. On the other hand, perceived value refers to the customer's assessment of the product/service price given quality and overall quality, given price. Both perceived quality and value have been shown to be a driver of customer switching behavior. In a study of bank switching behavior, Gerrard and Cunningham (2004) found that service failure and inconvenience were major reasons that caused a bank customer to switch to a competing bank. The effect of perceived value on loyalty, however, is not uniform across industries. For example, Martensen et al. (2000) in a cross-industry analysis in Denmark found perceived value to be a key driver of customer loyalty in the Internet, cable TV, soft drinks, and fast food industries, whereas company image had a greater impact on loyalty within the mobile sector, banks, and supermarkets. In another study, Leung et al. (1998) found support for the hypothesis that perceived product value is a predictor of customer loyalty in the retail industry.

CUSTOMER COMPLAINTS

Generally speaking, customer complaining behavior, i.e., a tendency to report a problem with a company's product or service, is inversely related to customer satisfaction, which in turn influences switching behavior. Chakravarty (2004) studied switching behavior among bank customers and found that propensity to switch is affected by whether or not the customer has had problems with the bank.

CUSTOMER LOYALTY

Customer loyalty is measured by the extent to which a customer is likely to purchase a company's products or services at various price points. Customer satisfaction has a positive effect on loyalty, but the magnitude of that effect varies greatly across companies and industries. For example, Methlie et al. (1999) studied antecedents of the loyalty of on line bank customers using intended loyalty as a measure of loyalty. They found that customer satisfaction has the most significant impact, followed by brand reputation, while switching costs and search costs have significant impact but minor explanatory power.

Kim (2004) studied determinants of subscriber churn and customer loyalty in the Korean mobile telephony market found that the probability of switching mobile carrier is affected by customer satisfaction with service-specific attributes such as call quality, handset type, and brand image. In a study of five product categories (vehicles, television, soap, hair oil, and ice cream) Shukla (2004) found that product usage and satisfaction failed to explain brand switching behavior, but product involvement had a moderate impact on propensity to switch.

The linkage between customer satisfaction and switching behavior has also been studied. Jones (2000) found that the influence of customer satisfaction on repurchase intention (propensity to switch) decreases when switching barriers are high. Similarly, in a study of mobile phone users in Turkey, Aydin (2005) found that switching cost has a direct impact on customer loyalty and a moderator effect on customer satisfaction and trust.

Lam et al. (2004) hypothesized that customer satisfaction mediates the relationship between customer value and customer loyalty, and that customer satisfaction and loyalty have significant reciprocal effects on each other.

Switching costs are known to influence customer loyalty. In other words, the higher the switching cost, the stronger the customer loyalty (Caruana 2004). Similar findings are reported by Patterson (2004) who examined the impact of switching barriers on the linkage between customer satisfaction and retention. The study showed that the linkage between satisfaction and retention is stronger when switching barriers are low and weaker when switching barriers are perceived to be stronger.

We conclude from the literature review above that certain drivers of customer churn behavior tend to be universal. For example, customer satisfaction is a key driver of customer churn across a wide range of industries, whereas the impact of certain other factors, such as perceived value, on customer churn is a function of product/service characteristics. Our primary aim in this research is to investigate the impact of customer satisfaction on customer switching propensity in the local telephone service. At the same time, we seek to identify those any additional factors that might explain why customers switch from one service provider to another in the local telephone market.

DATA AND METHODOLOGY

The data in this study is based on responses from 3205 consumers of telecommunications services. Roughly, 50 percent of the respondents were selected randomly to be representative of the national population of telecommunication services. For the remaining 50 percent, a quota sampling procedure was used to insure that consumers of major service providers were equally represented in the final sample. The sponsor of the survey was not revealed to the respondents.

For the purpose of our analysis, we chose respondents who a) were paying for local telecommunication services at the time of the survey, b) had responded to the questions regarding their satisfaction with the local service provider they were using at the time of

the study, and c) were users of the local telephony services for whom brand awareness data was collected. Applying the three criteria, we disqualified 663 respondents, leaving a total of 2542 cases for our analysis.

During the data collection, care was taken to insure that the respondent was either a sole or a joint decision maker within the households regarding the use of telecommunications services. In a joint decision-making situation, respondents with more influence were selected to participate. Respondents who worked for marketing research firms, advertising agencies, telecommunication services, and manufacturing of telecommunication equipment were excluded from the study. Finally, respondents with at least \$75 monthly expenditures on communication services were included.

The variables included in the analysis process, which is discussed at a detailed level in the following section, are described in Table 1.

Using the data described above, we built two structural equation models (SEMs), one which corresponds to the SCS model (but without the customer complaints node and links since we had no direct variable to measure customer complaints), and one which emerged as a better fit to the data. We used standard SEM software (Amos).

A MODEL OF CUSTOMER CHURN IN LOCAL TELEPHONE SERVICE

Our preferred SEM is presented in Figure 1 with standardized coefficients displayed. Table 2 gives a comparison of our model and the ACSI model (which was also built as a benchmark model) on several standard indices of goodness of fit of an SEM.

Table 2 reveals that our preferred model provides a better fit to the data, although the benchmark model would be acceptable. The p-value for the chi-square for our model is large enough (greater than, say, .05). Values of indices such as the GFI and AGFI, expected to

TABLE 1
Variables Included in the Model

Variable Name	Description	Measurement
<i>Customer Satisfaction</i>	Overall satisfaction with the service provider	Ten point rating scale (0=extremely dissatisfied, 10=extremely satisfied)
<i>Propensity to Switch</i>	Likelihood of switching service providers within the next 12 months	0%= customer will certainly not switch, 100%= customer would certainly switch
<i>Customer Expectation</i>	Overall impression of the service provider based on customer experience, and anything he/she has seen or heard.	Ten point rating scale (0=extremely unfavorable, 10=extremely favorable)
<i>Perceived Quality</i>	Customers' overall impression of the quality of the products and services offered by the service provider.	Ten point rating scale (0=poor, 10=excellent)
<i>Perceived Value</i>	Customers' assessment of the service provider's "value for money" compared with competing service providers	Ten point rating scale (0=poor, 10=excellent)

TABLE 2
Variables Included in the Model

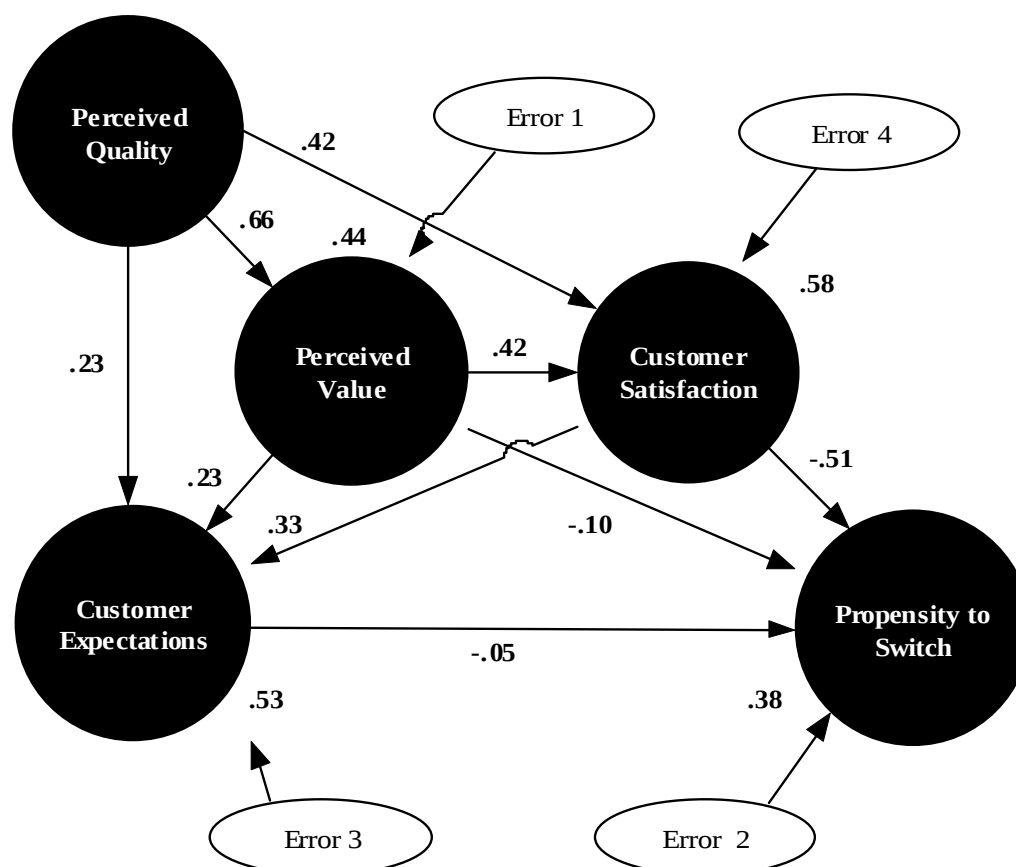
	Preferred Model	Benchmark Model
Chi-square	2.253	37.506
Deg. freedom and p-value	df = 1, p-val = .133	df = 3, p-val = .000
GFI	1.000	.994
AGFI	.995	.971
RMSEA	.022	.067
BIC	111.79	131.556

be close to one for satisfactory models, are quite presentable for the benchmark model, but better for our preferred model, and the RMSEA is smaller for our model than for the benchmark model. Finally the BIC criterion, which is known to help select parsimonious models with a good fit to the data, would select our model over the benchmark model (smaller values for the BIC criterion are preferred), and would select our model over the saturated model (the latter has a BIC of 117.563), but would select the saturated model over the benchmark model.

Quite interestingly, our model (featured in Figure 2) is similar to the benchmark model (featured in Figure 1) in certain respects, but we also observe some differences.

In our model, the perception of service quality strongly influences customer satisfaction, which in turn plays a major role in determining the propensity to switch. Perceived quality is also an important determinant of perceived value which links directly in to the propensity to switch. As far as these relationships are concerned, our model preserves the basic structure of the benchmark ACSI model. As for the differences, we find in our model that more attributes link directly to the propensity to switch providers, instead of being channeled through customer satisfaction as is the case in the ACSI model. More specifically, customer expectations and perceived value directly influence propensity to switch, but their influence is rather weak. Furthermore, we notice that customer satisfaction, perceived

FIGURE 2
SEM Model for Switching Local Telephone Provider



value, and perceived quality indirectly influence the propensity to switch through customer expectations. This is a quite sensible finding given the definition of customer expectations as an overall impression on experience with the product and on what the customer has heard.

CONCLUSIONS

Our goal in this research was to demonstrate that customer switching behavior is driven by a multitude of factors, and hence, a customer retention strategy based on financial incentives alone is not likely to be effective in preventing customer defection. We used the ACSI model as a benchmark and constructed our own model of switching behavior in the context of the local telephone service.

Our research confirms past research findings that customer satisfaction with the service is the single most important determinant of customer switching behavior. Therefore, local telephone service providers are well-advised to pay more attention to customer satisfaction issues to minimize customer defection. Our findings, however, provide additional insights into the management of customer satisfaction. Namely, service providers must pay close attention to the concepts of perceived quality and value. This is to say that they need to strike a balance between the quality of service offered in relation to the price charged.

Another interesting finding of our research is that customer expectation has a direct influence on customer switching behavior. Since customer expectation is partly shaped by what

the customer has seen or heard, service providers need to manage the content of their marketing communication in such a way as to create realistic expectations in the customer's mind. In other words, creating too much hype may be counterproductive.

We also note that perceived value, perceived quality and customer satisfaction play a moderate role in shaping customer expectations, which in turn, influences propensity to switch, albeit a weak influence. This finding contradicts the ACSI model in which customer expectations links into perceived quality, perceived value and customer satisfaction.

To sum up, we note that the ACSI model has been used as a generalized model across a wide range of industries. However, our research indicates that ACSI model may need to be adjusted to specific industries. In other words, drivers of customer propensity to switch may differ from one industry to another.

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