

**THE ANTECEDENTS AND CONSEQUENCES  
OF CONSUMER SWITCHING COSTS**

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October 5, 2001

Article Category: Marketing Management

The authors thank the Bonham Fund at The University of Texas at Austin for support, as well as the generous funding granted by the State Farm Companies Foundation. The authors gratefully acknowledge Ashesh Mukherjee, Shelby McIntyre, Georg Muller, Tassaduq Shervani, Rajendra Srivastava, David Jemison, Linda Golden and three anonymous reviewers for their helpful comments on earlier drafts. All correspondence should be addressed to the first author.

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### ABSTRACT

Over the last two decades, research on customer loyalty has increasingly viewed satisfaction and switching costs as the primary determinants of repeat choice behavior. Although the construct of satisfaction has received a great deal of attention in marketing research, the management of customer switching costs has been hampered by the lack of a comprehensive typology for conceptualizing, categorizing and measuring consumers' perceptions of these costs. To address this problem, the authors develop a switching cost typology that identifies three types of switching costs, each of which is composed of multiple facets: (1) *procedural switching costs* (consisting of economic risk costs, evaluation costs, learning costs, and set-up costs), (2) *financial switching costs* (consisting of benefit loss costs and monetary loss costs), and (3) *relational switching costs* (consisting of personal relationship loss costs and brand relationship loss costs). This typology is validated and applied by assessing the antecedents and consequences of consumer switching costs in two consumer service industries. The results of the antecedent model suggest that consumers' perceptions of product complexity and heterogeneity, their breadth of use, their modification of the product and their switching experience drive the switching costs they perceive. The results of the consequences model suggest that all three switching costs types contribute significantly to customer repurchase intentions, even in relatively low switching cost contexts. Further, some switching costs are found to negatively interact with satisfaction in driving repurchase intentions, suggesting that managing customers' switching cost perceptions is especially crucial for firms hoping to retain temporarily dissatisfied customers.

*In view of the potential importance of switching costs, the impact of all strategic moves on switching costs should be considered.*

*-- Michael Porter, Competitive Strategy (1980, p. 122)*

## INTRODUCTION

Reduced regulation, increased price competition, and diminished consumer loyalty has propelled customer retention and customer relationship management (CRM) to the forefront of marketing concerns (MSI 1996). As the primary tool for managing customer retention, customer satisfaction has received unflagging attention in the marketing literature (c.f. Anderson and Sullivan 1993; Fornell 1992; Fournier and Mick 1999; Szymanski and Henard 2001). Firms around the world have adopted customer satisfaction measures as a *de facto* standard for monitoring progress, motivated by the belief that customer retention and profitability will follow. While evidence accumulates that satisfaction influences repeat purchase behavior, it typically explains only a quarter of the variance in behavioral intentions (see the meta-analysis by Szymanski and Henard 2001), and the relationship between satisfaction and loyalty is now recognized as more complex than originally proposed (Fournier and Mick 1999; Garbarino and Johnson 1999; Mittal and Kamakura 2001; Oliver 1999). Yet firms appear to be stuck in a “satisfaction trap,” a myopic belief that customer satisfaction and service quality are the only tools for managing customer retention (Reichheld 1996). To break out of this trap, marketers must devote themselves to more fully understanding the various drivers of customer retention. This research investigates an often-noted, but seldom studied, driver of repeat choice behavior: the switching costs that reduce customers’ desire to leave an incumbent provider.

Firms regularly make marketing choices that affect consumers’ perceived switching costs. Consider an example from the U.S. long distance telephone industry. In 1991, MCI

launched the Friends&Family program. This marketing program asked customers to invest time and effort building “circles,” or databases of friends and family members, in order to receive a discounted calling rate. Between 1991 and 1997 MCI gained almost five share points in the long distance market. In 1995, AT&T scrapped its long-standing use of time-varying prices and began offering a 10¢ a minute plan for all long distance calls. Between 1991 and 1997, AT&T lost 18% of the market it had dominated. While additional factors are likely to have influenced these share changes, we suggest that the AT&T pricing change reduced the costs its customers faced in comparing among alternatives, and thus weakened AT&T’s customer retention. The MCI Friends&Family program, on the other hand, increased the time and effort investments its customers would lose upon switching, and thus strengthened MCI’s customer retention.

In the marketing, management and economics literature, a consensus has emerged that switching costs are prevalent in a wide variety of industrial and consumer contexts (Fornell 1992; Fornell, Robinson and Wernerfelt 1985; Klemperer 1995). There is evidence that switching costs have a significant impact on repeat choice behavior (Weiss and Heide 1993), on the strategies managers should (and do) adopt (Eliashberg and Robertson 1988; Karakaya and Stahl 1989), and on the resultant industry and competitive structures (Farrell and Shapiro 1988). Switching costs have also been associated with higher category profits (Beggs and Klemperer 1992), with inelastic response to price (Farrell and Shapiro 1988), with increased product pre-announcements (Eliashberg and Robertson 1988), and with barriers to market entry and sustainable strategic advantage (Karakaya and Stahl 1989; Schmalensee 1982; Kerin, Varadarajan and Peterson 1992).

Given their importance, it seems natural that firms would want to manage their customers’ switching cost perceptions. Yet despite the abundance of related studies, the

presence of switching costs perceived by customers has, by and large, been supported by anecdotes, logic, and simplistic measures that do not reflect the multi-dimensional nature of switching costs discussed in the literature. There is little surprise, then, in the calls for solid empirical research on the switching cost construct and its management (Gatignon and Robertson 1992; Klemperer 1995).

The objectives of this research are to:

- Discover and empirically validate a typology of consumer switching costs.
- Provide an assessment of major theoretical factors that drive consumer switching cost perceptions as a basis for managing customer retention.
- Assess the effects of different types of switching costs on consumers' repeat purchase intentions as well as the role that switching costs play in conjunction with satisfaction.

To achieve these objectives, we develop a comprehensive two-tiered typology for conceptualizing consumer switching costs using data from two consumer service industries. At the lower level the typology provides the granularity necessary to assess distinct switching cost facets, while at the higher level it offers the parsimony required to efficiently conceptualize and communicate the construct. Using this typology, we first test a model of switching cost antecedents. We then examine how different switching costs contribute to the satisfaction model in explaining consumers' intentions to stay with an incumbent provider. Drawing on the study findings, we present recommendations for managing the factors that influence consumer switching costs and we discuss the use of switching costs, along with customer satisfaction, as part of a program to improve customer retention. We conclude with a discussion of the generalizability of the findings and future research directions.

## **THE SWITCHING COST CONSTRUCT**

### **Switching Cost Definition**

Building on definitions proposed by Porter (1980, p. 10) and Jackson (1985, p. 13), we

define switching costs as *the one-time costs that customers associate with the process of switching from one provider to another*. Porter suggests that switching costs are “one time” costs (1980, p. 10), as opposed to the on-going costs associated with using a product or provider once a repeat-purchase relationship is established. Switching costs need not be incurred immediately upon switching; they must merely be associated with the one-time switching *process*. Furthermore, a switch need not consume economic resources to be perceived as costly. When consumers simplistically state that “it’s just not worth it” to switch providers, they may perceive impediments ranging from “search costs, transaction costs, learning costs, loyal customer discounts, customer habit, emotional cost and cognitive effort, coupled with financial, social, and psychological risk on the part of the buyer” (Fornell 1992, p. 10).

### **A Comprehensive View of Switching Costs**

In order to effectively manage switching costs, firms must consider all switching costs and be able to distinguish between different types of switching costs that consumers perceive. Descriptive, non-empirical research suggests a variety of ways to differentiate switching costs. Porter (1980) suggests that industrial purchasers may perceive switching costs associated with product and process integration, with the learning needed for product use and with the psychological bonds formed between providers. Jackson (1985) argues that switching costs should be broken into two categories: those created by risk (or exposure) and those created by investments. Guiltinan (1989) proposes a typology in which four types of switching costs are described: (1) contractual costs foregone (i.e. costs such as the loss of cumulative volume discounts), (2) setup costs (including learning, evaluation, monetary, search and transaction specific asset costs), (3) continuity (or risk) costs, and (4) psychological commitment costs. Finally, Klemperer (1995) suggests that there are six different types of switching costs

distinguished by differences in the nature of the loss involved: technological compatibility costs, transaction costs, learning costs, risk costs, contractual costs, and psychological costs.

Regrettably, these descriptions of switching cost facets have yet to be supported by empirical study, leaving both researchers and practitioners without accepted frameworks or measurements to draw upon. This is understandable --as Fornell (1992) states: “a direct measure of switching barriers is difficult to obtain,” as “all costs associated with deserting one supplier in favor of another constitute switching barriers.” A review of empirical switching cost literature reveals that prior research has typically adopted one of three approaches to measuring switching costs:

- It has measured one or a few switching cost facets specific to the context of the research. For example, Heide and Weiss (1995) measure a vendor’s retraining effort, their process development effort, and their relationship development time.
- It has measured switching costs as a unidimensional global construct. For example, “How costly would it be for you to switch suppliers?” (c.f. Eliashberg and Robertson 1988; Karakaya and Stahl 1989; Ping 1993).
- It has assumed that consumers perceive switching costs and have ascribed all evidence of differences in satisfaction response to such costs (c.f. Anderson and Sullivan 1993; Fornell 1992; Klemperer 1995).

While each of these approaches may be appropriate for its context, reliance on them leaves gaps in our understanding of switching costs, their drivers, and their impact on customer retention. As Kumar, Stern and Achrol point out (1992, p. 250), examining a single facet of a multifaceted construct is unlikely to produce an adequate assessment of the construct or its relationships with other constructs. Employing a global measure, on the other hand, increases measurement error as it forces respondents to mentally combine multi-dimensional ratings (Kumar, Stern and Achrol 1992). Further, a global measure provides little guidance for managing switching cost perceptions because the basis for consumers’ perceptions that switching

is costly remains unknown. Relying on regression intercepts to represent switching costs not only combines the effects of multiple switching cost types but may also confound switching costs with other possible influences on repeat purchase behavior. Thus existing approaches to measuring switching costs provide little guidance for their management.

### **A Switching Cost Typology**

Based on a review of the literature, interviews with industry managers, and consumer focus groups, we developed comprehensive, multi-item scales for measuring the switching costs suggested by these sources. Following accepted scale development procedures (Anderson and Gerbing 1988; Churchill 1979), we found support for eight switching cost facets. This eight-facet typology is based on a study of two continuous service industries – industries where consumers must make a conscious effort to switch away from an ongoing relationship. The comprehensive scope of the typology and the strong theoretical basis for the facets included suggest that the typology provides a sound framework for understanding the structure of switching costs across consumer contexts. The facets are described next; the methodology by which they were derived is presented later in the methods section.

### **Switching Cost Facet Definitions**

1. *Economic risk costs* are the costs of accepting uncertainty with the potential for a negative outcome when adopting a new provider about which the consumer has insufficient information (Guiltinan 1989; Jackson 1985; Klemperer 1995; Samuelson and Zeckhauser 1988). Perceived consumption risk has been conceptualized as a multi-dimensional construct with six dimensions (Bettman 1973), three of which are relevant here: performance risk, financial risk and convenience risk.
2. *Evaluation costs* are the time and effort costs associated with the search and analysis needed to make a switching decision (Hauser and Wernerfelt 1990; Samuelson and Zeckhauser 1988; Shugan 1980). Time and effort are associated with collecting the information needed to evaluate potential alternative providers. Mental effort is required to restructure and analyze available information in order to arrive at an informed decision (Shugan 1980).

3. *Learning costs* are the time and effort costs of acquiring new skills or know-how in order to use a new product or service effectively (Alba and Hutchinson 1987; Eliashberg and Robertson 1988; Guiltinan 1989; Wernerfelt 1985). Learning investments are often provider specific and new investments must be made to adapt to a new provider (Klemperer 1995).
4. *Set-up costs* are the time and effort costs associated with the process of initiating a relationship with a new provider (Guiltinan 1989; Klemperer 1995). Set-up costs are often dominated by the information exchange needed for a new provider to reduce its selling risks and understand the customers' specific needs (Guiltinan 1989).
5. *Benefit loss costs* are the costs associated with contractual linkages that create economic benefits for staying with an incumbent firm (Guiltinan 1989). In switching to a new provider, consumers may lose points they have accumulated and discounts or benefits that are not afforded to new customers (Guiltinan 1989).
6. *Monetary loss costs* are the costs associated with one-time financial outlays that are incurred in switching providers (Heide and Weiss 1995; Jackson 1985; Klemperer 1995; Porter 1980; Weiss and Heide 1993). Adopting a new provider often involves one-time expenditures such as deposits or initiation fees for new customers (Guiltinan 1989). In addition, switching providers may involve replacing transaction-specific assets, or "co-assets," in which the consumer has invested (Kerin, Varadarajan and Peterson 1992; Weiss and Heide 1993; Williamson 1975).
7. *Personal relationship loss costs* are the affective losses associated with breaking the bonds of identification that have been formed with the people with whom the customer interacts (Guiltinan 1989; Klemperer 1995; Porter 1980). Consumers' familiarity with the employees of an incumbent provider often creates a level of comfort that is not immediately available with a new provider.
8. *Brand relationship loss costs* are the affective losses associated with breaking the bonds of identification that have been formed with the brand or company with which a customer has associated (Aaker 1992; Porter 1980). Consumers often draw meaning from their purchases and form associations that become part of their sense of identity (McCracken 1986). These brand or company-based relational bonds are lost in switching providers.

In the next section, we describe the primary drivers of these switching cost perceptions.

### SWITCHING COST ANTECEDENTS

Prior research suggests a number of strategies for managing specific consumer switching costs. Klemperer (1995), for example, discusses reward programs and coupons that can only be redeemed by a particular vendor. Crosby, Evans and Cowles (1990) suggest using relational

selling efforts (such as mutual disclosure, high contact intensity and expression of cooperative intentions) in order to increase the relational bonds consumers would lose in switching. Although valuable, these suggestions represent a piecemeal approach to switching cost management, raising a number of concerns. First, managing each switching cost separately may be less effective than managing multiple switching costs simultaneously, as certain antecedents may influence multiple switching costs. Second, without a thorough understanding of switching costs and their antecedents, a provider may fail to recognize when its actions will influence certain switching costs, and may inadvertently, and perhaps counter-productively, alter some of its customers' switching costs. To provide a framework for managing different types of switching costs, we propose hypotheses linking six antecedents to the switching cost facets described above (see Figure 1).

*Insert Figure 1 about here*

### **Switching Cost Antecedents and Hypotheses**

Three types of consumer-based antecedents of switching costs have been suggested in previous research:

- Perceptions of product and market characteristics (Gatignon and Robertson 1992),
- Investments with the provider (Jackson 1985),
- Domain expertise (Alba and Hutchinson 1987; Klemperer 1987; Wernerfelt 1985).

We investigate operationalizable constructs from each of these three antecedent categories, many of which have not been empirically studied in a switching cost context. We also assess the effects of individual-level characteristics expected to influence switching costs (Gatignon and Robertson 1992; Jackson 1985).

#### *Perceptions of Product and Market Characteristics*

Product and market characteristics describe the nature of the products and providers in an

industry. Switching costs arise from some of the same factors that have long been associated with a decreased rate of diffusion of innovations. Two such factors are the perceived complexity of the items being considered (Gatignon and Robertson 1992; Klemperer 1995) and the heterogeneity of providers in the market (Schmalensee 1982).

*Product complexity* is defined as the extent to which the consumer perceives a product to be difficult to understand or use (Rogers 1995). A product that offers a large number of options or that involves a large number of steps in its use will typically be seen as more complex. Consumers are likely to perceive higher economic risk switching costs when products are more complex because difficulty in understanding the product leads to uncertainty, increasing the perception that an unknown negative outcome may occur (Holak and Lehmann 1990).

Similarly, consumers are likely to experience greater in difficulty evaluating more complex products and services. The larger number of attributes associated with complex products makes both information collection and direct comparisons of attributes more costly (Shugan 1980), leading to increased evaluation switching costs. A more complex product is also more likely than a simple product to involve a larger number of learned skills or scripts that may have to be relearned in order to switch providers, thus raising the learning costs involved in switching between providers (Wernerfelt 1985). Finally, a complex product is not “easy to try” (Holak and Lehmann 1980, p. 63); thus, as complexity increases, the efforts required to establish a new relationship will rise.

Product complexity may also lead to an increase in perceived financial switching costs. A large number of pricing options or a complex price structure often creates perceptions of product complexity for consumers. For example, bank accounts may combine a fixed monthly fee with an additional variable fee for processing checks, printing checks, minimum balance

shortfalls or ATM transactions. In the cellular telephone market, pricing structures are so complex that company representatives are often unable to accurately explain them. In such cases, consumers may perceive that switching to a new offering will involve the outlay of additional funds and the forfeiture of previously-made down payments, start-up fees, or investments in provider-specific assets. In summary, we propose the following hypothesis:

**H1:** *Product complexity will be positively associated with (a) economic risk costs, (b) evaluation costs, (c) learning costs, (d) set-up costs and (e) monetary loss costs.*

*Provider heterogeneity* is defined as the extent to which the consumer perceives the providers in a market to be different or non-substitutable. Variance across providers leads to higher processing requirements and thus to an increase in the “costs of thinking” associated with switching providers (Shugan 1980). Indeed, heterogeneous offerings have been called the defining characteristic of difficult decision environments (Heide and Weiss 1995).

Provider heterogeneity reduces the extent to which knowledge concerning one provider is applicable to another provider, increasing the uncertainty and perceived economic risk costs associated with switching providers (Schmalensee 1982). Just as a large number of attributes is proposed to increase evaluation costs, heterogeneity or difference on several attributes will also increase the effort required to evaluate or compare products. Thus, we propose that heterogeneity will increase evaluation costs (Shugan 1980). Similarly, the lack of standardization implied by heterogeneity suggests that knowledge and skills learned for use with one provider may not be applicable with another—the automaticity that comes with product familiarity will no longer apply (Alba and Hutchinson 1987). Thus heterogeneity is likely to be associated with greater learning switching costs.

Heterogeneity also implies that providers are unique. The financial incentives offered by

one service provider may not be redeemable if a new provider is chosen (Klemperer 1987; 1995). Loyalty benefits, including points accumulated and financial incentives (e.g., longstanding customer insurance discounts), are rarely transferable among providers. Thus, we propose that benefit loss and monetary loss switching costs will rise as heterogeneity in the providers rises. Finally, when organizations or brands are seen as heterogeneous, consumers are more likely to perceive strong bonds of identification with them (Bhattacharya, Rao and Glynn 1995). Since these bonds must be broken in order to switch providers, heterogeneity is likely to be associated with higher brand relationship switching costs. For these reasons, we propose the following:

**H2:** *Provider heterogeneity will be positively associated with (a) economic risk costs, (b) evaluation costs, (c) learning costs, (d) benefit loss costs, (e) monetary loss costs, and (f) brand relationship loss switching costs.*

#### *Investments with the Provider*

Investments in relationships tie the members together; if the relationship is terminated, the investments are lost (Dwyer, Schurr and Oh 1987; Morgan and Hunt 1994; Klemperer 1995). The potential for such loss makes investments an important driver of switching costs (Jackson 1985). Consumers invest in a provider when they use more of the provider's different products (Blattberg and Deighton 1996) and when they modify the products they receive from the provider (Bhardawaj, Varadarajan and Fahy 1993; Robinson 1988).

*Breadth of use* of a provider is defined as the extent to which the consumer employs a variety of product types, features, and functions offered by a provider (Ram and Jung 1990). Blattberg and Deighton (1996) suggest that the degree to which a customer buys complements and supplements to the core product determines the intrinsic retainability of the customer. We propose that a portion of this retainability comes from the switching costs inherent when a customer conducts multiple types of transactions with the service provider. For example, an

insurance customer can use a single company for life, health, home and auto insurance. A grocery store customer can make use not only of the primary grocery offerings and check-out stands, but also the deli, pharmacy, delivery service, video rental service or a store discount club. A credit card customer may make use not only of the credit aspects of the card, but also payment insurance service or extended warranty service.

Given the time and effort savings that a “full-line producer” offers, consumers are likely to switch either all the products associated with a given provider or none of them (Klemperer 1995). The prospect of switching multiple services increases the economic risk associated with switching providers—not only one service is at risk of performance, financial or convenience failure, but multiple, often interdependent or linked services are placed in jeopardy at once. When considering switching providers, consumers who use more products are likely to perceive (1) greater economic risks due to the multiple changes being made at once (Blattberg and Deighton 1996) (2) the need to evaluate or compare alternative providers on a greater number of attributes (Shugan 1980), (3) the need to set up a greater number of new products or features with a new provider (Pine, Peppers and Rogers 1995), and (4) the need to invest in learning how to use a greater number of new products or features (Schmalensee 1982).

In addition to the costs described above, there is often a very real financial cost associated with switching from one provider to another. The greater the breadth of products employed, the more likely the customer has accumulated financial benefits (consider, for example, the discounts offered to customers who purchase home, car, and life insurance from a single provider) or has prepaid for a service (such as credit card payment insurance), and the more likely that one of the products or services will be associated with a new monetary outlay in switching.

There are also non-monetary benefits that accrue to the consumer who uses multiple products or services from one service provider. A credit card customer, for example, would lose the benefits associated with extra services such as extended warranties on prior purchases; a long-distance customer using multiple services would lose a larger number of loyalty program points. Similarly, service can be more easily fine-tuned for the multi-product customer, resulting in consumers who purchase multiple product lines receiving superior service. Finally, establishing multiple links with a provider requires greater interaction with the provider. Such interaction may lead to higher personal and brand identification with the provider (McCracken 1986). This increased personal interaction leads to stronger personal and brand relationship bonds with the providers of the service. Based on these arguments, we propose that:

**H3:** *Breadth of incumbent provider use will be positively associated with (a) economic risk costs, (b) evaluation costs, (c) learning costs, (d) set-up costs, (e) benefits loss costs, (f) monetary loss costs, (g) personal relationship loss costs, and (h) brand relationship switching costs.*

*Modification* of a product is defined as the extent to which the consumer has adapted the product offered so that it better serves individual needs. Providers often offer aspects of their products that can be modified by consumers. For example, telephone customers can build personal long distance calling circles and program “fast dial” codes for their calling cards. Credit card customers can get personal photographs embedded in their cards and set up mileage accumulation accounts. Virtual grocery stores can be self-configured to match each consumer’s specifications.

Consumers face greater set-up switching costs as they invest effort in modifications and increase the number of processes that would need to be replicated upon switching (Bhardawaj, Varadarajan and Fahy 1993); by the same logic, learning costs would also increase. Switching to

an alternative provider raises the possibility that benefits such as frequent flyer miles or other “points” acquired through modification with the current provider will not be available, increasing benefit loss switching costs. Finally, similar to adding additional services, modification often requires greater communication with the provider. The personal interaction and the resultant matching between the consumers needs and the products provided may lead to higher personal and brand identification with the provider (McCracken 1986), thus creating higher personal and brand relationship loss costs. Thus, we propose the following:

**H4:** *Modification of the incumbent product will be associated with (a) learning costs, (b) set-up costs (c) benefit loss, (d) personal relationship loss and (e) brand relationship loss switching costs.*

#### *Domain Expertise*

Expertise in a product domain allows consumers to more rapidly and accurately evaluate options and learn additional product-related information (Alba and Hutchinson 1987).

Consumers can gain domain expertise by increasing product-related experiences (Park, Mothersbaugh and Feick 1994). Two forms of domain-level product experience are the extent of the consumer’s prior experience with alternative providers (Fornell 1992; Klemperer 1987) and the extent of the consumer’s switching experience (Nilssen 1992).

*Alternative experience* is defined as the extent to which the consumer has previously employed the products, features and functions of competing service providers. Experience with alternative providers leads to increased expertise in the industry. This expertise reduces the economic risks associated with switching by reducing the uncertainty associated with using a different service provider. Greater expertise is also associated with more well-developed mental structures (Alba and Hutchinson 1987) that assist the consumer in encoding and retrieving the information needed to evaluate the products offered by competing providers, thus decreasing

evaluation costs. Finally, well-developed mental structures also facilitate new learning (Alba and Hutchinson 1987). Thus, consumers with greater prior experience with alternative providers are likely to perceive lower learning costs even when they must learn new skills or scripts.

Therefore, we propose that:

**H5:** *Prior experience with alternative providers will be negatively associated with (a) economic risk costs, (b) evaluation costs, and (c) learning costs.*

*Switching experience* is defined as the extent to which the consumer has switched between providers in the past. Increased switching experience reduces switching costs in two ways: by increasing the consumer's familiarity with the process of switching and by reducing the duration of service with the incumbent provider.

Consumers' switching experience reflects their familiarity with the switching process. The knowledge garnered through switching experience reduces several switching costs. Economic risk costs are reduced due to greater familiarity with the range of the quality provided in the market and a decrease in uncertainty associated with switching providers. Having sampled a variety of the service providers available, the consumer is more familiar with the attributes on which the providers vary and hence, the processes by which they should be evaluated. Therefore, evaluation costs associated with switching providers should decrease. Further, experience with switching providers can reduce the learning costs associated with both the switching process and with learning to use new providers (Nilssen 1992).

Switching experience also implies a reduced duration with the incumbent provider. Reduced time with an incumbent provider may reduce switching costs for a number of reasons. First, reduced time with an incumbent provider is likely to be associated with fewer accumulated benefits that might be lost in switching. Second, consumers who have switched providers have

likely had less time with their current provider to develop brand and personal relationship bonds, and they are less likely to perceive their provider relationship as unique (Bhattacharya, Rao and Glynn 1995). In summary, we propose that:

**H6:** *Switching experience will be negatively associated with (a) economic risk costs, (b) evaluation costs, (c) learning costs, (d) benefit loss costs, (e) personal relationship loss costs, and (f) brand relationship loss costs.*

### *Individual Characteristics*

Characteristics of the consumer will influence the extent to which that individual perceives costs associated with switching. Two individual level characteristics likely to influence switching cost perceptions are the consumer's level of time pressure and their level of risk aversion (Jackson 1985). No formal hypotheses regarding the effects of these antecedents are offered.

To summarize, the antecedent model suggests that greater perceptions of complexity and heterogeneity, increased breadth of incumbent provider use and greater product modification will generally be associated with higher switching costs while increased experience with an alternative provider and increased experience with switching will generally be associated with lower switching costs (see Figure 1).

### **SWITCHING COST CONSEQUENCES**

The driving force behind managerial interest in switching costs is the premise that these costs impede customer switching and hence improve customer retention. While an ample body of research discusses this relationship, empirical evidence is scant—little is known about the role different switching costs play in aiding customer retention. Thus, a study of the effects of different consumer switching costs not only strengthens the nomological network for the construct (Gerbing and Anderson 1988) but may provide important insights into the use and

utility of switching costs as a managerial tool. Our study of switching costs effects builds on existing research which focuses on satisfaction as the primary driver of customer retention.

### **The Drivers of Customer Retention**

While the role satisfaction plays in retaining customers is now perceived as more complex than initially thought (Mittal and Kamakura 2001, Oliver 1999), abundant evidence supports the common sense expectation that satisfied customers are more likely to stay with their existing providers than are dissatisfied customers (c.f. Oliver 1997, Syzmanski and Henard 2001). Thus, we propose that:

**H7:** *Satisfaction will be positively associated with consumer intentions to stay with an incumbent provider.*

To the extent consumers perceive switching costs or barriers, their intention to switch should be reduced. Put simply, switching costs are disutilities that consumers would rather not incur. While prior research has not focused on the influence and roles of multiple switching cost types, evidence of direct switching cost effects has been accumulating at the industry level and at the global switching cost level. At the industry level, Anderson and Sullivan (1993) find differences in the regression intercepts across industries in testing for the influence of satisfaction on repurchase intentions. They conclude that “the large or small intercept might imply other factors such as switching costs or switching benefits affect repurchase intentions” (p. 137). Using global switching cost measures, relationships have been found between switching costs and reduced search effort (Weiss and Heide 1993) and between switching cost and reduced switching intentions (Bansal and Taylor 1999). Consistent with these efforts but offering more specificity in our definition of switching costs, we propose the following direct relationship between each switching cost facet and customer intentions:

**H8:** *Switching costs (economic risk, evaluation, learning, set-up, benefits loss, financial loss, personal relationship loss, and brand relationship loss) will be positively associated with consumer intentions to stay with an incumbent provider.*

While switching costs are expected to have a direct effect on consumer intentions, researchers have also suggested that switching costs and satisfaction may substitute for each other in driving customer intentions (Jones and Sasser 1995; Oliva, Oliver and MacMillan 1992). In other words, as switching costs rise, the influence of satisfaction on intentions to stay with a provider may decrease. Oliver (1999, p. 33) suggests that “satisfaction is a necessary step in loyalty formation but becomes less significant as loyalty begins to set through other mechanisms,” including “social bonding at the institutional and personal level.” Using a global measure of switching costs, recent research by Jones, Mothersbaugh and Beatty (2000) finds evidence of this moderating effect. Consistent with these efforts, we propose the following moderating effect for each switching cost facet:

**H9:** *The relationship between satisfaction and consumer intentions to stay with an incumbent provider will be weaker (stronger) when consumers perceive higher (lower) switching costs.*

## **METHOD AND RESULTS**

In this section we describe the process used to measure switching costs as well as their antecedents and their consequences. We then test the hypotheses described above and present a summary of our findings.

### **Measuring Switching Costs**

Drawing on interviews with managers in the long distance, local telephone and insurance industries, two consumer focus groups and the switching cost literature described above, we compiled a comprehensive list of potential losses faced by consumers when switching providers.

Items for these switching costs were developed, using modified items from previous research when possible.

Two industries were selected to test the measures. These industries were selected based on an expert survey in which 20 managers rated the expected presence of different switching costs and the level of competition for customers in 15 different consumer industries. The credit card industry and the long distance industry were selected as being representative of a large number of business domains in which producers or providers battle to improve customer retention — industries where it is relatively easy for consumers to switch providers yet where a wide array of switching costs perceptions should exist.

To develop the initial scales, a pretest survey was conducted with a convenience sample of 120 non-academic employees of a large southwestern university. A strict definition of switching was provided to assure consistent interpretation: respondents were asked to consider dropping their previously identified primary service provider in order to adopt a new provider. Respondents rated their perceptions of the costs involved in switching providers using five-point Likert-type scales. Based on this survey, scales for the switching costs constructs, antecedents, and consequence variables were refined using exploratory factor analysis, Cronbach's alpha, and confirmatory factor analyses (Churchill 1979; Gerbing and Anderson 1988).

The scales resulting from the preliminary survey were used in the final survey that was distributed to 287 credit card consumers and 288 long distance consumers. The samples included members of a local civic organization, employees of two national firms, members of a local church organization and employees of a large state university. One hundred fifty eight completed credit card surveys were returned (53%) of which 153 usable surveys constitute the sample for the credit card study. Of the long distance surveys distributed, 144 surveys were

returned (50%) and 141 were usable.

Initial analyses were conducted on the credit card data, and the long distance data was reserved to test the generalizability of the factor structure. The preliminary scales were verified and refined using exploratory factor analyses, item-total correlations, and Cronbach's alpha, revealing eight switching cost dimensions. Following the methods proposed by Gerbing and Anderson (1988), confirmatory factor analyses were then used to ensure the scales possessed convergent and discriminant validity. A confirmatory factor analysis of the long distance customer data for cross validation purposes showed that the eight switching cost facets fit the long distance data exceptionally well ( $\chi^2_{91} = 120$ ; CFI = .98). Coefficient alpha's for the eight scales in both industries ranged from .68 to .87 (see Appendix Table A-1). The eight resultant switching cost facets are those described in detail earlier: economic risk, evaluation, learning, set-up, benefits loss, financial loss, personal relationship loss, and brand relationship loss.

### **Testing the Switching Costs Antecedent Model**

Scales measuring the antecedent constructs were developed and tested in the same iterative manner as were the switching cost scales. The final versions of the six antecedent scales demonstrated good reliability (coefficient alpha's ranging from .65 to .92), as well as convergent and discriminant validity (see Appendix Table A-2).

The relationships between the six antecedent constructs and the eight switching costs were examined using seemingly unrelated regression (SUR) (Zellner 1962). To obtain an overall indication of the effect of the antecedents on the different switching cost facets, we followed the lead of satisfaction researchers (ref ref?) and pooled the data from the industries studied. The analysis included eight equations, one for each switching cost regressed on the antecedents hypothesized as well as the individual-level control variables of time pressure and risk aversion.

Unstandardized coefficients are presented in Table 1 and discussed below.

Our results provide full support for the relationships proposed in H1 between complexity and economic risk costs ( $b=.37, p<.001$ ), evaluation costs ( $b=.49, p<.001$ ), learning ( $b=.17, p<.01$ ), set-up ( $b=.21; p<.001$ ), and monetary loss costs ( $b=.19, p<.01$ ). We also find partial support H2: the proposed relationships between heterogeneity and economic risk costs ( $b=.12, p<.01$ ), learning costs ( $b=.19, p<.001$ ), and brand relationship loss costs ( $b=.14, p<.01$ ) are significant. Our results also provide partial support for H3. The proposed relationships between breadth of product use and economic risk costs ( $b=.14, p<.001$ ), benefit loss costs ( $b=.13, p<.05$ ), monetary loss costs ( $b=.17, p<.01$ ), personal relationship loss costs ( $b=.20, p<.001$ ), and brand relationship loss costs ( $b=.12, p<.05$ ) are significant. Of the H4 relationships proposed, we find support only for the relationship between modification and benefit loss costs ( $b=.18, p<.01$ ). All of the proposed H5 relationships are supported, including significant negative relationships between alternative experience and economic risk costs ( $b=-.07, p<.05$ ), evaluation costs ( $b=-.09, p<.05$ ), and learning costs ( $b=-.13, p<.001$ ). Finally, we find partial support for H6. The proposed negative relationships between switching experience and economic risk costs ( $b=-.13, p<.001$ ), personal ( $b=-.19, p<.001$ ) and brand relationship loss costs ( $b=-.14, p<.01$ ), but we also find a positive relationship between switching experience and benefit loss costs.

Although no hypotheses were offered regarding the control variables of time pressure and risk aversion, we summarize the results here briefly. Time pressure is significantly associated with evaluation costs ( $b=.26, p<.001$ ), learning costs ( $b=.15, p<.05$ ) and negatively associated with brand relationship loss costs ( $b=-.18, p<.01$ ). This suggests that as time pressure increases, the perceived switching costs associated with evaluating alternative providers and learning about new providers also increases, but the losses associated with switching brands is felt less. Risk

aversion is significantly and positively associated with economic risk costs ( $b=.15$ ,  $p<.01$ ), learning costs ( $b=.18$ ,  $p<.01$ ), and brand relationship loss costs ( $b=.21$ ,  $p<.01$ ). This suggests that for more risk averse consumers brand relationship losses loom larger and switching providers is associated with greater economic risk and a larger learning effort.

*Insert Table 1 (switching cost antecedent results) about here*

### **Testing the Switching Costs Consequence Model**

Our survey also included scales measuring respondents' satisfaction and their intentions to stay with their incumbent providers. A four-item satisfaction scale captured all three types of satisfaction items recommend by Fornell (1992): general satisfaction, confirmation of expectations and distance from the customers' hypothetical ideal product. A two-item scale captured consumers' repurchase intentions. As with the switching cost and antecedent scales, reliability, convergent validity and discriminant validity were checked and found satisfactory (see Table A-3).

H7 proposed a positive relationship between satisfaction and consumer intention to stay with an incumbent provider. This relationship was tested by regressing intention to stay with an incumbent provider on satisfaction. As expected, we find that satisfaction is positively and significantly associated with intentions to stay with a current provider ( $b=.50$ ,  $p<.001$ ). H8 proposed a positive direct relationship between switching costs and consumers' intentions to stay with an incumbent. H9 proposed a moderating role of switching costs on the satisfaction-intentions relationship. To test H8 and H9 (and to reconfirm H7 controlling for interaction effects), we added the eight switching costs facets to the regression equation along with the mean-centered switching cost by satisfaction interaction terms. This resulted in a large and significant increase in  $R^2$  over the satisfaction-only model. Specifically, adjusted  $R^2$  increased

from .14 to .29, a change of .15 ( $p < .001$ ). However, very few of the switching cost or interaction term coefficients were significant. The combination of high explanatory power and low predictor significance suggested multicollinearity among the independent variables. An examination of the eigenvalues and the variance proportion statistics uncovered several eigenvalues that accounted for a large proportion of the variance in more than one variable. Our desire to assess the effects of multiple switching costs while avoiding this multicollinearity led us to seek a more parsimonious structure of switching costs in a model of higher-order switching cost types.

Using both exploratory factor analysis and higher-order confirmatory factor analysis, a three-factor structure was discovered in the eight original switching cost facets. The procedure, which is described in Appendix 2, identified three "higher-order" switching cost types (see Figure 2):

- *Procedural switching costs*, which include the first-order factors of economic risk, evaluation, learning, and set-up costs,
- *Financial switching costs*, which include the first-order factors of benefits loss and financial loss costs, and
- *Relational switching costs*, which include the first-order factors of personal relationship loss and brand relationship loss costs.

We again ran the regression model for H8 and H9 using the three higher-order switching costs along with satisfaction and the mean-centered switching cost by satisfaction interaction terms (see Table 2). As with the model using eight switching costs reported above, we find that including the three switching cost types and their interaction effects significantly increases the variance explained when compared to the satisfaction-only model: the increase in adjusted  $R^2$  is .14 ( $p < .001$ ). However, with less multicollinearity among our independent variables, we are able to examine the relationships between the switching costs and intention to stay. We find

support for the proposed relationships between intentions to stay and procedural switching costs ( $b=.27, p<.001$ ), financial switching costs ( $b=.14, p<.05$ ), and relational switching costs ( $b=.30, p<.001$ ). Thus, H8 is supported.

Of the three proposed interactions (H9), we find support for the negative interaction between financial switching costs and satisfaction ( $b= -.13, p<.05$ ) and we find a near-significant negative interaction between relational switching costs and satisfaction ( $b= -.12, p=.06$ ).

Implications of these findings are discussed in the following section.

*Insert Table 2 (switching cost consequence results) about here*

## **DISCUSSION AND MANAGERIAL IMPLICATIONS**

This research affords managers the first set of tools and frameworks designed to measure and manage consumer switching costs. We believe that application of the switching cost typology as well as consideration of its antecedent and consequence relationships can aid managers in improving customer retention.

### **The Consumer Switching Cost Typology**

The eight-facet switching cost model developed in this study provides a granular representation of consumer switching costs. This allows researchers and practitioners to more finely distinguish different elements of switching costs. By delineating the types of switching costs, links with other constructs in the literature become more clear for the theoretician. However, both researchers and practitioners often seek tools that allow them to conceptualize complex constructs in a more succinct manner. The three-factor, higher-order framework of switching costs fulfills this need for parsimony. Depending on the demands of the question being pursued, the appropriate level of the typology can be employed. For applied managerial decisions or consumer segmentation, examination of the specific facets of the eight-facet model

is more appropriate. For conceptualizing areas for expanding switching cost research, the higher-order model may be more useful.

## **The Antecedents of Switching Costs**

### *Procedural Switching Costs*

The antecedent study suggests that consumers' procedural switching costs, or their perceptions of the economic risks, time, and effort involved in switching providers, may be best managed by increasing their perceptions of the product complexity and provider heterogeneity, and by reducing, to the extent possible, their experience with switching between and using other providers. Each of the four procedural switching cost facets (economic risks, evaluation, learning, and set-up) is positively associated with consumers' perceptions of product complexity, suggesting that firms that can raise existing customers' perceptions of complexity may be able to increase their switching costs. One tactic for managing complexity perceptions is to make customers cognizant of the varied features of the products offered. Long distance and credit card companies, for example, commonly send inserts along with their monthly bills describing new services and additional features of the services that they offer, along with details on how to use these new features.

Economic risk and learning costs are also positively associated with consumers' perception of the heterogeneity among providers. This suggests that it is important to convey differentiation messages not only to potential customers, but also to one's current customer base. By emphasizing to existing customers the features that differentiate the provider from competitors, a provider may increase its customers' procedural switching costs, reduce their search for alternatives (Heide and Weiss 1995; Weiss and Heide 1993) and reduce their intentions to switch.

We find that consumers' economic risk costs are related to their breadth of product use, but that their evaluation, learning and set-up costs are not. This was surprising as managers interviewed in the research process suggested that, in their experience, a strong link existed between the breadth of the products used by a customer and customer retention. As one manager noted, "If I can get customers to use three or more services, they're hooked." Our results suggest that the "hook" created by using multiple products is more a function of financial and relational switching costs (discussed below) than of procedural switching costs.

Finally, as expected, economic risk, evaluation, and learning switching costs are generally lower for consumers with more experience with alternative providers and for consumers with more switching experience. We conclude that firms seeking to increase switching-cost based retention should target customers with limited experience and avoid targeting avid switchers who are more likely to switch again in the future (Nilssen 1992). Further, by emphasizing defensive over offensive marketing, firms may decrease the cost of retaining customers as the switching costs of their customer base increases over time.

#### *Financial Switching Costs*

Our results suggest that financial switching costs are driven by perceptions of product complexity, by breadth of product use, and by product modification. As a customer develops more linkages with a firm or customizes a product, losing accumulated "credits" becomes an increasingly large impediment to switching. Losing money also becomes a greater barrier to leaving as consumers use more types, functions or features of products and as they perceive greater product complexity. For the manager seeking to build financial switching costs, particularly in an industry with few transaction specific assets, bundling products and services may be a particularly attractive option as may increase both breath of product use and perceived

product complexity. While bundling research has focused on firms' ability to maximize sales profits through bundling (e.g., Venkatesh and Mahajan 1993), our results suggest that bundling is likely to create valuable switching costs as well. Finally, firms seeking to build financial switching costs should encourage product modification, perhaps by offering rewards or 'points' to consumers who customize their products.

### *Relational Switching Costs*

Our results suggest that brand relationship loss switching costs are significantly related to consumer perceptions of provider heterogeneity. Further, both personal and brand relationship switching costs are influenced by the breadth of products used by a consumer. As a consumer uses more types of products from a provider, they appear to enter a more advanced relationship stage in which switching is more costly. This points, once again, to the potential defensive marketing value of bundling offerings and discounting cross-product sales. Finally, as expected, both types of relational switching costs are lower for consumers with more switching experience. One explanation is that consumers with more switching experience have spent less time with their provider during which they might develop relational bonds. However consumers with more switching experience may also perceive that their provider is not unique (Bhattacharya, Rao and Glynn 1995) and hence develop weaker ties with the people or the brand. This reminds us that those customers that have greater switching experience may need to be monitored more closely with respect to their satisfaction.

### **Satisfaction and Switching Costs as Drivers of Customer Retention**

The results of our consequence model confirm previous research findings that satisfaction is an important driver of consumers' intentions to stay with an incumbent service provider. The variance explained in our analysis is within the bounds reported as typical by Syzmanski and

Henard (2001) in their meta-analysis of satisfaction: we find an adjusted  $R^2$  of .14 ( $p < .001$ ). Although we expected to find that switching costs are related to consumers' intentions to stay with an incumbent provider, the amount of variance explained by switching costs after controlling for satisfaction is surprising. In fact, within the range of satisfaction exhibited by typical consumers (recognizing that very dissatisfied customers will already have switched providers), switching costs appear to contribute as much or more to explaining a consumer's intention to stay with a provider than does his or her satisfaction level. We believe this is noteworthy given our intentional selection of industries that are relatively "fluid;" industries such as the long distance industry where perceptions of switching costs exist, but where switching is still relatively easy.

Increasing a current customer's perception of the risk associated with switching, the difficulty of evaluating alternatives, the hassles associated with setting up a new relationship, and the learning that might be required with a new provider appears to increase their intention to stay in an existing relationship. The potential for losses of benefits and of money also appear to be significant disincentives to switching providers, even when no discernable physical assets are involved. Finally, even in industries with very little or no face-to-face contact, customers appear to perceive that they will incur losses in terminating a relationship with a brand or with people they associate with their service provider, and the potential for these losses ties them to their existing providers.

We find mixed evidence for interactions between switching costs and satisfaction. Financial switching costs appear to be more important when satisfaction is lower, suggesting that dissatisfied customers' switching intentions depend heavily on their perceptions of the financial costs of switching. Relational switching costs also show some evidence of this type of

relationship ( $p=.06$ ) suggesting that when satisfaction is low, relationships developed with the brand or people may become more important. Procedural switching costs, on the other hand, appear to function independently of satisfaction—they remain equally important for retaining customers, even when satisfaction is high. This suggests that certain switching costs should not only be viewed as a stopgap for retaining dissatisfied customers, but as a tool for fighting the surprisingly prevalent loss of satisfied customers (Jones and Sasser 1995).

In sum, the “passive loyalty” that switching costs create can provide tremendous defensive marketing benefits, including promoting voice over exit (Ping 1997) and providing an impetus to stay with the provider. Thus, switching costs may insulate firms from the immediate effects of dissatisfying service encounters by prompting consumers to “forget” the incident and allowing them to return to the relatively stable long-term global satisfaction level they felt before the dissatisfying incident (Bolton and Drew 1991). Clearly, firms have a strong incentive to ensure that *both* satisfaction and switching cost management are well tended.

In managing consumers’ perceived switching costs, strategists are reminded of two potential problems associated with developing such barriers (Fornell 1992): (1) customer awareness of switching costs may impede customer acquisition, (2) switching costs may be neutralized or eliminated by external forces. The latter concern merely suggests that firms must manage their customers’ switching costs while simultaneously managing customer satisfaction, and that firms should regularly monitor their customers’ switching cost perceptions. The former concern suggests that while switching costs should be employed to improve customer retention, they must also be managed with an eye towards customer acquisition. While we have emphasized the customer retention applications of our model, our findings are equally relevant for customer acquisition management, meaning that firms should work to lower potential

customers' perceptions of the complexity of their products in order to reduce the switching costs associated with switching "in." For example, Amazon.com's promotion of the simplicity of its "1-Click" shopping helps it attract new customers. These customers then generate set-up and learning switching costs as they invest time to enter personal information and to gain facility with more complex functions. Fornell's concerns do, however, highlight the potential downsides of an over-aggressive use of switching costs. Even if few consumers undertake the hyper-rational future cost assessments presumed by economists (e.g. Beggs and Klemperer 1992), potential customers may search for ways to avoid relationships with firms imposing obviously burdensome switching costs. Further, existing customers may seek out opportunities to undermine firms they feel are constricting them unfairly (Jones and Sasser 1995). Thus, switching costs must be managed judiciously; when possible they should be reduced for potential customers, while for existing customers they should be made high enough to discourage switching but not so high that they are perceived as burdensome.

### **CONCLUSION AND FUTURE RESEARCH**

We make three contributions with this research. First, we develop a typology of switching costs and validate our typology in two industries: the long distance and credit card industries. We find eight distinct switching costs perceived by consumers: 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. These eight switching costs comprise three higher-order factors of procedural, financial, and relational switching costs. The support for the typology across the two industries provides evidence that the factor structure of the switching cost model has external validity. Given the breadth of the literature from which the typology is drawn, the results found, and the parsimonious nature of the model, we believe that

the typology provides a foundation for understanding the nature of switching costs in other consumer industries.

Second, we propose a theoretical framework of the antecedents that drive consumer switching costs and we empirically test that framework. We find that the three categories of antecedents—market characteristics, consumer investments, and domain expertise—can significantly influence the switching costs consumers perceive.

Third, we examine the relationships between three types of switching costs and consumers' intentions to stay with their current service providers. Our results show that switching costs strongly influence customer retention. Our findings also validate the well-accepted notion that satisfaction is associated with intentions to stay with a provider. While these two drivers can substitute for one another, both remain crucial to assuring customer retention. We suggest that adept managers use both tools to their advantage.

Future research that investigates moderators of the antecedents of switching costs will enhance the managerial application of switching costs. For example, research is needed to investigate the importance of the complementarities between products purchased from a single provider as well as the moderating influence of the physical compatibility of assets related to the use of different providers. Until such research increases our ability to discriminate between the universal and the conditional drivers of switching costs, service providers are encouraged to empirically validate the antecedent relationships within their industries before undertaking a switching cost management strategy.

**TABLE 1**  
**SWITCHING COST ANTECEDENT MODEL**  
**UNSTANDARDIZED REGRESSION COEFFICIENTS FROM SUR ANALYSIS**

Antecedent	Switching Cost								
	Risk	Eval.	Learn	Set-Up	Benefit	Money	Person	Brand	
Intercept	1.10***	1.46***	1.00**	1.82***	.58	1.36**	2.00***	2.43***	
<b>H1</b> Complexity	.37***	.49***	.17**	.21***	---	.19**	---	---	
<b>H2</b> Heterogeneity	.12**	-.08	.19***	---	.12	.01	---	.14**	
<b>H3</b> Breadth of Use	.14***	.00	.06	.05	.13*	.17**	.20***	.12*	
<b>H4</b> Modification	---	---	.04	-.02	.18**	---	.04	.06	
<b>H5</b> Alternative Experience	-.07*	-.09*	-.13***	---	---	---	---	---	
<b>H6</b> Switching Experience	-.13***	-.04	-.03	---	.17**	---	-.19***	-.14**	
Time Pressure	.06	.26***	.15*	.09	.14	-.04	-.04	-.18**	
Risk Aversion	.15**	.00	.18**	.06	.06	.06	.11	.21**	
Adjusted R <sup>2</sup> from OLS Regression	.37***	.35***	.23***	.06***	.08***	.06***	.16***	.17***	

*Notes:* The symbol “---” indicates a non-hypothesized relationship.  
\*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$   
N = 280  
The SUR system weighted R<sup>2</sup> is .16

**TABLE 2**  
**SWITCHING COST CONSEQUENCE MODEL:**  
**UNSTANDARDIZED REGRESSION COEFFICIENTS**

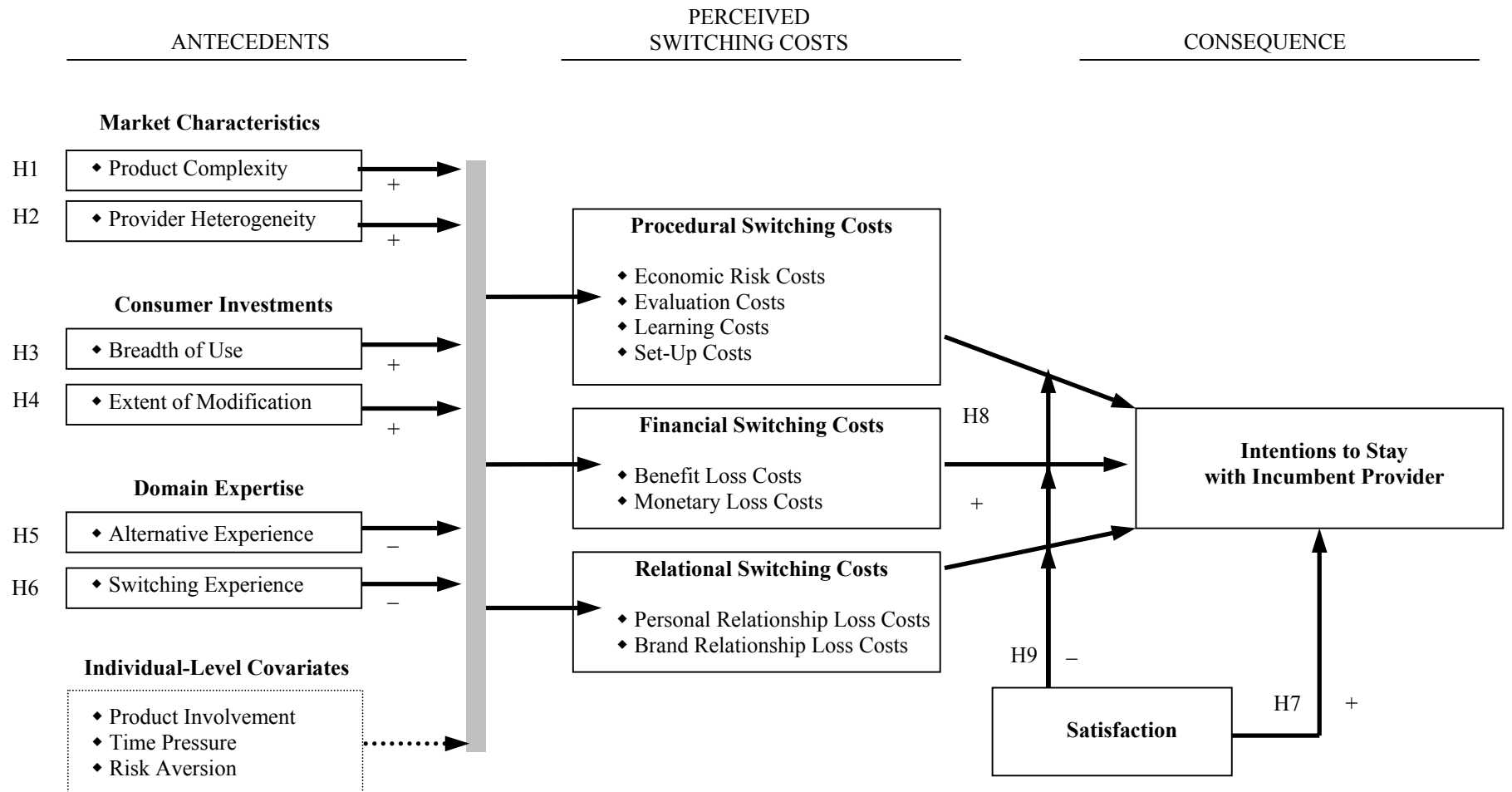
Construct	Satisfaction Only Model	Switching Cost Model
Intercept	2.24***	.87*
Satisfaction	.50***	.34***
Procedural Switching Costs		.27***
Financial Switching Costs		.14*
Relational Switching Costs		.30***
Procedural x Satisfaction		.12
Financial x Satisfaction		-.13*
Relational x Satisfaction		-.12 <sup>a</sup>
Adjusted R <sup>2</sup>	.14***	.28***

*Notes:* \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$

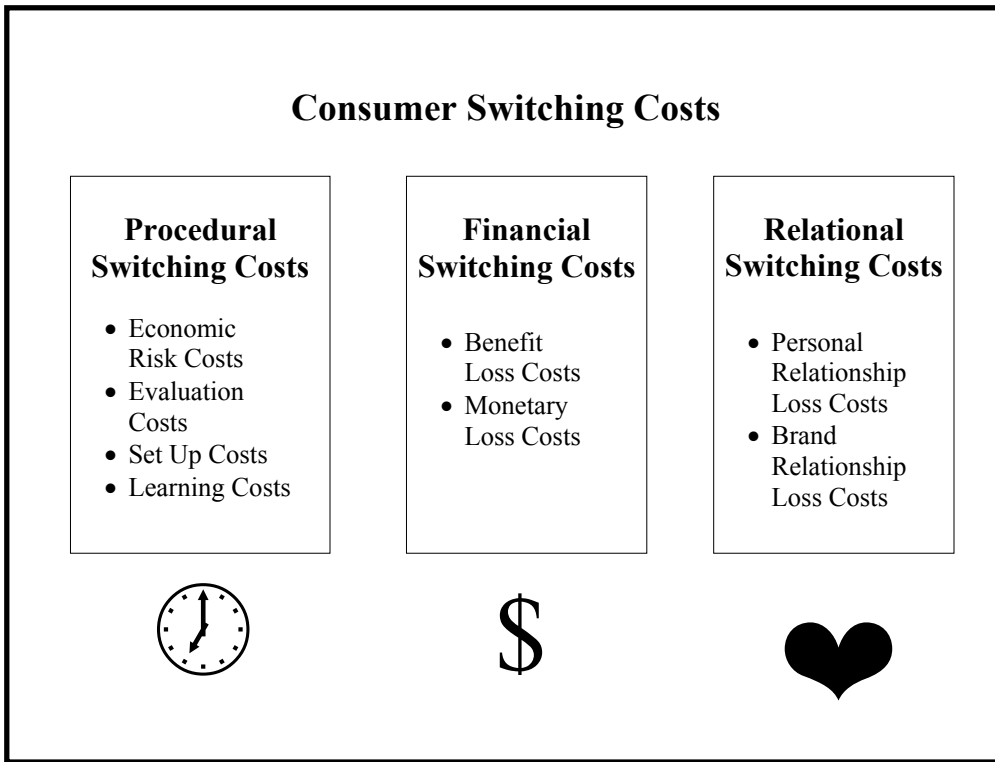
<sup>a</sup>  $p = .06$

N = 286

**FIGURE 1**  
**SWITCHING COST ANTECEDENT AND CONSEQUENCE MODEL**



**FIGURE 2**  
**SWITCHING COST TYPOLOGY**



**APPENDIX 1**  
**TABLE A-1**  
**SWITCHING COST SCALE ITEMS AND RELIABILITIES**

Scale	Items	Coefficient Alpha
Economic Risk Costs	• <i>I worry that the service offered by other service providers won't work as well as expected.</i>	(Long Distance, Credit Card)  .85, .87
	• <i>If I try to switch service providers I might end up with bad service for a while.</i>	
	• <i>Switching to a new service provider will probably involve hidden costs/charges.</i>	$n_{LD} = 158$ $n_{CC} = 144$
	• <i>I am likely to end up with a bad deal financially if I switch to a new service provider.</i>	
	• <i>Switching to a new service provider will probably result in some unexpected hassle.</i>	
	• <i>I don't know what I'll end up having to deal with while switching to a new service provider.</i>	
Evaluation Costs	• <i>I can not afford the time to get the information to fully evaluate other service providers.</i>	.80, .83
	• <i>How much time/effort does it take to get the information you need to feel comfortable evaluating new service providers (very little... a lot).</i>	
	• <i>Comparing the benefits of my service provider with the benefits of other service providers takes too much time/effort, <u>even when I have the information.</u></i>	
	• <i>It is tough to compare the other service providers.</i>	
Learning Costs	• <i>Learning to use the features offered by a new service provider as well as I use my service would take time.</i>	.85, .85
	• <i>There is not much involved in understanding a new service provider well. (r)</i>	
	• <i>Even after switching, it would take effort to "get up to speed" with a new service.</i>	
	• <i>Getting used to how another service provider works would be easy. (r)</i>	

**TABLE A-1 (CON'T)**

**SWITCHING COST SCALE ITEMS AND RELIABILITIES**

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Set-Up Costs	<ul style="list-style-type: none"> <li>• <i>It takes time to go through the steps of switching to a new service provider.</i></li> <li>• <i>Switching service providers involves an unpleasant sales process.</i></li> <li>• <i>The process of starting up with a new service is quick/easy. (r)</i></li> <li>• <i>There are a lot of formalities involved in switching to a new service provider.</i></li> </ul>	.74, .80
Benefit Loss Costs	<ul style="list-style-type: none"> <li>• <i>Switching to a new service provider would mean losing or replacing points, credits, services, etc. that I have accumulated with my service provider.</i></li> <li>• <i>How much would you lose in credits, accumulated points, services you have already paid for, etc. if you switched to a new service provider. (lose nothing.. lose a lot)</i></li> </ul>	.81, .78
Monetary Loss Costs	<ul style="list-style-type: none"> <li>• <i>Switching to a new service provider would involve some up-front costs (setup fees, membership fees, deposits, etc.).</i></li> <li>• <i>How much money would it take to pay for all of the costs associated with switching service providers? (no money.... a lot of money)</i></li> </ul>	.72, .71
Personal Relationship Loss Costs	<ul style="list-style-type: none"> <li>• <i>I would miss working with the people at my service provider if I switched providers.</i></li> <li>• <i>I am more comfortable interacting with the people working for my service provider than I would be if I switched providers.</i></li> <li>• <i>The people where I currently get my service matter to me.</i></li> <li>• <i>I like talking to the people where I get my service.</i></li> </ul>	.87, .85
Brand Relationship Loss Costs	<ul style="list-style-type: none"> <li>• <i>I like the public image my service provider has.</i></li> <li>• <i>I support my service provider as a firm.</i></li> <li>• <i>I do not care about the brand/company name of the service provider I use. (r)</i></li> </ul>	.77, .68

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Note: All items measured on five point Likert-type scales. Except where noted, scale endpoints used were “strongly disagree” and “strongly agree”.

**TABLE A-2**  
**ANTECEDENT SCALE ITEMS AND RELIABILITIES**

Scale	Items	Coefficient Alpha
Complexity	<ul style="list-style-type: none"> <li>• <i>I would have to know a lot to take full advantage of the options/programs offered by service providers.</i></li> <li>• <i>The offerings in this industry are difficult to understand.</i></li> <li>• <i>A salesperson selling this kind of service needs to know a lot to do a good job.</i></li> <li>• <i>This service is complicated in nature.</i></li> </ul>	<p><i>(Long Distance, Credit Card)</i></p> <p>.70, .82</p> <p><i>n<sub>LD</sub> = 158</i> <i>n<sub>CC</sub> = 144</i></p>
Heterogeneity	<ul style="list-style-type: none"> <li>• <i>The quality of service varies a lot between different service providers in this industry.</i></li> <li>• <i>I could be using a competing service provider and not notice much difference. (r)</i></li> <li>• <i>Different service providers in this industry offer very different programs/features.</i></li> <li>• <i>It really doesn't matter what service provider I use -- they are all pretty much the same. (r)</i></li> </ul>	<p>.72, .69</p>
Breadth of Service Use	<ul style="list-style-type: none"> <li>• <i>I take advantage of additional programs / service offered by my service provider.</i></li> <li>• <i>I use the services offered by my service provider in many different ways.</i></li> <li>• <i>I have used a variety of my service providers' services.</i></li> <li>• <i>I currently use _____ different features that are offered by my service provider.</i></li> </ul>	<p>.87, .88</p>
Modification	<ul style="list-style-type: none"> <li>• <i>My service is personalized in some way.</i></li> <li>• <i>I "set up" my service to use it the way I want to.</i></li> <li>• <i>I have put effort into adapting my service to meet my needs.</i></li> </ul>	<p>.92, .86</p>
Alternative Experience	<ul style="list-style-type: none"> <li>• <i>I have tried the services offered by other service providers.</i></li> <li>• <i>I am familiar with the quality of service that other service providers offer.</i></li> <li>• <i>My experience with other service providers is limited. (r)</i></li> </ul>	<p>.74, .76</p>
Switching Experience	<ul style="list-style-type: none"> <li>• <i>I have switched between service providers a lot.</i></li> <li>• <i>How many competing service providers have you tried in the last two years? (zero, one, two, three, four or more)</i></li> </ul>	<p>.65, .71</p>

**TABLE A-3**  
**CONSEQUENCE MODEL SCALES**

Scale	Items	Coefficient Alpha
Satisfaction	<ul style="list-style-type: none"> <li>• <i>I am satisfied with my service provider.</i></li> <li>• <i>What I get from my service provider falls short of what I expect for this type of service. (r)</i></li> <li>• <i>Imagine an ideal service provider -- one that does everything a provider of this service should do. How does your service provider compare to this ideal service provider? (far below ideal... equal to ideal).</i></li> <li>• <i>How well does your service provider meet your needs at this time (extremely poorly... extremely well).</i></li> </ul>	<p><i>(Long Distance, Credit Card)</i></p> <p>.85, .84</p> <p><math>n_{LD} = 136</math> <math>n_{CC} = 152</math></p>
Intentions to Stay with Incumbent Provider	<ul style="list-style-type: none"> <li>• <i>How likely are you to <u>switch</u> to a competing service provider during the next year? (very unlikely... very likely).</i></li> <li>• <i>What is the chance that you will <u>stay</u> with your service provider for the next year? (0% - No chance I will stay, 25%, 50%, 75%, 100% - I will certainly stay). (r)</i></li> </ul>	<p>.87, .84</p>

## APPENDIX 2 HIGHER ORDER SWITCHING COST DERIVATION

### *Seeking Higher-Order Switching Cost Types*

A more parsimonious structure within the eight switching cost facets was derived by first submitting composite measures for each construct to a varimax-rotated factor analysis. The results of this analysis suggested three higher-order switching costs types. A CFA for the three factor higher-order model was then tested. Following the recommendation by Marsh (1987), the fit of this proposed model was evaluated in comparison to (1) a one factor higher-order model, (2) higher-order models with dimensionalities both above and below that of the proposed model, and (3) a first-order model allowing free correlation among the eight latent switching cost facets. A partial disaggregation model was used to compare the higher-order factor structures in order to reduce measurement error.

The proposed three-factor higher-order model fit the credit card data well ( $\chi^2_{108} = 166$ ,  $p < .01$ ; CFI = .96). Using a change in  $\chi^2$  measure to compare the alternative (nested) covariance models, the three-factor higher-order model fit the data significantly better than a two-factor higher-order model ( $\Delta\chi^2_2 = 13$ ,  $p < .01$ ), and did not fit significantly worse than a four-factor higher-order model ( $\Delta\chi^2_1 = 0$ ,  $p > .05$ ). These results are presented in Table A-4. The small increases in the TC2 coefficient associated with dimensionality increases suggest that increasing the number of higher-order dimensions produces only marginal increases in the explanation of the variance of the lower order factors (Marsh 1987). Given the virtue of parsimony, these marginal increases do not warrant more than three higher-order dimensions for the model studied.

*Insert Table A-4 about here*

The models were then cross-validated using the long distance industry data. A three

factor higher-order switching cost model also fit the long distance data well ( $\chi^2_{108} = 209$ ; CFI = .92). The strong results of this replication suggest that a three-factor model fits well with consumer switching cost perceptions. The three higher-order switching cost types were titled “procedural costs”, “financial costs” and “relational costs” (see Figure 1).

**TABLE A-4**  
**HIGHER ORDER CONFIRMATORY FACTOR ANALYSES (CREDIT CARD DATA)**

Partial Disaggregation Model	Model Fit Statistics	Comments
Baseline First Order Model <i>(eight freely-correlated factors)</i>	$\chi^2$ (98) = 150 CFI = .95 RMSEA = .062	Fits significantly better than seven factor model.
Fully Constrained First Order Model	$\chi^2$ (126) = 608 CFI = .72 RMSEA = .166	Provides worst-fit measure; assumes no facet correlations.
2 Factor Higher Order Model	$\chi^2$ (110) = 169 CFI = .95 RMSEA = .062 TC2* = .96	Combines procedural and financial costs.
<i>Proposed 3 Factor Higher Order Model</i>	$\chi^2$ (108) = 156 CFI = .96 RMSEA = .057 TC2* = .99	<i>Procedural, financial, and relational costs.</i>
4 Factor Higher Order Model	$\chi^2$ (107) = 156 CFI = .96 RMSEA = .058 TC2* = .99	Separates benefit loss costs and financial loss costs.

\*TC2 =  $(\chi^2$  Fully Constrained -  $\chi^2$  Proposed) /  $(\chi^2$  Fully Constrained -  $\chi^2$  Baseline Free) (Marsh 1987)

## REFERENCES

- Aaker, David A. (1992), "The Value of Brand Equity," *Journal of Business Strategy*, 13 (July/August), 27-32.
- Alba, Joseph W. and J. Wesley Hutchinson (1987), "Dimensions of Consumer Expertise," *Journal of Consumer Research*, 13 (March), 411-454.
- Anderson, Eugene and Mary W. Sullivan (1993), "The Antecedents and Consequences of Customer Satisfaction for Firms," *Marketing Science*, 12 (Spring), 125-143.
- Anderson, James C. and David W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, 103(3), 411-423.
- Bansal, Havir S. and Shirley F. Taylor (1999), "The Service Provider Switching Model (SPSM)," *Journal of Service Research*, 2 (2), 200-218.
- Beggs, Alan and Paul Klemperer (1992), "Multi-Period Competition with Switching Costs," *Econometrica*, 60, 3 (May), 651-666.
- Bettman, James R. (1973), "Perceived Risk and Its Components: A Model and Empirical Test," *Journal of Marketing Research*, 10 (May), 184-190.
- Bhardawaj, Sunar G., P. Rajan Varadarajan, and John Fahy (1993), "Sustainable Competitive Advantage in Service Industries: A Conceptual Model and Research Propositions," *Journal of Marketing*, 57 (October), 83-99.
- Bhattacharya, C. B., Hayagreeva Rao, and Mary Ann Glynn (1995), "Understanding the Bond of Identification: An Investigation of Its Correlates Among Art Museum Members," *Journal of Marketing*, 59 (October), 46-57.
- Blattberg, Robert C. and John Deighton (1996), "Managing Marketing by the Customer Equity Test," *Harvard Business Review*, (July/August), 136-144.

- Bolton, Ruth N. and James H. Drew (1991), "A Longitudinal Analysis of the Impact of Service Changes on Customer Attitudes," *Journal of Marketing*, 55 (1), 1-9.
- , P.K. Kannan, and Matthew D. Bramlett (2000), "Implications of Loyalty Program Membership and Service Experiences for Customer Retention and Value," *Journal of the Academy of Marketing Science*, 28 (1), 95-108.
- Churchill, Gilbert A. Jr. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16 (February), 64-73.
- Crosby, Lawrence, A., Kenneth R. Evans, and Deborah Cowles (1990), "Relationship Quality in Services Selling: An Interpersonal Influence Perspective," *Journal of Marketing*, 54 (July), 68-81.
- Dwyer, F. Robert, Paul H. Schurr, and Sejo Oh (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, 51 (April), 11-27.
- Eliashberg, Jehoshua and Thomas S. Robertson (1988), "New Product Preannouncing Behavior: A Market Signaling Study," *Journal of Marketing Research*, 25 (August), 282-292.
- Farrell, Joseph and Carl Shapiro (1988), "Dynamic Competition with Switching Costs," *RAND Journal of Economics*, 19 (Spring), 123-137.
- Fornell, Claes (1992), "A National Customer Satisfaction Barometer: The Swedish Experience," *Journal of Marketing*, 56 (January), 6-21.
- , Thomas Robinson, and Birger Wernerfelt (1985), "Consumption Experience and Sales Promotion Expenditure," *Management Science*, 31 (September), 1084-1105.
- Garbarino, Ellen and Mark S. Johnson (1999), "The Different Roles of Satisfaction, Trust, and Commitment in Customer Relationships," *Journal of Marketing*, 63 (2), 70-87.
- Gatignon, Hubert and Thomas S. Robertson (1992), *The Handbook of Consumer Behavior*,

- Thomas S. Robertson and Harold H. Kassarian, eds. Englewood Cliffs, NJ: Prentice-Hall.
- Gerbing, David W. and James C. Anderson (1988), "An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment," *Journal of Marketing Research*, 25 (May), 186-192.
- Guiltinan, Joseph P. (1989), "A Classification of Switching Costs with Implications for Relationship Marketing," in *1989 AMA Winter Educators' Conference: Marketing Theory and Practice*, T. L. Childers, R. P. Bagozzi, J. P. Peter, et al. Eds. Chicago, IL: American Marketing Association, 216-220.
- Hauser, John R. and Birger Wernerfelt (1990), "An Evaluation Cost Model of Consideration Sets," *Journal of Consumer Research*, 16 (March), 393-408.
- Heide, Jan B. and Allen M. Weiss (1995), "Vendor Consideration and Switching Behavior for Buyers in High-Technology Markets," *Journal of Marketing*, 59 (July), 30-43.
- Holak, Susan L. and Donald R. Lehmann (1990), "Purchase Intentions and the Dimensions of Innovation: An Exploratory Model," *Journal of Product Innovation Management*, 7, 59-73.
- Jackson, Barbara B. (1985), *Winning and Keeping Industrial Customers*, Lexington, MA: Lexington Books.
- Jones, Michael A., David L. Mothersbaugh, and Sharon E. Beatty (2000), "Switching Barriers and Repurchase Intentions in Services," *Journal of Retailing*, 76 (2), 259-274.
- Jones, Thomas O. and W. Earl Sasser, Jr. (1995), "Why Satisfied Customers Defect," *Harvard Business Review*, 73 (1), 88-99.
- Karakaya, Fahri and Michael J. Stahl (1989), "Barriers to Entry and Market Decisions in Consumer and Industrial Goods Markets," *Journal of Marketing*, 53 (April), 80-91.
- Kerin, Roger A., P. Rajan Varadarajan, and Robert A. Peterson (1992), "First-Mover Advantage:

- A Synthesis, Conceptual Framework, and Research Propositions,” *Journal of Marketing*, 56 (October), 33-52.
- Klemperer, Paul (1987), “Markets with Consumer Switching Costs,” *The Quarterly Journal of Economics*, 102 (May), 375-394.
- (1995), “Competition when Consumers have Switching Costs: An Overview with Applications to Industrial Organization, Macroeconomics, and International Trade,” *Review of Economic Studies*, 62, 515-539.
- Kumar, Nirmalya, Louis W. Stern, and Ravi S. Achrol (1992), “Assessing Reseller Performance from the Perspective of the Supplier,” *Journal of Marketing Research*, 24 (May), 238-253.
- Marsh, Herbert W. (1987), “The Hierarchical Structure of Self-Concept and the Application of Hierarchical Confirmatory Factor Analysis,” *Journal of Educational Measurement*, 24 (Spring), 17-39.
- McCracken, Grant (1986), “Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods,” *Journal of Consumer Research*, 13 (June), 71-84.
- Mittal, Vikas and Wagner A. Kamakura (2001), “Satisfaction, Repurchase Intent, and Repurchase Behavior: Investigating the Moderating Effect of Consumer Characteristics,” *Journal of Marketing Research*, 38 (1), 131-142.
- Morgan, Robert M. and Shelby D. Hunt (1994), “The Commitment-Trust Theory of Relationship Marketing,” *Journal of Marketing*, 58 (July), 20-38.
- MSI (1996), *Research Priorities 1996-1998*, Cambridge, MA: The Marketing Science Institute.
- Nilssen, Tore (1992), “Two Kind of Consumer Switching Costs,” *RAND Journal of Economics*, 23 (Winter), 579-589.

- Oliva, Terence A., Richard L. Oliver, and Ian C. MacMillan (1992), "A Catastrophe Model for Developing Service Satisfaction Strategies," *Journal of Marketing*, 56 (3), 83-95.
- Oliver, Richard (1997), *Satisfaction, A Behavioral Perspective on the Consumer*, Irwin McGraw-Hill, Boston, MA.
- (1999), "Whence Consumer Loyalty," *Journal of Marketing*, 63 (Special Issue), 33-44.
- Park, C. Whan, David L. Mothersbaugh, and Lawrence Feick (1994), "Consumer Knowledge Assessment," *Journal of Consumer Research*, 21, 1 (June), 71-82.
- Pine, B Joseph II, Don Peppers, and Martha Rogers (1995), "Do You Want to Keep Your Customers Forever?" *Harvard Business Review*; 73 (2), 103-114.
- Ping, Robert A. Jr. (1993), "The Effects of Satisfaction and Structural Constraints on Retailer Exiting, Voice, Loyalty, Opportunism, and Neglect," *Journal of Retailing*, 69 (Fall), 320-352.
- (1997), "Voice in Business to Business Relationships: Cost-of-Exit and Demographic Antecedents," *Journal of Retailing*, 73 (2), 261-281.
- Porter, Michael E. (1980), *Competitive Strategy*, New York: The Free Press.
- Ram, S. and Hyung-Shik Jung (1990), "The Conceptualization and Measurement of Product Usage," *Journal of the Academy of Marketing Science*, 18 (Winter), 67-76.
- Reichheld, Frederick F. (1996), *The Loyalty Effect: The Hidden Force Behind Growth, Profits, and Lasting Value*, Boston, MA: Harvard Business School Press.
- Robinson, William T. (1988), "Sources of Market Pioneer Advantages: The Case of Industrial Goods," *Journal of Marketing Research*, 25 (February), 87-94.
- Rogers, Everett M. (1995), *Diffusion of Innovations*. New York: The Free Press.
- Samuelson, William and Richard Zeckhauser (1988), "Status Quo Bias in Decision Making," *Journal of Risk and Uncertainty*, 1, 7-59.

- Schmalensee, Richard (1982), "Production Differentiation Advantages of Pioneering Brands," *American Economic Review*, 27, 349-365.
- Shugan, Steven M. (1980), "The Costs of Thinking," *Journal of Consumer Research*, 7 (September), 99-111.
- Szymanski, David M. and David H. Henard (2001), "Customer Satisfaction: A Meta-Analysis of Empirical Evidence," *The Journal of the Academy of Marketing Science*, 29 (1), 16-35.
- Venkatesh, R. and Vijay Mahajan, (1993), "A Probabilistic Approach to Pricing a Bundle of Products or Services," *Journal of Marketing Research*, 30 (November), 494-509.
- Weiss, Allen M. and Jan B. Heide (1993), "The Nature of Organizational Search in High Technology Markets," *Journal of Marketing Research*, 30 (May), 220-233.
- Wernerfelt, Birger (1985), "Brand Loyalty and User Skills," *Journal of Economic Behavior and Organizations*, 6, 381-385.
- Williamson, Oliver E. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*, New York: The Free Press.
- Zellner (1962), "An Efficient Method of Estimating Seemingly Unrelated Regressions and Tests for Aggregation Bias," *Journal of the American Statistical Association*, 57 (June), 348-368.