

THE LONG-TERM IMPACT OF SERVICE PERSONNEL PRACTICES ON CUSTOMER
ATTITUDES AND BEHAVIOR

By

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(Under the Direction of Piyush Kumar)

ABSTRACT

This research examines the implications of two critical areas in services marketing: suggestive selling and service recovery performed by frontline personnel. In this first chapter, I compare the short and long-term consequences of up-selling versus an alternative suggestive selling practice called down-selling which involves salespeople pro-actively guiding customers to low price or discounted products. Using theories of mental budgeting and disconfirmation of price expectations, I develop a model relating the two alternative suggestive selling strategies to customer value, product quality perceptions, satisfaction, and loyalty. The results from testing the model with over 2000 customers of a casual dining chain provide the first insights into the detrimental long-term effects of up-selling and the surprising short and long-term benefits of down-selling. The results suggest that prevailing fears regarding down-selling are misplaced and firms may in fact gain by limiting up-selling and institutionalizing down-selling. More profitable customer relationships may be produced by the promotion of moderately priced products and switching customers *down* to lower-priced products using suggestive selling strategies.

The second chapter examines customer response to service failure and recovery efforts from a short and a long-term perspective across all four service outcome customer groups. The

results show a non-linear post experience attitudinal relationship across the four outcome groups. Those who did not experience a service failure (control) exhibited the highest attitudinal measures. Contrary to the Service Recovery Paradox, those who had a satisfactory recovery exhibited lower attitudinal scores than the control. Non-complainers, who comprise a much larger percentage of the population than previously thought, exhibited considerably lower attitudinal measures than the satisfactory recovery group but exhibited slightly better attitudinal measures than the double deviation group. Essentially, those that concluded their experience satisfied (control and satisfactory recovery) exhibited higher attitudinal measures than those who concluded their experience dissatisfied (non-complainer and double deviation). The small differences within the satisfied and dissatisfied customer groups dissipated prior to their next service purchase. Therefore, future purchase behavior is simply determined by whether or not they concluded their experience satisfied. Finally, the return on investment of service recovery is approximately three times the revenue of the original experience.

INDEX WORDS: *Suggestive selling, down-selling, up-selling, customer satisfaction, customer relationships, service recovery paradox, complaining behavior, non-complainers, double deviation, service failure, service performance*

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CHAPTER 1

THE LONG-TERM IMPACT OF UP-SELLING VERSUS DOWN-SELLING

Introduction

Firms often train and incentivize their salespeople to suggest additional or more expensive products to customers than what they otherwise would have bought (Kamakura 2002). This practice, labeled up-selling, is widely adopted across a range of industries, including automobiles, insurance, retail, computers, and restaurants (Blattberg and Deighton 1996; Kim 1999; Oh and Lucas 2006; Kimes 2008), and is designed to increase the revenue per customer visit. For example, car salespeople up-sell customers to accessories and extended warranties, and insurance salespeople up-sell to higher premiums and additional policies for family members. Computer salespeople and even online sales sites up-sell customers to additional features, such as memory, hard drive capacity, peripherals, and software.

The academic literature and the trade press documents the relationship between up-selling and increased immediate revenue across many markets. For example, the positive effect of up-selling to hair care products is observed in salons (Dickinson and O'Brien 1982), from purses and hosiery sales in shoe stores (O'Brien, Sperduto and Goff 1984), and from additional or more expensive food and beverages in restaurants (Martinko, White and Hassell 1989). Up-selling provides an alternative mechanism to reach revenue goals without new customer acquisition by increasing the revenue per transaction from existing customers. Other advantages of up-selling, a sales practice more prevalent in saturated markets (Ebster, Wagner and Valis

2005), include a reduction in overall selling costs (Rothfeder 2003), and an increase in the share of wallet which also increases the “share of mind” for a firm’s offerings (Kamakura 2008).

A less widely-discussed sales practice is what we label down-selling. As the term suggests, the objective of this approach is for salespeople to purposefully suggest lower-priced products to customers who would have otherwise purchased a more expensive product. Firms strongly discourage this practice for fear of a loss of revenue per-customer-per-visit.¹ Yet, a large number of salespeople engage in down-selling for reasons ranging from personal interpretation of customer-oriented selling, long-term customer retention (Saxe and Weitz 1982) and pro-social behavior (George and Bettenhausen 1990) to anti-citizenship behavior (Jelinek and Ahearne 2006).

While previous research and industry reports focus on the short-term revenue gains from up-selling, the long-term impact of this strategy on customers’ brand perceptions and repeat purchase behavior is not completely known. In most cases, the products sold during up-selling are generally appropriate, but more expensive than what customers originally planned to buy, or those that were not intended for purchase at all. Therefore, even though these more-expensive or additional products are unlikely to be dissatisfying in and of themselves, they tend to increase the total customer outlay during a purchase experience. It is therefore possible that the over-expenditure induced by up-selling may have adverse effects on customers’ overall satisfaction, brand perceptions, and future purchase streams to such an extent that future revenue losses may nullify the short-term gains from this strategy.

On the other hand, down-selling involves a salesperson’s suggestions regarding how customers can fulfill their needs at a lower price as compared to what they were willing to pay without the sales effort. As noted, salespeople engage in this practice for a number of reasons,

¹ Personal interviews with industry executives.

the primary being a belief that doing so will increase future purchases from their firm.

Therefore, while down-selling has not been examined in the literature, and managers generally oppose it for fear of revenue loss, it is possible that this non-institutionalized sales practice may have a positive effect on satisfaction, brand perceptions, and ultimately long-term firm revenue.

In this paper, we examine the impact of up-selling versus down-selling sales strategies on customers' brand perceptions, satisfaction, and loyalty. Our core thesis is that up-selling versus down-selling alters customers' value perceptions pertaining to a purchase occasion and, in turn, influence their post-consumption evaluation of the purchased products. We propose a model of how changes in customers' value perceptions under the two alternative sales strategies influence their retrospective product evaluations and lead to different downstream consequences. We test our model using a natural experiment involving over 2000 customers in ten restaurants across five geographically dispersed markets of a national casual dining restaurant chain. Our results provide perhaps the first insights into the long-term, customer-based effects of up-selling versus down-selling sales strategies. We find that, in contrast to popular belief, the revenue per customer may not decline with down-selling. Further, while up-selling does increase short-term revenues, it has detrimental long-term consequences. Specifically, customers who are up-sold have inferior value and product quality perceptions that translate into lower brand loyalty. This leads to an overall reduction in the frequency of use within the product category. In contrast, those who are down-sold have superior value and brand perceptions that drive increased loyalty and brand usage. We also find that the positive effects of down-selling are not uniform across customers and that this strategy has the greatest impact on light users of a brand, a segment that is often key to long-term growth.

Taken together, our findings run counter to conventional wisdom and widespread industry practice by identifying, perhaps for the first time, the adverse long-term consequences of up-selling and surprising benefits of a down-selling sales strategy. Based on our findings, we propose that firms should consider limiting the use of both upselling as preferred suggestive selling strategy as well as bait-and-switch as a promotional strategy. Instead, we raise a call for firms to institutionalize rather than suppress down-selling. We expect that firms may be able to build lasting customer relationships using a *reverse* bait-and-switch strategy, by attracting customers using moderately priced products and switching them *down* to less expensive products using institutionalized down-selling. We also suggest that institutionalizing down-selling may influence the design of product portfolios, the compensation structure for executives and the frontline, and reduce salespeople's role conflict. Finally, we argue that down-selling may be a superior strategy relative to simple price discounting because it offers greater pricing flexibility, limited erosion of reference prices, and future benefits from greater customer satisfaction and retention.

Theoretical Background

Disconfirmation of Mental Budgets

Customers often budget their spending into various expense accounts (Thaler 1985). As they spend money, customers deduct the spent amount from specific accounts and then re-compute the amount remaining for that type or category of expense (Heath and Soll 1996). For a specific purchase occasion, customers often have a pre-determined amount that they intend to spend.² We suggest that this mental budget for a specific usage occasion serves as a prior expectation regarding the spending levels for that occasion. However, during a visit, the actual

² Based on sponsoring company marketing research data.

expense may be less or more than what the customer a-priori expected to spend. For example, during a consumption experience, the customer may be exposed to suggestive up-selling or down-selling sales strategies whose objective itself is to influence customers to spend more or less than their prior expectation or budget. If the deployed sales strategy is successful, the customers experience a disconfirmation between what they ultimately spend and what they had intended to spend (Churchill and Surprenant 1982; Oliver 1980). This impact of the disconfirmation resulting from a sales strategy relative to a prior expectation set by mental budgets will influence customers' post-purchase evaluation of their consumption experience and affect their attitude towards the brand. Further, the disruption of the prior mental budget will affect the residual resources available for the specific consumption category and affect future category and brand purchases.

The Impact of Up-Selling

Up-selling has become one of the most useful tools in a salesperson's toolbox for increasing the sales volume per customer (Kamakura 2008). The salesperson, if compensated on a commission basis, also benefits financially when up-selling leads to increased sales.³ But because the practice is institutionalized, up-selling is often indiscriminate and not customized to meet individual customer needs. Since the focus is on maximizing revenue and not on meeting customer needs, up-selling is inconsistent with the concept of customer-oriented selling (Saxe and Weitz 1982).

³ The industry executives interviewed for this paper also claimed up-selling increases revenue and provided data to support their claims. Most were against changing their up-selling sales strategy and foregoing the immediate short-term sales boost to wait for a potential long-term gain from a value-based strategy.

Customers often enter purchase situations with prior expectations about the available options and with pre-formed preference structures (Wright 1975). However, in salesperson-mediated buying, a representative of the selling firm often has substantial influence on the customer's actual choice and purchase (Olshavsky 1973). Some customers even feel obliged to accommodate the wishes of the seller (Rhoads and Lagace 1989). In up-selling situations, a salesperson uses this influence to induce customers to purchase more expensive items than they had originally planned. Therefore, the total amount spent by those that were upsold will be greater than those customers that were not.

Formally, we hypothesize that:

H₁: The expenditure per-transaction per-customer for those who are up-sold will be greater than that for those who are not.

The Impact of Down-selling

While down-selling has not been explicitly defined in the literature, it is different from the practices of discounting or couponing. We define down-selling as a suggestive selling practice where a salesperson proactively guides a customer towards discounted products or less expensive products that the customer was unaware of or did not otherwise plan to purchase. This behavior occurs because the salesperson wants to maximize customer satisfaction in a manner that is similar to customer-oriented selling (Saxe and Weitz 1982).

Salespeople often engage in customer-oriented selling to help customers make decisions best suited to their needs (Saxe and Weitz 1982). This approach is consistent with the marketing concept which is a firm-wide approach toward providing customer satisfaction and establishing mutually beneficial, long-term relationships (Kotler 1980). Highly customer-oriented

salespeople engage in behaviors aimed at increasing long-term customer satisfaction (Anderson 1996) and sometimes sacrifice immediate sales in order to maintain satisfactory customer relationships (Saxe and Weitz 1982). Salespeople also engage in customer-oriented selling (Dubinsky and Staples 1981) because it affects their performance evaluation and incentives (Brown et al. 2002; Saxe and Weitz 1982). However, down-selling is different than customer-oriented selling because it (like up-selling) is indiscriminate suggesting of the same discounted or very low priced items to all customers regardless of their needs.

While most firms discourage this practice, down-selling may yet be mutually beneficial to the customer and the firm. Similar to up-selling situations, a salesperson using a down-selling strategy can have significant influence over the customer's purchase decision (Olshavsky 1973). Since the salesperson suggests a discounted or a much lower-priced product, the cost savings of down-selling are likely to be salient for the customer.

These unexpected savings from down-selling relative to customers' pre-determined budget for that occasion are analogous to windfall gains. Prior research suggests that customers are more likely to spend windfall gains than to save them (Arkes et.al 1994). They tend to allocate dollars saved to a "spend now" account especially when they have opportunities to make additional purchases (Hodge and Mason 1995). Since down-selling influences the customer at the time of the purchase decision, the customer has the opportunity to spend those savings during that same purchase experience. Therefore, we expect that one consequence of down-selling will be the creation of a "spend now" account and an allocation of the savings resulting from the suggestive selling practice to increased spending in related product categories until the customers reach their a-priori expected expenditure level. As a result, we expect that the amount spent by

customers who are down-sold will be comparable to amount spent by customers who are not. Formally, we hypothesize that:

H₂: The expenditure per-transaction per-customer for those who are down-sold will be comparable to that of those who are not.

Taken together, H₁ and H₂ point to an asymmetric effect of up-selling versus down-selling strategies on the short-term expenditures during a transaction. When compared with customers who are subject to neither suggestive selling practice (henceforth “the control group”), the expenditures will be higher for those who are up-sold, but not lower for those who are down-sold.

The Role of Selling Strategy on Customer Value Perceptions

The satisfaction literature (Oliver and Swan 1989) suggests that price disconfirmation influences product evaluations independent of performance and expectations. Because of the influence of up-selling and down-selling on the expenditures per customer, these sales strategies often lead to price disconfirmation, which is likely to have an effect on customers’ value perceptions (Varki and Colgate 2001, Zeithaml 1998).

Up-selling is different than customer matching (Chu, Gerstner, and Hess 1995) in that it, like down-selling, is usually executed indiscriminately with disregard to customer needs. But, successful up-selling causes the customer to spend more money during that experience than they had anticipated. Because value is evaluated in terms of what is received in exchange for what is

paid (Zeithaml 1988), up-sold customers are likely to have paid more for items that do not meet their needs negatively affecting value.

Conversely, in down-selling situations customers pay less than what they expected (positive price disconfirmation), thus their value perceptions will be superior. Or if customers place the money in a spend now account and use the savings from down-selling on additional items during that shopping occasion, they will feel as if they received more for their pre-determined budget leading to improved value perceptions.

Therefore, in purchase situations where the total amount paid for what is received is significantly different from prior expectations, customers will need to adjust their value perceptions to account for the discrepancy (Bolton and Drew 1991). Specifically, up-selling will require a reduction in the value perceptions and down-selling will require an increase in value perceptions to be consistent with the changes in the expected amount paid.

H_{3a}: Customers who are up-sold will have lower value perceptions than the control group.

H_{3b}: Customers who are down-sold will have higher value perceptions than the control.

The Impact of Value Perceptions on Product Quality Evaluations

Performance expectations have a significant impact on performance evaluations only when there is consistency between pre and post price perceptions (Voss, Parasuraman and Grewal 1998). In up-selling and down-selling situations, where the total outlay is significantly different than expectations, customers' product evaluations will not be consistent with prior expectations. Given that the total amount paid cannot be changed after the purchase occasion, the post-experience evaluation of the other components of the experience must be altered in

order to achieve this balance. This includes the adjustment of the product quality evaluations given the discrepancy in the total cost of the product. The failure or discrepancy on one attribute (amount paid) is likely to carry over to the evaluations of other attributes (quality) for the same product (Ahluwalia et al. 2000, 2001). In an up-selling situation, the customers paid more than expected for the products, so the negative disconfirmation on price will lead to lower perceptions of quality. The customers expect greater quality for the increase in price. In a down-selling situation, the customers paid less than expected so the quality for what they paid is higher than prior expectations. Therefore, the perceptions of product quality will be lower when customers are up-sold and higher when they are down-sold.

H_{4a}: Customers who are up-sold will have lower post-experience product quality evaluations than the control group.

H_{4b}: Customers who are down-sold will have higher post-experience product quality evaluations than the control group.

The Impact of the Sales Strategy on Customer Satisfaction

This hypothesis is based on the belief that value and quality perceptions are antecedents to satisfaction. Cronin et al. (2000) conducted an extensive study to evaluate the various proposed “antecedent-mediating-consequent” relationship models among quality, value, and satisfaction (e.g., Athanassopoulos 2000; Fornell et al., 1996; Zeithaml, Berry, and Parasuraman 1996). Most of the models tested by Cronin et al. (2000) posited quality and value as antecedents to satisfaction. Consistent with these findings, we posit that quality and value (directly and indirectly through quality) will drive customer satisfaction. Because of the critical

role of post-experience price perceptions (Voss et al. 1998), the expected changes in satisfaction can be traced back to the sales strategy deployed.

Therefore, the sales strategy's impact on value and product quality will then lead to a similar impact on customer satisfaction because of the disconfirmation between the price paid and the products received. According to Expectancy Disconfirmation Theory (Churchill and Surprenant 1982, Oliver 1980) satisfaction is influenced by the degree to which the product, service, or experience matches expectations. If expectations are exceeded, then the customer is satisfied. If the experience falls short of expectations, the customer will be dissatisfied. The product, service or experience is typically evaluated through measures of product quality and value. Therefore, if up-selling negatively impacts the product or service evaluation through lower product and value perceptions, then the experience will fall short of expectation leading to dissatisfaction. Conversely, the positive effects of down-selling will lead to increased satisfaction.

H_{5a}: Customers who are up-sold will have lower satisfaction than the control group.

H_{5b}: Customers who are down-sold will have higher satisfaction than the control group.

The Impact of the Sales Strategy on Attitudinal Loyalty

Customer loyalty is defined as a customer's overall attachment or deep commitment to a product, service, brand, or organization (Oliver 1999), and is believed to have a significant impact on firms' financial performance. Loyalty increases revenue, reduces acquisition cost, and lowers the cost to serve existing customers, all of which lead to greater profitability (Reichheld 1993; Reichheld and Sasser 1990). Customer satisfaction has been shown to be a key driver of

customer loyalty (Anderson and Sullivan, 1993; Cronin et al. 2000; Fornell 1992; Oliver 1980, 1999). Therefore, the posited changes in value, product quality, and satisfaction caused by the sales strategy will lead to analogous changes in loyalty. More specifically, up-selling will have a significant negative indirect effect on loyalty caused by lower satisfaction that was driven by lower value and product quality perceptions. Down-selling will have a significant positive indirect effect on loyalty caused by higher satisfaction that was driven by higher value and product quality perceptions. Therefore, we hypothesize that:

H_{6a}: Customers who are up-sold will have lower attitudinal loyalty towards the brand than the control group.

H_{6b}: Customers who are down-sold will have higher attitudinal loyalty towards the brand than the control group.

The Moderating Influence of Brand Experience

Because evaluation occurs after consumption (Zeithaml 1981), prior experience has a substantial impact on brand-choice for subsequent purchases of the service. Attitudes towards the brand are primarily formed after the first purchase and reinforced through subsequent purchases. Therefore, brand loyalty is developed through the experience of repurchasing a brand over time (Sheth 1968). The more frequent the prior experience, the stronger the attitude (Smith and Swinyard 1983). The attitude formed based on the extent of the prior experience (Ganesan 1994) then impacts future behavior (Oliver 1980).

There are two competing theories that address the moderating effect of brand experience on the satisfaction and the effect of disconfirmation. Assimilation theory in the satisfaction

literature (Anderson 1973) suggests an expectations oriented response tendency for those with greater brand experience. As Oliver and DeSarbo (1988) indicate, this approach shares elements with dissonance theory such that the individuals are reluctant to acknowledge discrepancies from previously held beliefs. Therefore, satisfaction levels would remain similar to expectations even in a situation of disconfirmation. The other theory of contrast effect (Dawes, Singer, and Lemons 1972) suggests a tendency to overreact to disconfirmation. Under this theory, in a situation of disconfirmation, a customer would react strongly in the direction of the disconfirmation.

The contrast effect has been more prevalent than the assimilation theory in high-involvement purchases (Anderson 1973). Thus, we propose that the contrast effect will dominate in up-selling and down-selling because these sales strategies usually occur in high involvement purchase situations. Therefore, we expect to see significant perception changes with expectation disconfirmation. The frequent brand users with more experience will react negatively to up-selling (a negative, disconfirming event) but will have no reaction to down-selling (a positive, expected event). The less frequent brand users with less experience will have no reaction to up-selling (negative, but not disconfirming because of inexperience with brand) but will have a positive reaction to down-selling (positive and unexpected).

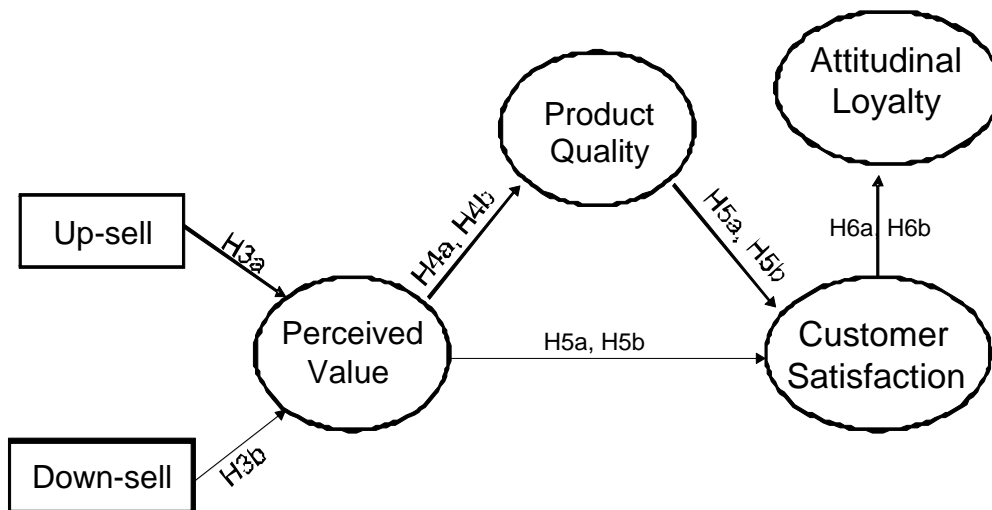
H₇: Customers with extensive (limited) brand experience will have a much more negative (no) response to up-selling and no (a positive) response to down-selling.

The specific hypotheses, H₂ through H₆ stated above lead to the research model depicted in Figure 1. We suggest that the two alternative sales strategies have a direct impact on customer

value. The sales strategy then indirectly affects product quality perceptions through customer value. The impact on product quality and value drive customer satisfaction. Customer satisfaction leads to attitudinal loyalty and then finally to future behavior.

FIGURE 1: THEORETICAL MODEL

Customer Impact of Up-selling and Down-selling



The Impact of Up-selling and Down-selling on Future Behavior

We suggest that up-selling and down-selling drive value perceptions which then drive product quality perceptions and customer satisfaction. As stated earlier, numerous studies suggest that satisfaction then affects loyalty and future behavior (Anderson and Sullivan, 1993; Cronin et al. 2000; Fornell 1992; Oliver 1980, 1999). Because of their impact on value, product quality, customer satisfaction and loyalty, Up-selling and down-selling will ultimately have long-

term consequences on future customer behavior. Not only is future behavior affected by the change in loyalty, we also suggest that this is facilitated by the impact of the selling strategies on customer's mental budgets. As stated earlier, Heath and Soll (1996) concluded that as people spend money they deduct the amount from that account and then re-compute the amount remaining for that type of expense. Therefore, when customers spend more than they expected (because of up-selling) they will reduce their expenditures on the entire category. Earlier, we hypothesized that down-selling will not result in an actual decrease in expenditures. But because the customers feel like they received such a great value with the focal brand because of the down-selling, they will visit that brand more often at the expense of others who provide less value. But because those that were down-sold spent the same amount as the control group, down-selling will not impact their overall usage of the category.

H_{8a}: Up-selling will cause a decline in category usage compared to the control.

H_{8b}: Down-selling will cause an increase in brand usage compared to the control.

Study

We conducted a natural experiment among customers of a casual dining chain to estimate our model and test our hypotheses. We chose the restaurant industry for this study because it is known for a high incidence of both up-selling and down-selling. The industry is also characterized by low switching costs and relatively short repurchases cycles, thereby enabling us to test the proposed long-term effects of the alternative sales strategies within a reasonably short period of time. Further, because customers in this category can adjust their purchase behavior in

response to up-selling versus down-selling during a purchase occasion itself, the category also allowed us to examine the, immediate, short-term impact of the sales strategies.

We chose the specific chain for this study because of its national presence and a demographically broad customer base. We administered surveys to over 2,300 customers in 10 restaurants across 5 geographically dispersed markets. The self-administered surveys were distributed during different times over the course of a week to yield a representative mix of the chain's customer base. The participants completed the first section of the survey prior to experiencing their meal and a second section after they had received their final check. They were compensated with a \$5 gift card for participation.

The survey consisted of brand usage, experience evaluation, customer satisfaction, and future intent questions on 5-point semantic differential scales. We also collected information on the specific products ordered, the reasons for ordering and the amount of final check. The brand attribute questions were asked prior to the meal and then again after the final check arrived.

During the course of the study, we allowed the servers to execute one of the three possible sales strategies based on their own personal preferences: 1) Up-selling 2) Down-selling 3) Neither. We did so because we did not want to interfere with or control the natural up-selling and down-selling behavior of over 200 service personnel across ten different restaurants in a dynamic market. The servers executed only their preferred sales strategy for the duration of the research. Each server in the up-selling group suggestively sold the same items which consisted of the highest priced items in each menu category. Likewise, each server in the down-selling group suggestively sold the same items which consisted of discounted or the lowest priced items in each menu category.

The customers participating in the study were then categorized into two treatment groups: 1) those who were up-sold, 2) those who were down-sold, and 3) a control group, where neither sales strategy was employed. They were assigned to groups based on the products ordered (from the list of up-sold or down-sold items provided by the sponsoring company) and the reasons for ordering (server suggested versus not) stated in the survey. To be categorized into Groups 1 or 2, customers had to explicitly state that they purchased a specific product from the respective lists and ordered it because the server suggested it. Those who made no purchase based on server suggestion were placed in the control group.

Preliminary analysis of the data suggested that every restaurant included in the sample engaged in both up-selling and down-selling and the incidence of the two selling strategies was similar across them. On average, the servers attempted to up-sell or down-sell to about 58% of the customers over the study period. An evaluation of the profile of those who were suggestively sold (up-sold or down-sold) versus those who were not suggested an absence of systematic variation on key demographic variables (Age: $p = 0.36$, Income: $p = 0.48$, Household size: $p = 0.81$, Industry Usage $p = 0.23$, Employment $p = .36$, Education $p = 0.37$, and Gender $p = 0.19$). A subset of the original sample (357 customers) was re-contacted one month later to participate in an online survey covering brand perceptions and brand and category usage. This was done to assess changes in longer-term effects of the two selling strategies.

Measures

There were four main constructs of interest for estimating our proposed model. Two items were used to measure value in terms of “value for the money” and “affordability.” Two other items were used to measure perceptions of product quality in terms of “food quality” and

“food taste.” These four items were chosen to represent the two constructs based on a prior factor analyses that demonstrated that these items adequately measured the constructs while minimizing respondent fatigue (Lehmann, McAlister and Staelin 2011). A second consideration was to get a high response rate without disrupting the restaurant operations. The completion rate was almost 100%. Much like in previous research (Kumar 2002, Watson et al. 1997), satisfaction was measured using a single item, “overall satisfaction” scale. However, it is believed that a single item cannot perfectly measure a latent variable. With only a single measure for this construct, it was necessary to make assumptions about the values of the measurement parameter (Williams and Hazer 1990). Therefore, a measurement error of 20% for this single item was used while estimating the model (Vandenberg and Scarpello 1990, Williams and Hazer 1990). Two key measures of customer loyalty were the propensity to recommend and the desire to repurchase the product or service (Fornell 1992; Zeithaml, Berry and Parasuraman 1996). Therefore, we used two items (likelihood to recommend, likelihood to revisit) to measure attitudinal loyalty (Keiningham, et al. 1991).

Results for Preliminary Hypotheses

Impact of Up-selling versus Down-selling on Revenue per Customer

A one-way ANOVA ($F_{2, 2,287} = 22.774, p < 0.01$) confirmed that up-selling generated significantly more expenditures per person than the control group (\$16.33 versus \$13.23, $t = 6.803, p < 0.01$) where no sales strategy was employed. The result is consistent with H_1 and extant literature which demonstrates that up-selling increasing the expenditures per person. More importantly, the difference between the expenditure per customer for those down-sold and the control group was not statistically significant (\$13.20 versus \$13.23, $t = -0.101, p > 0.90$).

The results support H₂ which states that, given the opportunity, customers will spend the windfall savings from down-selling on other products during that same purchase occasion. A detailed analysis of the portfolio of products purchased supports the contention that windfall savings are placed in a “spend now” account (Hodge and Mason 1995) because we find that the incidence of secondary, add-on products (beverages, appetizers, and desserts) was greater among those who were down-sold than for the control group.

Model Estimation

To evaluate both the direct and indirect effects of up-selling versus down-selling on post-experience perceptions and customer loyalty, we estimated the proposed structural equation model with path analysis (e.g., Bagozzi 1980; Oliver and Bearden 1985; Anderson and Gerbing 1988; Homburg and Jensen 2007). We tested the hypothesized effects of two selling strategies using measures of changes in the customers’ attitudes before and after the exposure to the suggestive selling strategy. The most direct measure of change is represented by the simple difference between the pre and post measures. However, this measure is often biased because of the potential influence of the pre-scores on the post-scores (Lord 1963). To address this potential bias, we used residualized change scores (RCS) (Cronbach and Furby 1970; Johnston, et al. 1990) that were created by regressing the values of the each of the post measures on the respective pre-measures. The residual from this regression analysis, at the participant level, is referred to as the residualized change score. The values provide a measure of change across individuals that is not affected by initial values and is “primarily a singling out of individuals who change more (or less) than expected” (Cronbach and Furby 1970, p.74). In order to examine the impact of the two selling strategies through an SEM model, we converted the two

strategies into two dummy variables with the null option representing the control group where neither strategy was employed. The constructs of value and quality were measured on a pre-versus post basis whereas satisfaction and loyalty were measured in the post-experience survey.

Model Evaluation

The reliability of the measurement model was evaluated through confirmatory factor analysis (Bagozzi, Yi, and Phillips 1991) using MPlus 5.21 software. The correlations among the constructs are reported in Table 1. The measurement model exhibited very strong fit with a CFI of .992, a TLI of .982, an RMSEA of .049, and an SRMR of .021. All of these values are significantly better than the recommended cut-off values (Hu and Bentler 1999). The reliability of all three constructs, measured using Cronbach's Alpha was high (product quality: 0.88, value: 0.61, loyalty 0.81) and above the threshold value of 0.6 (Bagozzi and Yi 1988).

The proposed structural equation model also exhibited very strong fit with a CFI of 0.982, a TLI of 0.972, an RMSEA of 0.047, and an SRMR of 0.027. All of these measures are significantly better than the recommended cut-off values (Hu and Bentler 1999).

Hypotheses Testing

The Impact of Sales Strategy on Value Perceptions

Hypothesis H_{3a} and H_{3b} suggest a positive relationship between down-selling and perceived value and a negative relationship between up-selling and perceived value. The analysis shows a path analysis coefficient of 0.168 ($p < 0.01$) for down-selling and a coefficient of -0.123 ($p < 0.01$) for up-selling in their respective relationships with customer value. Consistent with H_{3a} and H_{3b}, down-selling resulted in an improvement in value perceptions

relative to the control group while up-selling resulted in a decline in value perceptions. When we constrained the coefficients of up-selling and down-selling to be equal (Kline 2005), the model fit was considerably worse (chi-square difference = 69.917, 1 d.f., $p < .001$). Therefore, H_{3a} and H_{3b} are supported which state that up-selling negatively impacts value perceptions while down-selling positively impacts them.

To confirm that these results pertaining to value perceptions were not due to any unique restaurant or market characteristics, we estimated a General Linear Model with the restaurant and the market as random factors. Neither the restaurant ($F = 1.029$, 18 d.f., $p = 0.423$) nor the market ($F = 1.045$, 8 d.f., $p = 0.40$) yielded a significant interaction with the sales strategy.

Finally, we found no correlation ($r = -.009$, $p = .670$) between the amount paid by customers and their value perceptions. Also, we pulled random samples from the control group who match the average amount spent by the up-sold and down-sold customers. The random samples exhibited the same value perceptions as the control group and were significantly higher than the up-selling group and significantly lower than the down-selling group. Consequently, of the customers who paid more than average, only those who were up-sold exhibited significantly lower value perceptions. Also, of those who paid less than average, only those who were down-sold exhibited higher value perceptions. Therefore, the sales strategy was responsible for the changes in value perceptions as hypothesized.

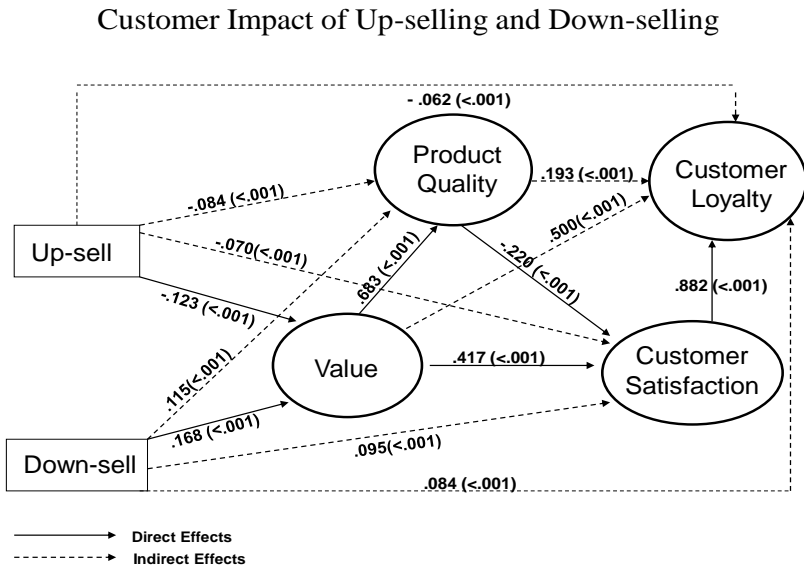
Table 1

Correlation Matrix and Descriptive Statistics of Measures

	<u>Satisfaction</u>	<u>Recommend</u>	<u>Revisit</u>	<u>Taste</u>	<u>Quality</u>	<u>Afford</u>	<u>Value</u>	<u>Downsell</u>	<u>Upsell</u>
Satisfaction	1.000								
Likelihood to Recommend	0.597	1.000							
Likelihood to Revisit	0.585	0.690	1.000						
Taste of Food	0.384	0.318	0.291	1.000					
Quality of Food	0.387	0.320	0.306	0.796	1.000				
Affordable	0.259	0.284	0.219	0.416	0.462	1.000			
Value for the Money	0.307	0.314	0.274	0.337	0.347	0.395	1.000		
Downsell (Dummy)	0.080	0.098	0.055	0.075	0.081	0.081	0.182	1.000	
Upsell (Dummy)	-0.055	-0.067	-0.078	-0.042	-0.027	-0.069	-0.156	-0.069	1.000
Sample Size	2,372	2,373	2,375	2,287	2,274	2,280	2,299	2,381	2,381
Mean	4.591	4.437	4.643	-0.001	-0.004	-0.002	-0.001	0.078	0.052
Standard Deviation	0.743	0.782	0.635	0.633	0.643	0.651	0.769	0.268	0.223

	<u>Value</u> <u>Factor</u>	<u>Food</u> <u>Factor</u>	<u>Sat L</u> <u>Factor</u>	<u>Loyalty</u> <u>Factor</u>	<u>Downsell</u>	<u>Upsell</u>
Value Factor	1.000					
Product Quality Factor	0.683	1.000				
Satisfaction (L) Factor	0.567	0.504	1.000			
Loyalty Factor	0.500	0.445	0.882	1.000		
Downsell (Dummy)	0.177	0.121	0.100	0.088	1.000	
Upsell (Dummy)	-0.135	-0.092	-0.077	-0.067	-0.069	1.000
Mean	0.009	0.008	0.007	0.007	0.078	0.052

Figure 2: Results From Model Estimation



Impact of the Sales Strategy Product Quality Perceptions

H_{4a} and H_{4b} state that the pre versus post quality perceptions will be impacted by the sales strategy through their impact on customer value. The proposed path is indirect because the sales strategy only affects the total amount paid for the products, not the actual quality of the products ordered. Additionally, as is typical in most up-selling situations, customers were up-sold products with high quality ratings such as the best selling entrees. A separate menu satisfaction study conducted with the sponsoring firm confirmed that the average product quality scores of the products ordered by those who were up-sold were significantly higher than for the products ordered by all other customers (37% Top Box for control group, 40.1% Top Box for those up-sold, $p < 0.01$, 37.4% for Down-selling, $p = 0.279$ versus the control group). Therefore, the group of customers who were up-sold consumed products that were, on average, of higher quality than those consumed by the customers in the control condition. However, because the sales strategy impacts value perceptions, we proposed that down-selling will lead to improved product quality perceptions while up-selling will lead to inferior perceptions. We do find that down-selling had a significant positive indirect effect (0.115, $p < 0.01$), and up-selling had a significant negative indirect effect on product quality perceptions (-0.084, $p < 0.01$).

One plausible alternative explanation could be that the sales strategies directly affect perceptions of product quality. That would imply that the model should show the sales strategy affecting product quality, and then product quality affecting value perceptions, without a direct link between the sales strategy and value. However, when we re-estimated the model with direct pathways between the sales strategies and product quality (with product quality then driving value), the resulting fit was significantly worse (increased Chi-Square of 49.759, both models

have the same d.f.). Therefore, the model fits better as proposed, which is consistent with our proposition that sales strategies affect value perceptions which affect product quality perceptions.

Overall, the data support H_{4b} that down-selling improves product quality perceptions through its impact on customer value perceptions. Product quality perceptions improve under this strategy even though the products ordered are similar to those ordered in the control condition. In contrast, consistent with H_{4a} , those who were up-sold had lower product quality perceptions even though the individual products they ordered had significantly higher objective quality ratings than the products ordered by those in the control group. Again, this provides additional support to our hypothesis that the change it is the change in value driven by the sales strategy that impact product quality perceptions.

Impact of Sales Strategy on Customer Satisfaction

H_{5a} and H_{5b} state that the selling strategy has a significant indirect effect on customer satisfaction. This occurs through its direct impact on value, its indirect effect on product quality, and then their combined direct and indirect effects on customer satisfaction. As with the analysis for product quality, to confirm the hypothesis the indirect effect on customer satisfaction should be significant and in the appropriate direction. The results confirm the hypothesized effect on customer satisfaction with a positive benefit from down-selling (0.095, $p < 0.01$) and a negative effect from up-selling (-0.070, $p < 0.01$). Therefore, H_{5a} and H_{5b} are supported.

Impact of Sales Strategy on Attitudinal Loyalty

H_{6a} and H_{6b} state that the selling strategy has a significant indirect effect on customer loyalty. This occurs through the impact on customer satisfaction demonstrated above which then

affects customer loyalty. We find that the indirect effect of down-selling was positive and significant (0.084, $p < 0.01$) indicating that down-selling had a positive impact on customer loyalty. The indirect effect of up-selling was negative and also significant (-0.062, $p < 0.01$) suggesting a negative impact on customer loyalty. Therefore, H_{6a} and H_{6b} are supported.

The Moderating Effect of Brand Experience

To evaluate H₇, the sales strategy variable was divided into four dummy variables: 1) up-selling to light brand users, 2) up-selling to heavy brand users, 3) down-selling to light brand users, and 4) down-selling to heavy brand users. Customers were classified as “light brand users” if they had visited the sponsoring brand only once in the past thirty days. If they had visited the brand twice or more in the past 30 days, then they were considered “heavy brand users.” This categorization system of customers into light versus heavy users is consistent with industry practice. The four dummy variables replaced the two (Down-sell, Up-sell) in the original model and then the measurement and structural models were estimated as before.

The model shows significant paths, in the appropriate direction, for all four sub-groups to all hypothesized direct and indirect relationships. To evaluate the hypothesis of brand experience as a moderator, we ran the same model with the coefficients of the up-selling heavy and up-selling light groups constrained to be equal simultaneously with the coefficients of the down-selling heavy and the down-selling light groups constrained to be equal as well. This resulted in a model fit that was not significantly different (chi-square = 3.52, 2 d.f. $p = 0.172$) than the original model based on the chi-square difference test (Kline 2005). The moderating effect of experience was next examined in the up-selling and the down-selling conditions separately. The chi-square difference test for the influence of experience on up-selling (up-

selling constrained to be equal) did not yield a significantly differently model (chi-square = 0.02, $p = 0.64$). This indicated that brand experience did not moderate the impact of up-selling and that both light and heavy users were affected adversely to the same extent. However, the difference test for the influence of experience on down-selling yielded a significantly worse model at $\alpha = 0.10$ (chi-square = 3.529, $p = 0.06$).

TABLE 2

Results of Structural Regression Analysis: Experience as a Moderator

<u>Relationship</u>	<u>Standardized Path Coefficients</u>	<u>t-values</u>	<u>significance</u>
Down-sell Light User Direct to Value	0.152	6.193	< .001
Down-sell Heavy User Direct to Value	0.093	3.782	< .001
Up-sell Light User Direct to Value	-0.084	-3.381	0.001
Up-sell Heavy User Direct to Value	-0.093	-3.823	< .001
Down-sell Light User Indirect to Product Quality	0.104	6.111	< .001
Down-sell Heavy User Indirect to Product Quality	0.063	3.779	< .001
Up-sell Light User Indirect to Product Quality	-0.057	-3.386	0.001
Up-sell Heavy User Indirect to Product Quality	-0.064	-3.825	< .001
Down-sell Light User Indirect to Satisfaction	0.086	5.995	< .001
Down-sell Heavy User Indirect to Satisfaction	0.052	3.700	< .001
Up-sell Light User Indirect to Satisfaction	-0.047	-3.326	0.001
Up-sell Heavy User Indirect to Satisfaction	-0.053	-3.788	< .001
Down-sell Light User Indirect to Loyalty	0.076	5.970	< .001
Down-sell Heavy User Indirect to Loyalty	0.046	3.693	< .001
Up-sell Light User Indirect to Loyalty	-0.042	-3.320	0.001
Up-sell Heavy User Indirect to Loyalty	-0.046	-3.782	< .001

This suggests that the effect of down-selling was moderated by brand experience and that those with “light” brand experience reacted more positively to down-selling than “heavy” brand users.

The light brand users may have been pleasantly surprised with the effects of down-selling on the

total amount they paid and then reacted positively with increased brand perceptions and loyalty. Conversely, the heavy brand users may have expected the positive experience of down-selling and, thus did not change their perceptions as much. Therefore, brand usage only moderated the effects of down-selling and not up-selling, and H₇ is only partially confirmed.

Impact of Sales Strategy on Future Visits

To evaluate H₈, we calculated the change in the stated number of visits during the past 30 days to the focal brand during the initial in-store intercept study and the stated visits during the past 30 days to that focal brand from the follow-up study conducted via the Internet one month after the in-store study. An ANOVA ($F_{1, 350} = 4.29, p = 0.04$) showed a significant positive impact of down-selling (+ 0.46 visits versus the control group, $p = 0.039$) on visitation to the focal brand but no change in the visitation to the category (+0.56 visits versus the control group, $p = 0.41$) over the 30-day period. This indicates that the increased value from down-selling that led to increased satisfaction and loyalty resulted in higher purchase frequency (Anderson and Sullivan, 1993; Cronin et al. 2000; Cronin and Taylor 1992; Fornell and Wernerfelt 1987; Fornell 1992; Oliver 1980, 1999). However, the significant increase in brand visitation did not lead to a significant increase in category visits, implying an increase in market share for the focal brand. This also suggests that the customers were still staying within their mental budget for the overall category (Heath and Soll 1996).

Although the number was negative, the ANOVA ($F_{1, 350} = 0.40$) of up-selling did not indicate a significant difference (-0.13 visits versus the control group, $p = .529$) in visits to the focal brand. However, the analysis showed a significant decrease in visits to the category (-1.35 visits versus the control group, $p = .03$). Because the customers spent more than expected in one

visit, they reduced their number of visits to perhaps stay within their medium-term mental budget for the category (Heath and Soll 1996). To test whether or not down-selling creates significantly more future visits than up-selling, the two sales strategies were compared directly using ANOVA ($F_{1,64} = 4.657, p = 0.035$). This analysis showed that down-selling significantly increases the visits to the focal brand (+0.54 visits versus the control group, $p = 0.035$) to the focal brand as well as more visits to the category (+1.72 visits versus the control group, $F_{1,64} = 3.726, p = .058$). Therefore, H_{8a} and H_{8b} are supported.

In order to assess the long-term effect of up-selling, we can compare the instantaneous gain of an average of \$3.10 per-person with a loss of category visits by 1.22, each with an average expenditure per person of \$13.23, over a 30-day period. The comparison suggests that not only do the customers rebalance their mental budgets because of up-selling; they may also reduce the total amount allocated to a budget category. This result is also directionally consistent with the value and satisfaction literature that states a disconfirmation in value and satisfaction will negatively impact future behavior. Conversely, down-selling does not generate as much initial revenue per customer as up-selling, but has a positive, brand-specific, long-term impact on future visits. Again, this is consistent with the value and satisfaction literature which supports the positive effect seen on future behavior.

Situations where Impact of Sales Strategy May be Moderated

Field Theory asserts that each individual views each social setting somewhat differently (Gehrt 2004). This theory states that characteristics of the individual and the situation affect reaction to the stimulus. Therefore, customers in different situations may react differently to up-selling and down-selling.

Some situational attributes were added to the re-contact study in order to identify possible moderators of the impact of the sales strategy. If the customers identified the occasion as a “treat or special occasion” and were up-sold, they did not experience a significant decline in their pre vs. post value perceptions (+0.047 change in pre vs. post ratings). However, those who stated that the occasion was not a “treat or special occasion” and were upsold, had significantly worse pre vs. post value perceptions (-0.845, $p = .008$). Therefore, up-selling may be an effective strategy to use among customers that are on a special occasion. Conversely, those that said “prices were important in their restaurant selection” reacted much more favorably (+0.645 pre vs. post value ratings, $p = .092$) to down-selling than those that said “price was not important.” This suggests that down-selling will have a more positive effect among those that consider price when making brand choices.

Service Measures and Attribution

Recall that we proposed that price disconfirmation induced by the two suggestive selling strategies influences customers’ value perceptions, which, in turn, affect their product perceptions as well. The results from our model estimation supported this hypothesis.

One implication of our findings is that the observed effects of the selling strategies on product quality should be observed on service quality as well. If the behaviors of all salespeople are perceived to be consistent, attributions for those behaviors are likely to be associated with the firm. If the behaviors of the salespeople are inconsistent, those actions are likely to be attributed to the individual salesperson (O’Laughlin and Malle 2002). In the restaurant situation examined in this paper, up-selling, because it is most common, is perceived as consistent behavior whereas

down-selling is perceived as inconsistent. Therefore, the impact of up-selling should be attributed to the firm and the impact of down-selling should be attributed to the individual server.

In order to test this implication, we conducted additional post-hoc analyses to evaluate the effect of the selling strategy on perceptions of service quality. We included two post-experience service measures for these analyses: service quality and speed of service, each measured on a 5-point scale. We find that those who were down-sold had significantly higher service quality (4.48 versus 4.07, $p < 0.01$) and speed of service (4.44 versus 3.98, $p < 0.01$) perceptions than the control group. However, those who were up-sold had essentially the same service quality (4.04 versus 4.07, $p = 0.95$) and speed of service (3.95 vs. 3.98, $p = 0.94$) perceptions as the control group. Based on our results, we conjecture that down-selling is attributed to the individual service personnel, whereas up-selling is attributed to the brand itself.

We next re-evaluated our core results using a GLM model to determine if the sales strategy had an impact on value, product quality, customer satisfaction, and purchase intent above and beyond the impact of the service differences. Although the GLM reflected the differences observed above, we found that the sales strategy still had a statistically significant effect on value, product quality, customer satisfaction, and customer loyalty (all with $p < .01$).

Finally, we placed the two service attributes into the structural equation model as a service factor in various parts (as an antecedent to value, as an antecedent to satisfaction, parallel attribute to value with same relationships) . All of the models had significantly worse fit (all with $p < 0 .01$) based on a chi-square difference test (Kline 2005). The results suggest that the sales strategies had a significant impact on all of the key dependent measures above and beyond the impact of the service construct.

Discussion

In this paper, we provide perhaps the first investigation into the differential short and long-term impact of up-selling versus down-selling strategies. Our findings provide strong caveats to the widespread practice of up-selling by firms across many industries, especially in weak economic conditions and mature markets. The results from our study within the casual dining industry suggest that up-selling may often be a myopic strategy because the resulting short-term gains from a current transaction may be at the expense of future customer patronage. Specifically, while we find that up-selling does increase the revenue-per-current-transaction, we also find that it decreases satisfaction and compromises long-term demand.

Our study demonstrates a negative customer response to up-selling that lowers value perceptions and subjective retrospective evaluations of product quality. These findings are significant because in today's data intensive sales environment, most firms are aware of the short-term gains from up-selling (on average \$3.10 per person in our study), but relatively oblivious of the erosion in long-term brand perceptions and revenues from such a suggestive selling strategy. In contrast, our study provides evidence that down-selling rather than up-selling may be a superior long-term strategy from both a brand value and a long-term revenue perspective.

In our study, up-selling placed the firm's most frequent customers at risk through a negative effect on value, satisfaction, loyalty, and future visits. In similar environments, where the cost of switching is low and customers change brands with high frequency, the negative impact of up-selling cannot be overstated. Further, in a variety seeking industry, like restaurants, the greater opportunity for revenue growth often comes from light users of the brand. Our

results indicate that down-selling may be highly beneficial in such environments because of its positive effect on the value, satisfaction, and repurchase intent of light users of the brand.

Previously, the long-term impact of the two sales strategies has been difficult for researchers to estimate because of the time delays between purchase occasions. The longitudinal component of our study enabled us to demonstrate that customers who were down-sold visited the restaurant significantly more in the following 30-day time period than those who were up-sold. We used this information to develop several breakeven scenarios that we discussed later. Even the most conservative approach among these scenarios provides evidence that down-selling discounted products may provide higher customer satisfaction and greater long-term revenue than a short-term selling strategy focused on up-selling higher priced products.

This paper also demonstrates that down-selling to lower-priced or discounted products may not negatively impact short-term revenue as is often claimed. In fact, a firm may be able to down-sell to customers and still achieve current revenue-per-customer numbers that are comparable to those of customers who are not, but with significantly higher satisfaction, loyalty, and future revenue. Although this selling strategy may slightly erode profit margins in the short term, the increased customer frequency, particularly in mature markets, is likely to pay off in the long-term.

Finally, we examined two situational factors that may moderate the response to suggestive selling strategies. First, we find that for those customers that are out for a special occasion, up-selling did not have a negative impact on pre- versus post value perceptions. We conjecture that special occasions may be associated with malleable budgets and an increase in the total expenditure may therefore not be detrimental. By implication, if a firm is able to identify such customers prior to the sale, then an up-selling strategy to this segment may be

beneficial. In other words, the firm may be able to increase short-term revenue-per-customer without suffering negative long-term consequences. We also find that customers for whom price is an important factor in brand selection, down-selling will have a significant impact on value perceptions which will lead to increased future visitation. This suggests that for a value-focused brand the impact of the sales strategy may be even greater.

Theoretical Contributions

This study expands on and adds to the current literature in several areas. It provides the first ever examination of the short-term and long-term impact of up-selling, one of the most widely used suggestive selling strategies, on brand perceptions, satisfaction, attitudinal loyalty and future behavior. It links changes in value (Zeithaml 1988, Bolton and Drew 1991) to product quality and attitudinal loyalty changes through the disconfirmation of prior price expectations (Churchill and Surprenant 1982, Oliver 1980, Varki and Colgate 2001) set based on the customer's mental budget (Heath and Soll 1996). Because the customer does not explicitly become aware of the total amount paid until after the experience is completed, the resulting disconfirmation in price changes value perceptions and evokes a re-evaluation of product quality perceptions. These changes lead to reduced loyalty and future purchases. The price disconfirmation may also force a re-calculation of the customer's mental budget which may result in changes in future intentions and behavior.

Second, this paper formally introduces the concept of down-selling. While this suggestive selling practice has long existed, it is different from traditional discounting or couponing because it requires the salesperson to proactively inform customers of a discount of which they were not aware or not actively considering. Our findings challenge widespread

current belief that down-selling has a negative impact on initial revenues. In fact, we show that firms may not necessarily lose revenue because of down-selling and may be able to gain higher future revenue and well as stronger brand perception than what up-selling, the polar opposite selling approach, may be able to generate.

Third, if we evaluate both suggestive selling strategies through the lens of customer-oriented selling (Saxe and Weitz 1982), our results suggest that up-selling may not meet the criterion of being “mutually beneficial” to the firm and its customer. We find that it results in a lower satisfaction levels and a decline in customer perceptions of the brand and also adversely affects the frequency of usage and firm revenue. Surprisingly, down-selling meets the “mutually beneficial” criterion because it results in both higher customer satisfaction as well as higher firm revenues in the long run.

Fourth, this research provided additional evidence to support Hodge and Mason’s (1995) assertion that customers put windfall savings in a “spend now” account. The customers in our study spent the savings from down-selling during that same purchase occasion and arrived at an amount spent that was comparable to that of the control group. The underlying concept of mental budgeting (Thaler 1985, Heath and Soll 1996) is advanced further through its affect on spending with the brand following down-selling and the category following up-selling. Consumers will spend the savings in their mental budget with the brand that provided those perceived savings. However, when consumers spend more than expected, they will reduce expenditures in the category to re-balance that mental budget.

Finally, we examined brand experience as a potential moderator of the impact of post-experience disconfirmation of pre-experience price expectations. Our findings suggest that up-selling may adversely affect some of the firm’s most valuable customers, that is, those who are

currently the more frequent users of the brand. On the other hand, light brand users, who offer potentially the highest potential for growth, react most positively to down-selling.

Managerial Implications

The results from this initial study into the effects of up-selling versus down-selling suggestive selling strategies raise serious questions about the merit of the widely-adopted practice of up-selling. We find that, while up-selling does increase the revenue-per-transaction during the purchase occasion when it is deployed, it has negative long-term consequences for satisfaction, loyalty, and long-term brand revenue. Instead, our results point to the hitherto hidden benefits of down-selling. Taken together, our findings suggest that firms should consider limiting an indiscriminate use of up-selling and instead explore ways to institutionalize the currently ad-hoc and often unapproved down-selling activities of their sales force. The goodwill generated within the customer base through such programs will yield improved brand perceptions, satisfaction, attitudinal loyalty, and future revenue that might more than compensate for the loss in short-term revenue from up-selling.

These results indirectly have implications for the design of incentives for both the executives and the frontline salespeople at firms. From the perspective of executives, we suggest that the time horizon for their evaluation should be extended so that the interest of the firms are not compromised through adverse long-term effects from upselling captured through myopic metrics such as revenue-per-transaction. We suggest that incentives should be based not necessarily on achieving short-term targets, a practice that promotes widespread up-selling, but on longer-term performance that would allow the sales executives to realize the benefits from alternative strategies, such as down-selling. Along the same lines, firms should carefully

evaluate compensating frontline salespeople for controlled and directed down-selling that may not necessarily reflect in higher instantaneous revenue. We expect that as the practice of down-selling is institutionalized and adopted, specific compensation systems to encourage the practice would emerge in parallel. We also expect that the adoption of such programs may need to be accompanied with tracking systems to monitor salespeople's down-selling performance.

Currently, firms do have alternative mechanisms for achieving short-term-price reductions for their customers such as delivering coupons or promoting "value" products in their portfolio. However, we expect that down-selling may be a more powerful approach than these mechanisms for at least four reasons. First, it can be delivered selectively across time and customer segments. For example, firms may be able to turn on and turn off down-selling depending on the level of congestion or traffic on their premises. It may similarly be able to adopt this practice selectively based on customer characteristics such as ordering patterns or past patronage, if observable. In other words, unlike other discounting programs, an institutionalized down-selling program can be adjusted in real time across geographies to account for micro-level changes in demand. Second, down-selling may not lower customers' reference prices yet provide a favorable price disconfirmation experience at the point of sale. Third, discounting may not necessarily have a positive future value. On the other hand, we find that the positive effects of a down-selling may manifest themselves in higher satisfaction, brand loyalty and future revenues. And finally, down-selling may also reduce role conflict by encouraging the sales force to engage in behaviors that they currently engage in but without explicit firm approval.

Our results also have implications for product design and their selective promotion prior to customer visits. For example, the currently-prevalent, value-based positioning strategy dictates an active promotion of potentially the lowest priced products to customers. Firm then

choose to either continue with the position through the completion of the sales process or deploy use up-selling as a bait-and switch tactic. This approach leaves little room to implement down-selling. Our results suggest that an alternative feasible strategy might be to promote moderately priced, rather than the cheapest products in the portfolio, and switch customers down during the sales process in order to generate long-term satisfaction and brand value. This would be analogous to a *reverse* bait-and-switch strategy. Down-selling may therefore be construed as one form of relationship marketing where firms may suggestively sell customers to cheaper options at the point of sale in order to build enduring relationships.

We should however point out that while we highlight the benefits of down-selling, we do not necessarily advocate a switch from all current up-selling programs. Our objective is to highlight the benefits and costs of the two alternative strategies so that firms can make informed choices between the two instead of universally pursuing an up-selling strategy as the only choice. In our data specifically, the firm would breakeven in terms of revenues from down-selling relative to up-selling in about three months. In other markets, where such computed breakeven periods are substantially larger, or where the inter-purchase times are very long, the returns from up-selling may yet be greater than those from down-selling. Similarly, in markets where it is impossible for customers to spend the windfall gains resulting from down-selling, the practice may lead to an instantaneous revenue loss rather than the revenue neutrality observed in our study.

Breakeven Scenarios

Given the expenditure per customer and the change in future visits, we calculated the revenue garnered from each of the customer groups over the two time periods (Table 7) to

determine the breakeven period for down-selling. We developed two scenarios to estimate the average amount per person for the group that was “up-sold.” For Scenario 1, we assumed that their average expenditures would remain constant over time. For the Scenario 2, we made the assumption that, because of the negative response to up-selling, expenditures would regress towards the mean expenditure in the future. Under either scenario, the additional visits obtained through down-selling yield greater overall revenue from customers over the next 30 days. The difference is increased revenue of \$2.09 per person for the down-selling group under Scenario 1, and \$7.08 per person under Scenario 2 (Table 3). Given these differences, the time needed for the increased visits under the down-selling scenario to exceed the additional revenue garnered from the “up-selling” is 2.7 months under Scenario 1 and just 0.8 months under Scenario 2. We believe that Scenario 1 is very conservative and the breakeven time period is likely to be much shorter. We expect customers to react to the negative experience through not only decreased visits but also decreased spending on subsequent visits. The differences between the effects of up-selling and down-selling may favor the latter even more, if we are able to measure and include the effects of word-of-mouth (Reichheld 2003).

Table 3
Long-term Revenue Impact and Breakeven Time Estimates

Scenario	Initial Study Visits	Revenue Per Person	Revenue Wave 1	Diff From Other Strategy	Post Wave Study Visits	Revenue Per Person	Revenue Wave 2	Diff From Other Strategy	Breakeven Time Frame (months)
Down-sell	1.78	\$13.20	\$23.50	-\$5.57	2.15	\$13.20	\$28.38	X	
Up-sell Scenario #1	1.78	\$16.33	\$29.07	+\$5.57	1.61	\$16.33	\$26.29	-\$2.09	2.7
Up-sell Scenario #2	1.78	\$16.33	\$29.07	+\$5.57	1.61	\$13.23	\$21.30	-\$7.08	0.8

Limitations and Future Research

While the study reported in this paper is perhaps the first comparative investigation into the merits of up-selling versus down-selling, it has some limitations that can be addressed in future research. First, the data were collected from a single industry where price points are moderate, frequency of visits is high, and several opportunities to adjust the portfolio of products bought, either during a consumption occasion, or across multiple occasions. Future research should evaluate the extent to which our results generalize to other consumption settings.

Second, the study employed a natural experiment where customer data were collected without disrupting the sales process or the operations of the retail chain. The chain uses standard up-selling scripts for its sales-people. However, because the down-selling observed was non-institutionalized, the scripts used by the salespeople likely varied from one to another. Future research should examine the effects of scripted up-selling and down-selling and the whether alternative scripts influence the relative merits of one strategy versus the other. For example, scripts may involve informing customers of the price difference when they are up-sold or down-sold or involve sharing information on non-price related attributes of alternative products.

From a brand and service quality perspective, it is important to examine customers' patterns of attributions to up-selling versus down-selling sales strategies. If, for example, customers see variations in down-selling activities across servers, the benefits from the strategy may not translate into brand level benefits or improvement in perceptions of service quality across an entire service system. On the other hand, if they see systematic up-selling, they may attribute the undesirable sales activity to the brand and lower its equity.

Finally, more research is needed to examine the effect of the mindset of the customer for that specific brand or occasion on the sales strategy. Our limited findings on two situational

factors, “special occasion” and “price importance,” suggest that the customer mindset prior to or the goal for the purchase experience may determine the appropriate sales strategy. Future research should examine the role of other situational and attitudinal factors.

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CHAPTER 2

THE LONG-TERM IMPACT OF SERVICE RECOVERY

The service industry in the United States accounts for over three-fourths of the gross domestic product and has been the key driver of job and GDP growth over the past decade (Lovelock and Wirtz 2011). The increasing significance of the industry has attracted academic interest especially in the investigation of and the measurement of service performance and quality (Cronin and Taylor 1992). However, the quality of a customer's service experience often depends on the performance of customer-facing service personnel who generally tend to be underpaid and undertrained (Bitner, Booms, and Tetreault 1990). Consequently, many service experiences result in failure and require supplemental effort on the part of service firms to recover from such adverse episodes. Because of the inevitability of service failures across multiple industries, the study of failure and recovery is becoming an increasingly important stream of research (Andreassen 2000).

It is noteworthy that service firms' recovery efforts are likely to be contingent upon the customer's experience and complaining behavior. In order for recovery efforts to begin, the customer must be dissatisfied with the service performance and also bring his or her unfavorable experience to the attention of the service provider. Further, the customer may or may not be satisfied by the quality of the recovery received in response to a complaint. Oliver (1987) proposed a classification system to capture customers' service, complaining, and recovery experience and categorized them into four groups: satisfied non-complainers, dissatisfied non-

complainers, satisfied complainers and dissatisfied non-complainers. The first group represents customers who had a satisfying service experience and had no reason to complain. The remaining three groups consist of customers who were dissatisfied with their initial service and chose to either complain or not. And, from among the complainers, those who were satisfied with the firm's recovery effort to redress their complaint (Gronroos 1988) were categorized separately from those who were not.

Previous research on service failure suggests that it is a key determinant of customers' switching behavior (Roos 1999), and that successful recovery can make the difference between customer retention and defection (McCullough, Berry, and Yadav 2000). In fact, the Service Recovery Paradox (McCullough and Bhardawaj 1992) states that satisfactory remedy of service failure might often make customers more loyal than if no failure had occurred in the first place. However, the satisfaction rate with the recovery efforts is, at best, mediocre. An early study by Andreasen and Best (1977) found that only 30-53% of customers who experience problems with a purchased service were satisfied with the resolution. A more recent study (Berry and Parasuraman 1991) finds this number to be between 50 – 67%. A possible explanation for such a low number might be that without knowing the returns on service recovery efforts, firms may be unwilling to invest in recovery initiatives. Second, because a majority of dissatisfied customers do not complain (Stephens and Gwinner 1988, Singh 1990, Voorhees, Brady, and Horowitz 2006), the extent of service failure may be understated.

Previous research on service failure and recovery comprises of two distinctly different literature streams. The first focuses on the service recovery paradox related, while the second focuses on customers' complaining behavior. Although both streams relate to outcomes following a service failure there is virtually no research at their intersection that comprehensively

examines both complaining behavior and recovery. As a result, the impact of the four recovery outcomes on service firms is unknown. In this paper, we aim to close this gap and seek to merge the two streams of literature by examining customer response to service failure and recovery efforts from both a short and a long-term perspective across all four service outcome customer groups. In contrast to previous research in the area, we examine both the attitudinal and behavioral responses from complainers as well as non-complainers. In addition, we assess the return on investment from a successful service recovery effort as well as the cost of a non-complainer to the firm. Finally, we provide details on the characteristics of the different service recovery outcome groups as well as provide the situational factors of the service recovery effort that lead to greater satisfaction.

Our results show a non-linear post experience attitudinal relationship across the four outcome groups. Those who did not experience a service failure (control) exhibited the highest attitudinal measures. Contrary to the Service Recovery Paradox, those who had a satisfactory recovery exhibited lower attitudinal scores than the control. Non-complainers, who may comprise a much larger percentage of the customer population than previously reported, exhibited considerably lower attitudinal measures than the satisfactory recovery group but exhibited slightly better attitudinal measures than what is called the double deviation group. In summary, those that concluded their experience satisfied (control and satisfactory recovery) exhibited high attitudinal measures than those that concluded their experience dissatisfied (non-complainer and double deviation). However, the differences within the satisfied customer groups and the dissatisfied customer groups dissipated prior to their next service purchase. Therefore, future purchase behavior was simply determined by whether or not the customers concluded their experience to be satisfactory. Finally, the return on investment of service

recovery was substantial as it is approximately three times the revenue from the original experience.

Background

It is important for firms to understand the impact of service failure because it has been identified as a key determinant of switching behavior and customer retention (Roos 1999). Small increases in customer retention, in turn, can have a magnified impact on profitability. For example, Reicheld and Sasser (1990) find that, under certain situations, a 5% increase in customer retention can improve profits by almost 100%. Given the importance of service recovery efforts in driving customer retention, the relationships among failure, recovery, and subsequent customer response has been intensely debated and also been identified as an area needing additional research (Andreassan 1999; Fisk, Brown, and Bitner 1993; Singh and Widing 1991, Tax Brown, and Chandrashekar 1998; McCullough, Berry, and Yadav 2000).

Much of the debate on the consequences of service recovery centers on what is called the Service Recovery Paradox (McCullough and Bharadwaj 1992). This paradox states that when failure has been satisfactorily remedied, customers are more satisfied, more likely to remain loyal, and more likely to engage in favorable word of mouth than customers who have never experienced a failure. Several researchers have found empirical evidence in support of this paradox (e.g., Smith and Bolton 1998). However, others have failed to find supportive evidence (Andreassen 2001; McCullough, Berry, and Yadav 2000; McCullough, Berry, and Parasuraman 1996). Several explanations have been offered to reconcile these differences and include the impact of moderating influences. For example, failure severity, failure attribution, and experience with the failure are found to influence whether failing and recovering is superior to

not having failed at all (Matos, Henrique and Rossi 2007). However, most of the inferences regarding the impact of failing and recovering have been compromised because of an absence of any information about customers who never experienced a failure (McCullough et. al 2000).

Theoretical Foundation

The assessment of service recovery typically begins with the evaluation of the original service experience itself (Singh 1991). Customers' satisfaction with such experiences is generally examined using the expectation-disconfirmation theory (Churchill and Surprenant 1982; Oliver 1980, 1981, 1989, 1993; Bearden and Teel 1983; Swan and Trawick 1981). This theory posits that satisfaction is determined by the degree to which a service or experience matches expectations. A customer is satisfied if expectations are exceeded, and dissatisfied if the experience falls short of them. In case of a service failure, overall satisfaction is determined by the evaluation of the service recovery process (Parasuraman, Berry, and Zeithaml 1991). Under such circumstances, overall satisfaction is based on the combination of the initial experience and the service recovery efforts. While the relative importance of the two is a matter of debate, Halstead and Page (1992) concluded that satisfaction is driven primarily by the initial service evaluation with the recovery efforts acting only to mitigate the adverse consequences of a service failure. Therefore, we formally hypothesize that:

H1a: Customers who do not experience a service failure will exhibit higher satisfaction than those that experience a service failure with satisfactory recovery.

Some customers who experience a service failure may complain to the firm to resolve their service issue or obtain some form of restitution. If the corresponding recovery is satisfactory, the negative impact of the initial failure will be mitigated. However, if the service recovery effort itself is dissatisfactory, the customer will encounter two dissatisfying experiences within one service episode. This double deviation effect (Bitner, Booms, and Tetrault 1990) will intensify customer dissatisfaction. Therefore, we hypothesize that:

H1b: Customers who receive adequate service recovery will exhibit higher satisfaction than those who receive inadequate recovery.

Satisfaction with a service experience has downstream consequences on future customer behavior. For example, extensive research on post-purchase behavior provides conceptual arguments (e.g., Oliver 2009) and empirical data (Cooil et al. 2007; Mittal and Kamakura 2001; Voss, Godfrey, and Seiders 2010) in support of a positive relationship between customer satisfaction and repurchase intentions. Specific research on service recovery also shows a positive link between both initial satisfaction and that related to service recovery and repurchase intent (Halstead and Page 1992, Voorhees et, al. 2006). These findings suggest that the ordinal relationship of customer satisfaction between the service recovery outcome groups will remain consistent for the purchase intent well. Therefore, those outcome groups that had higher satisfaction will also have higher repurchase intent. Formally, we hypothesize that:

H2a: Customers who do not experience a service failure will exhibit higher repurchase intent than those who experience a service failure with satisfactory recovery.

H2b: Customers who receive adequate service recovery will exhibit higher repurchase intent than those who receive inadequate service recovery.

Another critical consequence of the quality of a service experience is word-of-mouth behavior. While there are several ways of measuring such behavior, the likelihood to recommend a service is found to be an effective measure of word-of-mouth behavior that strongly correlates with future firm sales (Reichheld 2003). Similarly, Zeithaml, Berry, and Parasuraman (1996) tested a 13-item scale of behavioral intention and also found that likelihood to recommend and repurchase were highly correlated. Intent to recommend is also deemed an important dependent variable because, in most product categories, word of mouth is one the most important factors in acquiring new customers (Mittal, Kumar, and Tsiros 1999). Word-of-mouth in service industries in particular is related to satisfaction and recovery (Maxham and Netemeyer 2002; Swanson and Kelley 2001; Bejou and Palmer 1998). Therefore, we hypothesize that:

H3a: Customers who do not experience a service failure will be more likely to recommend a brand than those who experience a service failure with adequate recovery.

H3b: Customers who receive adequate service recovery will be more likely to recommend a brand than those who experience inadequate service recovery.

Non-Complainers

As stated earlier, a majority of dissatisfied customers do not complain (Stephens and Gwinner 1988, Singh 1990). The estimates of non-complainers range from 70% to 95%

(Gronroos 2007, Harari 1992). However, very little research exists that compares non-complainers with the other three customer groups in Oliver's (1987) classification (Voorhees, et al 2006). As a result, our understanding of the complaining phenomenon is "quite limited" (Singh and Wilkes 1996). The large percentage of non-complainers is troublesome for service firms because they miss the opportunities to recover from service failures. Secondly, even though dissatisfied customers did not complain to the firm, they are still likely to spread negative word-of-mouth which can hurt the firm's reputation and discourage other customers (Richins 1983). Finally, the firm misses vital feedback that may enable it to solve problems for future customers (Fornell and Wernerfelt 1987).

Although many theoretical frameworks for complaining behavior have been provided, most are based on Hirschman's theory of exit voice and loyalty (Blodgett and Granbois 1992). This theory accounts for the personal characteristics, situational factors, and the cost and value of voicing a complaint. Individual difference variables, such as attitudes toward complaining (Bearden and Crockett 1981; Blodgett et al. 1995, Richins 1980, 1982) and politeness (Lerman 2006) are shown to affect the propensity to complain. In addition, situational factors such as the likelihood for successful recovery (e.g., Richins 1985, 1987; Sing 1990), the price and the importance of the product (e.g., Bearden and Oliver 1985; Bolting 1989) also affect complaining behavior. Finally, the overall cost, in terms of time, effort, and emotional stress relative to the potential value of redress affect whether or not a customer will complain (Blodgett and Granbois 1992). If customer involvement is high and the cost of complaining is low, we expect the likelihood of complaining to be high.

Formally we hypothesize,

H4: In a moderately priced, high involvement service, a majority of dissatisfied customers will complain to the offending brand after experiencing a service failure.

Service failures often result in negative emotions which signal a strong need for coping strategies (Mattila and Wirtz 2004). One strategy involves direct action to resolve the situation, whereas the other minimizes the emotions by removing oneself from the stressful situation or attribute the failure to someone else (Folkman and Lazarus 1988). This desire to avoid confrontation and minimize negative emotion affects customer complaining behavior. To minimize the emotion in a service failure situation a customer may choose to either abstain from complaining or avoid contact with the person responsible for the failure by bringing the issue to the attention of someone else within the company. By voicing the complaint to someone else, the customer is avoiding the potential stressful situation of criticizing the person that caused the failure. Therefore, many customers will be more likely to complain if they are able to voice the complaint to someone that is not directly responsible for the failure.

For example, a customer would avoid confronting the frontline personnel to complain about the poor service they experienced because the frontline personnel are responsible for service. However, if they attributed the failure to the product, they will be more likely to complain since it was most likely caused by someone in the kitchen and not by the frontline personnel. This would yield a greater percentage of customers that would complain about a product failure than about a frontline personnel service failure.

H5: Customers are more likely to complain about a product failure than a service failure.

Dissatisfied non-complainers do not provide the company with the opportunity to recover from its service failure. Therefore, they are more likely to exit the brand dissatisfied. As a result, their satisfaction will be lower than that of customers who experienced a service failure, complained, and were provided with an adequate recovery.

H6a: Non-complainers will have lower satisfaction than that of those complained and received an adequate service recovery.

However, some customers who complained after experiencing a service failure may receive an inadequate recovery. Because these customers have expended time and effort to complain, the unsatisfactory recovery magnifies the adversity of their experience (Johnston and Fern 1999). This will result in satisfaction that is lower than what it would have been if they had not complained.

H6b: Non-complainers will have higher satisfaction ratings than those who complained about a service failure and received inadequate recovery.

Consistent with the extant research and prior hypotheses, the ordinal effects in customer satisfaction will have similar ordinal effects on repurchase intent.

H7a: Non-complainers will exhibit lower repurchase intent than those who experienced a service failure but received adequate recovery.

H7b: Non-complainers will exhibit higher repurchase intent than those who complained about a service failure and received inadequate recovery.

The same ordinal effects that are stated in previous hypotheses and supported by the extant literature will apply to the likelihood to recommend

H8a: Non-complainers will be less likely to recommend the offending brand than those who experienced a service failure but had a satisfactory recovery.

H8b: Non-complainers will be more likely to recommend the offending brand than those who experienced a service failure and had an unsatisfactory recovery.

The Locus of Recovery

The speed with which complaints are resolved has been identified as an antecedent of recovery satisfaction (Blodgett, Hill, and Tax 1997; Tax, Brown, and Chandrashekar 1998). The ability of the frontline personnel to immediately address a service failure will enhance the satisfaction with service recovery. Customers evaluate service recoveries attributed to either the service employee or the service firm more favorably than those attributed to themselves (Swanson and Kelley 2001). Additionally, service recovery executed by the frontline personnel may be evaluated more favorably than recovery attributed to higher-level representatives of the firm (Hart, Heskett and Sasser 1990). Given this and the ability of frontline employees to address the customer issues in an expedient manner, customer satisfaction will be higher with frontline employee resolution than with managerial resolution to the failure.

H9: The customer's overall satisfaction and repurchase intentions will be higher if the service recovery is performed by the frontline employees than if it is performed by managers.

Impact on Future Behavior

Most studies that have examined service recovery have focused on satisfaction and repurchase intentions as the key dependent variables (de Matos, Henrique, and Rossi 2007). Other studies have used word of mouth (e.g. Hocutt, Bowers, and Donovan 2006; Kau and Loh 2006; Maxham and Netemeyer 2002), corporate image (Andreassen 2001; Kwortnik 2006), trust (Kau and Loh 2006), quality (McCullough 1995), complaint intentions (Hocutt, Chakraborty, and Mowen 1997), switching intentions, or willingness to pay (Zeithaml, Berry, and Parasuraman 1996). However, because these approaches do not actually track future purchase behavior, they do not provide the answer to the key managerial questions of the true cost of service failure and the financial benefit of service recovery. While managers agree that service recovery is important to success of their brands, they do not know much they can invest in service recovery and still obtain a positive return on investment. Many of the dependent measures examined in the extant literature and mentioned previously in this study are surrogates for future behavior and have been shown to correlate with it. Therefore, when actual purchase behavior is measured, we expect the same pattern of results as hypothesized earlier: Formally, we hypothesize that:

H10a: Customers who do not experience a service failure will visit the brand more in the future than those who experienced a service failure but had an adequate recovery.

H10b: Customers who experience a service failure but have an adequate recovery will visit the brand more in the future than those who experienced a service failure but did not complain.

H10c: Customers who experience a service failure but do not complain will visit the brand more than those who experience a service failure and an inadequate recovery.

Methodology

We used data from an online longitudinal tracking study among a panel of 8,800 casual dining restaurant customers for this research. The respondents were recruited from a nationally representative panel of individuals who had visited a casual dining restaurant in the past 30 days. Over 7,000 of these customers participated in follow-up surveys every three months over the following thirteen quarters. The respondents were compensated for their participation by a professional market research firm which managed and maintained the panel. The customers were asked a broad range of attitudinal and behavioral question including the frequency of visiting any of the 18 major brands studied, brand perceptions, visit intent, the likelihood to recommend these brands, identification of any recent service failures, disclosure of failure, and satisfaction with the recovery.

The specific information pertaining to service failure and recovery was obtained by asking the customers about any major issues or problems they had experienced during a dining occasion during the past week. We focused on only events during the previous week to ensure good recall of the actual failure and the recovery effort. And, by asking every respondent about

failures, we are able to identify the percentage of complainers and non-complainers in our sample.

Measures

Customers were assigned to one of the four groups outlined in Oliver's (1980) recovery matrix based on their response to the service recovery questions. Those who stated that they did not encounter a service failure were placed in the control group and were designated as customers to whom the brand was successful in delivering the service. Those who experienced a service failure were then asked if they had complained to anyone. If customers stated that they had voiced a complaint, they were asked a series of questions about who was involved in the recovery, what compensation was offered, what was the nature of the problem, and what overall satisfaction level did they have with the recovery process. Out of the total sample, 8.1% or 711 customers experienced a service failure in the first wave of the study. Of those who experienced a failure, 188 customers received adequate recovery, 306 were non-complainers, and 217 experienced inadequate recovery efforts. Respondents who provided a top two box rating (somewhat satisfied or very satisfied) on a five point semantic differential scale (1 = very dissatisfied, 5 = very satisfied), were classified as "satisfied with their service recovery." All other complainers were classified as "dissatisfied with their service recovery," also known as the double deviation group. The brand responsible for the failure was recorded and the customers' attitudes and behaviors toward that brand were tracked over the subsequent thirteen waves. Only nine customers experienced a second failure from the same brand. Those customers were removed from the sample.

We used three key constructs to measure the impact of different service recovery outcomes in the study: customer satisfaction, repurchase intent, and the propensity to

recommend. All of these constructs were measured using single-item semantic differential scales. Although the use of single-item measures has come under scrutiny, such measures have been used in numerous large scale commercial surveys (e.g. Bolton and Drew 1991; Mittal, Kumar, and Tsiros 1999; Mittal, Ross, and Baldasare 1998). Further, because the longitudinal study involved customer participation over a long period of time, minimizing the respondent defection rate was paramount. Multi-item scales increase survey length which can decrease the response rate leading to lower reliability (LaBarbera and Mazursky 1983). Overall Satisfaction and repurchase intention questions are frequently used metrics and have been shown to accurately measure their respective constructs. Likelihood to recommend is also a commonly used metric not only because of its correlation to repurchases (Zeithaml, Berry, and Parasuraman 1996) but also for its link to revenue growth and profitability (Reichheld 2003).

RESULTS

Satisfaction with Different Service Recovery Outcomes

To test some of our hypotheses, we first had to identify those respondents who had encountered a service failure during their visit and then determined if they voiced a complaint to a representative of the company. If a complaint was voiced, then we ascertained whether or not they were satisfied with the resolution to the problem. We then compared the outcome variables across the following four groups of customers:

1. Customers who did not experience a service failure (control group)
2. Customers who experienced a service failure, voiced a complaint, and were satisfied with the resolution to their problem (Satisfactory Recovery)

3. Customers who experienced a service failure, but did not voice a complaint (non-complainers)
4. Customers who experienced a service failure, voiced a complaint, but were not satisfied with the resolution to their problem (double deviation)

A general linear model multivariate analysis of variance was conducted to evaluate the differences among the four customer groups across the three key dependent variables. The model yielded a significant main effect of the customer group (Wilks' $\lambda = .828$, $F = 191.467$, $p < .001$) and significant effects for each of the three dependent variables: satisfaction ($F = 448.045$, $p < .001$), revisit intent ($F = 382.991$, $p < .001$), and the likelihood to recommend ($F = 408.828$, $p < .001$).

We then used planned comparisons to test our hypotheses. We found that the control group exhibited the highest satisfaction ratings of the four customer groups ($M = 4.43$) which were significantly higher ($t = -7.663$, $p < .001$) than for those who experienced a failure and had satisfactory recovery ($M = 3.71$). A similar pattern of results was seen for revisit intent ($M = 4.54$ vs. 4.30 ; $t = -3.792$, $p < .001$) and the likelihood to recommend ($M = 4.40$ vs. 4.05 ; $t = -5.760$, $p < .001$). These findings do not support the service recovery paradox (McCullough and Bharadwaj 1992; Smith and Bolton 1998), and are similar to the work of other authors who also failed to find support for the paradoxical effect (i.e. Andreassen 2001; McCullough, Berry, and Yadav 2000; McCullough, Berry, and Parasuraman 1996). They support our contention that satisfaction and behavioral intentions are driven by both the initial experience and the recovery efforts and that the latter can only mitigate, but not necessarily nullify, the negative impact of the failure (Halstead and Page 1992).

It has been argued that the recovery paradox may be evident when the recovery effort can completely mitigate the harm caused by the failure (McCullough et al. 2000). However, that was not the case in this study even when the service firm paid for the entire meal, thereby eliminating the financial cost for the customer. Customers in our study visited an average of almost five other brands (4.87) during the 30 day period leading up to the failure. Given their frequent comparison to other brands and the likelihood that some of the other brands have not failed them, it is possible that the customers' tolerance for failure may be limited. Their access to and experience with other brands also explains why the revisit intent and likelihood to recommend is lower for the satisfactory recovery group relative to the control group. Almost all of the customers have other brands to which they can transfer their patronage and recommendations instead of risking another service failure.

To test H1b, H2b, and H3b, an ANOVA we used planned comparisons across the three key measures for the satisfactory recovery group with the double deviation group. We found that the satisfactory recovery group exhibited significantly higher satisfaction ($M = 3.71$ vs. 2.65 ; $t = 8.151$, $p < .001$), revisit intent ($M = 4.30$ vs. 3.23 ; $t = 10.191$, $p < .001$), and likelihood to recommend ($M = 4.05$ vs. 2.95 ; $t = 10.060$, $p < .001$). These findings support our hypotheses and are consistent with the extant literature and highlight the benefit of satisfactory recovery to the firm. Although the ratings for the service recovery group are not as high as the control group, given inevitable service failure, our findings suggest that satisfactory recovery remains critical to the success of service providers.

Customer Group	Satisfaction Mean	Revisit Intent Mean	Likelihood to Recommend Mean
No Failure	4.43	4.54	4.40
Failure Recovered	3.71	4.30	4.05
Double Deviation	2.65	3.23	2.95

The Response of Non-Complainer

Although it has been suggest from various sources that the incidence of non-complainers ranges from 70% to 90%, no study to date has been able to provide a definitive percentage. Since we are sampling from a large representative sample of the target customer base, the methodology allows us to determine the true percentage of non-complainers. In our sample of casual dining restaurant user, 8.1% of customers experienced a service failure, 57% of whom voiced a complaint. Only 43% were non-complainers, a number significantly lower than the 70% to 95% noted in the literature. The casual dining restaurant industry would be considered to be of moderate value to most customers given an average price of \$29.60. It also provides the customer with ample opportunities to complain to the service provider. Our findings support H4 which states that in a moderately priced service with the ability to complain, a majority of the customers who experience a service failure will complain.

The Impact of Product vs. Service Failure

To test H5, we conducted an independent sample t-test to determine if customers were more likely to complain about a product failure than a service failure. Within the context of our study, a product failure refers to failure with regard to the food. A service failure refers to issues involving the frontline service personnel. The results show that a customer was significantly

more likely to voice a complaint about a product (67%) rather than a service failure (45%, $t = 4.901, p < .001$). These results are consistent with our hypothesis that, when faced with a product failure, a customer does not have to confront the individual provider responsible for the failure and can voice their concerns to third party: their server. However, with a service failure, the customers have to confront the person responsible for the service failure (the server) to voice a complaint, which may arouse anticipation of additional negative emotions and lead to complaint avoidance (non-complainer).

The Response of Non-Complainers

We used planned comparisons to test H6a, H7a, and using the three key dependent variables for the non-complainers versus the satisfactory recovery group. The satisfactory recovery group exhibited significantly higher satisfaction ($M = 3.71$ vs. 3.09 ; $t = -5.339, p < .001$), revisit intent ($M = 4.30$ vs. 3.49 ; $t = -9.017, p < .001$) and likelihood to recommend ($M = 4.05$ vs. 3.18 ; $t = -9.004, p < .001$) than the non-complainer group. In other words, even though the satisfactory recovery group experienced similar failures as the other group, the recovery increased their satisfaction and behavioral intention ratings significantly. This underscores the importance of maximizing the opportunities for customers to complain to at least give the company a chance to recover from the failure. These findings support H6a, H7a, and H8a.

To evaluate H6b, H7b, we used planned comparison for the three key dependent variables for the non-complainer group versus the double deviation group. The non-complainers exhibited significantly higher satisfaction ($M = 3.09$ vs. 2.65 ; $t = -3.864, p < .001$), revisit intent ($M = 3.49$ vs. 3.23 ; $t = -2.382, p < .018$) and likelihood to recommend ($M = 3.18$ vs. 2.95 ; $t = 2.146, p < .032$) than the double deviation group. These results support Hypotheses H6b, H7b,

and H8b, and suggest that customers who did not complain had higher satisfaction and behavioral intentions than those who experienced a service failure and a failed recovery. The additional expenditure of resources taken to complain magnified the negative experience (Johnston and Fern) leading to the lower ratings. These findings shed light on the potential downside of increasing the incidence of customer complaining behavior. If a high percentage of customers complain but the satisfaction with recovery is not high, the effect on the brand will be worse than if they had not complained at all.

Customer Group	Satisfaction Mean	Revisit Intent Mean	Likelihood to Recommend Mean
No Failure	4.43	4.54	4.40
Failure Recovered	3.71	4.33	4.05
Non-Complainer	3.09	3.49	3.18
Double Deviation	2.65	3.23	2.95

Locus of Recovery: Frontline vs. Manager Involvement

To evaluate the customer reaction to service recovery provided by the frontline personnel versus the manager, we compared the means scores for the key dependent variables across the two. When the frontline personnel were involved in the recovery, customer satisfaction ($M = 3.38$ vs. 2.77 ; $t = 3.556$, $p < .001$), revisit intent ($M = 3.92$ vs. 3.52 ; $t = 2.718$, $p = .007$), and likelihood to recommend ($M = 3.67$ vs. 3.26 ; $t = 2.651$, $p = .009$) ratings were higher than when the manager was involved. The results support H10. They are consistent with our expectation that the additional psychological and physical resources needed to wait for problem resolution by the manager and the expectation of higher recovery outcomes may result in lower satisfaction when managers rather than the frontline personnel are the locus of the recovery effort.

Impact on Future Behavior

In our longitudinal study, we asked customer about their brand patronage behavior for thirteen quarters (3 month periods) following the initial period where we had identified service failures and recovery efforts. We identified the brand that was responsible for the service failure (or no failure for the control group) in the initial period and tracked customer's future visits to it in the future waves of the study. To measure patronage the customers are asked how many times they have visited that brand in the past 30 days. Because this question focuses on visitation during the past 30 days, the wave 1 results serve a pre-measure for the post-failure impact. We refer to this first wave as T_0 . Not all customers participated in every wave of the study. To be included in the analysis, a customer had to participate in a minimum of seven waves. We used linear interpolation based on visitation prior to and after the missing value to replace the missing values.

To evaluate H13a an ANOVA with planned comparisons were conducted to compare the mean change in visitation for the control group versus the service recovered group for each of the 13 subsequent waves. However, because the pre-failure or T_0 measure for visitation was different for each of the service recovery groups, we evaluated the change in percentage of visits for each group from the beginning to the wave under examination. Given that there is a natural migration out of brands in this category because of variety seeking we express the change as a percentage of customer retained visits relative to T_0 . Although the starting points were different, an ANOVA analysis indicated that there were not any significant differences across the four groups at T_0 ($F_{3,1278} = 1.076, p = .358$).

The ANOVA analysis of the change in percentage of visits retained for all 13 measurement periods demonstrated a significant effect for the Service Recovery Outcome group

factor (F - values ranging from a low of $F = 3.5321$, $p = .014$ to a high of $F = 11.797$, $p < .001$). For the quarter following the service failure, T_1 , the no failure and service failure recovered groups retained about the same percentage of visits (48% vs. 51%, $t = -0.409$ $p = .683$). In fact, both groups retained the same percentage of visits until T_8 , two years after the failure (30% vs. 17%, $t = -2.522$, $p = .013$). Interestingly, from T_9 to T_{13} , the control retained more visits. When asked shortly after the event, those who had a satisfactory recovery had lower attitudinal and behavioral intention measure than those without a failure. However, that did not translate into fewer visits than the control group. This is perhaps because those who complain experience a short-term increase in negative emotions that dissipates within a few days (Pennebaker 1990). Because some time elapsed between the failure and the next purchase decision, the negative emotions may have dissipated and the recency effect of the satisfactory recovery, rather than the preceding failure seems to have driven purchase behavior. In other words, what mattered was whether or not the customer was finally satisfied rather than whether the satisfaction was the result of a successful service experience or a successful recovery from a failed experience. However, unlike what was hypothesized in H13a, the benefit of the satisfactory recovery dissipated after two years.

To test H13b, a t-test was conducted to compare the mean percentage of visits retained for the satisfactory recovery group versus the non-complainers across all of the waves. The satisfactory recovery group retained a significantly higher percentage of visits in T_1 than non-complainers (51% vs. 26%; $t = -3.265$, $p = .001$) and this benefit lasted through T_7 (24% vs. 12%; $t = -2.040$, $p = .044$). These findings highlight the importance of service recovery and its long lasting impact on customer behavior.

To test H13c a t-test was conducted to compare the changes in visitation behavior for non-complainers versus double deviations. These two groups had essentially the same visitation retention in every wave from T₁ (26% vs. 24%; $t = 0.395, p = .693$) through T₁₃ (7.5% vs. 6.4%; $t = 0.337, p = .737$). Similar to the comparisons between the first two groups, the non-complainers had significantly better satisfaction and behavioral intention measures than the double deviation group. However, over time, both groups reduced visitation at the same rapid pace. It is likely that many in the non-complainer group had already made the decision to leave the brand so they did not want to spend any additional resources on complaining. Again, those who complained may have experienced a short-term increase in negative emotions that dissipated within a few days (Pennebaker 1990). This is why the immediate post-experience satisfaction and behavioral measures are negatively affected but the future purchase decisions are no different than the non-complainers. In other words, no matter how the customers left the experience dissatisfied (double deviation or non-complainer), the negative experience impacted future visitation behavior similarly.

To gain additional perspective on the benefit of satisfactory recovery, we conducted a t-test to compare the satisfactory recovery group with the double deviation group. The service recovered grouped retained a higher percentage of visits versus the double deviation group from T₁ (51% vs. 24%; $t = 3.056, p = .003$) through T₈ (17% vs. 6.7%; $t = 2.054, p = .042$), which is one quarter longer than the benefit over the non-complainers. Again, this highlights the importance of improving satisfaction through recovery efforts.

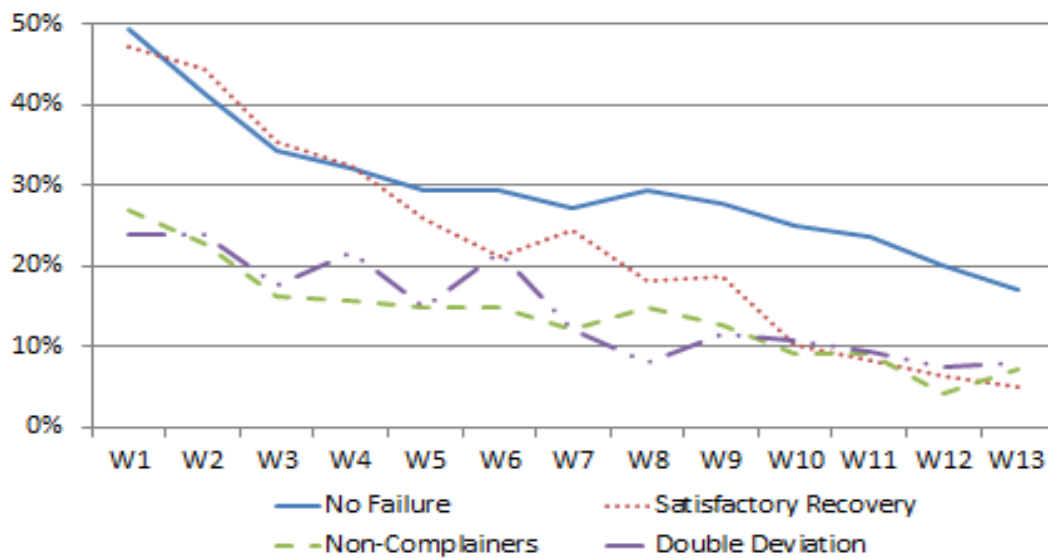
The key information that managers have been lacking is the total cost of failure versus service recovery. This would provide managers with a monetary amount they could invest to save a customer and still maintain a positive return on investment. The difference in visitation

for satisfactory recovery group compared to the non-complainers for the 21 months that comprise the seven quarters of significantly different visitation is 2.58 total visits. Therefore, if a firm could identify the failure associated with a non-complainer and provide a satisfactory recovery, the company would obtain, on average, more than two and a half additional visits from that customer. With an average expenditure of \$28.92 for the non-complainer, the conversion to a satisfactory recovery would equate to an additional \$74.61 per customer over 21 months.

The service recovered group visits an additional 3.3 times more than the double deviation group during the 24 months that comprised the eight quarters of significantly different visits. The average expenditure for the double deviation group is \$33.03. Increasing visits by 3.3 leads to an additional \$109.00 in revenue indicating that small improvements in recovery satisfaction can have a significant impact on revenue. The data demonstrates that cost of failure and the benefit of recovery is more than double the amount of the entire purchase. This provides managers with ample resources to perform a successful recovery.

This data also demonstrates the immediate and strong negative reaction by customers to an experience that ends in dissatisfaction (non-complainer and double deviation). These customers are patronizing, on average, five other brands during the same time period. Therefore, the economic, monetary, evaluation, learning, set-up, and personal relationship costs associated with switching (Burnham, Frels and Mahajan 2003) do not exist. The customers then simply avoid the risk of experiencing another service failure at the same restaurant and, thus opt for a safer and comparable alternative in their brand usage portfolio.

Percentage of Retained Visits After Service Failure (No Failure)



Theoretical Implications

First, this research provides the first comprehensive evaluation of the service failure that includes a study of complainers, non-complainers, and those who never experienced a service failure. Second, it traces the longitudinal impact of the alternative failure and recovery outcomes which allows us to estimate the financial benefits from recovery efforts and test whether and how the effects of failure and recovery evolve over time.

Our results also provide insight into the prevalence of the service recovery paradox from a long-term customer behavior perspective. We find that, in the immediate short run, the paradox does not necessarily apply within our study context, which is the casual dining industry. However, over the long run, we find that the patronage behavior of those recovered successfully does converge to that for which no failure ever took place. These findings are consistent with the

assumption that, because of emotional dissipation, the negative impact of failure may be mitigated over time (Pennebaker 1990).

Our findings are also inconsistent with the popular belief that only a small percentage of customers complain about adverse service experience. We find that more than half of those who experienced a failure complained to the firm. However, there was variance in complaining behavior in that we find that customers were less likely to complain about a service than a product issue, perhaps in an effort to avoid direct confrontation with the service provider. Our findings also demonstrate the negative long-term effect of non-complainers on patronage. However, once again, we find that, contrary to previous research (Vorhees et. al 2006), there is a difference in the short versus the long-term differences between the non-complainers and the double deviation group. We find that, although the short-term response is worse for the double deviation group, the patronage behavior of the two groups converges over the long run.

Taken together, our results from the long-term impact of the various service failure and recovery outcomes suggest that we may need fewer customer classifications than envisaged in service recovery outcome matrix (Oliver 1980). While the matrix is an intuitive description of the possible failure and recovery outcomes, our data suggest that the long-term customer response can be grouped into just two rather than four categories. The first is satisfied customers who either experienced no failure or received successful post-failure recovery. The second category is non-complainers or those who received a poor response to their complaint. In other words, what matters in the long run is ultimate satisfaction from the experience not whether it was with the initial service or the recovery process.

This study also examines the locus of service recovery. This research highlights the importance of the frontline personnel's ability and empowerment to solve problems. If the

frontline personnel can remedy the failure, customer satisfaction and behavioral intentions will be higher than if the manager was involved because it requires fewer resources from the customer.

Managerial Implications

This study provides new insights into the impact of service failure and recovery. Most managers recognize that satisfactory service recovery is important. However, few, if any, know the return on the recovery investment. The restaurant chains in this study attract about 225,000 customers per year per restaurant and the overall average failure rate was 8.1% which leads to 18,225 failures per year. Even a small expenditure of \$5 to recover each failure across the average chain's 500 restaurants adds up to over \$45 million a year. Our findings show that satisfactory recovery is worth 2.6 (non-complainer) to 3.3 times the customer expenditure during the initial failure over the next two years. This demonstrates that significant resources can be expended to save customers and still provide the firm with a high return on investment.

Conversely, the results show the cost of a service failure that is not recovered. Given the loss of revenue for each non-complainer, resources should be directed towards developing proactive procedures that identify and address an undisclosed service failure. For example, one firm in the restaurant industry has determined through internal research that satisfaction considerably declines when the food is delivered more than 15 minutes after the order was placed. So whenever the food takes more than 15 minutes, instead of waiting for the customer to complain, the server should proactively compensate the customer for his/her wait. This would enable the company to reduce the percentage of non-complainers even more.

The double deviation group also visits significantly less than the satisfactory recovery group. Given the considerable revenue gained by saving that customer, every possible effort (monetary and non-monetary) should be made to insure that the recovery is satisfactory. No company will be able to recover 100% of its failures. In fact, our study indicated that only 46% of the customers who complained were satisfied with their recovery which is consistent with the Andreasen and Best (1977) study. But with the knowledge of the return on the investment, companies can commit more resources that would dramatically increase the success rate.

Finally, this study highlights the importance of the frontline personnel in the customer's satisfaction with the recovery. If firms can train and empower their frontline employees to provide satisfactory recovery, their long-term revenue will increase. This includes empowering the employees with the ability to provide significant monetary compensation to the customer, if the situation warrants. Any recovery procedure that requires manager approval, and a subsequent delay in resolution, will likely mitigate the benefit of the frontline personnel involvement observed in this study.

Limitations

Although the restaurant industry is widely used across almost all demographics of the U.S. population, there are some unique aspects of this industry that may inhibit generalizing to other industries. As was previously discussed, there are no switching costs and almost all customers are already using multiple brands. These results may not generalize to industries that do not meet these two criteria. Also, the long-term benefits may not transfer to industries where the customer expenditure is significantly more or significantly less.

This data relies on customers' memory of restaurants visited within the past 30 days. Therefore, the future behavior information is stated and not observed. Although there is potential for bias at the individual level in this methodology, it should be noted that in aggregate it has proven to closely mirror publicly reported sales and traffic numbers for several restaurants in this study that publicly report that information.

Future Research

Further longitudinal behavioral research is needed in other industries that have different switching costs and competitive landscapes to determine if the revenue and return on investment findings from our study generalize to other situations. We need to identify key industry variables that quantify the differences observed between these results and past service recovery research. Additional work can be done on the identification of moderators to the long-term outcomes of service failure and recovery. For example understanding the role of brand perceptions relative to the competition, different recovery procedures, and the number of available competitors can provide additional insight to this phenomenon. Customer psychographic profiling may enable additional predictive power to the long-term impact of service failure.

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