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FOR HOSPITALITY FIRMS

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ABSTRACT

As organizations gradually recognize that enhanced customer satisfaction leads to better customer retention and profitability, the economic value of customers has been increasingly studied in various industries and individual companies in the past decade (e.g., Goodman, Ward, & Yanovsky, 1998; Reinartz & Kumar, 2000; Zeithaml, 2000). There has also been a significant increase in research on service recovery (Brown, Cowles & Tuten, 1996). However, very little research has aimed at the economic value of customers retained by effective service recovery in general and none, specifically, in the hotel industry. This paper presents a methodology to measure revenue recovery and the results of a six-year study on the effectiveness of a hotel call-center in recovering revenue for the hotel brand. The results show that the call-center has been effective in recovering revenue in that the recovery has been significant and is greater than the administrative costs of the call-center operation.

THE EFFECTIVENESS OF A BRAND CALL-CENTER IN REVENUE

RECOVERY

As both business practices of organizations and focuses of marketing research, the concepts of service recovery and customer retention have evolved over time. It is generally believed that service recovery increases customer satisfaction (Brown, Cowles & Tuten, 1996; Hepworth & Mateus, 1994); enhanced customer satisfaction leads to decreased customer defection and increased customer retention (Buttle & Burton, 2002; Reichheld, 1993) and; higher retention rate leads to improved profitability (Reichheld & Sasser, 1990; Zeithaml, 2000). The importance of service recovery and customer retention has been well researched. Among the most widely reported benefits of customer retention are the following (Narayandas, 1998): (1) resistance to counter-persuasion, (2) resistance to competitors' offers, (3) resistance to adverse expert opinion, (4) willingness to wait for products to become available, (5) willingness to pay a premium and (6) willingness to recommend (word of mouth). In addition to the direct effects of service recovery on resolving customer problems and increasing customer satisfaction, and consequently increasing customer retention, service recovery also plays an important role in indirectly assisting service quality improvement in the long-run because it provides valuable information for organizations to improve their service systems and avoid future customer defections (Brown, Cowles & Tuten, 1996; Goodman, Ward, & Yanovsky, 1998).

On the other hand, although it is well supported that service recovery increases customer satisfaction, many studies show that increasing customer satisfaction does not necessarily increase retention and profit. Reichheld (1993) found that customer satisfaction

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was higher among the most unprofitable customers, and between 65% and 85% of customers who defect were satisfied or very satisfied with the organizations they left. Zeithaml (2000), citing Storbacka & Luukinen (1996), also found that customer satisfaction was higher among the most unprofitable customers. In the auto industry, satisfaction scores average from 85 to 95 percent, while repurchase rates average only 40 percent (Reichheld, 1993). Moreover, research suggests that even increasing customer retention does not always lead to increases in profitability. In some instances increasing the retention of unprofitable customers will reduce the company's profits (Christopher, Payne, & Ballantyne, 2002). Researchers argue that most customer satisfaction measurements are not designed to examine customer profitability, therefore better measurements should be developed to provide insight into the economic value of customers (e.g., Christopher, et al., 2002; Hepworth & Mateus, 1994; Reichheld, 1993; Zeithaml, 2000). In a study conducted in various industries by Reichheld (2003), the most effective predictors of future profitability are asking the customers the likelihood of recommending the product/service to others and the likelihood of repurchasing.

A national survey across different industries (e.g., IT, communication, clothing, residential service, newspaper subscription, etc.) reveals that nearly half the marketing managers and thirty percent of sales managers do not know how many customers their firms lost annually (Griffin and Lowenstein, 2001). Hepworth and Mateus (1994) report that fewer than thirty percent of two hundred Canadian companies' managers believed their customer satisfaction efforts added economic value to their bottom line, and fewer than two percent were able to translate the increased customer satisfaction into financial improvements. A study on marketing directors and senior marketing managers in 225 large UK organizations shows that companies are spending less on retaining customers than on acquiring new

customers, and it indicates that very few organizations measure the economic value of their customer retention strategies (Christopher, et al., 2002).

The focus of this research is on customer call centers. The purpose of a call center is to provide a feedback and response mechanism for customers of a company. Customers, usually dissatisfied customers, will contact the call center through a toll-free number. Customers have usually experienced a service failure and are giving the company an opportunity to provide a recovery response. This is a critical juncture in the service experience. The continued business of the customer may very likely be at stake based on the response provided by the call center personnel.

LITERATURE REVIEW

The impact of service recovery and customer retention on profitability has been researched in many industries. It is reported that, across most industries, an average of twenty percent of customers that encountered service failure switched to the competition (Goodman & Ward, 1993). Reversing this analysis, service recovery helps to retain revenue from at least one of every five complaints. Researchers admit that a relatively small increase in customer retention will drive relatively large increases in profits. A widely referenced study conducted by Reichheld and Sasser (1990), provided evidence from multiple companies in different industries that reducing customer defections by five percent could generate profit increases from twenty-five percent to eighty-five percent. As an average company loses between twenty to forty percent of its customers every year, simply cutting defections in half will more than double the company's growth rate (Griffin and Lowenstein, 2001; Reichheld & Sasser, 1990).

In addition to the direct profits generated by recovered customer's repurchases, Reichheld and Sasser (1990) suggest that other indirect economic benefits of customer retention such as less price sensitivity, greater willingness to purchase other products of the company and lower service costs should be taken into consideration to calculate a customer's real monetary value. In addition, service recovery can lower the total marketing expenditure by substantially reducing the cost of acquiring new customers.

One important benefit of calculating economic impact that has not been cited is using the economic impact results as a performance measure for a call-center, an operation within a company that handles various customer related issues via answering inbound phone calls from customers and/or placing outbound calls to customers. Although a call-center is only visible as an 800 number to the customers, it is indeed an important function of customer services to ensure customer satisfaction. Call-centers are typically cost-centers, there is generally no direct revenue reported by these units. By calculating economic impact, companies can get a better understanding of the economic contribution made by the efforts of the call center.

Although no research has been found from the perspective of determining the economic value of recovered hotel guests, previous research in other settings has suggested a few methods of measurement on the economic value of customer retention. Berry (1993) suggested that firms can measure the cost of poor service quality by multiply the number of customers who defect by the profit contribution of a customer. To take into consideration the concept of lifetime value, Reinartz and Kumar (2000) proposed the following formula in their research on a large catalog retailer:

$$LT\pi_i = \sum_{t=1}^{36} (GC_{ti} - C_{ti})(\frac{1}{1+0.125})^t$$

where $LT\pi_i$ = individual net present lifetime profit for 36 months

GC_{ti} = gross contribution in month t for customer i

C_{ti} = cost in month t for customer i (cost refers to the catalog mailing cost)

0.125 = monthly discount rate based on a 15% annual rate, which equals the

U.S. prime rate at the time of the study plus 7%.

Another approach was applied by Technical Assistance Research Programs (TARP), a Virginia-based customer service research and consulting firm, on the economic impact of call centers of different industries on customer retention (Goodman, et al., 1998). In this study, the customer satisfaction levels have been classified as satisfied (completely satisfied) and mollified (customers are not completed satisfied but the action was acceptable), and these two levels of satisfaction are computed separately based on different service recovery rates. To calculate the lost profits from complaints, the following equation is drawn from the TARP study:

$$LP = S \times P \times C \times SC \ (\text{or} \ MC) \times NPsc \ (\text{or} \ NPmc)$$

where LP = total lost profits due to service failure

S = number of sales per customer per year

P = profit per sale

C = number of customers who complained

SC = percentage of satisfied complaints

MC = percentage of mollified complaints

NPsc = percentage of customers who will not repurchase even if satisfied

NPmc = percentage of mollified customers who will not repurchase

The total lost profits can be obtained by adding up the lost profits from the satisfied complaints and the lost profits from the mollified complaints. It is noticeable that this study

does not compute the recovered revenue directly, while the method of calculating lost profits from the complaints could be easily reversed for calculating the economic value of recovered customers.

While the two previous measurements might be effective in their respective settings, they are not appropriate for studies on the call centers of the hotel or similar industries due to two significant limitations. First, profit or cost has to be known in both approaches: in Reinartz and Kumar's (2000) formula, unit cost data is required to derive the profit, and the TARP formula also asks for profit per sale information. However, using profits for a large brand, hotels or others, may be questionable since the profit margins of the various hotels may vary widely and the system-wide profit margin would have to be known. As a call center usually represents only one brand, the revenue recovered is more critical to brand management, and operating profits must be left to the individual operations. Second, while revenue could be substituted for profits in the TARP formula, the formula also proves problematic in that it only considers satisfied or mollified customers. Another possible outcome of the call-center interaction is that the customer is even more dissatisfied, or less likely to return after a call-center interaction because of the interaction or (lack of) outcome experienced. While the TARP formula accounts for satisfied or mollified customers who subsequently indicate that they will still not repurchase, it does not account for the customers that express dissatisfaction with the call-center interaction. Through proposing an approach incorporating all possible outcomes that could be produced by the interaction between customers and call centers, this research seeks to overcome the limitations of previous research and to more effectively measure economic impact of call centers in terms of revenue recovered.

METHODOLOGY

This study is designed to estimate the revenue recovered by a call center of a major mid-scale hotel company with over a thousand mid-scale properties worldwide. Telephone surveys were completed seven times over a six-year period, including two surveys completed in 2002 under the direction of the sponsoring company. Following Reichheld (2003), we asked the customer about their recent experiences with the call center and the likelihood of returning to a hotel of the company in each survey. The number of responses for each survey period ranged from 282 to 360. A goal of 360 responses was set to achieve a representative sample of what is a large population (annual calls to the company during the survey period ranged from 170,000 to 221,000). However, due to research budget constraints, the total responses may have been less than the 360-responses goal in a survey period. The variables in this study were based on the answers to three questions (number of nights per year in brand hotels, intent to return pre- and post-call center experience) of a much longer survey that addressed many aspects of the call center experience.

Revenue recovery was calculated with the following model for the first three survey periods. As the variable of interest in revenue recovery is intent to return, the scenario that most correlated with intent to return was selected as the appropriate method for calculating revenue recovery. The basic methodology is:

RR = ADR * RN * FSM * SEN * SA

where RR = revenue recovered

ADR = system-wide average daily rate (provided by company)

RN = annual room nights spend at hotel brand (survey response)

FSM = frequency of scale movement on intent to return

SEN = degree of scale movement

SA = an adjustment factor to project the sample to the population

With any new economic model, different scenarios should be tested to determine which scenario best represents the underlying data. For this study, four initial scenarios were tested. These scenarios are defined in Table 1.

(Insert Table 1 about here)

Scenario number one (ACTSEN) utilized actual annual room nights reported by each respondent in the calculation and a "sensitive" scale movement. SEN represents the degree of scale movement. This variable is necessitated by the consideration of various scenarios to be tested. Each question utilized a five-point scale with five representing "very likely" to return and one representing "very unlikely" to return. Each scale point is considered to represent a twenty-five percent interval in intention to return. Very likely is assigned a value of one hundred percent, likely a value of seventy-five percent, maybe a value of fifty percent, unlikely a value of twenty-five percent and very unlikely a value of zero percent. The "degree" of recovery is based on the movement on the scale between pre and post-intent to return measures. If a respondent's post-intent to return shifted one place, from maybe to likely (or unlikely), they are considered to be "twenty-five percent recovered (or lost)," and twenty-five percent of their annual room nights are recovered (or lost). Two of the scenarios will consider a "sensitive" scale shift, a degree of recovery or loss is considered based on any scale movement, both positive (1 to 5, 2 to 5, 3 to 5, 4 to 5, 1 to 4, 2 to 4, 3 to 4, 1 to 3, 2 to 3, 1 to 2) and negative (reverse of all possibilities listed previously). The other scenario utilizing

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the sensitive scale shift is the AVGSEN scenario. This, in addition to the sensitive scale calculation, uses the average annual room nights reported by the entire sample rather than calculating the actual annual room nights by individual case. This may reduce the effect of outliers in the actual annual room night calculations.

Previous research suggests that the relationship between loyalty behaviors including intent to return and profitability may not be linear: it is possible that slight movements of one place on the scale are not an adequate indicator of any change of actual behavior, and change may be only indicated by a more significant shift (Reichheld, 2003). To take this possibility into consideration, two other scenarios consider a "general" rather than previously stated "sensitive" scale movement. Only scale movements of two or more places, positive (1 to 5, 2 to 5, 3 to 5, 1 to 4, 2 to 4, and 1 to 3) and negative (reverse of all possibilities listed previously) are considered. The ACTGEN scenario uses the general scale movement calculation with the actual annual room nights and the AVGGEN scenario uses the general scale movement calculation with the average annual room nights.

The frequency measure (FSM) in the formula is the actual number of cases showing scale movement. For example, if two respondents indicate a movement from two on the pre-intent to return to four on the post-intent to return then the frequency for this scale movement is two. The frequency is determined for each of the possible scale movements, both positive (1 to 5, 2 to 5, 3 to 5, 4 to 5, 1 to 4, 2 to 4, 3 to 4, 1 to 3, 2 to 3, 1 to 2) and negative (reverse of all possibilities listed previously). The sample adjustment measure (SA) is determined by dividing the total number of annual calls received by the company by the sample size. The revenue recovery indicated in the sample is then multiplied by this factor to get the revenue recovery on an annualized basis for the company.

RESULTS AND DISCUSSION

The scenario results for the first three survey periods (1999-2001) are presented in Table 2. The 1999 survey was completed in the Fall of 1999 and the 2000 survey was completed in the Spring of 2000. The sponsoring company did not have updated system-wide numbers for the 2000 survey so 1999 numbers were used. It can be seen from a visual review that actual room night scenarios, ACTSEN and ACTGEN, do not best represent the intent to return measure as the 2001 revenue recovery figures are less than 1999 while the intent to return has increased by a greater margin. Between the AVGSEN and AVGGEN scenarios, the correlation analysis of those measures to the changes in intent to return supports the AVGSEN scenario (correlation coefficient of .99 for AVGSEN and .87 for AVGGEN). While correlation is not the sole criteria for scenario selection, it does support the visual selection of AVGSEN as the best scenario to measure economic impact.

(Insert Table 2 about here)

Table 3 presents the findings for the seven survey periods using the AVGSEN scenario. The revenue recovery has been positive for all seven survey periods, ranging from $2.1 million to $7.5 million. All of the pre and post-intent to return measures were statistically significant except for the first year as shown in Table 3. Based on other information collected in the 1999 survey, the company began an aggressive plan to offer compensation in the form of gift certificates to more callers. The result can be seen the following year with the 250% increase in revenue recovery from $2.1 million to $7.5 million.

After that year, the company reduced the gift certificate compensation due to internal considerations. While the revenue recovery did decrease, the statistical impact was still significant in pre and post-intent to return measures. The 2004 increase is directly attributable to the increased average daily rate and call volume.

(Insert Table 3 about here)

To determine a true economic impact, the call center would reduce the revenue recovery by the cost of the call center. While that information was not made available to this research, the company has stated that, in all cases, the revenue recovered exceeded the annual cost of the call center. The final economic impact would then have to consider the incremental recovery reduced to address individual profit margins at the hotels, generally ranging from twenty to fifty percent. While it seems that the revenue recovery is being reduced significantly to get to economic impact, the "hidden" benefits need to be considered in the work. First, if one alternative is to not have a call center, the dissatisfaction of callers would be increased by the aggravation of not finding a call center outlet. The calculation in this case would start with the cost of the call center gained, but then would have to factor in the cost of the dissatisfied guests who would not find the call center outlet. This would be extremely difficult to do, and logic would suggest that this number would be tremendous and the practice would be unacceptable. The first purpose of having a call center is to provide an outlet, what will really distinguish the operation is the effectiveness in recovering revenue for the brand. A mediocre, poorly trained call center will provide an outlet for the guest but may not generate revenue to cover its costs. If the argument is that a company must provide the

outlet, it is in the best interest of the company to study how the call center can be more effective in recovering revenue. If the revenue recovery is positive, the call center truly justifies its existence in the structure of brand management.

CONCLUSION AND SUGGESTION FOR FUTURE RESEARCH

This research investigates the revenue recovered by the call center of a major hotel company. Through proposing a methodology to measure revenue recovery, this study is expected to expand on the previous research on the measurement of service recovery and customer profitability. The results of this six-year study show that the studied call center has continuously recovered significant revenue for the brand. The findings indicate that revenue recovery, if appropriately measured, is a reliable indicator of the effectiveness of the call center. As the revenue recovery proves essential in documenting the value and efforts of the call center to brand affiliates, the results of this research suggest that a call center could undertake the revenue recovery exercise to determine how effective it is in recovering revenue for the brand. Those who ultimately pay for the call center can therefore see that the call center operation is having a positive impact on brand performance.

While the proposed methodology of measuring revenue recovery is proven effective, the findings of this research should be interpreted with caution due to its limitations. First, a more accurate calculation on the economic value of a call center would need to subtract the cost of the call center from the revenue it recovers. When such data becomes available in the future, continued research measuring both revenue recovery and the cost of the call center would reveal a more complete picture on the effectiveness of the call center. In addition, although the studied company is fairly representative in the lodging industry, its product

focuses primarily on mid-scale hotels. However, it is reasonable to expect that customers of different types of hotels (e.g., luxury, upscale, mid-scale, economy) may have different expectations and thus may respond differently to the efforts of the call centers. Future research that studies multiple brands and multiple companies with different hotel types would be very informative in this regard. Furthermore, revenue recovery is only a measurement of the direct economic impact of the call center. Indirect economic outcomes, such as generating referred business from positive word of mouth, providing information to improve the service product and consequently reducing future customer defections, etc., could also be important benefits of the call center. Future research might be extended to take the indirect benefits into consideration and therefore gain deeper understanding on the economic value of the call center.

REFERENCES

Griffin, J., & Lowenstein, M. W. (2001). *Customer winback : How to recapture lost customers and keep them loyal*. San Francisco, CA: Jossey-Bass Publishers.

Berry, L. (1993). Improving America's service. *Marketing Management, 1*(3), 28-38.

Brown, S., Cowles, D., & Tuten, T. (1996). Service recovery: Its value and limitations as a retail strategy. *International Journal of Service Industry Management, 7*(5), 32-42.

Buttle, F., & Burton, J. (2002). Does service failure influence customer loyalty? *Journal of Consumer Behavior, 1*(3), 217-227.

Christopher, M., Payne, A., & Ballantyne, D. (2002). *Relationship marketing: Creating stakeholder value.* Woburn, MA: Butterworth-Heinemann.

Goodman, J., & Ward, D. (1993). The importance of customer satisfaction. *Direct Marketing, 56*(8), 23-26.

Goodman, J., Ward, D., & Yanovsky, M. (1998). Cents and sensibility: Profiting from customer service. *TeleProfessinal Magazine, 11*(8).

Hepworth, M., & Mateus, P. (1994). Connecting customer loyalty to the bottom line. *Canadian Business Review, 21*(4), 40-43.

Hogan, J., Lemon, K., & Libai, B. (2003). What is the true value of a lost customer? *Journal of Service Research, 5*(3), 196-208.

Narayandas, D. (1998). Measuring and managing the benefits of customer retention. *Journal of Service Research, 1*(2), 108-128.

Reichheld, F. (1993). Loyalty-based management. *Harvard Business Review, 71*(March-April), 64-74.

Reichheld, F. (2003). The one number you need to grow. *Harvard Business Review*, 81 (Demember), 46-54.

Reichheld, F. & Sasser, W. (1990). Zero defections: Quality comes to services. *Harvard Business Review, 68*(September-October), 105-111.

Reinartz, W., & Kumar, V. (2000). On the profitability of long-life customers in a noncontractual setting: An empirical investigation and implications for marketing. *Journal of Marketing, 64*(4), 17-35.

Zeithaml, V. (2000). Service quality, profitability, and the economic worth of customers: What we know and what we need to learn. *Academy of Marketing Science, 28*(1), 67-85.

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Table 1.
Definitions of scenarios.

Abbreviation	Definition
ACT	Actual room nights for each case used in the calculation
AVG	Average room nights for the entire sample used in the calculation
SEN	Any scale movement (i.e., 2 to 3, 5 to 4) used in the calculation
GEN	Only scale movements of two or more (i.e., 2 to 4, 5 to 3) used in the calculation
ACTSEN	Actual room nights with a sensitive scale
AVGSEN	Average room nights with a sensitive scale
ACTGEN	Actual room nights with a general scale
AVGGEN	Average room nights with a general scale

Table 2.
Revenue recovery for three survey periods (1999-2001).

	1999	2000	2001
Pre-guest relations intent to return	2.95	2.88	2.82
Post-guest relations intent to return	3.07	3.27[a]	3.09[b]
Average Daily Rate[c]	64.92	64.92	71.22
Volume of phone calls[c]	188,100	188,100	180,000
Avg. night used for "avg." measure	6.05	6.71[d]	6.40[e]
Actsen	$3,708,915	$11,450,242	$3,689,555
Avgsen	$2,146,333	$7,521,190	$4,621,340
Actgen	$3,182,141	$8,698,107	$910,024
Avggen	$1,040,646	$5,621,900	$1,392,733

a. statistically significant at p<.001
b. statistically significant at p<.01
c. Information received from sponsoring company
d. Actual number of 7.64 reduced due to outliers
e. Actual number of 7.19 reduced due to outliers

Table 3.
Revenue recovery for entire study period

	1999	2000	2001	2002S	2002F	2003	2004
Pre-guest relations intent to return	2.95	2.88	2.82	2.99	2.91	2.89	2.62
Post-guest relations intent to return	3.07	3.27	3.09	3.20	3.06	3.11	2.85
Revenue recovery	$2,146,333	$7,521,190	$4,621,340	$4,176,936	$3,425,047	$4,871,999	$6,349,719
Average Daily Rate[a]	64.92	64.92	71.22	70.87	72.48	70.65	87.97
Volume of phone calls[a]	188,100	188,100	180,000	186,000	187,000	189,500	211,226
Avg. night used for "avg." measure	6.05	6.71[b]	6.40[c]	6.00	6.83	6.68[d]	6.10

1999	not statistically significant
2000	statistically significant at $p<.001$
2001	statistically significant at $p<.001$
2002S	statistically significant at $p<.001$
2002F	statistically significant at $p<.05$
2003	statistically significant at $p<.001$
2004	statistically significant at $p<.01$

a. Information received from sponsoring company
b. Actual number of 7.64 reduced due to outliers
c. Actual number of 7.19 reduced due to outliers
d. Actual number of 7.62 reduced due to outliers