The Service Recovery Strategies, Customer Satisfaction, Customer Loyalty

Gye-Soo Kim[†]

Department of Business Administration, Semyung University
579 Shinwol-dong, Jecheon Chungbuk 390-711, Korea
Tel: +82+43+649+1242, E-mail: gskim@semyung.ac.kr

Abstract

This paper reports on a study investigating key attributes of service recovery strategies in internet shopping mall. In theses day, service recovery has received important attention in the service operation management literature. Service recovery involves those actions designed to resolve problems, alter negative attitudes of dissatisfied consumers and to ultimately retain these customers.

The study examined that service recovery strategies (apology, compensation) impact on the customer satisfaction. And customer satisfaction impacts on customer loyalty with SEM (Structural Equation Modeling). This study can be used a strategic implication for internet shopping mall managers to develop successful service recovery strategies.

Key Words: Service Recovery Strategies, SEM (Structural Equation Modeling), Customer
Satisfaction, Customer Loyalty

1. Introduction

Loyal customers are a vital asset of service companies. The most effective way to ensure repeat customers is to provide a product and service that meets or exceeds the customer's expectations every time (Miller et al., 2000). Although this fact is important, effective application of recovery strategies may enable eservice managers to maintain or even increase loyalty. Generally, Good service recovery not only turns angry and frustrated customers into loyal ones, but it also has the potential to create more goodwill than if things do go wrong.

Hocutt et al. (1997) found that when the customer causes the service failure, satisfaction (complaint) levels are higher (lower) after service recovery efforts than in situations where no service failure occurs. Indeed, Hart et al. (1990) stress that a good recovery can turn angry, frustrated customers into loyal ones.

This paper provides a cause and result research model for service managers to get im-

---

†Corresponding Author

plication a service operations perspective as well as a turning point for a researcher in service operation management to identify recovery strategies.

When one shops on the Web, Service recovery is a concern. However, there is no further study on service recovery about internet shopping in South Korea. So, The purpose of this study draws on the service failure and service recovery literature to develop and experimentally test a conceptual research model that link customer satisfaction and customer loyalty.

2. Literature Review

2.1 Service Recovery

A service failure occurs when the quality of service delivery fall short of customers' expectations (Bell and Zemke, 1987). As service mistakes are an unavoidable feature of service delivery just lie all human endeavors, service firms must have service recovery strategies to recover service failures. Service recovery involves those actions designed to resolve problem, alter negative attitudes of dissatisfied consumers and to ultimately retain these customers (Miller et al., 2000).

According to Miller et al. (2000), service recovery frame work typically consist of three phases that are pre-recovery phase, immediate recovery phase, and follow-up recovery phase.
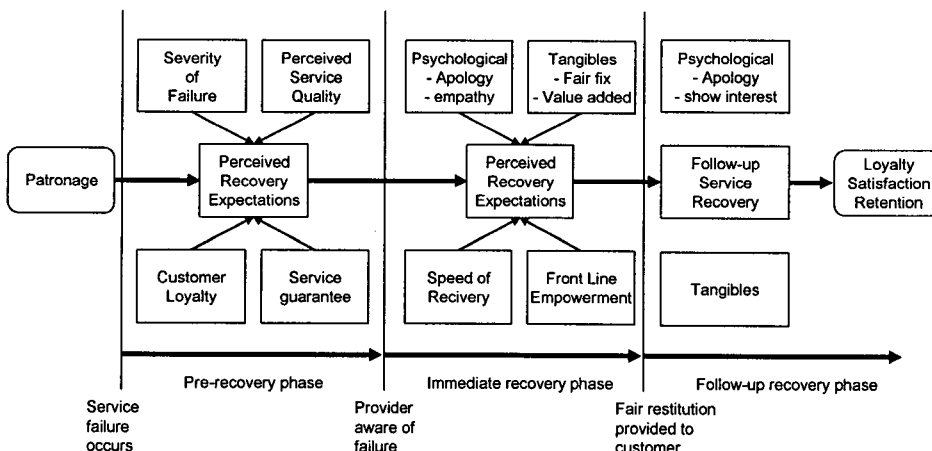

Figure 1. A service recovery framework

Miller et al. (2000) have discussed what constitutes service recovery strategies which are psychological, tangibles, speed of recovery, and front line empowerment. Bell and zemke (1987) proposed five ingredients for service recovery: apology, urgent reinstatement, empathy,

symbolic atonement. A study by Bitner et al. (1990) suggested four key elements of suc-
cessful service recovery strategies-acknowledgement, explanation, apology, and compensation.
Kelly et al. (1993) identified seven recovery strategies: discount, correction, management/
employee intervention, correction plus, replacement, apology, and refund. Their research
found that discount, correction plus, management/employee intervention and replacement were
particularly more effective, whereas apology and refund were less effective. Johnston (1995)
found that most incidents where customers were delighted by the outcomes of service recov-
ery three key strategies were identified. These were empathy, information, and action.
Levesque and McDogugall (2000), Hart et al. (1990) service recovery strategies typically
consist of three types of action that are used either singly or in combination: (1) apologize
(acknowledging the problem); (2) assistance (fixing the problem); and (3) compensation
(paying for the costs of the problem).

   After review of the literatures, this thesis suggests three service recovery strategies: apolo-
gy, assistance (fixing the problem), compensation.

2.2 Customer Satisfaction

   Customer satisfaction is a customer's overall or global judgment regarding the extent to
which product or service performance matches expectations (Anderson and Sullivan, 1993).
Customer satisfaction can be described as a process. Currently, the most widely adopted of
the process theories is that of "expectancy disconfirmation," in which satisfaction is view as
largely based on meeting or exceeding expectation (Erevelles and Leavitt, 1992 ; Tse et al.,
1990).

   According to disconfirmation literature, when customer's perceived experience exceeds a
customer's expected outcome, positive disconfirmation results. Conversely, when expectations
are not met, customers experience negative disconfirmation (Bearden and Teel, 1983). Research-
ers also have shown that satisfaction is positively related to disconfirmation (Oliver and
Swan, 1989). In other words, when customers receive more benefits than they expected from
a transformation, they experience greater levels of satisfaction. The service recovery literature
shows that this disconfirmation model is appropriate in recovery situations as well (Boshoff,
1997). Understanding satisfaction with remedies is important because, as Spreng et al. (1995)
show, customer satisfaction with service failure recovery has a grater impact on overall sat-
isfaction than does any other individual aspect of the outcome of the service delivery.

2.3 Customer Loyalty

   Leading companies in business know that loyalty is a competitive necessity. Without the
glue of customer loyalty, even the best-designed e-business model will collapse. Building su-
perior customer loyalty is no longer just one of many ways to boost profits. Moreover, loy-

alty plays a key liaison role between trust and more profits. Internet companies understand that building trust leads to more enduring relationships while a quick sale may simply leave a customer feeling cheated.

Today loyalty is essential for survival. Therefore, in this paper, I examine the extent to which customer satisfaction fosters customer loyalty. Keller (1993) suggested that loyalty is present when favorable attitudes for the brand are manifested in repeat buying behavior. Gremler(1995) suggested that both attitudinal and behavioral dimensions needed to incorporated in measuring loyalty. Smith and Bolton (1998) complete this sequence by showing that satisfaction after a service recovery affects retention and word-of-mouth behaviors. The service recovery level should have a main effect on repurchase intentions. Therefore, for present research purpose, loyalty is defined as the customer's favorable attitude toward an electronic business resulting in repeat buying behavior.

3. Research Model and Hypothesis

3.1 Research Model

Service managers are interested how service recoveries become customer satisfaction, customer loyalty. The study uses research model by a number of authors but most particularly those of Mill et al. (2000) and Heskett et al. (1997). The research model in this study is illustrated in Figure 2.
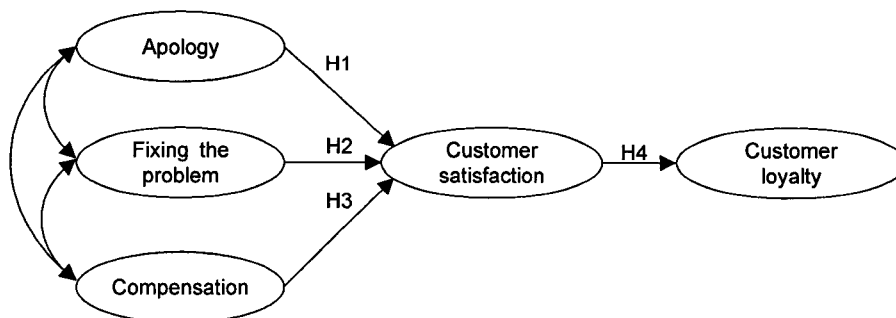

Figure 2. A service recovery research model

3.2 Hypothesis

3.2.1 Relationship between Service Recovery Strategies and Customer Satisfaction

According to service recovery literature, when service recoveries outcome exceed a customer's expected outcome, positive disconfirmation result. Hart et al. (1990) and Bitner et al. (1990) service recovery strategies typically consist of three types of action that are used ei-

ther singly or in combination: (1) apologize (acknowledging the problem); (2) assistance (fixing the problem); and (3) compensation (paying for the costs of the problem). Hocutt et al. (1997) found that when the customer causes the service failure, satisfaction (complaint) levels are higher (lower) after service recovery efforts than in situations where no service failure occurs. Hart et al. (1990) suggested that effective service recovery can enhance customer satisfaction and prevent customer defection. Therefore, I hypothesize:

H1: Apology will affect the customer satisfaction.
H2: Fixing the problem will affect the customer satisfaction.
H3: Compensation will affect the customer satisfaction.

3.2.2 Relationship between Customer Satisfaction and Customer Loyalty

Building on the customer satisfaction literature, better service recoveries increase customer's propensity to return to the same service provider (Bitner, 1990; Boulding et al., 1993; Smith and Bolton, 1998). Smith and Bolton (1998) complete this sequence by showing that satisfaction after a service recovery affects customer loyalty (retention and word-of-mouth behaviors). Therefore, I hypothesize:

H4: Customer satisfaction will affect the customer loyalty.

4. Methodology

4.1 Survey Instrument

Development of the measurement scales for each construct in the model proceeded through a series of steps. A review of the relevant literature was first conducted to identify available measures based on the measures derived from the literature. And I pre-tested to Interviews of eleven customers who used the on line shopping and experienced the service failure. The interviews were particularly critical for the development of meaningful measure of Apology, Fixing the problem, Compensation, Customer satisfaction. The items were measured on a five-point Likert's scale with anchors ranging from strongly disagree (1) to strongly agree (5) in order to ensure high statistical variability among the survey response. The final survey instrument incorporated feedback received from internet heavy users, which enhanced the clarity of the instrument. This process yielded a survey instrument that was judged to exhibit high content validity.

4.2 Sample

Empirical data was obtained through random survey customers, most of whom experienced

service failure who had knowledge of internet shopping mall service in South Korea. The sample was selected randomly. A total of 165 customers responded. Cases with missing value were subsequently dropped form the analysis.

4.3 Data Analysis

The data were subjected to a confirmatory factor analysis using the AMOS 7.0 structural equation modeling software. Following Anderson and Gerbing's (1988) work, the model was tested using a two-stage structural equation model. First I performed Confirmatory Factor Analysis (CFA) to evaluate construct validity regarding convergent and discriminant validity. In the second, we performed structural equation analysis to test research hypotheses empirically.

Table 1. Construct Measurement

Constructs	Variables	Supporting literature
Apology	I believe that internet shopping mall has cordially sorry. I feel that this company was interested in me. This company thinks of customer oriented. This company has the etiquette.	Miller et al. (2000) Hart et al. (1990) Bitner et al. (1990) Hocutt et al. (1997)
Fixing the problem	The company solved the problem to your satisfaction. The company shows a sincere. The company has the effective service recovery process. The company has the credible service recovery process..	Miller et al. (2000) Hart et al. (1990) Bitner et al. (1990) Hocutt et al. (1997)
Compensation	The compensation for real and perceived damages is proper The compensation is fair. The compensation is pertinent The quality of compensation is excellent.	Miller et al. (2000) Hart et al. (1990) Bitner et al. (1990) Hocutt et al. (1997)
Customer Satisfaction	I am delighted with internet shopping mall's service recovery. I am satisfied with service recovery process. I am satisfied with service response system I received more benefit than I expected Overall, I am satisfied with this company.	Anderson, Sullivan (1993) Leuthesser, Kohli (1995)
Loyalty	I would recommend that friends and relatives continue using internet shopping mall. I would recommend others internet shopping mall. I would recommend others this company's service. If I have to do it over again, I would choose this shopping mall.	Cronin, Morris (1989) Hunt (1994)

5. Results

5.1 Measurement Model

The confirmatory factor analysis was completed with maximum likelihood estimation. In

this study, one item (I believe that internet shopping mall has cordially sorry) of apology was deleted because item factor loading was lower than 0.7. The measurement model offered an acceptable fit to the data ($\chi^2 = 214.091$, df=160, χ^2/df = 1.338, p = 0.03 < α = 0.05, GFI = 0.871, CFI = 0.963, RMR = 0.038, RMSEA = 0.049). Item factor loadings and squared multiple correlations from the confirmatory factor analysis completed on the data collected in internet shopping mall service recovery perception is shown in Table 2.

Table 2. Items, factor loadings and squared multiple correlations (SMC)

Constructs	Variables	Factor-loading	SMC	Reliability
Apology	I believe that internet shopping mall has cordially sorry I feel that this company was interested in me This company thinks of customer oriented. This company has the etiquette,	Deleted 0.735 0.562 0.735	Deleted 0.540 0.516 0.661	0.78
Fixing the problem	The company solved the problem to your satisfaction. The company shows a sincere. The company has the effective service recovery process. The company has the credible service recovery process.	0.601 0.648 0.831 0.837	0.520 0.558 0.705 0.756	0.844
Compensation	The compensation for real and perceived damages is proper The compensation is fair. The compensation is pertinent The quality of compensation is excellent.	0.746 0.840 0.834 0.688	0.723 0.832 0.786 0.675	0.895
Customer Satisfaction	I am delighted with internet shopping mall's service recovery. I am satisfied with service recovery process. I am satisfied with service response system I received more benefit than I expected Overall, I am satisfied with this company.	0.796 0.825 0.621 0.783 0.674	0.681 0.756 0.543 0.761 0.665	0.909
Loyalty	I would recommend that friends and relatives continue using internet shopping mall. I would recommend others internet shopping mall I would recommend others this company's service. If I have to do it over again, I would choose this shopping mall.	0.705 0.866 0.874 0.654	0.643 0.757 0.765 0.578	0.901

Discriminant validity was established using the procedures outlined by Fornell and Laker (1981), Table 3 shows the correlations between the latent variables and the average variance extracted (AVE) of each construct is shown on the diagonal. Fornell and Lacker (1981) prescribe that the squared correlation between constructs must be less than the average variance extracted (AVE) of each underlying construct in order for the constructs to have discriminant validity. In this research, there was no case was the square of a correlation between constructs greater than average variance extracted of the constructs (see Table 2). Fornell and Lacker (1981) also suggest that convergent validity exists when item factor loadings are

greater than 0.7 and item squared multiple correlations are greater than 0.5. In this study, one item (I believe that internet shopping mall has cordially sorry) of apology was deleted because item factor loading was lower than 0.7. After one item deleted, a confirmatory factor model was tested. The resulting statistics was strong evidence of both discriminant (see table 3) and convergent validity (see Table 3).

On the basis of these results, This study summed the scores on the items of each construct. The mean, standard deviations, and correlation matrix are shown in Table 3.

Table 3. Means (Standard Deviation) and Correlation Matrix

	1	2	3	4	5
Apology (#1)	0.543				
Fixing the problem (#2)	0.449*	0.581			
Compensation (#3)	0.463*	0.520*	0.683		
Customer Satisfaction (#4)	0.504*	0.535*	0.588*	0.596	
Loyalty (#5)	0.297*	0.394*	0.354*	0.566*	0.698
Mean	2.618	2.733	2.706	2.777	3.000
Std. Deviation	0.712	0.712	0.697	0.628	0.711

* Correlation coefficients are significant at $\alpha = 0.05$ level.

5.2 Path Model Results

The followings are the overall model fit and the tests of each research hypotheses. As shown, the results of the full model (structural and measurement models) indicated fit indices: $\chi^2 = 216.290$, degree of freedom = 163, provability level = 0.003, RMR = 0.038, GFI = 0.869, AGFI = 0.831, NNFI = 0.957, CFI = 0.963, RMSEA = 0.048). The adequacy of the structural equation models was evaluated on the criteria of overall fit with the data.

Next, we evaluated the individual paths of the model. These results are summarized in Table 4.

Table 4. Path model results

Paths	Estimate	t-values	p	Assessment (p ≤ 0.05)
H1 Apology → customer satisfaction	0.226	1.978	0.048	H1 was supported
H2 Fixing the problem → customer satisfaction	0.181	1.332	0.183	H2 was not supported
H3 Compensation → customer satisfaction	0.355	4.030	0.000	H3 was supported
H4 Customer satisfaction → loyalty	0.702	7.123	0.000	H4 was supported

The effect of apology on customer satisfaction was significant ($\gamma = 0.226$, $p < 0.05$). Therefore, H1 was supported by the data. The effect of fixing the problem on customer satisfaction was not significant ($\gamma = 0.181$, $p > 0.05$). Therefore, H2 was not supported by the data. The effect of compensation on customer satisfaction was significant ($\gamma = 0.355$, $p < 0.05$). Therefore, H3 was supported by the data. These results showed that the effect of compensation in service recovery strategies is very important. And apology's influence is the second factor on customer satisfaction. But the effect of fixing the problem on customer was not significant. These results showed that in critical situations, compensation is a more effective than apology and fixing the problem.

The effect of customer satisfaction on loyalty was significant ($\gamma = 0.702$, $p < 0.05$). Therefore, H4 was supported by the data. The results thus demonstrate that customer satisfaction is predictor factor on loyalty.

6. Discussion and Limitations

Service recovery strategies refer to the actions that firms undertake to respond to service failures. Service recovery is an important and core process in all organization. In this research showed that compensation, and fixing the problem are the most typical strategies develop by the internet shopping providers. Compensation could serve as an important factor to improve customers' service disconfirmation in internet shopping mall. Therefore, in the internet shopping, tangible compensation is viewed to be more favorably.

This study used a small and convenient sample in a internet shopping mall. In the future research, examining the interrelationships between service strategies and cultural dimensions is needed in service operation research. And longitudinal studies may be needed to assess causality.

References

1. Anderson, E. W. and Sullivan, M.(1993), "The antecedents and consequences of customer-satisfaction, market share, and profitability: findings from Sweden," *Journal of Marketing*, Vol. 58, No. 3, pp. 53-66.

2. Bearden, W. O. and Teel, J. E.(1983), "Selected determinants of consumer satisfaction and complaint reports," *Journal of marketing research*, Vol. 12, No. 1, pp. 21-28.

3. Bell, C. R. and Zemke, R. E.(1987), "Service breakdown: the road to recovery," *Management Review* October, pp. 32-35.

4. Bitner, M. J.(1990), "Evaluating service encounters: the effects of physical surroundings

and employee responses," *Journal of marketing*, Vol. 54, No. 2, p. 69.

5. Bitner, M. J., Booms, Booms, B. H., and Tetreault, M. S.(1990), "The service encounter: diagnosing favorable and unfavorable incidents," *Journal of Marketing*, Vol. 58, pp. 71-84.

6. Boshoff, C.(1997), "An experimental study of service recovery options," *International journal of industrial management*, Vol. 8, No. 2, pp. 110-130.

7. Cronin, J. J. and Morris, M. H.(1989), "Satisfying customer expectations: the effect on conflict and repurchase intensions industrial marketing channels," *Journal of Academy of Marketing Science*, Vol. 17, No. 1, pp. 41-49.

8. Erevelles, S. and Leavitt, C.(1992), "A comparison of current models of consumer satisfaction/dissatisfaction," *Journal of consumer satisfaction*, dissatisfaction and complain behavior, Vol. 5, pp. 104-114.

9. Fornell, C. and Lacker, D.(1981), "Evaluating structural equation models with unobservable variables and measurement error," *Journal of marketing research*, Vol. 18, pp. 39-50.

10. Gremler, D. D.(1995), "The effect of satisfaction, switching costs, and interpersonal bonds on service quality," Unpublished doctoral dissertation, Arizona State University, Tucson, Arizona

11. Hart, C. W. L., Heskett, J. L. W., and Sasser Jr E.(1990), "The profitable art of service recovery," *Harvard business review*, July-August, pp. 148-156.

12. Heskett, J. L., Jone, T. O., Loveman, G. W., Saser, W. E., and Schlesinger, L. A.(1994), "Putting the service-profit chain to work," *Harvard Business Review*, Vol. 72, No. 2, pp. 164-.

13. Hocutt, M. A., Chakrabotry, G., and Mowen, J.(1997), "The impact of perceived justice on customer satisfaction and intention to complain in a service recovery," *Advances in consumer research*, Vol. 24, pp. 457-463.

14. Hunt, S. D.(1997), "Competing through relationships: Grounding relationship marketing in resource-advantage theory," *Journal of Marketing Management*, Vol. 13, pp. 431-445.

15. Johnston, R.(1995), "Service failure and recovery: impact, attributes and processes, Advance in Services Marketing and Management," *Research and Practice*, Vol. 4, pp. 211-228.

16. Keller, K. L.(1993), "Conceptualizing, measuring, and managing customer based brand equity," *Journal of Marketing*, Vol. 57, pp. 1-22.

17. Kelly, S. W., Hoffman, K. D., and Davis, M. A.(1993), "A typology of retail failures and recoveries," *Journal of retailing*, Vol. 69, pp. 429-452.

18. Leuthesser, L. and Kohli, A. K.(1995), "Relational behavior in business markets," *Journal of Business Research*, Vol. 34, No. 1, pp. 221-233.

19. Levesque, T. G. and McDogugall, G. H. G.(2000), "Service problems and recovery strategies: an experiment," *Canada Journal of Administration Science*, Vol. 17, No. 1, pp. 20-37.

20. Miller, J. L., Craighead, C. W., and Karwan, K. R.(2000), "Service recovery: a frame-work and empirical investigation," *Journal of Operations Management*, Vol. 18, pp. 387-400.

21. Oliver, R. L. and Swan, J. E.(1989), "Consumer perceptions of interpersonal equity and satisfaction," *Journal of marketing*, Vol. 53, No. 2, p. 21.

22. Smith, A. K. and Bolton, R. N.(1998), "An experimental investigation of customer re-actions to service failure and recovery encounters: paradox of peril?" *Journal of service research*, Vol. 1, No. 1, pp. 65-81.

23. Smith, A. K. and Bolton, R. N.(1998), "An experimental investigation of customer re-actions to service failure and recovery encounters: paradox or peril?" *Journal of service research* Vol. 1, No. 1, pp. 65-81.

24. Spreng, R. A., Harrell, G. D., and Mackoy, R. D.(1995), "Service recovery: impact on satisfaction and intentions," *Journal of service marketing*, Vol. 9, No. 1, p. 15.

25. Tse, D. K., Nicosia, F. M., and Wilton, P. C.(1990), "Consumer satisfaction formation: An extension," *Journal of Marketing Research*, Vol. 25, pp. 204-212.