



# RELATIONSHIP OF SERVICE RECOVERY QUALITY AND CUSTOMER SATISFACTION IN ONLINE RETAILING OF FRUITS AND VEGETABLES IN SURAT CITY: SPECIAL REFERENCE TO JIO MART

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## **Abstract:**

The retail landscape has transformed as a result of the growing usage of the internet. The majority of products and services are now accessible over the internet. Consumers may now find everything they desire with only a few mouse clicks in the age of internet purchasing. Even daily necessities, like fruits and vegetables, are no longer excluded. Companies, on the other hand, are focused on earning and sustaining customer e-satisfaction to stay competitive in the market, owing to increased competition. Satisfaction of customers in online shopping is determined by a number of variables. Service quality is one of the important factors among them. Online retailing is a technology-driven service and on the other hand when retailing of perishable product like fruits and vegetables are involved service failure is unavoidable. Service failure may result in customer dissatisfaction. So, it becomes very important to handle such service failures by the organisations. To handle such service failures more effectively and to frame the strategies to satisfy those customers, who encountered certain problems in the process of service delivery it becomes necessary to know how consumers perceive such service recovery by the organization. This paper attempts to measure online service recovery in the context of online retailing for fruits and vegetables in Surat city by using E-Recs-QUAL scale developed by Parasuraman et al. (2005) and relationship these factors with customer satisfaction in retailing of fruits and vegetables. Primary data was collected from customers who purchased fruits and vegetables online from Jio Mart and faced some problem in service delivery process. There were a total of 104 responses. The factors determining online retail recovery service quality were discovered using exploratory factor analysis. Responsiveness, Contact and Compensation came out as factors of recovery service quality in online retailing. To study the impact of these recovery quality dimensions on customer satisfaction, regression was used. All the factors found significantly contributing towards customer satisfaction and the factor contact was found to be the most important factor in service recovery.

**Key words:** online retailing, fruits and vegetables, e-service recovery quality, e-satisfaction

## 1. INTRODUCTION:

Services have occupied a very important place in the economy. Service industry is growing in importance and it seems to continue in future also. Importance of services portion is increasing in the industries like retailing in the era of internet and online retailing. Online retailing is becoming a competitive business in this global environment as a result of technological advancements in the recent years. The increasing adoption of internet services in India has altered retailing industry's trends and patterns. Customers choose to shop online rather than in physical stores as a result of technology advancements in the retail industry (Wang et al. 2011). Consumers interact virtually with the organizations in case of online retailing. As this service becomes technology driven, it becomes difficult task to satisfy all the customers at the first attempt. Particularly when retailing of perishable product like fruits and vegetables are involved service failure is unavoidable. There is a high possibility of issues or dissatisfaction on the side of customers. When a service fails to meet a customer's expectations, it is referred to as a service failure (Hoffman and Bateson, 1997). Grönroos (1982) defined service recovery as "the measure taken by a service provider in regard to a service breakdown or failure." Successful service recovery is the key strategy to sustain and nurture customer loyalty to the organization. (Brown, 2000). The objective of recovery action is to regain the customer confidence and trust, after a service failure (McCullough et. al. 2000). It is an accepted fact that it's good to maintain existing customers than to attract new ones. So, if something goes wrong during the service delivery phase, service providers should take steps to recover these dissatisfied customers. To obtain a competitive edge, service providers should concentrate on developing effective service recovery plans in order to generate trust in online services. As a result, service recovery is critical, allowing online retailers to retain long-term relationships by increasing customer satisfaction, loyalty, and retention. Furthermore, service recovery aids in the improvement of service providers' profitability and reputation (Kuo et al., 2012; Wang et al. 2011; Holloway et al., 2003; Miller et al. 2000). As a result, aspect of service recovery has got lot of consideration. (Lewis et al., 2004; Tax et al., 1998).

## 2. CONCEPTUAL FRAMEWORK:

This part goes through the conceptual frameworks of this study, such as online service recovery and customer satisfaction.

### 2.1 Service recovery

Service recovery is described as "an organization's efforts in reaction to a service failure." Service failure may be the result of variety of reasons like lack of availability of service at the appropriate time, failure in the service result, a delay in delivery of the service, irresponsibility of the staff etc (Zeithaml et al. 2010). Service failure in online retailing may be classified as failure due to: web site lay out, online customer service, payment procedure, service delivery, and online transaction security (Kuo et al., 2012; Holloway et al., 2003). Providing services properly and right at the first time should always be the first preference of the service provider. However, service failure is unavoidable due to the intangible and inseparable nature of services. To convert unsatisfied consumers to satisfied customers, the service provider can develop suitable recovery policies such as "apology and explanation for service failures, refund, free service, gift, discount, and coupon" (Kuo and Wu, 2012). Finally, service recovery enables the service provider to keep customers who have encountered service failure (Miller et al. 2000). As a result, service recovery methods are extremely important for online retail services, particularly in India, where customers are sensitive to service failure.

### 2.2 The Dimensions / Elements of Online Service Recovery:

This study is conducted by adopting E-Recs-Qual scale developed by Parasuraman et al. (2005). This scale includes total of 11 statements on three dimensions to measure perceptions of customer on recovery services provided by the organization/ service provider.

**(i) Responsiveness:** This dimension is concerned with the online retailer's quickness about solving the service problems and policies related to product return.

**(ii) Compensation:** This includes how service provider provides compensation for service failures faced by the customer.

**(iii) Contact:** This dimension measures how service provider is available to the customer for assisting them in case of any problems faced by them.

### 3. Literature review:

Customers' satisfaction is dependent on their satisfaction with the service delivery experience. Customers' repeat purchase and word-of-mouth intents are influenced by overall customer satisfaction (Spreng et al.,1995).Customer satisfaction will be linked to meeting their expectations. Satisfaction results from expectations being met. The consumer will be satisfied when all criteria meet or exceed his or her expectations. When failure occurs, the consumer will be dissatisfied. Service providers must have a plan to shift the balance from discontent to satisfaction. Satisfaction is connected to service recovery. One of the primary goals of service recovery is to transform an unhappy customer's emotional response into a more acceptable one.A successful recovery is defined as an activity that restored a customer's satisfaction with the service provider. A good recovery plan will guarantee that the consumer stays with the service provider rather than switching to a new one. (McCullough et. al, 2000)As per the study conducted by Michel (2002), customers who experienced failure and successfully recovered had a greater degree of satisfaction than customers who were happy the first time they received the service.Service recovery has a strong beneficial influence on customer satisfaction, according to the literature (Collier et. al., 2006; Gustafsson, 2009; Chang et.al. 2010).

### 4. Objectives of the Study:

- To measure online service recovery by using E-Recs-QUAL scale developed by Parasuraman et al. (2005) in the context of online retailing for fruits and vegetables in Surat city.
- To determine the effect of service recovery factors on customer satisfaction in online shopping for fruits and vegetables.

### 5. Research Methodology:

To meet the study's objectives, primary data was collected from Surat city customers who purchased fruits and vegetables online through Jio Mart and faced some problems in service delivery. Responses from only those respondents who faced problems in service delivery and some recovery action was needed, was considered for this research. The convenience sampling approach was used to acquire the data. On the basis of Zeithaml et al. (2002)'s e-SERVQUAL model, a structured questionnaire was constructed for data collection. They developed a model with a total of seven e-service quality parameters separated into two groups. One set included the dimensions associated with the core service scale. Another set is concerned with the recovery scale. This E-Recs-Qual measure is used to assess customer perceptions when they face some problems or difficulties with service delivery via the website. The questionnaire for this study comprises questions based on recovery service quality in the mentioned model. The questionnaire included questions on the respondent's demographic profile, service recovery parameters, and customer satisfaction. Responses were generated on a five-point likert type scale; 11 statements were used to assess consumers' perceptions of recovery service quality, while five items were used to assess customers' satisfaction with online retailers. Data was collected from 104 respondents and stored in an SPSS database before being analysed with the Statistical Package for Social Science (SPSS version 22.0) and a Microsoft excel sheet.

### 6. Data Analysis:

**Table 1 Demographic profile**

	Frequency	Percentage
<b>Gender</b>		
Male	29	27.9
Female	75	72.1
Total	104	100.0
<b>Age</b>		
Less than 25 years	30	28.8
25-40 years	49	47.1
41-55 years	25	24.0
More than 55 years	0	0.0
Total	104	100.0
<b>Marital status</b>		
Married	88	84.6

Unmarried	16	15.4
Divorced	0	0
Total	104	100.0
<b>Qualification</b>		
Primary and less	4	3.8
Secondary	10	9.6
Higher secondary	24	23.1
Graduate	29	27.9
Post Graduate	35	33.7
More than Post Graduate	2	1.9
Total	104	100.0
<b>Occupation</b>		
Student	4	3.8
Businessman	15	14.4
Service	56	53.8
Retired	28	26.9
Housewife	1	1.0
Others	104	100.0
Total	4	3.8
<b>Monthly income</b>		
Below 30000	17	16.3
30000-44999	10	9.6
45000-59999	62	59.6
60000-74999	8	7.7
75000-99999	2	1.9
above 1,00,000	5	4.8
Total	104	100.0
<b>Online Purchase Experience for fruits and vegetables</b>		
Less than 3 months	23	22.1
3 to less than 6 Months	9	8.7
6 to less than 12 Months	62	59.6
12 Months or more	10	9.6
Total	104	100.0
<b>Monthly purchase Frequency of fruits and vegetables online</b>		
2 or less times	26	25.0
3 to 5 times	14	13.5
6 to 8 times	31	29.8
More than 9 times	33	31.7
Total	104	100.0

Source: Primary data

### Scale Reliability

Cronbach's Alpha Reliability Test was used to establish the measuring instrument's reliability. This test checks if the items associated with each dimension are internally consistent and may be used to evaluate the same construct or dimension of recovery service quality. Cronbach's alpha of scale is 0.853, which is a positive sign for moving forward since a Cronbach's alpha coefficient of 0.6 or more is good for social science research (Cronbach, 1990).

### Measure of Sampling Adequacy

The Kaiser-Meyer-Olkin sampling adequacy test assesses whether or not partial correlations between variables are significant. High scores (around 1.0) imply that a factor analysis using data may be advantageous. Bartlett's test of sphericity is used to test the hypothesis that the correlation matrix is an identity matrix,

implying that the variables are unrelated. Small significance level values (less than 0.05) imply that a factor analysis may be useful with data. The Kaiser-Meyer-Olkin (KMO) measure in the current tests was 0.788, as shown in Table 2. Chi-Square =498.581, df = 55 with a significance of 0.000 according to Bartlett's sphericity test. Both results show that factor analysis is beneficial for reducing data for the supplied data.

**Table 2 : KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.788
Bartlett's Test of Sphericity	Approx. Chi-Square	498.581
	df	55
	Sig.	.000

Source: Primary data

**Table: 3 Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.643	42.213	42.213	4.643	42.213	42.213	3.356	30.511	30.511
2	1.601	14.551	56.765	1.601	14.551	56.765	2.569	23.356	53.867
3	1.068	9.710	66.475	1.068	9.710	66.475	1.387	12.608	66.475
4	.837	7.609	74.084						
5	.685	6.231	80.314						
6	.585	5.315	85.629						
7	.453	4.114	89.743						
8	.392	3.563	93.306						
9	.317	2.880	96.187						
10	.250	2.276	98.463						
11	.169	1.537	100.000						

Extraction Method: Principal Component Analysis.

Source: Primary data

**Table 4: Result of factor analysis**

Item/ Statements	Factor loading
<b>Factor 1: Responsiveness</b>	
RS3 It offers meaningful guarantee.	.832
RS2 It handles product return well	.796
RS1 This online retailer provides me with convenient options for returning items	.786
RS8 It picks up the item I want to return from my home or office	.739
RS5 It takes care of problems promptly	.660
<b>Factor 2: Contact</b>	
RS11 It offers the ability to speak to a live person if there is a problem	.857
RS9 This online retailer provides a telephone number to reach the company in case of a problem	.824
RS10 It has customer service representatives available online in case of a problem	.603
<b>Factor 3: Compensation</b>	
RS4 It tells me what to do if my transaction is not processed	.846
RS7 It does compensate me when I ordered doesn't arrive on time	.529
RS6 This online retailer does compensate me for problem it creates	.516

Source: Primary data

Table 4 shows the result of factor analysis run using eleven statements. It resulted in three dimension of online service recovery quality. These three factors together explained 66.48 % of the total variance as shown in table 3 above. Based on the statements loaded in each component, these factors were named as: Responsiveness, Contact and Compensation.

### Regression analysis

Multiple regression was employed to assess the relationship between derived factors of recovery service quality and customer satisfaction. R values of 0.595, F= 18.254, and sig. =.000 indicate that all recovery parameters are good predictors of consumer satisfaction in online fruit and vegetable retailing.

**Table 5: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.595 <sup>a</sup>	.354	.334	.30610

a. Predictors: (Constant), responsiveness, contact and compensation

Source: Primary data

The model summary showed in table no. 5 indicates that customer satisfaction is dependent on service recovery factors like responsiveness, contact and compensation. The model's R square is 0.354, which suggests that it accounts for 35.4 percent of the variation in customer satisfaction.

**Table 6: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.131	3	1.710	18.254	.000 <sup>b</sup>
	Residual	9.370	100	.094		
	Total	14.501	103			

a. Dependent Variable: Average Satisfaction

b. Predictors: (Constant), responsiveness, contact and compensation

The AVOVA test of the model is shown in Table 6 above, which categorises customer satisfaction as a function of responsiveness, contact and compensation. ANOVA indicates the model's overall quality of fit. The model's F-statistic is 18.254, which is good and indicates that the model is a good fit at the 1% level of significance.

**Table 7: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.937	.030		131.148	.000
	Responsiveness	.132	.030	.350	4.360	.000
	Contact	.161	.030	.428	5.323	.000
	Compensation	.082	.030	.219	2.724	.008

a. Dependent Variable: Average Satisfaction

Result of the model for predicting satisfaction of customer who faced issues in service delivery and had to raise issue for service recovery through the dimensions of recovery service quality is presented in table 7 above. The regression coefficients show positive significant relation with Responsiveness (0.350), Contact (0.428) and compensation (0.219). Thus contact is found to be the strongest predictor of customer satisfaction in service recovery.

### Conclusion:

For organizations, improving recovery service quality can prove to be a good technique for maintaining customer satisfaction. The study's primary goal was to investigate the link between online service recovery and customer satisfaction. Furthermore, the study attempted to use and validate the E-RecS-QUAL scale created by Parasuraman et al., (2005) to evaluate service recovery in online retailing for fruits and vegetables. The study

findings validated the model's broad applicability in local environment of Surat city of Gujarat, India. The study shows the positive relationship between service recovery and customer satisfaction. This finding is consistent with empirical research indicating that service recovery has a considerable favorable influence on customer satisfaction (Collier et al., 2006; Gustafsson, 2009; Chang et al., 2010). The study found that responsiveness, contact, and compensation were the important factors of recovery service quality. All the factors found to significantly contribute towards customer satisfaction. Contact came out as the most important factor of customer satisfaction in service recovery.

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