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Measuring customer satisfaction for F&B chains in Pune using ACSI Model

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Abstract

For growth and competitiveness in any service sector, it is necessary that service quality and customer satisfaction should be given adequate attention. In today's competitive environment, the key for a sustainable competitive advantage is delivering high quality service. The aim of this primary research was to apply the American customer satisfaction index (ACSI) model in the context of service quality in the Food and Beverage (F&B) industry in order to describe how customers perceive service quality and whether they are satisfied with services offered by Café Coffee Day, Barista and Costa Coffee (three mobile F&B players). A structured questionnaire was developed from the ACSI model and was randomly distributed to the consumers of the three F&B outlets to determine their satisfaction with service quality delivery in the Pune's Food and Beverage outlets. From the data analysis, it was found out that the overall service quality perceived by the customers was just satisfactory and that customer expectations were higher than what was perceived.

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1. Introduction

India is one of the fastest growing economies with a huge population of 1.2 billion. In this the food and beverage (excluding alcoholic drinks) industry is expected to grow \$300 billion by 2015. Overall F&B consumption is expected to grow at the rate between 6–11 percent for the next few years. The food processing industry is witnessing an annual growth of 20%. There are more than 500 million upper-and-middle-class consumers of processed and

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packaged food. In the scenario, the food processing industry has been accorded priority status by the new government.

The given below products and sectors are expected to have the highest potential for growth:

- Processed food
- Milk and dairy
- Beverages, including wine
- Fish and seafood

Customer satisfaction is one of the most important aspects for F&B sector in India. F&B retail chains in India like McDonalds, KFC, Pizza hut etc., offer more or less the same products; the only thing that makes a difference is their quality of service. Customer satisfaction is one of the important aspects of consumer behavior. In this competitive environment delivering high quality service is the main objective to sustain in the mind of the customer otherwise customer will switch his preferences.

A satisfied customer is like a sales force for a company who will talk positively about the service brand to others. According to some researchers, the satisfied customers share their experiences to 5-6 people in their community and hence act as promoter's for the brand whereas a dissatisfied customer share their experience with at least 10 or more people creating bad word of mouth for the brand. Word of mouth plays a big role in this industry as service industry is mostly based on the word of mouth/customer's feedback. Nowadays companies are realizing the need of service quality. Delivering and managing high quality of service will lead to customer satisfaction.

In order to fulfil the research on measuring and evaluating customer satisfaction towards customer service provided at three F&B retail chains in Pune, ACSI model for measuring the overall satisfaction was chosen. This measurement model is used because their use is appropriate and corresponds to the research study problem. ACSI is used to measure overall customer satisfaction with service delivery because it combines responses to three questions that ask about the same idea, i.e., overall satisfaction. It is also relatively easy to apply as the weight of each response can be determined by the researcher irrespective of which industrial context it is used.

1.1 ACSI Model

The American customer satisfaction index is called as cause-and-effect model with indices for drivers of satisfaction on the left side that is perceived quality, customer expectation and perceived value; satisfaction is in the centre, and on the right side are the outcomes of satisfaction that includes customer complaints and customer loyalty. The indexes of the model are multivariable components having certain weight age within the model and are measured by many questions through survey. These questions assess customer evaluations of the determinants of each index. Indexes are measured on a scale of 0-100. The arrows in the ACSI model represent "impacts of these factors" and these factors help to improve the customer satisfaction. The ACSI model explains customer satisfaction (ACSI) on customer loyalty. By looking at the indexes and impacts, users can determine which are the important drivers of satisfaction, that are if improved, would have the greatest effect on customer loyalty.

2. Literature review

Customer is the king of business. In services, customer plays a major role. Customer satisfaction is important for both product and service industry. In service industry customer satisfaction is the major factor. If the customer is not satisfied he switches the service very fast. This happens because of low differentiation in services offered as well as low brand loyalty involved. From the newsletter of Singapore Management University, it has been found that Food and Beverage and Tourism companies need not to over-deliver for customer satisfaction. In reference to this, it says that customer satisfaction in Food & Beverage sector remained unchanged whereas in tourism there is a significant drop in customer satisfaction. Research by wisegeek.org shows that location convenience an important role in choosing a cafe. The important factors that build customer satisfaction are:

- Price
- Quickness of service
- Atmosphere

A mediocre food with high price makes the customer highly dissatisfied. For aged customer prompt service is one of the major factors for customer satisfaction as they cannot wait for long time. In other study, data collected by ASCI reveals that McDonald's ranks last in customer satisfaction, despite being the top fast food company in revenue. There are many factors that are there in customer's mind while visiting any place. The same study was done in US for Chinese restaurants. It was found out that customer satisfaction is necessary because satisfied customers can generate long-term benefits for companies as well as customer loyalty and sustained profitability. There are many theories that are been used to find out the level of customer satisfaction like:

- Expectancy-disconfirmation theory
- Contrast theory
- Cognitive dissonance theory
- Equity theory
- Value percept theory

3. Research methodology

The aim of this research was to apply the ACSI model in the context of service quality in the F&B industry in order to describe how customers perceive service quality and whether they are satisfied with services offered by F&B retail outlets. A structured questionnaire was developed from the ACSI model and was randomly distributed to the users of the three F&B retail operators to determine their satisfaction with service quality delivery in the Food and beverage market.

3.1 Sampling Technique

Non- probability sampling technique using convenience sampling was used for collecting information. The survey method was used for gathering information from the customers of Café Coffee day, Barista and Costa Coffee in Pune area.

- **Tool Used** SPSS and MS excel software is used to analyze data to find meaningful results.
- **Sample Unit**
- Sample units are nothing but the respondents covered during the process of collecting data for the purpose of research. The sampling units consisted of people who are the customers of Café Coffee day, Barista and Costa Coffee visiting F&B retail chains in Pune.
- **Sample Size**
- The sample size is the total number count of the number of total respondents covered for the research purpose. Total sample size of 150 customers and three F&B service providers consisting of 71 male and 79 female were chosen.

3.2 Primary Data

Pilot study was conducted with a set of 20 customers of the selected F&B outlets and then their inputs were taken. Based on the valuable inputs, necessary changes have been done in the final questionnaire. There are two aspects of the study; one is service quality provider while the other is the customer point of view. Since the study needed to be conducted in Pune, the numbers of F&B retail outlets that are visited are three. The model used for the project is ASCI model of customer satisfaction.

- Questionnaire Administration
- Scoring Procedure
- Outlet Visited- Cafe Coffee Day, Barista and Costa Coffee

3.3. Secondary Data

Secondary data sources are published government sources, magazines, databases, annual reports of companies, private publications, books, internet and academic journals. The data collected is in the form of questionnaire. It is then compiled in the form of tables and after that charts and figures are used to make the study more clear. The data has been analyzed and presented in the form of tables and figures in chapter 4 data analysis.

3.4 Limitations of the study

The sample collected was a convenience sample; mostly of students those visited these three cafes (Cafe Coffee Day, Barista and Costa coffee). Time constraint was another factor that could have affected the data collected. There were 2 months for data collection and in this 150 data entries were collected.

4. Data Analysis

4.1. Demographics

Out of the 150 respondents selected for the study, 53% of the respondents were females and 47% were males. This means that preference of visiting cafes among both males and females is more or less similar. Out of these 150 respondents, 132 respondents were between the ages of 18-25 years followed by the next age group of 25-40 years. This shows that the data collected is in synchronization with the target segment of the cafes. The targeted age group of most of the cafes is between the ages of 18-25 years. On analysis it was found that 76% of the respondents had occupation as students and were in the age group of 18-25 years. The remaining 17% were the working professionals, 2% were businessmen and 5% were respondents in other type of occupations.

4.2. Measuring customer satisfaction with service quality using ACSI

The following tables show details of frequencies of the three core questions (with 9 factors involved) from the ACSI that were used to measure:

- The overall customer satisfaction with the F& B service delivery (*table 1*);
- The extent to which the service has met customers' expectations (*table 2*);
- The extent to which the service provided is compared to the ideal one (*table 3*);

Table 1, shown below gives the frequency distribution and the percentage of the responses to the questionnaire based on overall customer satisfaction, by applying the 5-point Likert scale starting with 1- Very dissatisfied, 2-dissatisfied, 3-neutral, 4-Satisfied, and 5-Very Satisfied.

Table 1 (The overall customer satisfaction with the F& B service delivery)

Responses	Frequency	Percentage (%)
Very Satisfied	9	6
Dissatisfied	22	14.67
Neutral	63	42
Satisfied	52	34.67
Very Satisfied	4	2.67
Total	150	100

Table 2, shown below gives the frequency distribution and the percentage of the responses to the questionnaire based on overall customer satisfaction, using the 5-point Likert scale starting with 1- Much Worse, 2-Worse than expectation, 3-neutral, 4-Equal to expectation and 5-Better than expectation.

Table 3, shows frequency distribution and the percentage of the answers to the questionnaire based on the Desire Disconfirmation, using the 5-point Likert scale (starting with 1- Very far from Ideal, 2-Far from Ideal, 3-neutral, 4-Close to ideal and 5- Very close to ideal)

Table 2 (Expectation Disconfirmation)

Responses	Frequency	Percentage (%)
Much worse	11	7.33
Worse than expectation	32	21.33
Neutral	50	33.33
Equal to expectation	53	35.33
Better than expectation	4	2.67
Total	150	100

Table 3 (Desire confirmation)

Responses	Frequency	Percentage (%)
Very far from Ideal	9	6
Far from Ideal	25	16.67
Neutral	58	38.67
Close to ideal	49	32.67
Very close to ideal	8	6
Total	150	100

Cronbach’s alpha: The *Cronbach’s Alpha* is used for comparing the internal reliability of items both in expectation and perception of service quality in F&B outlets was used. Table 4, shows the Cronbach's Alpha based on standardized items.

Table 4: Reliability statistics

Cronbach’s Alpha	Cronbach’s Alpha based on standardized items	N of Items
.953	.954	3

According to table 4, Cronbach's Alpha results of .953 for the three items are above the suggested threshold of .70. The results show internal consistency between variables taken for the study.

Table 5, shows Item-Total Statistics, which provides five pieces of information for each item in the scale. Out of 5, 2 are found most useful i.e. *Corrected Item-Total Correlation*, and *Cronbach's Alpha if Item Deleted*. Corrected Item-total correlation is the correlation of each specific items with the total other item in the scale and if this correlation is moderately high or high say .40 or above, the item is probably at least moderately correlated with most of the other items and will make a good component of this summated rating scale. The Cronbach's Alpha if item deleted shows if each item is deleted from the dimensions and to see the reliability scale for each dimension calculated when each item is deleted from the dimension in order to see if the deleted item is genuine or not. In case Cronbach’s alpha increases when an item is deleted not shows that the item is not genuine in dimension.

Table 5: Item total statistics

	Scale mean if Item deleted	Scale variance if item deleted	Corrected item-Total correlation	Squared multiple correlation	Cronbach’s alpha if item deleted
Overall satisfaction	6.27	3.485	0.943	0.893	0.902
Expectation Disconfirmation	6.35	3.438	0.869	0.780	0.956
Desire Disconfirmation	6.21	3.373	0.895	0.843	0.937

Table 5 above shows the reliability scale for all five dimensions of Item-total statistics. The obtained results show that there is internal consistency between the items. From the table above it can be also seen that almost all the items showed a lower value of reliability when deleted.

The three ACSI Questions related with Customer Satisfaction

The three core questions of ASCI were used to measure Overall Customer Satisfaction (OCS), Expectation

Disconfirmations (ED), and Desire Disconfirmation (DD). A five-point Licker scale and five different scores were used to represent the five-point scale.

Table 6: The core ACSI questions

Variable	1	5
1 Overall expectancy	Very Dissatisfied	Very satisfied
2 Expectancy disconfirmation	Much worse than expectation	Better than expectation
3 Performance Vs Ideal	Very far from Ideal	Very close to ideal

According to table 7, respondents had to answer the three questions that deal with Overall Customer Satisfaction (OCS), Expectation Disconfirmations (ED), and Desire Disconfirmation (DD) with a Likert scale ranging from 1 to 5.

Q1. Concerning **Overall Customer Satisfaction (OCS)** respondents had to answer the research question: *What is your overall satisfaction with your Food and Beverage service delivery*, with the following:

5 = Very satisfied

4 = Satisfied

3 = Neutral

2 = Dissatisfied

1 = Very dissatisfied

Customers must have been satisfied or unsatisfied with their perception of services. Thus, the hypothesized test value in this study is 4 (satisfaction level starts at 4) and it can divide customers into satisfied and unsatisfied. In this way the null and the alternative hypothesis could be specified as follow:

H0: Null hypothesis Ho: $\mu \geq 4$ "Customers are satisfied with service quality in F&B outlets".

H1: Alternative hypothesis Ha: $\mu < 4$ "Customers are not satisfied with service quality in F&B outlets".

One sample t test was used to analyze customer expectation. The one-sample t test shows whether a mean of a single variable differs from a specified constant.

Table: 7 One-Sample Statistics

One sample statistics				
	N	Mean	St. Deviation	Sd. Error mean
Overall satisfaction	150	3.15	.915	.075

The one-sample statistics in table 7 shows the mean of Overall Satisfaction, the standard deviation, and the number of participants in each condition, which are 150.

Table: 8 One-Sample Statistics

One-Sample Test						
	Test value=0 T	DF	Sig. tailed)	(2 Mean difference)	95% confidence interval of difference	
					Lower	Upper
Overall satisfaction	42.114	149	0.000	3.147	3.00	3.29

As shown in Table 8, service scores had positive value, which means that service quality was somewhere close to the satisfaction in the service quality but not fully satisfying the customer. Therefore, the null hypothesis was rejected, that means that customers were not satisfied but since the mean is greater than 3 that means they were also not dissatisfied, their option is lying between neutral and satisfaction level. Table 8 also indicates that the p-value .000 is lower than the significant level .05, denoting that there is a significance difference between customer satisfaction with service quality. *Therefore, we can conclude that customers were in between the level of neutral and satisfied with the service delivery.*

Q2. Concerning **Expectation Disconfirmations (ED)** respondents had to answer the research question: **To what extent has the service met your expectations in Food and Beverage outlets?** with the following:

- 5 = Better than expected
- 4 = Equal to expected
- 3 = Neutral
- 2 = Worse than expected
- 1 = Much worse than expected

Satisfied customers must have perceived perception worse than expectation, equal to expectation or better than expectation. Thus, the hypothesized test value in our study is 4 (satisfaction level starts at 4) and it can divide customers into satisfied and unsatisfied. In this way the null and the alternative hypothesis could be specified as follow:

H0: Null hypothesis **H₀: $\mu \geq 4$** "Service quality has met customers' expectation in F&B outlets".

H1: Alternative hypothesis **H_a: $\mu < 4$** "Service quality has not met customers' expectation in F&B outlets".

One sample T Test was used to analyse customer expectation. The one-sample t test shows whether a mean of a single variable differs from a specified constant.

Table 9 One sample Statistics
One sample statistics

	N	Mean	St. Deviation	Sd. Error mean
Expectation disconfirmation	150	3.06	.978	.080

The one-sample statistics table shows the mean of Expectation Disconfirmation that is 3.06, the standard deviation, and the number of participants in each condition, which are 150.

Table 10 one sample test
One sample test

	Test value=0 T	DF	Sig. (2 tailed)	Mean difference)	95% confidence interval of difference	
					Lower	Upper
Expectation disconfirmation	38.328	149	0.000	3.060	2.90	3.22

As shown in Table 10, the t value is more while the p-value is smaller which indicates that the null hypothesis is rejected but since in table 10, the mean of the sample is above 3 that mean the service provided was not matching the expectation of the customer but the customer was fine with the services. The customer was not dissatisfied. **Thus, service delivery was lower than customers' expectations but was not dissatisfying.**

Q3. Concerning **Desire Disconfirmation (DD)** respondents had to answer the research question: **How well the service provided compare with ideal one in the Food and Beverage outlets?** with the following:

- 5 = Very close to ideal
- 4 = Close to ideal
- 3 = Neutral
- 2 = Far from ideal
- 1 = Very far from ideal

Satisfied customers must have perceived value far from ideal, close to ideal or very close to ideal. Therefore the hypothesized test value in this study is 4 and it can divide customers into satisfied and unsatisfied. In this way the author could specify the null and the alternative hypothesis as follow:

H0: Null hypothesis **H₀: $\mu \geq 4$** "Service quality is close to or very close to ideal in F&B outlets"

H1: Alternative hypothesis **H_a: $\mu < 4$** "Service quality provided is not close to or very close to ideal in F&B outlets"

One Sample t test was used to analyze customer expectation. The one-sample t test shows whether a mean of a single variable differs from a specified constant.

Table 11 one sample Statistics
One sample statistics

	N	Mean	St. Deviation	Sd. Error mean
Desire disconfirmation	150	3.21	.978	.080

The one-sample statistics from table 11 shows the mean of Desire Disconfirmation, the standard deviation, and the number of participants in each condition, which are 150.

Table 12 One-Sample Test
One sample test

	Test value=0		Sig. (2 tailed)	Mean difference	95% confidence interval of difference	
	T	DF			Lower	Upper
Desire disconfirmation	40.169	149	0.000	3.207	3.05	3.36

As shown in Table 12 shows big t value of 40.146 and small p value of .000 it can be concluded that the null hypothesis is rejected. Therefore, *service delivery was lower than customers' expectations comparing it with the ideal service though it wasn't dissatisfactory.*

5. Recommendations

From the above results and conclusion, the following solutions can be recommended:

- Mostly customers were dissatisfied in terms of parking availability near F&B outlets. For instance Cafe coffee day which has maximum number of outlets across India. They score full points in terms of location of cafes but in terms of parking space it is a drawback. So companies should take this minimum expectation into consideration to for giving total service delivery.
- Food variety is a major factor in terms of customer satisfaction. More food variety attracts more customers and serves the expectations of many customers.
- Food quality is another important factor. Poor food quality results in bad customer feedback and losing of customer base. Food quality matters a lot when it comes to processed food. So it should be fresh. Loyalty in cafes usually matters because of taste of coffees so if there is dilution in food/beverage quality then that will directly affect the customer base of the cafe.
- In terms of timely order delivery, the food and beverage industry is doing optimum but ambience is quite an issue. Cafes are places that are used for spending quality time by youngsters.

Space to spend time in Café should be adequate so that more products could be sold in the time customers spend time at the outlet.

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