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A Study on Impact of Restaurant Features and Average Dining Cost on Customer Satisfaction

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Abstract- India has always been a food-loving country with each region having its own special cuisine. Indians have never been very big on eating out. But all that is changing now. The restaurant industry in India has been growing at a rapid pace over the last decade or so and the growth story is set to continue for the upcoming future. There were nearly 220K good restaurant establishments in India in 2002. The food service or restaurant industry was worth a whopping Rs.43, 000 crores in 2010 and growing at a healthy rate of 15-20% annually. Full-service restaurants are under more pressure than ever, in part because the restaurant business has seen strong growth in the home-meal-replacement concept in recent years. We searched nearly 8653 restaurants that come under the famous "zomato restaurants". This investigation focused on two factors: (1) Average cost of dining for Two,(2) Customer satisfaction, To analyse this relationship among the cost and customer satisfaction, we attempt to present multistate cost and customer satisfaction analysis. We have to categorise an analysis based on effective cost slabs along with services provided for customer satisfaction on that particular slab. To analyse this investigation we used the online version of the tool provided by IBM that is IBM Cognos.

Keywords- Dining cost, Customer Satisfaction, Zomato Restaurants.

I. INTRODUCTION TO INDIAN RESTAURANTS

We begin by describing India's restaurant market, where we conducted this investigation, and discussing the study's methodology. We selected India for a few main reasons, First, India is a large country having various metropolitan cities with a diverse, multiethnic population. Second, In India, after every 20 km there is a change in the type of cuisines and language as it is a very diverse country. Third, at the time of this investigation Indian restaurant industry was found to be robust and exhibiting a strong period of growth, as reported by National Restaurant Association of India (NRAI). To conduct our analysis we searched for reliable sources of data. Through extensive search process, we discovered readily available consumer –

provided data through kaggle.com. The dataset available on kaggle.com features a collection of 8653 restaurants scattered all over India which includes the style of cuisine they serve, average cost of dining for two persons, ratings and online delivery option, table booking, food quality, etc.

The restaurant were examined thoroughly and was found that most of them were averagely rated restaurants due to various factors like their ambience, food quality, customer service, etc. The average cost of dining for two persons was found to be a minimum of Rs.50 to a maximum of Rs.8000, which include restaurants that were street food stalls to five star hotels.

Here we would majorly be focussing on the average cost of dining for two persons with respect to the customer ratings.

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II. CUSTOMER SATISFACTION AND SERVICE QUALITY

Many researchers have looked into the importance of customer satisfaction. According to Hansemark and Albinsson (2004), "satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some need, goal or desire". Kotler (2000) defined satisfaction as: "a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations". Hover and MacInnis (2001) said that "satisfaction can be associated with feelings of acceptance, happiness, relief, excitement, and delight". It has been argued that while the two concepts have things in common, "satisfaction is generally viewed as a broader concept service quality is a component of satisfaction" (Zeithaml and Bitner, 2003). Customer satisfaction is defined here in Oliver's (1997) terms: that it is the consumer's response towards his/her fulfillment. It is a judgement that the service or the product provided gives a level that is delighted by the customer being it consumption, service feature, food quality, or ambiance. Service or the food quality determines the level of success or failure of an organization.

Table 1: Number of Restaurants and Ratings observed

Number of Restaurants	Restaurant Ratings
116	Excellent
180	Poor
692	Very Good
1847	Good
2139	Not Rated
3679	Average

Companies and organizations that virtually every industry employs customer satisfaction measures for the straightforward reason that satisfied customers are essential for a successful business (Gupta, S., McLaughlin, E., and Gomez, M. 2007). . Service quality is influenced by expectation, process quality and output quality; in other words the standards of service is defined by customers who have experienced that service and used their experience and feelings to form a judgment (Chen, F.P., Chen, C.K.N., and Chen, K.S. 2001). In order to achieve a quality service organization, commitment from employees and support from all levels of management is necessary. Therefore, it is important for managers who provide goods or services constantly to keep track of information about the company's well being as far as meeting its customers' needs are concerned (Aigbedo, H., and Parameswaran, R. 2004). The level of customer satisfaction is influenced by various factors ranging from internal to external factors. Customer satisfaction may be identified as internal as well as external customer satisfaction of an organization. However, there seems to also be dissatisfaction of internal customer satisfaction from organization's point of view. This is an issue that has raised concern among certain organizations who are employees' interested in welfare. Such dissatisfaction has been identified through opinion surveys conducted in organizations. These dissatisfactions are based on the facilities provided by the organization for the employees, such as the staff cafeteria. As mentioned by John Feilmeier, (Perlik, A. 2002), we need to run cafeterias similar to what an outside business or regular restaurant would do. Many food service providers have a perception that people only go to eating outlets for the food. There is an assumption that the primary reason people go to restaurants is for the meal (Andaleeb, S.S., and Conway, C. 2006). Josiam and Monteiro (2004) found that patron of Indian restaurants in Minneapolis (USA) metropolitan area were better educated and more affluent. Food habits undergo continuous change as they adapt to travel, immigration, and the socio-economic environment (Jerome 1982; Lowenberg et al. 1974; Senauer et al. 1991; Kittler and Sucher 1995). However, Food preferences, а result of physiological and psychological development and social experience related to the degree of linking a food, play an important role in food selection because they give an indication of the amount of satisfaction an individual anticipates from eating a food. Other influences of consumer food choices include cultural and lifestyle factors, and food trends (ASP 1999). According to Zugarramurdi

(2003), people are increasingly concerned about nutrition, food safety at a reasonable cost.

III. ANALYSIS AND DISCUSSIONS

The tables shown below, describes the ratings (kaggle.com) of a number of restaurants that have their average cost of dining for two, from a cost of Rs 50 to Rs 8000. The average cost has been divided into various subgroups of smaller amount, to make the analysis easier. The restaurants were rated on the basis of five major factors, i.e., its Ambiance, the Quality of food, Online delivery of food(if available), types of cuisines served (like Chinese, Rajasthan, Mughlai, etc), and the service provided to the customer. The ratings were categorised from Excellent to Poor and Not Rated. The number of restaurants present in each rating depending on the factors has been marked. The price range was grouped as:

1. Rs.50 - Rs.250

At this price range, we analyzed that there are 1389 restaurants out of which 6 restaurants were excellent and 2 restaurants among them have excellent food quality. The customer satisfaction rate, calculated on the basis of excellent and very good ratings in this slab comes out to be 2.3%.

Table 2: Customer satisfaction in respect to ratings in price range Rs. 50 - Rs. 250

	i price		90.0		NS. 2		
	Excellent	Very Good	Good	Average	Poor	Not Rated	Total
Ambiance	1	6	32	106	1	123	269
Food Quality	2	5	30	104	1	129	271
Online Food Delivery	1	4	28	103	1	143	279
Cuisines Served	1	6	26	99	2	164	298
Customer Service	1	5	24	105	1	135	271
Total	6	26	140	517	6	694	1389

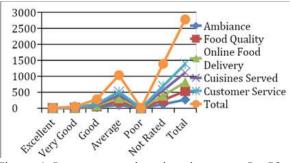


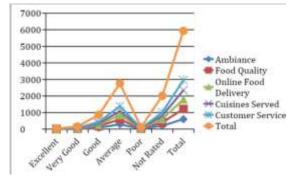
Figure 1: Restaurant ratings in price range Rs. 50 - Rs. 250

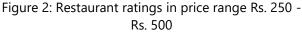
2. Rs 250 – Rs 500

At this price range, we analyzed that there are 2966 restaurants out of which 18 restaurants were excellent among which 5 restaurants have excellent food quality and 6 restaurants have excellent ambiance. The customer satisfaction rate, calculated on the basis of excellent and very good ratings in this slab comes out to be 3.16%.

Table 3: Customer satisfaction in respect to ratings in price range Rs. 250 - Rs. 500

		range				-	
	Excellent	Very Good	Good	Average	Poor	Not Rated	Total
Ambiance	6	12	84	290	9	201	602
Food Quality	5	14	93	295	12	198	617
Online Food Delivery	1	18	81	268	16	200	584
Cuisines Served	2	13	82	236	7	205	545
Customer Service	4	19	92	291	11	201	618
Total	18	76	432	1380	55	1005	2966





3. Rs 500 – Rs 750

At this price range, we analyzed that there are 2304 restaurants out of which 17 restaurants were excellent among which 5 restaurants have excellent food quality and 3 restaurants have excellent ambiance. The customer satisfaction rate, calculated on the basis of excellent and very good ratings in this slab comes out to be 6.98%.

Table 4: Customer satisfaction in respect to ratings
in price range Rs. 500 - Rs. 750

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	Excellent	Very Good	Good	Average	Poor	Not Rated	Total
Ambiance	3	27	105	240	17	69	461
Food Quality	5	32	111	229	14	70	461
Online Food Delivery	2	26	109	220	15	73	445
Cuisines Served	3	28	106	239	18	76	470
Customer Service	4	31	114	232	12	74	467
Total	17	144	545	1160	76	362	2304

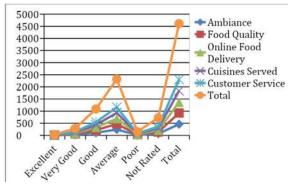


Figure 3: Restaurant ratings in price range Rs. 500 - Rs. 750

4. Rs 750 – Rs 1000

At this price range, we analyzed that there are 594 restaurants out of which 16 restaurants were excellent among which 4 restaurants have excellent food quality and excellent ambiance. The customer satisfaction rate, calculated on the basis of excellent and very good ratings in this slab comes out to be 16.67%.

Table 5: Customer satisfaction in respect to ratings
in price range Rs. 750 - Rs. 1000

III price range KS. 750 - KS. 1000							
	Excellent	Very Good	Good	Average	Poor	Not Rated	Total
Ambiance	4	15	37	47	4	8	115
Food Quality	4	20	38	56	6	8	132
Online Food Delivery	3	18	36	49	2	6	114
Cuisines Served	2	16	34	44	5	5	106
Customer Service	3	14	41	59	3	7	127
Total	16	83	186	255	20	34	594

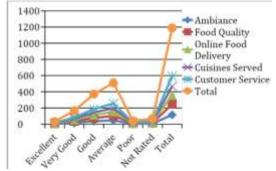


Figure 4: Restaurant ratings in price range Rs. 750 -Rs. 1000

5. Rs 1000 – Rs 1250

At this price range, we analyzed that there are 498 restaurants out of which 12 restaurants were excellent among which 2 restaurants have excellent food quality and 3 restaurants have excellent ambiance. The customer satisfaction rate, calculated on the basis of excellent and very good ratings in this slab comes out to be 23.7%.

Table 6: Customer satisfaction in respect to ratings in price range Rs. 1000 - Rs. 2500

	Excellent	Very Good	Good	Average	Poor	Not Rated	Total
Ambiance	3	25	37	36	1	7	109
Food Quality	2	24	49	41	4	3	123
Online Food Delivery	1	15	32	24	1	4	77
Cuisines Served	2	19	25	39	3	5	93
Customer Service	4	23	36	25	2	6	96
Total	12	106	179	165	11	25	498



Figure 5: Restaurant ratings in price range Rs. 1000 - Rs. 2500

6. Rs. 1250 - Rs 1500

At this price range, we analyzed that there are 171 restaurants out of which 8 restaurants were excellent among which 2 restaurants have excellent food quality and have excellent ambiance. The customer satisfaction rate, calculated on the basis of excellent and very good ratings in this slab comes out to be 38.01%.

Table 7: Customer satisfaction in respect to ratings in price range Rs. 1250 - Rs. 1500

		unge			1.5.	1500	
	Excellent	Very Good	Good	Average	Poor	Not Rated	Total
Ambiance	2	12	13	9	0	1	37
Food Quality	2	15	19	10	0	1	47
Online Food Delivery	1	9	11	6	1	0	28
Cuisines Served	1	11	10	5	0	0	27
Customer Service	2	10	7	12	1	0	32
Total	8	57	60	42	2	2	171

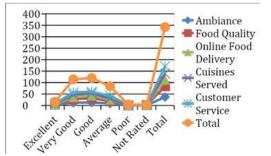


Figure 6: Restaurant ratings in price range Rs. 1250 - Rs. 1500

7. Rs 1500 – Rs 1800

At this price range, we analyzed that there are 310 restaurants out of which 25 restaurants were excellent among which 7 restaurants have excellent food quality and 5 restaurants have excellent ambiance. The customer satisfaction rate, calculated on the basis of excellent and very good ratings in this slab comes out to be 38.39%.

Table 8: Customer satisfaction in respect to ratings in price range Rs. 1500 - Rs. 1800

		range	1.0.	1300	1.0. 1.		
	Excellent	Very Good	Good	Average	Poor	Not Rated	Total
Ambiance	5	15	30	12	1	1	64
Food Quality	7	26	28	15	1	1	78
Online Food Delivery	4	14	23	8	0	1	50
Cuisines Served	6	19	26	11	0	1	63
Customer Service	3	20	20	10	0	2	55
Total	25	94	127	56	2	6	310

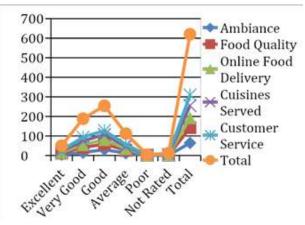


Figure 7: Restaurant ratings in price range Rs. 1500 - Rs. 1800

8. Rs 1800 – Rs 2500

At this price range, we analyzed that there are 238 restaurants out of which 16 restaurants were excellent among which 5 restaurants have excellent food quality and 3 restaurants have excellent

ambiance. The customer satisfaction rate, calculated on the basis of excellent and very good ratings in this slab comes out to be 33.61%.

Table 9: Customer satisfaction in respect to ratings in price range Rs. 1800 - Rs. 2500

		9-			N3. Z		
	Excellent	Very Good	Good	Average	Poor	Not Rated	Total
Ambiance	3	12	20	15	1	2	53
Food Quality	5	15	18	13	2	2	55
Online Food Delivery	2	10	15	11	1	1	40
Cuisines Served	4	18	12	9	1	1	45
Customer Service	2	9	19	12	1	2	45
Total	16	64	84	60	6	8	238

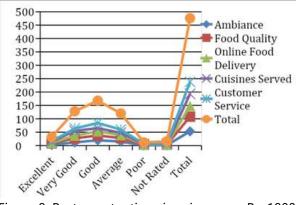


Figure 8: Restaurant ratings in price range Rs. 1800 - Rs. 2500

9. Rs 2500 - Rs 4000

At this price range, we analyzed that there are 125 restaurants out of which 1 restaurant was excellent on the basis of its ambiance. The customer satisfaction rate, calculated on the basis of excellent

rate, and very good ratings in this slab comes out to be good 21.6%.

Table	10: Customer satisfaction in respect to ratings
	in price range Rs. 2500 - Rs. 4000

-		<u> </u>					
	Excellent	Very Good	Good	Average	Poor	Not Rated	Total
Ambiance	1	9	16	5	0	0	31
Food Quality	0	5	12	6	0	1	24
Online Food Delivery	0	2	9	9	1	1	22
Cuisines Served	0	4	10	7	0	0	21
Customer Service	0	6	9	11	0	1	27
Total	1	26	56	38	1	3	125

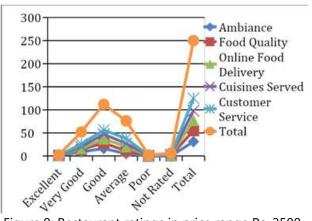


Figure 9: Restaurant ratings in price range Rs. 2500 - Rs. 4000

10. Rs 4000 - Rs 8000

At this price range, we analyzed that there are 50 restaurants out of which 2 restaurants were excellent among which 1 restaurant has excellent food quality and 1 restaurant has excellent ambiance. The customer satisfaction rate, calculated on the basis of excellent and very good ratings in this slab comes out to be 30%.

in price range Rs. 4000 - Rs. 8000										
	Excellent	Very Good	Good	Average	Poor	Not Rated	Total			
Ambiance	1	3	9	1	0	0	14			
Food Quality	1	2	5	0	0	0	8			
Online Food Delivery	0	1	7	1	0	0	9			
Cuisines Served	0	4	4	1	0	0	9			
Customer Service	0	3	6	1	0	0	10			
Total	2	13	31	4	0	0	50			

Table 11: Customer satisfaction in respect to ratings in price range Rs. 4000 - Rs. 8000

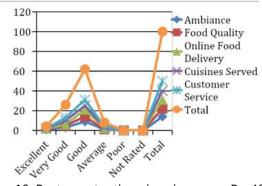


Figure 10: Restaurant ratings in price range Rs. 4000 - Rs. 8000

V. RESULTS AND CONCLUSION

From the above analysis, we found that the customer satisfaction rate, calculated on the basis of excellent and very good rating is higher in the average cost range of Rs 1500 – 1800, that also matches to our real life statistics. The person with income lying in average economic rate may not afford. However, the persons with higher income graph can easily afford this cost range. Whereas, there is a slight difference between the ratings of restaurants lying in the average cost of Rs 1250 – 1500 which may be affordable by the average economic class but as per the Indian economy the population lies in the economic range which can afford the cost range of Rs 1000 – 1250, for 2 persons.

Keeping in view the Indian economy rate, the restaurant must provide good quality services in the average dining cost lying between Rs 1000 – 1250 for two people to boost their businesses.

REFERENCES

- Aigbedo, H., and Parameswaran, R. 2004. Importance-performance analysis for improving quality of campus food service. International Journal of Quality & Reliability Management, 21, 876-896.
- 2. Andaleeb, S.S., and Conway, C. 2006. Customer satisfaction in the restaurant industry: an examination of the transaction-specific model. Journal of Service Marketing, 20, pp. 3-11.
- Chen, F.P., Chen, C.K.N., and Chen, K.S. 2001. The integrated evaluation model for administration quality based on service time. Managing Service Quality, 11, pp. 342-349.
- 4. Gupta, S., McLaughlin, E., and Gomez, M. 2007. Guest satisfaction and restaurant performance. Cornell Hotel and Restaurant Administration Quarterly, 48, p. 284.
- Hansemark, O. C. & Albinson, M., 2004, Customer Satisfaction and Retention: The Experiences of Individual Employees, Managing Service Quality, 14 (1), pp. 40-57
- Hoyer, W. D. & MacInnis, D. J., 2001, Consumer Behaviour. 2nd ed., Boston, Houghton Mifflin Company. Jerome, N.W., 1982. Dietary patterning and change: a continuous process. Contemporary Nutrition Newsletter 7(6). General Mills, Inc.
- Josiam, B. and Monteiro, P. 2004. "Tandoori Tastes: Perceptions of Indian restaurants in America". International Journal of Contemporary Hospitality Management. 16(1): pp. 18-26.
- 8. Kotler, P., 2000, Marketing Management. 10th ed., New Jersey, Prentice-Hall.
- 9. Perlik, A. 2002. The un-cafeteria. Restaurants & Institutions, 21, p. 75.
- 10. Senauer, B., Asp, E., Kinsey, J., 1991. Food Trends and the Changing Consumer. Eagan Press, St. Paul, MN.
- 11. Zugarramurdi A (2003). 'Import requirements and quality costs', in FAO Report of the Expert

Consultation on International Fish Trade (FAO Fisheries Report No. 744). Rio de Janeiro, Brazil.

- Md. Arifur Rahman, Abul Kalam ,Md. Moshiur Rahman , and Md. Abdullah. The Influence of Service Quality and Price on Customer Satisfaction: An Empirical Study on Restaurant Services in Khulna Division.
- 13. https://www.numbeo.com/cost-ofliving/in/Delhi (date of access:7.9.18)
- 14. https://www.kaggle.com/datasets