

MEASURING SERVICE QUALITY IN RESTAURANTS OF JHARKHAND USING DINESERV MODEL

*Dr. Praveen Srivastava**

Introduction

A Restaurant can be understood as a business establishment which prepare and serve food and drink to the customer in return of money. However, the history of Restaurant can be traced back to 18th century in France. The word restaurant itself is derived from the French word *restaurer* which means to restore. Earlier restaurant were place to sell restaurant (*which means meat base consommé [clear soup] intended to restore a person's strength*) to people who were ill. The French revolution launched the modern restaurant industry and now we have numerous restaurants serving various cuisines and making it a place to enjoy the meal rather than restoring the strength.

This restaurant culture has now become need of hour. We can see the restaurant in most of the places: either chain or stand alone. The increase in disposable income and double income group has given way to rapid growth of restaurant in India. People prefer to take their meal out if they are leaving their home for a shopping spree or for a movie or to celebrate any special occasion. The reason to eat out is also increasing and hence, restaurant business is a growing segment in today's market. Identifying the potential, there are several restaurants which have come up and are providing excellent food and service to customer. In the competitive world it is important to identify what are the expectations of customers and how well these are met in the restaurants. Moreover, when the quality of food is of similar standard it is the service deliveries which differentiate the restaurants from one another. Hence, an effort on improving it will help in building more customers.

* HOD (I/C), Department of Hotel Management & Catering Technology, Birla Institute of Technology, (Deemed University), Mesra, Ranchi, Jharkhand-835215
Email: hotelmgt@bitmesra.ac.in; Mob: +91 8987479515

The state of Jharkhand is also witnessing growth of restaurant. The website www.indiafoodguide.com states that they have listed in their website forty six dining places alone in Ranchi city which is a huge number and speaks about the competition. No doubt, the competition is growing in Jharkhand as tourist (both domestic and international) also looks for good restaurant to enjoy their meal. Chain restaurant like Yo China, Café Coffee Day, Moti Mahal, Dominoz has already entered in the market making the competition further tough for already established Kaveri, seventh heaven, Jalajoga etc. Restaurant in order to help guest decide menu or to have a look at the ambience are building their own websites. Jungli, MotiMahal, Dominoz all are having their own websites. Hence, the competition is growing in the Jharkhand state and restaurants need to improve their service delivery else they will either left behind or will have to close their business.

In restaurant service one has to meet the guest expectations which are created by promises. These expectations may also be influenced by prior experience, opinion of friends or associates or on the image of restaurant. Hence, the restaurant managers and owners should keep on trying to find the ways to make their customer happy and satisfied. They cannot afford to lose a customer on the ground of dissatisfaction as this will give negative word of mouth publicity and will force other guest not to choose the restaurant for their dining experience. Hence, in the restaurant service it is important to find whether they are keeping their guest happy or not, and if not what is annoying the guest from service end.

Literature Review

Service delivery process is a unique process and it consists of mainly two processes. These are activities involved and technological aspects that help make those products. There have been various researches in the service delivery aspect. Lemmink (1998) cites an instance of a restaurant visit, which is characterized by personal interaction; others are described in non-personal terms (e.g., a wide selection of food). During a visit to a restaurant, a customer experiences various things. In case of a restaurant service delivery process this would begin by checking in at the reception of the restaurant and end with presenting the bill to the customer and saying good-bye (checking-out). Within the period, the customer will evaluate the table, the menu card, the ordering, the food and the service by restaurant personnel. At the same time, the different stages can be described in terms of the three value dimensions that were introduced above (emotional, practical and logical). The practical dimension focuses on physical and concrete objects in the service process (e.g., food), while the logical dimension pertains to an abstract and rational sequence of events, procedures (helping customers in an efficient manner). The emotional value dimension reflects the feelings of the respondent in relation to the stage in the service delivery process. While an operational of the practical dimension will focus on objects that is logical and emotional dimensions will frequently describe the experience.

Chase and Hayes (1978) consider service delivery as a system in which the basic elements are the staff, the customers and the material environment. The process of “production”, rendering and consumption of hotel services is carried out during their interaction.

Jones and Lockwood (1998) describe the delivery process as the combination of various operations which include customers, staff and physical environment (buildings, equipment and financial resources). All the three are related to each other and should be in a balanced state. Physical environment plays an important in satisfying the needs of the customer using the skills of the staff. The authors point out that the main problem in improper delivery of services is due to imbalance in the three operations.

Service quality as a concept has been difficult to define and measure. Moreover, different definitions define service quality differently. However, service quality can be defined as difference between customer expectation of service and perceived service. If expectation are greater than performance than, perceived quality is less than satisfactory and hence customer dissatisfaction occurs.

The service quality model or the ‘GAP model’ developed by a group of authors-Parasuraman, Zeithaml and Berry at Texas and North Carolina in 1985, highlights the main requirements for delivering high service quality. It identifies five ‘gaps’ that cause unsuccessful delivery. Customers generally have a tendency to compare the service they ‘perceived’ with the service they ‘expect’. If the experience does not match the perceived, there arises a gap.

Since, the SERVQUAL model was unable to justify itself for the unique Restaurant service. Hence, Steven, Knutson and Patton (1995) developed a new model named DINESERV keeping in mind the unique restaurant service environment. In the DINESERV model another seven restaurant specific item was added.

DINESERV was developed from SERVQUAL model given by Parasuraman et al. (1985). Tangibles can be understood as anything which is real or actual rather than imaginary or visionary. In service industry it relates with employees dress and appearance, physical facilities, etc. Similarly reliability means dependability, which in service industry means ability to perform accurately the services promised by the organization. Responsiveness means replying or responding or readily acting to the suggestions. In the firm, this refers to the willingness of employee not only to help customer but also to provide prompt services to them. Assurance means confidence or certainty in one’s ability. In service industry this refers to the courtesy of employee and their skill to inspire trust and confidence in the customer. Lastly Empathy, which means to understand and share the feeling of other. This refers to caring, individualized attention a firm provides to customer.

However, reliability of service outcome is of prime importance when it comes to meet the customers’ expectation in restaurant service. The Quality (eg. Aesthetic appearance, aroma, temperature and taste) of the food is the prime reason for visiting the restaurant (Schiffman

and Kanuk, 2009). The process dimension (assurance, responsiveness and empathy) however are the most important dimension in exceeding expectations (Ziethaml et al, 1990)

According to Steven et al. (1995), the final version of DINESERV consisted of total of 29 items covering five dimensions as under:

| Sr. No. | Representing | No. of Items |
|---------|----------------|--------------|
| 1. | Tangible | 10 |
| 2. | Reliability | 05 |
| 3. | Responsiveness | 03 |
| 4. | Assurance | 06 |
| 5. | Empathy | 05 |

Items of DINESERV model are as under:

| Sr. No. | Items | Representing |
|---------|--|--------------|
| 1. | Has visually attractive parking areas and building exteriors. | TANGIBLE |
| 2. | Has a visually attractive dining area | |
| 3. | Has staff members who are clean, neat and appropriately dressed. | |
| 4. | Has a décor in keeping with its image and price range. | |
| 5. | Has a menu that is easily readable. | |
| 6. | Has a visually attractive menu that reflects the restaurant image. | |
| 7. | Has a dining area that is comfortable and easy to move around in. | |
| 8. | Has rest room that are thoroughly clean | |
| 9. | Has dining area that are thoroughly clean. | |
| 10. | Has comfortable seats in the dining room | |

| Sr. No. | Items | Representing |
|---------|--|--------------|
| 11. | Serves you in the time promised | RELIABILITY |
| 12. | Quickly correct anything that is wrong | |
| 13. | Is dependable and consistent | |
| 14. | Provides an accurate guest check | |
| 15. | Serves your food exactly as you ordered it | |

| Sr. No. | Items | Representing |
|---------|---|---------------------|
| 16. | During busy times have employees shift to help each other | RESPONSIVE- NESS |
| 17. | Provides prompt and quick service | |
| 18. | Gives extra effort to handle your special request. | |

| Sr. No. | Items | Representing |
|---------|--|--------------|
| 19. | Has employees who can answer your question completely | ASSURANCE |
| 20. | Makes you feel comfortable and confident in your dealing with them | |
| 21. | Has personnel who are both able and willing to give you information about menu items, their ingredients and methods of preparation | |
| 22. | Make you feel personally safe. | |
| 23. | Has personnel who seem well trained, competent and experienced | |
| 24. | Seems to give employees support so that they can do their jobs well. | |

| Sr. No. | Items | Representing |
|---------|--|--------------|
| 25. | Has employee who are sensitive to your individual needs and wants, rather than always relying on policies and procedures | EMPATHY |
| 26. | Makes you feel special | |
| 27. | Anticipates your individual needs and wants | |
| 28. | Has employees who are sympathetic and reassuring if something goes | |
| 29. | Seems to have the customers' best interest at heart | |

(Source: Pete Stevens et al. 1995)

By administering the DINESERV questionnaire to guest we can get a reading on how customers view the restaurant's quality. In the present study the above set of questionnaires were distributed to 50 guests who were frequent visitor to different types of dining establishments like fine-dining restaurants, fast food restaurants, pizzerias etc. Customers' expectations and perceptions are measured on a seven point Likert-type scale, where the higher the score, the greater the expectation (perception) of restaurant service.

| Statistics | | | | |
|------------|---------|--------|-----------|---|
| | | Gender | Education | Number of visit to Restaurant in last three month |
| N | Valid | 50 | 50 | 50 |
| | Missing | 0 | 0 | 0 |

| Gender | | | | | |
|--------|--------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Male | 29 | 58.0 | 58.0 | 58.0 |
| | Female | 21 | 42.0 | 42.0 | 100.0 |
| | Total | 50 | 100.0 | 100.0 | |

| Education | | | | | |
|-----------|---------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | High School | 7 | 14.0 | 14.0 | 14.0 |
| | Graduate | 27 | 54.0 | 54.0 | 68.0 |
| | Post Graduate | 16 | 32.0 | 32.0 | 100.0 |
| | Total | 50 | 100.0 | 100.0 | |

| Number of visit to Restaurant in last three month | | | | | |
|---|--------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 3 OR LESS | 18 | 36.0 | 36.0 | 36.0 |
| | 4 TO 10 | 21 | 42.0 | 42.0 | 78.0 |
| | MORE THEN 10 | 11 | 22.0 | 22.0 | 100.0 |
| | Total | 50 | 100.0 | 100.0 | |

| Attribute | Expectation | | Perceptions | | Gap | t – value* |
|--|-------------|---------|-------------|---------|-------|------------|
| | Mean | SD | Mean | SD | | |
| Has visually attractive parking areas and building exteriors. | 5.94 | .73983 | 3.04 | 1.08722 | -2.9 | 14.042 |
| Has a visually attractive dining area | 6.26 | .66425 | 3.90 | .95298 | -2.36 | 12.346 |
| Has staff members who are clean, neat and appropriately dressed. | 6.04 | .75485 | 4.64 | 1.19112 | -1.4 | 7.846 |
| Has a décor in keeping with its image and price range. | 5.64 | 1.00529 | 4.32 | .84370 | -1.32 | 11.063 |
| Has a menu that is easily readable. | 5.94 | .71171 | 5.04 | .90260 | -0.9 | 6.034 |
| Has a visually attractive menu that reflects the restaurant image. | 5.46 | .61312 | 4.16 | .88893 | -1.3 | 9.055 |
| Has a dining area that is comfortable and easy to move around in. | 5.10 | .90914 | 3.42 | 1.34149 | -1.68 | 7.325 |
| Has rest room that are thoroughly clean | 5.98 | .89191 | 3.12 | 1.28793 | -2.86 | 11.407 |
| Has dining area that are thoroughly clean. | 6.46 | .50346 | 3.00 | .92582 | -3.46 | 21.338 |
| Has comfortable seats in the dining room | 5.92 | .87691 | 4.42 | 1.17959 | -1.5 | 8.602 |
| Serves you in the time promised | 7.24 | 9.95205 | 3.78 | 1.09339 | -3.46 | 2.446 |

| | | | | | | |
|--|------|---------|------|---------|-------|--------|
| Quickly correct anything that is wrong | 5.60 | .67006 | 3.78 | .84007 | -1.82 | 15.145 |
| Is dependable and consistent | 5.68 | .58693 | 4.06 | .79308 | -1.62 | 10.202 |
| Provides an accurate guest check | 5.90 | .76265 | 5.08 | .77828 | -0.82 | 4.675 |
| Serves your food exactly as you ordered it | 6.46 | .50346 | 4.90 | 1.03510 | -1.56 | 9.482 |
| During busy times have employees shift to help each other | 5.82 | .80026 | 4.72 | .64015 | -1.1 | 8.352 |
| Provides prompt and quick service | 6.30 | .70711 | 4.34 | 1.02240 | -1.96 | 13.464 |
| Gives extra effort to handle your special request. | 5.10 | 1.01519 | 3.10 | 1.05463 | -2 | 10.932 |
| Has employees who can answer your question completely | 5.88 | .84853 | 4.70 | 1.03510 | -1.18 | 5.438 |
| Makes you feel comfortable and confident in your dealing with them | 5.74 | .82833 | 4.82 | .80026 | -0.92 | 4.608 |
| Has personnel who are both able and willing to give you information about menu items, their ingredients and methods of preparation | 5.64 | .98478 | 4.48 | .90891 | -1.16 | 5.665 |
| Make you feel personally safe. | 5.26 | .98582 | 4.12 | .65900 | -1.14 | 7.283 |
| Has personnel who seem well trained, competent and experienced | 5.86 | .90373 | 4.90 | .93131 | -0.96 | 4.574 |
| Seems to give employees support so that they can do their jobs well. | 4.90 | .93131 | 4.22 | .97499 | -0.68 | 4.179 |
| Has employee who are sensitive to your individual needs and wants, rather than always relying on policies and procedures | 6.06 | .91272 | 3.94 | .73983 | -2.12 | 12.793 |
| Makes you feel special | 6.16 | .68094 | 3.24 | .91607 | -2.92 | 18.403 |
| Anticipates your individual needs and wants | 5.50 | 1.07381 | 2.92 | 1.12195 | -2.58 | 9.359 |
| Has employees who are sympathetic and reassuring if something goes | 5.56 | .81215 | 3.82 | .84973 | -1.74 | 9.308 |
| Seems to have the customers' best interest at heart | 6.10 | .81441 | 2.82 | .89648 | -3.28 | 15.617 |
| Overall mean for 29 attributes | 5.84 | | 4.03 | | -1.82 | |

Remark: t – test (2 tailed Sig.) $p < 0.05$ for all attributes.

From the above chart it is clear that the mean score of expectation ranges from 4.90 to 7.24. The lowest expectation item was “employee support to do their job well”. This implies that guest is not much concerned about the type of support given to the staff in order to perform their task. Hence, they want staff to perform their task effectively, irrespective of support extended. Alternatively, the highest expectation was regarding “serve you in the time promised”. This implies that the guests are not ready to wait for longer duration to avail the service and hence, they expect that order should be placed to them at the time promised. Other items which score high in expectations are cleaning of dining area, serving exact food as ordered, have customer interest at heart and make them feel special. Thus customer expects to be pampered and look forward for a high class, error free service in clean and comfortable place. The score also indicates the same as overall mean for expectation was 5.84 indicating high expectation from customers end.

The mean score of customer perception range from 2.82 to 5.08, the lowest being “Customer best interest at heart”, which indicate that the guest in the restaurant is of belief that restaurant owner and staff do not keep their interest at the center of everything. Alternatively, customer higher perceptions were regarding providing accurate guest check and easy to read menu. This implies that error in computing the total bill of the guest is least and Menu Cards in the restaurant are well prepared and are easy to read. The overall mean score for the guest perception was 4.03, which is less than the expected mean score indicating that guests in the restaurant of Jharkhand are not satisfied with the service quality.

As per the results obtained in Table 1, the expectations are much higher than the perceptions of service. Thus, we find that DINESERV gap is negative for all restaurant attributes. The narrowest gaps are for the attributes “seems to give employee support to do their job well” and “has personnel who seem well trained, competent and experienced”. Though this low negative gap scores means that the difference between perceived and expected service is small, but it also indicate that guest expectation on these two front is not high in comparison to other attributes, hence, resulting in smaller gap. Similarly, the widest gap is for the item “clean dining area” and “Service in time promised”, this indicates that customer needs the food items to be served fast and expect much cleaner dining area than they actually find. Lastly, the overall DINESERV gap is -1.82. Such a huge gap indicates that restaurants should improve their service quality, because all restaurant attributes were found much below customers’ expectations.

Conclusion

SERVQUAL has become one of the principal indicator to determine and asses the service quality for a particular service provider. Hence, it was justified to apply the modified SERVQUAL for our research as we were concentrating on only one aspect of service i.e.

Restaurant (Dining Area) service Quality to find whether delivered service meets, exceeds or falls below customers' expectations.

The result indicates that the difference in expectation and perception is too large and hence the managers should try to minimize it. Perhaps the reason for not having a large group of loyal restaurant guest is this negative gap. Even those items which have lesser gap like support form management to perform the task and well trained personnel should not be ignored. After all it is these well trained personnel who are representing restaurant to the guest. Hence, care should be taken to ensure that proper attentions are given to them.

The overall mean score for perception was 4.03 which clearly indicate that restaurant in Jharkhand are not performing well and need improvement in the quality of service being offered to the guest.

The results of gap analysis clearly indicate that restaurant service providers are not meeting the customers' expectations. The overall DINESERV gap is -1.82, which is quite high and clearly indicates that the overall restaurant service quality fell much below customers' expectations and that there is room for service quality improvement in the restaurant of Jharkhand. Hence, managers should find the ways to improve upon and meet the expectations of the customers.

REFERENCES

- Accessed from <http://www.indiafoodguide.com/i/results.aspx?src=home&search=direct&q=&city=Ranchi&Input.x=75&Input.y=23> accessed on 1st July'14
- Allen, D. R., Rao, T. R. (2000). *Analysis of customer satisfaction data*, Milwaukee, WI: ASQ Quality Press.
- Andaleeb, S. S. & Conway C. (2006). Customer satisfaction in the restaurant industry: an examination of the transaction-specific model. *Journal of Services Marketing*, 20 (1), 3-11.
- Barrington, M. N. & Olsen, M. D. (1987). Concept of service in the hospitality industry. *International Journal of Hospitality Management*, 6, 131-138.
- Bojanic, D. C. & Rosen, L. D. (1994). Measuring service quality in restaurants: an application of the SERVQUAL instrument. *Hospitality Research Journal*, 18, 3-14.
- Chase, R. B. (1978). Where does the customer fit in a service operation? (November, page. 138). Harvard: *Harvard Business Review*.
- Dulen, J. (1999). Quality control. *Restaurant & Institutions*, 109 (5), 38-52.
- Grönroos, C. (1990). *Service Management and Marketing: Managing the Moments of Truth in Service Competition*. Lexington, MA: Lexington Books.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R.L. (2006). *Multivariate Data Analysis*, 6th Edition, New Jersey: Pearson Prentice Hall, Upper Saddle River.

- Keiser, T. C. (1988). Strategies for enhancing service quality. *Journal of Service Marketing*, 2, Summer, 65- 70.
- Kim, W. G. K., Ng, C. Y. N. & Kim, Y. (2009). Influence of institutional DINESERV on customer satisfaction, return intention and word-of-mouth. *International Journal of Hospitality Management*, 28, 10-17.
- Kivela, J., Inbakaran, R. & Reece, J. (2000). Customer research in the restaurant environment, part 3: analysis, findings and conclusions. *International Journal of Contemporary Hospitality Management*, 12 (1), 13-30.
- Ladhari, R. (2008). Alternative measures of service quality: a review. *Managing Service Quality*, 18 (1), 65- 86.
- Lee, Y. L & Hing, N. (1995). Measuring quality in restaurant operations: an application of the SERVQUAL instrument. *International Journal of Hospitality Management*, 14 (3-4), 293-310.
- Lehtinen, U. & Lehtinen, J. R. (1982). *Service Quality: A Study of Quality Dimensions*. Helsinki: Service Management Institute.
- Liu, Y. & Jang, S. (2009). Perceptions of Chinese restaurants in the U.S.: What affects customer satisfaction and behavioral intention? *International Journal of Hospitality Management*, 28, 338-348.
- Lemmink J, Ruyter K. D & Wetzels M. (1998). *The role of value in the delivery process of hospitality services*, 19.
- Lockwood A, Jones P. (1998). *The Management of Hotel Operations*, Cassel, pp.28-30.
- McIntosh, A. & Cave, J. (2005). Expectations of the service experience offered by restaurants and cafes in Hamilton. *Journal of Hospitality and Tourism Management*, 12 (2), 108-116.
- Namkung, Y. & Jang, S. (2008). Are highly satisfied restaurant customers really different? A quality perception perspective. *International Journal of Contemporary Hospitality Management*, 20 (2), 142-155.
- Parasuraman, A., Berry, L. L. & Zeithaml, V. A. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50.
- Parasuraman, A., Zeithaml, V. A. & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64 (1), 14-40.
- Peri, C. (2006). The universe of food quality. *Food Quality and Preference*, 17 (1-2), 3-8.
- Pete Stevens, Bonnie Knutson and Mark Patton (1995). Dineserv: A tool for measuring service quality in restaurants, *The Cornell Hotel and Restaurant Administration Quarterly*, pp 56-60.
- Stevens, P., Knutson, B. & Patton, M. (1995). DINESERV: A Tool for Measuring Service Quality in Restaurants. *The Cornell Hotel and Restaurant Administration Quarterly*, 36 (2), 56-60.

- Sulek, J. M. & Hensley, R. L. (2004). The relative importance of food, atmosphere and fairness of wait. *The Cornell Hotel and Restaurant Administration Quarterly*, 45 (3), 235-247.
- Susskind, A. M. & Chan, E. K. (2000). How restaurant features affect check averages: a study of the Toronto restaurant market. *The Cornell Hotel and Restaurant Administration Quarterly*, 41 (6), 56-63.
- Wishna, V. (2000). Great expectations. *Restaurant business*, 99 (1), 27-30.
- Wu, C. H. & Liang, R. (2009). Effect of experiential value on customer satisfaction with service encounters in luxury-hotels restaurants. *International Journal of Hospitality Management*, 28, 586-593.
- Yuksel, A & Yuksel, F. (2002). Measurement of tourist satisfaction with restaurant services: a segment-based approach. *Journal of Vacation Marketing*, 9 (1), 52-68.
- Zeithaml, V. & Bitner, M. J. (2003). *Services Marketing: Integrating customer focus across the firm*. 3rd edition. New York: McGraw-Hill.
- Zeithaml, V., Parasuraman, A. & Berry. L. L. (1990). *Delivering Service Quality*. New York: The Free Press.
- Zopiatis, A. & Pribic, J. (2007). College students' dining expectations in Cyprus. *British Food Journal*, 109 (10), 765-776.