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## SERVICE QUALITY: REVISITING THE TWO FACTORS THEORY

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### ABSTARCT

Present paper is based on the findings of the ongoing Ajmer Experiments. Ajmer Experiments are quasi-experiments that inquire into the consumer evaluation of service quality. The paper presents the two factors' theory of the author. The paper suggests that a more detailed approach is required wherein each factor needs to be considered independently and not as an aggregate dimension. The paper reports evidence to support two-factor theory for services that was discarded by earlier researchers. The paper argues to differentiate between the factors and the outcome of performance along these factors. The study describes the two factors as 'vantage factors' and 'qualifying factors'. Marketers need to be selective in that certain factors behave as vantage factors while others as qualifying factors. The two are different in nature and require a differential treatment. The paper also analyses the nature and behavior of these two types of factors. Managerial implications of these factors are also dealt with in this paper.

### INTRODUCTION

This paper revisits the much-debated issue- whether the determinants of service quality can be classified into two types along the Herzberg's two-factors theory: the hygiene factors and the motivators? Hygiene factors are those, which, if not provided, result in customer dissatisfaction, and the motivators are those, which do not cause dissatisfaction when absent, but when provided, create a positive disposition for services, leading to enhanced demand for it.

### SERVICE QUALITY

One of the most accepted facts is that service quality in most cases depends on a number of factors or aspects [1], [2], [3], [4], [5], [6]. Parasuraman, Zeithaml, and Berry (1985) identified ten determinants: *reliability,*

*responsiveness, competence, access, courtesy, communication, credibility, security, understanding/ knowing the consumer, and tangibles* [1]. Later these were reduced to five: *tangibles, reliability, responsiveness, empathy and assurance* [7]. Grönroos added a sixth dimension *recovery* to these five [8]. This refers to having a clear-cut strategy for removing the unwanted elements of service offer to the satisfaction of the consumer.

All have not universally accepted these dimensions. Researchers have reported that their research do not support these dimensions. Finn and Lamb researching on retailing negated the Parasuraman *et al.*'s claim that their instrument is applicable to a wide range of services [9]. They concluded that the five dimensions are insufficient to measure service quality in the retail setting. Similarly, Cronin and Taylor, researching for services like banks, dry-cleaning, etc. found little support for Berry *et al.*'s five dimensions [10]. They did not have any research sample that confirmed Parasuraman's five dimensional construct of service quality.

Silvestro and Johnston [11] and Fitzgerald *et al.* [12] in their studies enlarged the Parasuraman *et al.*'s efforts by redefining some of the previous dimensions and enlarging this list to as many as 15 factors. They caution against relying exclusively on the market (or consumers) to determine all the key attributes of service quality. Thus, they maintain that due attention to the specific tasks of operations is also desirable.

Among others Collier identifies the following service quality attributes: *accuracy, volume and activity, convenience, time-oriented responsiveness, reliability, professionalism and competence, friendliness and consumer empathy, atmosphere and aesthetics, security and safety, productivity and efficiency, overall market and*

performance indicators, technology, and price/value/cost/relationships [5]. Earlier, Juran and his associates have identified three aspects of services that should be measured: *timeliness*, *consumer well being*, and *continuity of services* [13].

Armistead classified the service dimensions as 'soft' and 'firm'. The style (attitude of staff, accessibility of staff, and ambience), steering (the degree to which customers feel in control of their own destiny) and safety (trust, security and confidentiality) are the soft dimensions whereas; time (availability, responsiveness and waiting), fault freeness (in physical good, intangible activities and information) and flexibility (recovery, customization and augmented services) are the 'firm' dimensions [14].

The significance of these quality characteristics can vary considerably between types of services and individual buyers. Yet what is important here is that these studies assume a similar characteristic for all dimensions- that a good performance along these dimensions will lead to customer satisfaction and an insufficient performance level will lead to customer's dissatisfaction?

#### FACTORS THEORY: EARLY RESEARCH

There exists an alternate view. Some research has tried to approach the determinants by attempting to classify them as 'satisfiers' and 'dissatisfiers'. Way back in 1976, Swan and Combs suggested that:

Consumers judge products on a limited set of attributes, some of which are relatively important in determining satisfaction, while others are not critical to customer satisfaction but are related to dissatisfaction when performance on them is unsatisfactory [15].

Swan and Combs made an attempt to classify the determinants into two- *instrumental* (the performance of physical product) and *expressive* (the psychological performance of the product). He suggested that both of these have to be achieved to satisfy a customer. They further suggested that:

Satisfaction will tend to be associated with expressive outcomes above or equal to expectations and dissatisfaction will tend to be related to performance below expectations for instrumental outcomes.

Further, to be satisfactory, the product must meet expectations on both instrumental and expressive outcomes. Also that dissatisfaction may result from either type of performance. Though the Swan and Combs study provide us with some initial research on the factors theory, it must be pointed out that the exploratory study was focused on products and therefore cannot be generalized for services. Also the researchers had faced some problems in classifying their data, for example 'comfort' could be classified as either expressive or instrumental. In either case it significantly affected the outcome. Later in his

studies Maddox found some evidence to support Swan and Combs' suggestions [16]. He concluded:

Low values on an expressive attribute will reduce satisfaction, but will not lead to dissatisfaction.

Later in an important study, Cadotte and Turgeon found that some variables were dissatisfiers when the performance or absence of the desired feature led to dissatisfaction, which then resulted in a complaining behavior. On the other hand, higher levels of performance along these features did not necessarily lead to compliments [17]. They therefore concluded, "Dissatisfiers represent the necessary but not sufficient conditions of product performance". They also identified the existence of some satisfiers that lead to a complimenting behavior, when performed well, but their absence does not necessarily leads to dissatisfaction. Thus, they suggested, "From a management point of view satisfiers represent an opportunity to move ahead of the pack".

They also identified some 'criticals' that could lead to both positive and negative feelings. Using 'quality of service' as a single dimension, they classified it as a critical one wherein it can be either or both a satisfier and a dissatisfier. Another category identified by them was 'neutrals' that neither elicits compliments nor the complaints. Studies by Cadotte and Turgeon thus recognised that causes of satisfaction and dissatisfaction may be different and that management must handle them separately. One limitation of this study was that is considered 'service' as a single variable and it failed to identify and classify the determinants of 'service'.

Working on similar lines Johnston and his associates [18], [19], drawing analogy from Herzberg, *et al.*'s called their categories *hygiene*, *enhancing* and *dual factors*. Mersha and Adlakha using a similar approach also claim some evidence that a certain level, there may be some difference between the causes of satisfaction and dissatisfaction [20]. Using critical incidence and cluster analysis, Smith *et al.* also subscribed to the idea that determinants of satisfaction and dissatisfaction may be different [21].

Johnston again in 1995 tried to approach the service quality using a two factor's approach. He this time called them satisfiers and dissatisfiers [22]. He pointed out serious limitations of earlier studies as being product based [15], [16], [23]; or, having used broad categories [15], [17], [24]; or, having used smaller samples [20], [21]; or, being exploratory in nature, whose findings cannot be generalized [15], [16], [20], [21], [23]; and that some studies used data from different industries where the satisfiers and dissatisfiers may not necessarily be the same [18], [20], [24]. In this study Johnston used 17 determinants of service quality [18] to study the banking service. Johnston resorted to critical incident technique

(CIT) in this study to solicit customers' perceptions about the banking service. This important study that returned more 'satisfying' incidents than 'dissatisfying' incidents has concluded that: (i) determinants associated with dissatisfaction are significantly different from those that create satisfaction; (ii) study returned a low value of  $r$ , which implies no correlation rather than inverse correlation, contrary to the suggestion of Berry *et al.* that the determinants that tend to satisfy are the obverse of those that dissatisfy [1]; (iii) there were only four exclusive determinants of satisfaction or dissatisfaction with the bank- integrity (dissatisfaction), commitment (satisfaction), aesthetics (dissatisfaction), and cleanliness (satisfaction); (iv) most determinants can be either a source of satisfaction or dissatisfaction / the remaining 13 factors in this case; (v) more significant determinants related to intangible side of the service; (vi) it was pointed out that 'reliability' was typical factor and it at times is a satisfier and at times a dissatisfier (reliability however was tenth on the list of satisfiers with only two percent of mentions).

This study thus substantiates the earlier studies by Johnston and associates [1], [8], [25]. Silvestro and Johnston [25] maintains:

It might be argued that this implies that quality factors do not split into two groups of hygiene and enhancing factors. The reasons behind such a position would be as follows:

- Had some or many of these factors been cited exclusively as reasons for satisfaction or dissatisfaction, this would have provided strong evidence for hygiene/ enhancer hypothesis. However, this was not the case for any of the factors. This is not in itself a reason to reject the framework; indeed, it might be worthy of note that none of the Herzberg's factors were found to be exclusively dissatisfying or satisfying either and this did not prompt him to abandon the theory.
- If the factors divided clearly into two distinct groups, one would expect the factors most commonly causing dissatisfaction to be different from those factors most commonly referred to as satisfying. In fact, in this sample of customers, the four factors which most commonly caused dissatisfaction was identical to the four factors most commonly referred to as dissatisfying.
- Five of the 15 quality factors which emerged from the anecdotal could not

be easily be categorized as either enhancing or hygiene, since the ratio of satisfying to dissatisfying references for each of these factors was less than 55:45.

They however caution that this is not a conclusive disproof of the enhancer/ hygiene hypothesis.

### AJMER EXPERIMENTS

September 1997, a simulated classroom experiment was carried out at different student groups at different levels of different faculties. The experiment included a survey of the student's perception of what they considered important in a classroom teaching experience. What qualities do they consider important in a teacher? Surprisingly, the findings suggested that friendliness; empathy appeared to be more important. Competence of the teacher, his knowledge of the subject, etc. appeared at a low priority. This generated an intense debate - "Do the competence of the teacher, his knowledge of the subject not considered important by the consumer?" Should a new model of "teacher" be explored in the light of above? In the light of Indian higher education scenario that continues to exist with shades of its colonial past and bureaucratic structures this was a startling result. Findings appeared to be in consonance with the results of Parasuraman, Berry, Zeithaml model, in that that there are certain important determinants of quality of any service. Factors constituting empathy and responsiveness took prominence over those that account for assurance and reliability. In the light of above findings, it was being suggested, that newly discovered attributes of a teacher need to be emphasized. As a sequel to this, a study was carried out in later half of 1999 that analyzed the performance at a classroom. This study was carried out on the lines of the *Three-Column Format* suggested by Parasuraman, *et al.* [26]. The SERVQUAL dimensions were not used yet *performance* was evaluated as compared to minimum service level and desired level. It was decided to carry out a comparative analysis of the evaluations for two groups one that categorically evaluated the performance as *unsatisfactory* and the other group that evaluated it as *good*.

Another important thing about Ajmer Experiments is that it approaches the service quality problem by analyzing the various factors and not the entire dimension as a basic unit. It must be noted that a dimension consists of a number of factors. Further that though a dimension may give us an aggregate idea about the preferences and expectations of the consumer, it is the factors that are individually responsible for consumer evaluation on service quality. In certain critical situations the consumer evaluation of key factors is such that it do not matches with the evaluation of the dimension as a whole.

### FACTORS AS DETERMINANTS OF QUALITY

It is important that service providers identify and emphasize some *Key Factors* (KF) rather than considering the entire dimension as one with all constituent factors as being equally important. This study by the author and his associates confirms the results of Rosen and Karwan, that, the importance of quality dimensions appears to vary with service setting [27]. Ajmer Experiments suggest that generalizations are difficult to make because of variation in the basic nature of services (labor or capital intensity) and also that the type of industry affect the construct of service. It was found that the factors that constitute *empathy* and *responsiveness* were found to be more important for labor-intensive industry while those constituting *tangibles* and *reliability* affected the assessment of quality dimensions in case of capital-intensive services. This was also confirmed by the results from a similar study done for 'Management Education' where the single most important dimension was the knowledge of the teacher (assurance).

Services USP (unique selling proposition) can be woven around different criteria (tangibility, customization, labor intensity, etc.). This criterion in turn could be the *KPD* (key performance dimension). Different user groups can see each type of service in turn as performing on a number of factors across different dimensions. From among these factors, some are the *key factors* and are relatively more important for the consumer. A number of these KFs could be simultaneously important for these user groups, though the relative importance of these dimensions may vary from one user group to another. Though there may be general shift in consumer preference for a dimension for example from medical care through patient care to hospital care in case of the consumers of healthcare. Their importance may also vary from one consumer group/ segment to another.

### SERVICE QUALITY IS DYNAMIC

This proposition is based on the findings of the *Ajmer Experiments*<sup>1</sup>. As a part of research design an assessment of quality gap was made for various services. This assessment was made using the standard SERVQUAL tool of Parasuraman, Zeithaml and Berry [7]. The questionnaire was administered to the consumers of various relatively new services like computer centers, cyber-cafes, supermarkets, etc., during February-March, 1997. A feedback on different quality dimensions was furnished to the service providers. This was intentionally done so that the providers may consciously/ subconsciously try to make some improvements in their services along the various

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<sup>1</sup> *Ajmer Experiments are quasi experiments instituted since March 1997 to carry out investigation into the dynamics of service quality. The Findings are revealing and have significant contributions to the body of knowledge in the subject.*

quality dimensions. In the second phase (April-March 1998) again an assessment of quality was made. To the surprise of the researchers it was observed that in spite of the reported conscious efforts by the provider to improve the services there existed a quality gap between the expectations and the perception about the services provided.

The Quality Gap increased with time. This suggested that the expectations of the consumer rise with time irrespective of the activities of the provider. Expectations keep on rising along the time axis and this may be due to the ever-increasing pressures of competition, word-of-mouth, designed external communication by the service provider, or imagination of the consumer.

### DIFFERENTIATE BETWEEN 'QUALIFYING' AND 'VANTAGE' FACTORS.

Further, the weights assigned to the various quality factors change over a period of time. It appears that certain factors of service quality behave as "*order winning*" factors. These are the *Vantage Factors*. They are the most sought after factors for the consumer group. All assessments about the quality are influenced by these dominant factors. Over a period of time these factors start settling down as *maintenance factors* or *Qualifying Factors*. The qualifiers are those that were once considered important by the consumers (say cleanliness in a hospital). They are still important (cleanliness is still important in that its absence would alienate the consumer) but the focus of competition gradually shifts to other consideration (say hospitality or nursing care, etc. in case of hospitals). An absence of these factors drives away the consumer, while their presence is considered a basic essential part of the service contract. Their presence no longer *drives in* the consumers. Thus the factors of service quality for a service can be divided into two parts - one set that enables the service to qualify for the competition by maintaining the consumer satisfaction with the service and the other that wins orders by motivating the consumer into consuming the services as against the offers of the competitor.

### CONSUMER IS MORE TOLERANT OF VANTAGE FACTORS

Studies as part of the Ajmer Experiments have shown that consumers are more tolerant of vantage factors. Though they expect better performance on vantage factors as a differentiator of a particular service they are generally more tolerant to a not so good a performance i.e. empathy and courtesy of nursing personnel in a healthcare setting or decor in the service scope of a travel agent or that of a hotel. The factors that the consumer classifies as qualifying factors are ones, which the consumer generally does not consider for differentiating a service offer. But paradoxically he is not willing to accept an inadequate performance. It must be noted that both the desired service level and adequate service levels are both close and low.

As opposed to this, the zone of tolerance is wide for vantage factors - decor in the front office of a bank or a hospital. Thus the consumer is not very particular about the qualifying factors which he assumes will be of an adequate quality for a service offer to exist in the market in the face of competition. But this reluctance does not mean that he is not interested in the performance along this factor. In fact he is intolerant of any inadequate performance along this factor.

### **TRANSITION OF VANTAGE FACTOR TO A QUALIFYING FACTOR**

The service provider as a part of their marketing strategy often introduce and communicate about a performance along a particular factor as a unique selling proposition. The pressures of competition generally drive this. Either the going practice of the contemporary times is adapted or an innovation is introduced as an enhancement of service concept. This serves as vantage factors say; cleanliness in Indian hospitals some years back was a vantage factor. In recent times e-shopping is a vantage factor. Consumer is delighted by this 'new experiment'. But over a period of time he gets used to it and is no more attracted by the offer. In fact he starts expecting this 'new' feature as a necessary part of routine offer. This then becomes a part of the bare essential requirements of the offer. To be in the market a hospital has to be clean, self service in a fast food outlet is absolutely fine and Pentium machines- of course! *Apart from this what else is on the offer?*

The factor enters into consideration as a vantage factor but over a period of time, as competition matures, is relegated to as a qualifying factor. The zone of tolerance gradually gets narrower. To begin with consumer allows for more variation as he attributes such a variation to experimentation with the new offer and he gets more tolerant about this factor of the service offer. But over a period of time he believes that a provider must include this factor as a part of the offer. His tolerance reduces. He is now not ready to excuse the provider for inadequacies of performance on this factor, which by now is a qualifying-factor.

### **DOMINANT FACTORS**

There are certain factors that are important for consumers at a point of time. Performance along these factors/ dimensions eclipses, to a certain extent, the evaluation of performance along other factors/ dimensions. In the third phase of Ajmer experiments, with responses from consumers of auto servicing, air travel agents, private nursing homes, beauty parlors and supermarkets, it was analyzed that aggregate assessment of the quality of a service is with reference to a few factors alone. The consumer considers not all factors of all dimensions. Given some time to respond to a structured questionnaire seeking response for various items (22 items in SERVQUAL) and dimensions a consumer may evaluate the performance. But

while making an overall assessment all factors/ dimensions do not get into consideration. Respondents from a cross-section of industries were asked to evaluate the performance along various factors and also make an overall assessment. The results suggest that qualifying factors do not enter the consideration as long as there is an inadequate performance. Consumer evaluation of service quality is based only on the performance along vantage factors that are the dominant factors. In case the qualifying factors are not of an adequate quality, they assume dominant postures and the evaluation of quality revolves around them. It must be noted that qualifying factors are dominant only for a negative evaluation. They have little role in positive evaluation of the service quality. Given an adequate performance of qualifying factors, dominant vantage factors determine whether the service offer is good or not so good.

### **QUALIFYING FACTORS**

An inadequate performance of a qualifying factor would adversely affect the overall perception of service quality, more than an inadequate performance of a vantage factor. The consumers who rated the overall performance as inadequate did so because the gap between the expected adequate level of performance and the consumers' perception of the service providers' quality was larger for certain factors that did not appear on consumers' priority. Only in 19 percent cases was the overall rating poor when the performance of factors rated 'important' was not so good. This was substantiated by the fact that for an overwhelming 68 percent of the cases where the overall rating was 'inadequate' the performance along the 'important dimensions' was between the expected levels and the adequate levels. The lesson for the service marketers is that they need not invest a lot on qualifying factors, as they do not extend any additional advantage to the provider. But performance along all such factors be tracked so as to ensure that these factors do not get below the adequate level mark. In such situations these qualifying factors become the *dominant factors* and tend to eclipse even the good performance along the vantage factors (factors that are contemporarily rated 'important' by the provider).

### **VANTAGE FACTORS**

As long as the performance of qualifying factors is maintained around the 'adequate levels', the vantage factors become the *dominant factors*. The vantage factors are those factors that the consumers rate as important at a particular point of time. It is these factors that are emphasized (or need to be emphasized) in all communication and appear as a part of USP hospitality in a hospital, decor at a saloon, in-flight gifts, etc.

Just opposite to the nature of qualifying factors, an exceptionally good performance of a vantage factor over-assesses the over-all quality of service, more than an

exceptionally good performance of a qualifying factor. An exceptionally good performance on qualifying factors in 73 percent cases could get converted in only an adequate overall rating (2 on a 3-point scale). Of all the cases where the overall rating was good (3 on a 3 point scale) 84 percent reported that the perceived performance was close to the expected level mark. The evidence suggests that companies should work hard to identify and select a few important vantage factors at a point of time so that energies may be channelized to keep the performance on higher side of the zone of tolerance.

### DISCUSSION AND CONCLUSIONS

This section tries to highlight how the findings of the present study are a departure from some earlier studies.

The first important thing to be noted here is that the Parasuraman *et al.*'s five dimensions with 22-item tool though may provide a good theoretical model of service quality. It is rather difficult for the customer/s to evaluate quality on the basis of such a comprehensive list. In fact what determines the service quality at a point of time is a function of some dominant factors. One, which factor/s dominate at a point-of-time, must be determined on a case basis and two, what is likely to dominate must be understood by the service leadership. Further as pointed out earlier factors are not same as dimensions. A dimension consists of a number of factors. It must also be understood that a dominating factor may come from a not so important dimension. On the other hand there may be some not-so-important factors from a very important dimension. Factor dominance often depends on the competitive position and the positioning strategies adopted by the provider. As an example, Johnston and Lyth suggest that the cleanliness of facilities in a restaurant is a hygiene factor because the customer expects it- for example if, if the cutlery is dirty, then the customer becomes dissatisfied. However, if cutlery is clean, the customer's perception of quality provided is not positively enhanced... [28]. It is however known that McDonalds has successfully communicated cleanliness as an enhancing factor that its customers value. Thus 'satisfying', 'dissatisfying' and 'critical' may not necessarily be different categories of factors- instead it is just the customer reaction to the perceived performance along the factor. Thus this study suggests that the factors could be 'vantage' or 'qualifying' depending upon the state and nature of competition, while the resultant experience could be 'satisfying' or 'dissatisfying' which may lead to its being 'a dominating factor', still it may not be critical.

A factor cannot be classified as satisfier or dissatisfier. Factor is secular and a performance of this factor results into satisfaction or dissatisfaction or some intermediate position. These intermediate positions are also important in that the service leadership must keep a track of these and evaluate how much of variation may result into these becoming dominating factors. Thus factors need to be

differentiated from the outcomes of the performance along these factors at certain levels.

At a point of time there may be many factors that account for evaluation of service quality. Conscious efforts by providers may induce the consumers to consider some more factors as part of their evaluation say for example - cleanliness in case of McDonalds or timely home-delivery in case of Domino's Pizza. Service companies must make sustained efforts to keep these factors as vantage factors or else the competition may relegate them as qualifying factors. In that case the providers must focus on new service features to keep them ahead of the competition.

It must also be understood that there will be a limited number of dominating factors around which the customer will evaluate the service experience. Both the vantage and qualifying factors could be dominating depending upon the level of performance along them. A below expectation performance for a qualifying factor may render it dominating while an outstanding performance along a vantage factor may help differentiate a service from the competition. Further what is a vantage factor and what is a qualifying factor will vary from situation to situation. Also, how long a factor remains a vantage or qualifying factor will also vary from case to case.

Still the service leadership must understand that customers are generally less tolerant to inadequate performance along a qualifying factor whereas they are relatively more tolerant to an inadequate performance along a vantage factor.

### LIMITATIONS OF THE PRESENT STUDIES

One of the most important limitations of the Ajmer experiments has been the failure to develop an Analytical Hierarchy Process (AHP)<sup>2</sup> tool that differentiates between a vantage factor and a qualifying factor. This is an important gap in the service quality research as service providers may like to have such a tool to track which factors are vantage factors and which are qualifying factors

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*2 Analytical hierarchy process (AHP) tool is a quantitative technique that facilitates structuring a multi-attribute, multi period and multi person problem hierarchically. The attribute can be qualitative or quantitative. The Methods involve development of relative importance among the attributes using expert opinion or similar methods. Relative weights are then calculated based on respective importance of the attributes. The relative importance would then depend upon the goals and sub goals of the problem. Hence, the problem to decide which factors are vantage factors and which one are just qualifying factors, can be broken hierarchically into different structures depending upon its goals and sub-goals. Ajmer Experiments propose to concentrate on the development of a suitable AHP tool for the purpose*

and to pin point when a vantage factor slips into the qualifying factor category. Given the present state of research only some indications are available that may help us differentiate between the two categories:

- a. Given the adequate overall performance, the factors that attract the consumer towards a service offer are generally vantage factors.
- b. Vantage factors have a greater zone of tolerance
- c. Factor that are individually important but are from a not-so-important dimension may be the qualifying factors.
- d. Consumers are very particular about the inadequate performance of a qualifying factor.
- e. Qualifying factors have a narrow zone of tolerance.

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