CHAPTER 2
Review of Literature

2.1 Introduction

In this Chapter, the researcher has made an attempt to study and understand the complex concepts of Customer Satisfaction. This attempt includes, understanding the basic concepts of Customer satisfaction, analysing research studies made by earlier researchers in respect of Customer Satisfaction in Cellular Phone Industry, various Customer Satisfaction Models and various Methods of Measurement of Customer Satisfaction. For this, the researcher has used various books, research Journals and websites. The detailed list is further elaborated in the Bibliography. Through this Literature Survey researcher wants to find out which are the important parameters of Customer Satisfaction in respect of Cellular Phone Subscribers in Pune City.

Pune presently is one of the most modern cities of Maharashtra. It is the Head Quarter of the Indian Army's Southern Command, Air base for Indian Air Force, and a Military Cantonment. It is the home of Gopal Krishna Gokhale, Maharshi Dhondo Keshav Karve, Wrangler P.R. Paranjape, and Mahatma Jyotiba Phule. The University of Pune offers courses in languages, basic sciences, social sciences, law, and management. Pune is thus a city of political leaders, reformers, educationists, revolutionaries, and scientists.

2.2 Customer Satisfaction

Last few decades have witnessed dramatic changes in market environment characterized by unprecedented levels of diversity, knowledge richness and turbulence. The turbulence in environment has created by macro environmental changes, namely, technological advances and globalization. The technological changes have made the traditional economic concept of scale, scope and structure irrelevant in the new economy removing the time and place barriers of doing business. Technological advances combined with forces of globalization have resulted in the transformation of the economy, industries, markets and customers, resulting in a connected knowledge economy, borderless global economy, globalizing, converging and consolidating
industries, fragmenting and frictionless markets and active, connected, informed and demanding customers.[1] Organizations’ attempts to adapt to these changing environmental realities have effected changes in the focus, emphasis and scope of marketing. Today’s customers demand choice and convenience. Customers mix and match according to their needs for product or service. Customer “satisfaction presents a versatile cross-channel metric to gauge the service provider’s strengths and weaknesses from the customer’s point of view. The concept of customer satisfaction occupies a central position in marketing thought and practice.

Satisfaction is a major outcome of marketing activity and service to link processes culminating in purchase and consumption with post purchase phenomenon such as attitudinal change, repeat purchase and brand loyalty. It is a feeling, which a customer gets from a process of evaluating what was received against that expected, the purchase decision itself and the fulfilment of needs and want. The key to customer satisfaction lies in meeting these expectations.

Expectations are created in the customer mind from a variety of causes and reasons like past-experience, promotional claims, word of mouth and third party information. Kotler[2] also noted that satisfaction is a function of perceived performance and expectations that identifies feelings of a person resulting from comparing a product’s perceived performance in relation to his/her expectations.

Customer satisfaction is multi-dimensional in nature and lies with multiple experiences with the service provider.

Customer satisfaction is a business term, which is used to capture the idea of measuring how, satisfied an enterprise customers are with the organizations efforts. During the past decades, customer satisfaction has emerged as a strategic imperative for most firms. In the 1980’s, achieving a higher satisfaction became a goal in itself. During the 1990’s, there was a widespread realization that satisfaction is a strategic goal for all organization involved in the delivery of customer service. Satisfied customers usually return and buy more, they tell people about their experiences, and they may well pay a premium for the privilege of using service product of the organization.

Since satisfaction drives behaviour, a more thorough understanding of what drives customer satisfaction will give service providers the insights they need to influence customer behaviour in the short-term and long-term. The centrality of the concept is reflected by its inclusion in the marketing concept that high customer satisfaction ratings are widely believed to be the best indicator of a company’s future profit[3]. Because, satisfied customers are more willing to pay for the benefits they receive and are more likely to be tolerant of increases in price. This implies high margins and customer loyalty. Otherwise, it will lead to customer turn over, high replacement costs and high customer acquisition costs[4]. This is a means to strategic ends such as customer retention that directly affect profits.

Customer satisfaction is generally described as a judgment that a customer develops after the act of purchase of a product/service. The determinant to customer satisfaction includes product quality, product packaging, keeping delivery commitments, price and responsiveness and ability to resolve complaints and overall communication, accessibility and attitude. Most firms realize that the more competitive the market, the more important the level of customer satisfaction. In this context it is very important to provide customers with outstanding value, i.e. quality, service and price to achieve sustained customer satisfaction and loyalty.

Improving quality and customer satisfaction reduces costs associated with defective services such as warranty costs, field service, and reworking and handling or managing complaints. Word-of-mouth from satisfied customers lowers the cost of attracting new customers and enhances the firm’s overall reputation, while that of dissatisfied customers are naturally has the opposite effect.

The constantly changing environment forces enterprises to identify new opportunity for claiming competitive advantages and to adapt these intense and environmental factors become more hostile; the concern for service quality grows. Quality has been considered to be one of the management’s topmost competitive priorities and a prerequisite for sustenance and growth of firms. The quest for quality improvement has become a highly desired objective in today’s intense competitive market.

Though service quality and customer satisfaction is conceptually different, but there exists a high relationship between them. The perceived service quality is an antecedent to satisfaction and leads to customer satisfaction. Firms that are clearly interested in providing outstanding customer value would be expected to have culture that reinforces high quality. A high quality service can level the customer’s perception and exception towards an offering. Quality has to satisfy, and preferably exceed, the needs and expectations of the customers. That is why; service quality is widely seen as a key antecedent to successful customer relationships. A service offer, which is inferior or indistinct, may lead to greater problems in attracting and retaining satisfied customers.[5]

In recent years, customer satisfaction has grown much more important to business firms. Of all types because of increased customer requirements, new technological possibilities and the ongoing globalization mean that a focus on quality improvements are necessary for all organizations, who want to strengthen their competitiveness on the world market. Keeping this fact in the mind, all firms are paying greater attention to service quality and customer satisfaction in this increased competitive and deregulated market.

2.3 Analytical study of performance of Telecom industry (Market Dynamics)

The world is rapidly moving toward an economic system based on the continuous and ubiquitous availability of information. Recent development in telecommunications technology has been an important vehicle in permitting information exchange to develop as a valuable commodity. With the use of telephone, productivity has increased in all industries. As compared to other infrastructure investments, Investments in telecommunication has increased the demand for the goods and services used in production and increased in national output. Such investment has increased employment through both direct and indirect effects stated by Alleman et al (2002).[6]

Hardy (1980)[7] found the impact of telecommunication on growth taking 45 countries data into consideration. It was found that telecommunication has largest effect in the least developed countries and the smallest effect in the developed countries.

Shridhar & Sridhar (2004)[8] observed that telecommunication infrastructure development and economic growth proceed together taking 68 countries data in the study for analysis. It was found that a significant impact of cellular Services on national output. The impact of telecom penetration on total output is significantly lower for developing countries.

Maximum time telephones were used for economic purposes such as finding out employment opportunities, price of a product, land transactions, remittances and other business opportunities. The average prices of the agricultural commodities were higher in villages with phones than without phones found by Bayes et al (1999)[9]. Telecommunications can create market through information dissemination to local people and improve the standard of living leading to growth has stated by Eggleston et al (2002)[10].

Fink et al (2003)[11] analyses the impact of policy reform in telecommunication for 86 developing countries over the period from 1985 to 1999. The study concludes that both privatization and competition leads to significant improvements in performance. Due to the reform process, the level of productivity has increased compared to years of partial and no reform.

It was noted by the researchers that to become at par with developed countries, developing countries where telephone penetration rates are extremely low has meant investment in wireless and cellular mobile systems.

For developing countries, cellular services are becoming a very significant proportion of the overall telecom infrastructure. The reason for growth of cellular services in developing countries is due to technology availability, low line cost and cellular mobile systems.

The economic conditions, market structure, policies regarding tariffs and interconnect agreements and customer/customer characteristics are significant forces affecting the growth of cellular service. R. C. Natarajan (2006)\cite{12} stated that the regulated monopoly enjoyed by the department of telecommunications has entered the stage of deregulated market competition. Cellular service providers are attracted towards Indian market due to low tele-density demand from middle class and the rapid change in customer behavior towards this sector.

Advanced Technology and globalization are the two major influential elements that forces change in the market function and firms relate to customers. Globalization has powerful influence on the homogenization of different markets. This has changed customer choice and permanently altered the competitive landscape of business across the globe. Jeffl Thomas and Rajen K. Gupta (2005)\cite{13} attempted to identify that organizations adapt to those changing environmental realities that changes in value distribution to value creation, customer acquisition to customer retention and immediate customer to value chain of marketing. The shifts are from a goods-cantered view to service cantered view and co-creating valued customer experience.

Prahlad and Ramaswamy (2000)\cite{14} have rightly states that consumers/customers are changing the dynamics of the marketplace. The market has become a forum in which customers play an active role in creating and competing for value. Customers are becoming a new source of competence for the corporation. The competence that customers bring is a function of the knowledge, skills and their willingness to learn and experiment and ability to engage in an active dialogue.

\begin{thebibliography}{99}
\bibitem{12} Natarajan, R. C., Perception of Mobile Telephone among Youth: An Exploratory Study among the students of Manipal, The ICFAI Journal of Management, April 2006, vol.5, Issue 4, p 7
\bibitem{13} Thomas, Joffi; Gupta Rajen K, Marketing Theory and Practice: Evolving through Turbulent times, Global Business Review, 2005, vol. 6, Issue 1, pp 95-112
\bibitem{14} Prahlad, C.K; Ramaswamy, Venkaitram, Co-opting Customer competence, Harvard Business Review, January/ February 2000, Vol. 78, Issue 1, pp 79-87
\end{thebibliography}
From the above literature review, it is seen that telecommunications have grown faster than the economy as a whole during the period. The previous studies presented an analytical framework for analysing the market dynamics of telecom industry including mobile telephony. It has helped the researcher to understand the importance of operating environment and various external forces that governs the growth of industry.

### 2.4 Analysis of Customer’s purchasing motives of Telecom Services

Common sense suggests that increase in purchasing power also increases demand for Service. Chatterjee et al (1998)[15] pointed out that income patterns decide the purchase power for telecommunication Services and in turn the growth of services.

Pakola et al. (2003)[16] surveyed 397 Finnish customer-purchasing motives on one hand and factors affecting operator choice on the other and the result indicates that audibility; price and other related factors are regarded as the most-important in the choice of the mobile phone service provider.

Kesti and Ristola (2003)[17] investigates customer intentions to use different mobile services. The services were divided into three groups such as personal communication, guidance service and mobile advertisements. The group of personal communication differed from the other two groups in a way that the users could not test all these services in the field trials. The main findings of the study indicated that the perceptions users got from testing mobile services in the future. The test users regarded the guidance services such as to know the location of stores, public services, product search etc., as the most important, followed by mobile ads and communication services.


Firms has to differentiate their offer that of competitor by providing something unique that is valuable to the buyer to influence them to choose the product over others. Krishna and Shylajan (2007)\[18\] stated that brand awareness and brand visibility plays an important role along with product features. It is concluded that for most of the products, brand awareness is a significant determinant for buying behaviour.

Kennedy & Schneider (2000)\[19\] states, that in the changing economy, knowledge is as important as product / Service which is becoming globally standardized. Companies gain competitive advantage through constant innovation; better targeting customers and additional service. Customer satisfaction has been an important aspect for every organization due to constant innovation in components or service.

The studies have shown that cellular phone usage has permeated across various economic classes as well as professional categories. Customer buying behaviour and purchasing power is changing due to fierce competition. It has helped researcher to understand the need for a greater understanding of behaviour, which is more demanding in nature.

### 2.5 What’s Customer Satisfaction?

Customer buying behaviour is important to be studied by the cellular mobile service providers because customer satisfaction determines the market share for the organization. Oliver (1997)\[20\] has given a famous comment stating, *"Every one knows what satisfaction is, until asked to give a definition. Then, it seems, nobody knows."*

Oliver (1999)\[21\] defined, "Satisfaction as pleasurable fulfilment. Satisfaction is the customer’s sense that consumption provides outcomes against a standard of pleasure versus displeasure.

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It is judgment that a product or service feature, or the product or service itself, provides a pleasurable level of consumption related fulfilment. Furse et al (1994)[22] refers, "Satisfaction as the measurement of one or more variety of customer opinions including ratings of service quality, future behavioural intentions, customer’s self assessment of outcome and satisfaction?

Boulding et al (1993)[23] stated another perspective of customer satisfaction, which deals with the difference between transaction specific and cumulative customer satisfaction. Customer satisfaction is viewed as a post-purchase evaluative judgment of a specific purchase occasion according to transaction-specific perspective. Cumulative customer satisfaction is an overall evaluation based on the total purchase and consumption experience with goods or service over time. Cumulative satisfaction is a more fundamental indicator of the firm’s past, current and future performance and its cumulative satisfaction that motivates a firm’s investment in customer satisfaction.

Kotler and Armstrong (1993)[24] stated that consumer/customer satisfaction is determined by the relationship between the customer’s expectations and product’s perceived performance.

Customer satisfaction is important because a company earns sales from new customers and retained customers. Satisfied customers buy a product again, talk favourably to others about the product, pay less attention to competing brands and advertising.

Bitner et al (1996)[25] defined, satisfaction is the customers evaluation of a product or service in terms of whether that product or service has met their needs and expectations.

[22] Furse, David H; Burcham, Michael R; Rose, Robin L; Oliver, Richard W, Leveraging the Value of Customer Satisfaction Information Marketplace Insights, Fall 1994, Vol. 14, No. 3,
Fe and Ikova (2004)[26] added that the perception of the word "satisfaction" influences the activities, which a customer conduct to achieve it. Researchers have also identified customer satisfaction as a multi dimensional in nature and viewed overall satisfaction as a function of satisfaction with multiple experiences with the service provider. Giese & Cote (2000)[27] studied various literatures and indicated that customer satisfaction is a response (emotional or cognitive), the response pertains to a particular focus (expectations, product, consumption experience, etc) and the response occurs at a particular time (after consumption, after choice, based on accumulated experience, etc).

2.6 Various studies in Customer Satisfaction

Firms must appropriately modify these components of customer satisfaction to develop a context-specific definition that should give to measure satisfaction. This measurement process will lead to understand customer more closely and to make better managerial decision.

Halstead, Hartman and Shmidt (1994)[28] found that customer satisfaction is a transaction-specific affective response resulting from the customer’s comparison of product performance to some pre-purchase standard.

Webbrook and Oliver (1991)[29] described customer satisfaction is a post choice evaluative judgment concerning a specific purchase selection.

Oliver (1987)[30] examined whether satisfaction was an emotion and concluded that satisfaction is a summary attribute phenomenon coexisting with other consumption emotions.

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Tse and Wilton (1998)[31] stated customer satisfaction as the customer’s response to the evaluation of the perceived discrepancy between prior expectations (or some norm of performance) and the actual performance of the product as perceived after its consumption.

Mano and Oliver (1993)[32] examined the three aspects of the post consumption experience- product evaluation, product elicited affect and product satisfaction. Product satisfaction is best characterized as an attitude-like post consumption evaluative judgment (Hunt, 1977) with the evaluative aspect of that judgment varying along the hedonic continuum (Oliver 1989; Westbrook and Oliver 1991)

Kumar and Oliver (1997)[33] indicated that satisfaction was associated with customers expectations being met, feeling they got "fair" value and feeling contented.

Oliver (1987)[34] defined customer satisfaction as an outcome of a purchase/ usage experience would appear to be an important variable in the chain of purchase experience linking product selection with other post purchase phenomena including favourable word-of-mouth and customer loyalty.

Cadotte et al (1987)[35] conceptualized customer satisfaction is la widely accepted as a view of the process by which customers develops feeling from an evaluation of the use experience.

Cote, Foxman and Bob (1989)[36] suggest that satisfaction is determined at the time the evaluation occurs. In some cases, satisfaction assessment may be a naturally occurring, internal response such as after consumption, or prior to repurchase. In some case of the assessment of satisfaction may be externally driven.

Kotler has explained the concept of value and satisfaction as stated by Gita Parimal (2006)[37].

[37] Parlmal, Gita, Philip Kotlen-the future is already here, The Smart Manager, 2006, val. 5, Issue 5, p 46
It has been stated that customers, when faced with a variety of products, make their choice based on perceived value to themselves, not to the marketing company. Value thus depends on how well the offering—be it a product or service or other good—will satisfy a need, want or demand, regardless of what the selling party perceives value to be. Satisfaction, then, is the extent to which actual value realized by the purchase or acquisition of the product matches the pre-purchase assessment of value. If actual value is equal to or greater than perceived value, satisfaction will result, if not, then dissatisfaction will result.

Kristensen et al. (1999)\textsuperscript{[38]} states customer/customer satisfaction is an evaluative response of the product purchase and consumption experience resulting from a comparison of what was expected and what is received. The overall conclusion from his study is that expectations influence customer satisfaction and the effect can be positive, negative or non-existent.

The review of this literature indicates definition of customer satisfaction. Customer satisfaction is very important in the light of the fact that customers are the primary source of most firms’ revenue. It is understood from the above literatures that customer satisfaction is determined by a cognitive process of comparing what customers receive against what they pay for getting the service.

2.7 Customer Satisfaction studies in Telecom Industry

Customer satisfaction is a multidimensional nature and viewed overall satisfaction as a function of satisfaction with multiple experiences with the service provider. Munnukka (2005)\textsuperscript{[39]} discovered that price sensitivity is one of the key factors affecting companies pricing choices. Yet in mobile services sector business, practitioners are facing problems in pricing decisions as they are short of knowledge on their customers’ price sensitivity levels and dynamics.

\textsuperscript{[38]} Kristensen, Kai; Martensen, Anne; Grenholdt, Lars, Measuring the impact of Buying Behaviour on customer satisfaction, Total quality Management, July 1999, Vol, 10, Issue 4/5, p 602


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Mobile service customers differ significantly in their price sensitivity levels; customers with moderate usage of mobile services are least price sensitive, while intensive and low-end users are most sensitive to price changes. Important was also the notion that customer’ price perceptions and innovativeness levels were accurate indicators of their price sensitivity.

Customer satisfaction and customer service has been critical factors of the cellular industry (Assaari & Karia, 2000)[40]. Cellular service providers need to ensure about the technology that provides customer service best in the industry. It is stated that investment in people and in technology helps in providing best customer service for today and for the future. One common ground that most carriers and customers agree on is that good customer service can have a key impact on how a customer views firm’s services and company.

Goodman et al (1995)[41] examined the relationships among levels of involvement between customers and suppliers, customers evaluations of core and peripheral factors in their transactions and customers and overall those less involved. Peripheral aspects, such as supplier responsiveness to customer inquiries, appeared to influence how customers evaluated a core product as well as their overall satisfaction.

Pakola et al (2003)[42] surveyed and results indicated that price and properties were the major influential factors affecting the purchase of a new mobile phone, where as audibility, price and friends were regarded as the most important in choice of the mobile phone operators. Customers have certain amount of self-knowledge i.e. telephone features, connection fee, access cost, mobile-to-mobile phone rates, call rates and free calls which are related to mobile phone purchasing respondents had to important rate while choosing a mobile phone service. Many researchers found that customers with prior experience about a product could be able predict their choices relatively well but tend to overestimate the importance of a monthly access fee, mobile-to-mobile g rates and connection fees.

Ka-Shing Woo & Henry (1999)[43] studied the determinants of satisfaction among mobile phone users. Based on the results of an exploratory factor analysis of 20 attributes, four determinants in order of importance were envisaged:

- Transmission quality and network coverage
- Pricing Policy
- Staff competence
- Customer/Customer service

The result suggested that network providers should focus more on transmission quality and network coverage as the core attributes of their service offering and formulate appropriate pricing policy, rather than competing or, customer service and other supplementary services. Palkar (2004)[44] studied the relationship between the service quality, customer satisfaction and payment equity for the services provided by cellular mobile service providers. He argues that there are five factors such as service quality, usage pattern, billing and service support determines customer satisfaction. He also argues that customer satisfaction influences on payment equity i.e. customers’ perceived fairness of the price paid for the firms products and services.

High customer satisfaction leads several benefits to the firm has stated Fornell (1992)[45]. These benefits include current customer’s loyalty, insulation of customers from competitive efforts, future transactions, low failure cost, low cost in creating new customers and an enhanced goodwill for the firm. Customer satisfaction has direct impact on the primary source of future revenue streams for most companies.

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Customer satisfaction is a concern for any businesses throughout the world. Raja, Sharma and Shashikala (2006)[46] discussed customer/customer satisfaction in the context of perceived values of the mobile commerce, service attribute’s, product quality, service support, product distribution, service personnel, information about the service and corporate brand equity are the underlying factors of customer satisfaction.

Business transactions involve trust, investment, social bond and structural bonds that hold the parties together in a relationship. The overall satisfaction with the relationship may not be high but so long as the product performance satisfaction is high the customer may be retained. Soni, Wilson and Keeffee (1996)[47] argued that being committed to the partner in a buying-selling relationship is an important predictor of retention. Customer satisfaction has the largest impact on commitment.

Trust facilitates the development of the transaction specific investments in both assets and knowledge that creates the structural bonds that hold the relationship together.

Bhave (2002)[48] studied the link between customer satisfaction and customer retention. Customer’s perception towards service and quality of a product determines the success of that product or service in the market. With better understanding of customers’ perceptions, firm can determine the suitable actions to meet the needs of customers. Firm’s can identify their own strengths and weaknesses in comparison to their competitors. Major attributes that influence customer satisfaction are product quality, packaging, delivery commitments, price, responsiveness and ability to resolve complaints and overall communication, accessibility and attitude failing short creates dissatisfaction. Customer loyalty is an important strategic objective for all organization. Bruce Cooli et al (2007)[49] investigated the relationships between customer satisfaction and loyalty in various contexts taking Canadian Banking industry into consideration. They found that customer satisfaction changes on changes in the share of benefits provided to customers and effect of customer age, income, education, expertise and length of relationship.

Reddy (2005)\textsuperscript{[50]} states that it is not enough if the product meets the functional requirements of the customer; it should meet certain other customer expectations like behaviour/attitude of the person who provides service. Customer satisfaction is the combination of both technical features and human behavioural aspects.

Dubrovski (2001)\textsuperscript{[51]} has concluded from the satisfaction model that the customer satisfaction directs the scope of finding success/failure of certain products/companies in the market. This is very much important in strategic marketing analysis. It has also stated that only relying of producer's own views could cause great damage to the company in long run. The company could achieve a better place if they were aware of differences between the customers' opinion about the product and their own. Customer satisfaction is the most efficient and also least expensive source of communication, as a satisfied customer will spread the word of satisfaction to the other people and recommend the product to potential customers. It is understood from the previous study that customer satisfaction is influenced by various external and personal factors. The factors like quality, price, employee who deliver service, self knowledge and various demographic factors can be analysed to ensure customer satisfaction.

There is significant evidence in the study of Luo and Homburg (2007)\textsuperscript{[52]} that customer/customer satisfaction is an important driver of firm profitability. It has also been explained that customer satisfaction generates free word-of-mouth advertising and saves marketing costs.

Customer satisfaction should be the major yardstick for every organization in today’s work environment because customers are the driving force for a business. Hockin (1990)\textsuperscript{[53]} states the following points what customer/customer satisfaction means to one organization.

\textsuperscript{[50]} Reddy, M. Madhukar, Customer Satisfaction Management in Service Industry, Published in Beacon-NIQR, Bangalore, July-September 2005, pp 1-4


• Define a vision of customer satisfaction for the organization.

• Identify the appropriate customers.

• Measure customer satisfaction regularly and consistently.

• Create an interactive customer information system.

• Create a viable plan to incorporate customer information into action for the entire organization.

Customer satisfaction might be linked to individual loyalty, aggregate retention rate, market share and profits showed in the study of Rust and Zahorik (1993)[54].

The only thing counts is that what the customer wants as stated by Kitaeff (1993)[55]. There are following steps suggested to increase customer satisfaction, as it is not the latest fad, but a concept that is likely to be remaining an important force.

• Always to have a complete understanding of the attributes of the product or service that the customer believes to be important.

• Know the perception of the decision maker and collect the information regarding actual purchase behaviour.

Despite of the claim that satisfaction is linked to repurchase behaviour, few attempts can be found that relate satisfaction to actual purchase behaviour. Mittal & Kamakura (2001)[56] represented a conceptual model for relating satisfaction and repurchase behaviour. Results showed that customers with different characteristics have different thresholds such that, at the same level of rated satisfaction, repurchase rates are systematically different among different customer groups.

Banumathy and Kalivani (2006)[57] found that customer attitude towards cell phone service could be useful to service providers to formulate new strategies, policies and market their services in a better way.

Customer attitude measures the credibility of services provided by any service provider. According to Karimpanal (2006)\cite{58}, retaining customer loyalty is the most important factor in the growth stage of the Indian mobile industry. The company has to look into the changing expectations of the evolving cellular users to maintain customer loyalty in mobile telephony. Marketing scholars emphasize the influence of customer satisfaction on retention. Gustafsson et al (2005)\cite{59} conducted the research from the sample of customers of a large Swedish telecommunications company about the effect of customer satisfaction on retention and found that customer satisfaction has a consistent positive effect on retention.

Researcher identified from the above literature that customer satisfaction is important to all companies because of the repetitive nature of the business. Customer satisfaction has a significant influence on customer retention, brand loyalty and repeat purchases that varies across customers.

2.8 Factors influencing Customer’s Level of Satisfaction

Terblanche & Boshoff (2001)\cite{60} assessed the influence of certain factors on customer’s level of satisfaction in their study. It has been found that service quality, product quality and product varieties are the three dimensions that influence customer satisfaction.

Fornell et al (1996)\cite{61} has introduced the American Customer Satisfaction Index (ACSI), a new type of customer-based measurement system for evaluating the performance of firms, industries, economic sectors and national economies. ACSI measures the quality of the goods and services as experienced by the customers. They found that customer satisfaction is determined by customization. Customer expectations and quality drives customer satisfaction that value or price.

\cite{59} Gustafsson, Anders; Johnsons, Michael D; Roos, Inger, The Effects of Customer Satisfaction, relationship Commitment Dimensions and Triggers on Customer Retention, Journal of Marketing, October 2005, Vol. 69, issue 4, pp 210-218
\cite{60} Terblanche, N,S; Boshoff, C, Measuring Customer Satisfaction with some of the controllable elements of the total retail experiences; An exploratory study, South African Journal of Business Management, June 2001, Vol. 32,Issue 2, p 35
Turel and Serenko (2004)\textsuperscript{[62]} studied validation of American Customer Satisfaction Model in mobile telecommunication sector and found that there is a positive association between perceived customer expectations, perceived quality, value and satisfaction and a negative link between satisfaction and customer complaints.

Pothas et al (2001)\textsuperscript{[63]} proposed an unconventional way of monitoring customer satisfaction based upon promoting the expressing of customer perceptions from the frame of reference of the customers, not from the frame of reference of the investigator.

Churchill, Jr. & Suprenant (1982)\textsuperscript{[64]} investigated whether it was necessary to include disconfirmation as van intervening variable affecting satisfaction as was commonly argued, or whether the effect of disconfirmation was adequately captured by expectation and perceived performance. Further, they modelled the process for two types of products using experimental procedures in which three levels of expectations and three levels of performance were manipulated for each product in a factorial design. Each subject’s perceived expectations, performance evaluations, disconfirmation, and satisfaction were subsequently measured by using multiple measures for each construct. The results suggested that the effects were different for the two products. For the non-durable good, the relationships were as typically hypothesized. The results for the durable good were different in important respects. First, neither the disconfirmation experience nor subjects initial expectations affected subjects’ satisfaction with it. Further, their satisfaction was determined solely by the performance of the durable good. Expectations did combine with performance to affect disconfirmation, though the magnitude of the disconfirmation experience did not translate into an impact on satisfaction. Finally, the direct performance satisfaction link accounts for most of the variation in satisfaction.
Ganesh et al (2000)[65] note that investigations of overall satisfaction provide useful insights into the various customer groups, further exploration, of satisfaction with service dimensions provide a more detailed look into the factors that drive customer satisfaction.

Many researchers have suggested that satisfaction with specific service attributes should be measured routinely when customer satisfaction and switching behaviour are investigated. The reason behind such advice relies on the multidimensional nature of perceptions of service quality and satisfaction, such that some dimensions may be perceived as more important than others in determining overall satisfaction and intentions to repatronise or switch.

2.9 Service Quality: the Key Influence in Customer Satisfaction

Ching-chow Yang (2003)[66] stated that customer satisfaction measurement highlights the strength and the area of improvement in the quality of product. Continuous improvement is considered one of the important quality activities for a firm to pursue the best quality for its products. Through the continuous improvement actions, the enterprise can increase customer satisfaction and raise profits.

Woodside et al (1989)[67] found from the research study that customer judgment of service quality is positively associated with overall satisfaction with the service encounter. The overall satisfaction varies with the service quality and customer satisfaction. Overall customer satisfaction with the service encounter-is associated with behavioural intention to return to the same service provider.

Now, quality is an important factor in determining the customer satisfaction. Service quality and customer satisfaction are important concept as a means of creating competitive advantages and customer loyalty. According to Berry et al (1997)[68], service quality has become a significant differentiator and the most powerful competitive weapon, which all the service organizations want to possess.

Jain & Hundal (2006)\(^{[69]}\) revealed in their study that the choice of service provider was affected by facilitating factor followed by coverage, quality of services, and easy availability of connection and bill payment. It was stated that neighbours choice had affected the respondent’s choice to a great extent.

Zeithaml, Berry and Parasuraman (1996)\(^{[70]}\) study shows that companies offering superior service achieve higher than normal market Share growth. Zeithmal et al (1996)\(^{[71]}\) developed a conceptual framework of the behavioural and financial consequences of service quality. Superior (inferior) service quality is related to favourable (unfavourable) behaviour intentions.

McCune (1989)\(^{[72]}\) suggested that due to increased public desire for improved services with the dramatic growth in the service industry, companies has led to assess quality of service for an increased customer satisfaction.

Service quality and customer satisfaction are widely recognized as key influences in the formation of customers purchase intentions in service environment. From the study of Taylor and Baker (1994)\(^{[73]}\), it appears that customer decision-making which includes the interaction of satisfaction and service quality provided a better understanding of customer purchase intentions.

Rust et al (1999)\(^{[74]}\) have developed the concept of the Return on Service Quality model that looks at investments in service as a chain of effects with the following characteristics:

- Improvement in service will produce an increased level of customer satisfaction at the process of an attribute level.

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\(^{[69]}\) Jain, Abhaya; Hundal, B.S, Factors influencing the Adoption of Cell Phone Services in Rural Areas, The ICFAI Journal of Management Research , April 2006, vol. 5, Issue 4, p 22


\(^{[71]}\) Ibid


\(^{[73]}\) Taylor, Steven A; Baker, Thomas L, An Assessment of the relationship between Service Quality and Customer Satisfaction in the Formation of customers/ purchase intentions, Journal of Retailing

\(^{[74]}\) Rust, Roland T; Inman, Jeffrey; Jia, Jaamin; Zahorik, Anthony, What you don’t know about Customer-Perceived Quality: The Role of Customer Expectation Distributions. Marketing Science, 1999, Vol.18, Issue 1, pp 77-92
• Increased customer satisfaction at the process or attribute level will lead to increased overall customer satisfaction.

• Higher overall service quality or customer satisfaction will lead to increased behavioural intention, such as greater repurchase intention and intention to increase usage.

• Increased behavioural intention will lead to behavioural impact, including repurchase or customer retention, positive word of mouth and increased usage.

Service is characterized and distinguished by intangibility, inseparability of production and consumption, heterogeneity and perishability (Parasuraman et al, 1985)[75]. Harvey (1995) [76] identified quality is behavior an attitude- that says, "you will never settle for anything less that the best in service for your stakeholders, whether they are customers, the community, your stockholders or colleagues with whom you work every day."

Zeithaml and Berry (1996) [77] has made attempts to understand the characteristics of services and what providers should possess in order to project a high quality service articulated by their customers. They made a conclusion that customers’ provided service quality is a different concept from their satisfaction level and service quality can be known by measuring the gaps between customers’ expectations and their performance.

Cronin and Taylor (1992) [78], however, argue that the conceptualization of service quality as a gap between expectations and performance is inadequate. According to them, the concept of satisfaction defined as a gap between expectations and performance of disconfirmation of expectations.

Gronroos (1984) [79] created a service quality model to illustrate how customers perceive the quality of a given service. It divides customer’s perception of any particular service into two dimensions:

[76] Harvey, T, Quality; the only profit strategy, Bank Marketing, 1995, pp.43
• Technical quality- what the customer receives.
• Functional quality- how the customer receives the technical outcome.

Parasuraman et al[80] published a conceptual paper in 1985 identifying customer perceptions of quality are influenced by five gaps such as not knowing what customers expect, not selecting the right service design, not delivering to service standards, not matching performance to promises and perceived service quality occurring in the internal process of service delivery. Parasuraman et al (1985)[81] has designed a method called SERVQUAL instrumentation to measure service quality in a variety of different business. Service providers of different business were evaluated on the basis of quality perceptual dimensions such as tangibles, reliability, assurance and empathy.

Noh et al (2004)[81] has suggested that telecommunication service exists to fulfil the needs of users. Therefore, it is important to specify and measure the quantity of service that accurately, concisely and consistently express user’s satisfaction.

Goode et al (2005)[82] found that customer satisfaction for mobile phones determined by experience with a mobile phone’s product quality, the level of call charges, the level of service charges and satisfaction with the service provider. One could argue in the case of mobile phones that the customer satisfaction is likely to be dependent on attribute importance related to physical product as well as on attribute related to the service offered by the service provider.

Agus (2004)[83] found from a research study that every organization should focus in meeting the unlimited expectations of its customers. Quality can make customer satisfaction the number one priority, where an emphasis should be placed on meeting or exceeding the customer expectation in every transaction. Therefore, the organization must know and understand the customer’s needs to ensure that the customer’s quality is met.

Cronin Jr, Brady and Hult (2000)[84] studied the relationships between quality, value, satisfaction and behavioural intentions. They suggested that the customer decision-making process for service product is modeled as a complex system that incorporates both direct and indirect effects on behavioural intentions. Tam (2004)[85] suggested that increasing customer’s perceptions of service quality could result in high customer satisfaction and perceived value.

Bolton (1998)[86] indicates that customer satisfaction is positively related to the duration of the relationship. The strength of the relationship between duration times and satisfaction levels depends on the length of customer’s prior experience with the organization.

Customers who have a many months’ experience with the organization weigh prior cumulative satisfaction more heavily. The duration of the service provider-customer relationship depends on whether customers experienced service transactions or failures.

Satisfying customers is a challenge for any service company. Taylor (2002)[87] stated that company should stay focus on delivering services quickly and consistently so that it reaches to customer fast.

The paper of Bou-Llusar et al (2001)[88] provides empirical evidence on the relationship between firm perceived quality and overall customer satisfaction on purchase intentions. It can be stated that firm perceived quality exerts an important influence on purchase intentions. It has also seen that customer satisfaction acts, as a mediating variable that moderates perceived quality and purchase intention.

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[88] Bou-Llusar, Juan Carlos; Camison-Zornoza, Cesar; Escrig-Tena, Ana Belen, Total Quality Management, December 2001, Vol 12, Issue 6, pp 719-734
Anderson et al. (1994)\(^{[89]}\) states that when quality and expectations increase, there is a positive effect on customer satisfaction in the long run, but increased expectations may have a negative impact in the short run. Expectations have a positive effect on customer satisfaction in the long run because they capture the accumulated memory of the market concerning all past quality information and experience.

Customer satisfaction is based on an understanding of customer value— from the customer’s perspective, the ratio of the expected benefits of a product or service to the expected outlays (Naumann et al, 2001)\(^{[90]}\).

Any organization must be able to deliver high levels of all the three critical factors such as cost of service, outcome of service and perceived quality found from the study of Furse et al (1994)\(^{[91]}\). The best providers Q Y would be those who can able to deliver and manage information about the critical factors.

Wisniewski (2001)\(^{[92]}\) found an overall conclusion from the study that SERVQUAL approach is conceptually attractive and operationally useful.

It offers a cost-effective way of ensuring that services remains customer focused and helps to identify the gap between performance and customer expectations about a service that will result in improvement.

Bruce Cooli et al (2007)\(^{[93]}\) has investigated the relationship between customer satisfaction and lo alt in various contexts. Researchers have co found on the intuitive relationship between customer satisfaction and business outcomes in two key ways:

- Changes in satisfaction are positively and non-linearly related to the share of wallet a customer allocates to a particular service provider over time.

\(^{[89]}\) Anderson, Eugene W; Fornell, Claes; Lehman, Donald R, Customer Satisfaction, Market Share and Profitability; Findings from Sweden, Journal of Marketing, July 1994, Vol. 58, issue 3, p 53

\(^{[90]}\) Naumann, earl; Jackson Jr, Donald W; Ronenbaum, Mark S, How to Implement a customer satisfaction program, Business Horizon, January 2001/ February 2001, Vol. 44, Issue 1, p 37

\(^{[91]}\) Furse, David H, Burcham, Michael R; Rose, Robin L; Oliver, Richard W, Leveraging the Value of Customer Satisfaction Information, Marketplace Insights, Fall 1994, Vol. 14, No. 3, pp 16-20


\(^{[93]}\) Cooli, Bruce; Keinvingham, Timothy L; Aksuoy, Leazang Hsu, Michael, A Longitudinal Analysis Of Customer Satisfaction and Share of Wallet: Investigating the moderating effect of customer characteristics, 2007, Vol. 71, pp 67-83
• The relationship between satisfaction and share of wallet is moderated by both demographic and situational customer - characteristics. In particular, income and length of relationship are significant predictors.

P. Chandiran (2005)[94] states that company’s positioning and differentiation strategy changes as the product, market and competitors change over time. Mobile telephony has a life cycle asserts four things:

• These services have a limited life because of technology.
• Service sales pass through distinct stages.
• Profit rise and fall at different stages.
• These services require different marketing strategies at different stages.

Ennew and Binks (1996)[95] state in the study that service quality is seen as a key antecedent to successful customer relationships. Arguably, this is particularly so in the service sector where quality can be difficult to imitate and as such can potentially provide the basis for a sustainable competitive edge. Offering a superior service, which the competition cannot match, provides customers with a reason for selecting and remaining with a particular provider.

Anderson and Sullivan (1993)[96] have investigated the antecedents and consequences of customer/customer satisfaction by analyzing a representative survey of 22,300 customers of a variety of products and services in Sweden in 189-90. This paper has the following important implications.

• Firms, which consistently provide high-quality products, should have a more satisfied customer base and one that is more likely to be retained.
• An important component of managing satisfaction is the ability to control the impact of negative disconfirmation through complaint handling and effective customer service.
• The firm’s future profitability depends on satisfying customers in the present.

Achieving the full profit potential of each customer relationship is Vital for the organization. Grant and Schlesinger (1995)[97] stated that profits from customer relationships are the lifeblood of all businesses. Profits can be increased by acquiring new customers- to increase the number of people who use a product or service and enhance the profitability of existing customers- to motivate people to engage in behaviours that generate higher returns. The company must examine customer behaviours such as share of use, costs of service, price paid and referrals for studying full potential of target customers.

This above review of literature described the relationship between perceived value, customer expectations, and customer satisfaction. It’s observed that the perceived value, expectations are determinants of customer satisfaction. Accordance to the review of literature, it is hypothesized that ‘perceived value’ customer expectations and ‘factors’ will directly influence customer satisfaction.

2.10 Customer Satisfaction Models

Customer satisfaction, a term frequently used in marketing, is a measure of how products and services supplied by a company meet or surpass customer expectation. Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals."[1]

It is seen as a key performance indicator within business and is often part of a Balanced Scorecard. In a competitive marketplace where businesses compete for customers, customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy.[2]

Within organizations, customer satisfaction ratings can have powerful effects. They focus employees on the importance of fulfilling customers’ expectations. Furthermore, when these ratings dip, they warn of problems that can affect sales and profitability. These metrics quantify an important dynamic. When a brand has loyal customers, it gains positive word-of-mouth marketing, which is both free and highly effective.[1]

Therefore, it is essential for businesses to effectively manage customer satisfaction. To be able to do this, firms need reliable and representative measures of satisfaction. In researching satisfaction, firms generally ask customers whether their product or service has met or exceeded expectations. Thus, expectations are a key factor behind satisfaction. When customers have high expectations and the reality falls short, they will be disappointed and will likely rate their experience as less than satisfying. For this reason, a luxury resort, for example, might receive a lower satisfaction rating than a budget motel—even though its facilities and service would be deemed superior in “absolute” terms.[1]

The importance of customer satisfaction diminishes when a firm has increased bargaining power. For example, cell phone plan providers, such as AT&T and Verizon, participate in an industry that is an oligopoly, where only a few suppliers of a certain product or service exist. As such, many cell phone plan contracts have a lot of fine print with provisions that they would never get away if there were, say, a hundred cell phone plan providers, because customer satisfaction would be way too low, and customers would easily have the option of leaving for a better contract offer.

There is a substantial body of empirical literature that establishes the benefits of customer satisfaction for firms.

A business ideally is continually seeking feedback to improve customer satisfaction. Customer satisfaction provides a leading indicator of customer purchase intentions and loyalty. Customer satisfaction data are among the most frequently collected indicators of market perceptions. Their principal use is two fold[^1]:

Within organizations, the collection, analysis and dissemination of these data send a message about the importance of tending to customers and ensuring that they have a positive experience with the company’s goods and services[^1]

[^1]: Ibid
Although sales or market share can indicate how well a firm is performing currently, satisfaction is an indicator of how likely it is that the firm’s customers will make further purchases in the future. Much research has focused on the relationship between customer satisfaction and retention. Studies indicate that the ramifications of satisfaction are most strongly realized at the extremes. On a five-point scale, individuals who rate their satisfaction level as “5” are likely to become return customers and might even evangelize for the firm. (A second important metric related to satisfaction is willingness to recommend. This metric is defined as "The percentage of surveyed customers who indicate that they would recommend a brand to friends." When a customer is satisfied with a product, he or she might recommend it to friends, relatives and colleagues. This can be a powerful marketing advantage.) Individuals who rate their satisfaction level as “1,” by contrast, are unlikely to return. Further, they can hurt the firm by making negative comments about it to prospective customers. Willingness to recommend is a key metric relating to customer satisfaction.[1]

2.10.1 Measuring customer satisfaction

Organizations need to retain existing customers while targeting non-customers.[3] Measuring customer satisfaction provides an indication of how successful the organization is at providing products and or services to the marketplace.

Customer satisfaction is measured at the individual level, but it is almost always reported at an aggregate level. It can be, and often is, measured along various dimensions. A hotel, for example, might ask customers to rate their experience with its front desk and check-in service, with the room, with the amenities in the room, with the restaurants, and so on. Additionally, in a holistic sense, the hotel might ask about overall satisfaction “with your stay.”[1]
As research on consumption experiences grows, evidence suggests that customers purchase goods and services for a combination of two types of benefits: hedonic and utilitarian. Hedonic benefits are associated with the sensory and experiential attributes of the product. Utilitarian benefits of a product are associated with the more instrumental and functional attributes of the product (Batra and Athola 1990)[4].

Customer satisfaction is an ambiguous and abstract concept and the actual manifestation of the state of satisfaction will vary from person to person and product/service to product/service. The state of satisfaction depends on a number of both psychological and physical variables which correlate with satisfaction behaviors such as return and recommend rate. The level of satisfaction can also vary depending on other options the customer may have and other products against which the customer can compare the organization's products.

Work done by Parasuraman, Zeithaml and Berry (Leonard L)\[^5\] between 1985 and 1988 provides the basis for the measurement of customer satisfaction with a service by using the gap between the customer's expectation of performance and their perceived experience of performance. This provides the measurer with a satisfaction "gap" which is objective and quantitative in nature. Work done by Cronin and Taylor propose the "confirmation/disconfirmation" theory of combining the "gap" described by Parasuraman, Zeithaml and Berry as two different measures (perception and expectation of performance) into a single measurement of performance according to expectation. The usual measures of customer satisfaction involve a survey\[^6\] with a set of statements using a Likert Technique or scale. The customer is asked to evaluate each statement and in term of their perception and expectation of performance of the organization being measured. Their satisfaction is generally measured on a five-point scale.

<table>
<thead>
<tr>
<th>Very dissatisfied</th>
<th>Somewhat dissatisfied</th>
<th>Neither satisfied nor dissatisfied</th>
<th>Somewhat satisfied</th>
<th>Very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Customer satisfaction data can also be collected on a 10-point scale.[1]

Regardless of the scale used, the objective is to measure customers’ perceived satisfaction with their experience of a firm’s offerings. It is essential for firms to effectively manage customer satisfaction. To be able do this, we need accurate measurement of satisfaction.[7]

Good quality measures need to have high satisfaction loadings, good reliability, and low error variances. In an empirical study comparing commonly used satisfaction measures it was found that two multi-item semantic differential scales performed best across both hedonic and utilitarian service consumption contexts. According to studies by Wirtz & Lee (2003)[8], they identified a six-item 7-point semantic differential scale (e.g., Oliver and Swan 1983), which is a six-item 7-point bipolar scale, that consistently performed best across both hedonic and utilitarian services. It loaded most highly on satisfaction, had the highest item reliability, and had by far the lowest error variance across both studies. In the study[8], the six items asked respondents’ evaluation of their most recent experience with ATM services and ice cream restaurant, along seven points within these six items: “please me to displeased me”, “contented with to disgusted with”, “very satisfied with to very dissatisfied with”, “did a good job for me to did a poor job for me”, “wise choice to poor choice” and “happy with to unhappy with”.

A semantic differential (4 items) scale (e.g., Eroglu and Machleit 1990)[9], which is a four-item 7-point bipolar scale, was the second best performing measure, which was again consistent across both contexts. In the study, respondents were asked to evaluate their experience with both products, along seven points within these four items: “satisfied to dissatisfied”, “favourable to unfavourable”, “pleasant to unpleasant” and “I like it very much to I didn’t like it at all”.[8]
The third best scale was single-item percentage measure, a one-item 7-point bipolar scale (e.g., Westbrook 1980)\(^{10}\). Again, the respondents were asked to evaluate their experience on both ATM services and ice cream restaurants, along seven points within “delighted to terrible”\(^{8}\).

It seems that dependent on a trade-off between length of the questionnaire and quality of satisfaction measure, these scales seem to be good options for measuring customer satisfaction in academic and applied studies research alike. All other measures tested consistently performed worse than the top three measures, and/or their performance varied significantly across the two service contexts in their study. These results suggest that more careful pre-testing would be prudent should these measures be used\(^{8}\).

Finally, all measures captured both affective and cognitive aspects of satisfaction, independent of their scale anchors\(^{8}\). Affective measures capture a customer’s attitude (liking/disliking) towards a product, which can result from any product information or experience. On the other hand, cognitive element is defined as an appraisal or conclusion on how the product’s performance compared against expectations (or exceeded or fell short of expectations), was useful (or not useful), fit the situation (or did not fit), exceeded the requirements of the situation (or did not exceed)\(^{11}\).

### 2.10.2 Methodologies

American Customer Satisfaction Index (ACSI) is a scientific standard of customer satisfaction. Academic research has shown that the national ACSI score is a strong predictor of Gross Domestic Product (GDP) growth, and an even stronger predictor of Personal Consumption Expenditure (PCE) growth. On the microeconomic level, academic studies have shown that ACSI data is related to a firm's financial performance in terms of return on investment (ROI), sales, long-term firm value (Tobin's \(q\)), cash flow, cash flow volatility, capital performance, portfolio returns, debt financing, risk, and customer spending\(^{12}\).

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8. ^ Ibid
Increasing ACSI scores has been shown to predict loyalty, word-of-mouth recommendations, and purchase behavior. The ACSI measures customer satisfaction annually for more than 200 companies in 43 industries and 10 economic sectors. In addition to quarterly reports, the ACSI methodology can be applied to private sector companies and government agencies in order to improve loyalty and purchase intent. Two companies have been licensed to apply the methodology of the ACSI for both the private and public sector: CFI Group, Inc. and Foresee Results apply the ACSI to websites and other online initiatives. ASCI scores have also been calculated by independent researchers, for example, for the mobile phones sector[^13] higher education[^14] and electronic mail[^15].

The Kano model is a theory of product development and customer satisfaction developed in the 1980s by Professor Noriaki Kano that classifies customer preferences into five categories: Attractive, One-Dimensional, Must-Be, Indifferent, Reverse. The Kano model offers some insight into the product attributes which are perceived to be important to customers.

POSE Analysis[^16] offers an alternative to customer satisfaction. Instead of evaluating satisfaction with a proposition, POSE Analysis determines both the positioning and strength of a proposition. POSE Analysis thus offers a competitive perspective to customer satisfaction.

SERVQUAL or RATER is a service-quality framework that has been incorporated into customer-satisfaction surveys (e.g., the revised Norwegian Customer Satisfaction Barometer[^17]) to indicate the gap between customer expectations and experience.

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16. POSE Analysis explained
Top-Box approach by J.D. Power and Associates provides another measure of customer satisfaction, known for its top-box approach and automotive industry rankings. J.D. Power and Associates' marketing research consists primarily of customer surveys and is publicly known for the value of its product awards.

Other research and consulting firms have customer satisfaction solutions as well. These include A.T. Kearney's Customer Satisfaction Audit process,[18] which incorporates the Stages of Excellence framework and which helps define a company’s status against eight critically identified dimensions.

For Business to Business (B2B) surveys there is the Info Quest box.[19] This has been used internationally since 1989 on more than 110,000 surveys (Nov '09) with an average response rate of 72.74%. The box is targeted at "the most important" customers and avoids the need for a blanket survey.

In the European Union member states, many methods for measuring impact and satisfaction of e-government services are in use, which the eGovMoNet project sought to compare and harmonize.[20]

These customer satisfaction methodologies have not been independently audited by the Marketing Accountability Standards Board (MASB) according to MMAP (Marketing Metric Audit Protocol)

18. ^ Ibid
2.11 Customer Satisfaction Measurement Models

Customer satisfaction is the most common of all marketing surveys and is part of the “big three” research studies in marketing that include market segmentation and concept testing. Measuring satisfaction and building a satisfaction survey requires a basic knowledge of the satisfaction measurement literature, combined with your own customer satisfaction experiences.

This brief provides an introduction to the theoretical and methodological underpinnings of satisfaction research by first defining the concept of customer satisfaction and how satisfaction is used in business. This satisfaction research attempts to provide the basis for understanding what measures should be included in satisfaction surveys and why those measures are of value to any business.

Three very different approach Models:

2.11.1 Post Purchase Evaluation Model

Satisfaction feedback is obtained from the individual customer at the time of product or service delivery (or shortly afterwards). This type of satisfaction survey is typically used as part of a CRM (Customer Relationship Management System) and focuses on having a long term relationship with the individual customer.

2.11.2 Periodic Satisfaction Survey Model:

Satisfaction feedback from groups of customers at periodic intervals to provide an occasional snapshot of customer experiences and expectations.

2.11.3 Continuous Satisfaction Tracking Model:

Satisfaction feedback is obtained from the individual customer at the time of product or service delivery (or shortly afterwards). Satisfaction tracking surveys are often part of a management initiative to assure quality is at high levels over time.

Satisfaction surveys are developed to provide an understanding of customers' expectations and satisfaction. Satisfaction surveys typically require multiple questions that address different dimensions of the satisfaction concept.
Satisfaction measurement includes measures of overall satisfaction, satisfaction with individual product and service attributes, and satisfaction with the benefits of purchase. Satisfaction measurement is like peeling away layers of an onion—each layer reveals yet another deeper layer, closer to the core.

All three models of conducting satisfaction surveys are helpful models to:

Obtain customer feedback for assessing overall accomplishments, degree of success, and areas for improvement.

Customer Satisfaction Survey Measures

Customer satisfaction surveys often include multiple measures of satisfaction, including:

Overall measures of customer satisfaction

Affective measures of customer satisfaction

Cognitive measures of customer satisfaction

Behavioural measures of customer satisfaction

Expectancy value measures of customer satisfaction

General Measures that are part of a customer satisfaction analysis usually involve product fulfilment and will often include product use scenarios where and how is the product used?

2.11.4 Satisfaction Measurement: Overall Measures of Satisfaction

Satisfaction measures involve three psychological elements for evaluation of the product or service experience: cognitive (thinking/evaluation), affective (emotional-feeling/like-dislike) and behavioural (current/future actions).

Customer satisfaction usually leads to customer loyalty and product repurchase. But measuring satisfaction is not the same as measuring loyalty. Satisfaction measurement questions typically include items like:
1. An overall satisfaction measure (emotional):

   Overall, how satisfied are you with “Amul” fresh Dahi”?

   Satisfaction is a result of a product related experience and this question opinion of a customer’s experience with the product’s performance. Note that it is meaningful to measure attitudes towards a product that a customer has never used, but not satisfaction for a product or brand that has never been used.

2. A loyalty measure (affective, behavioural):

   Would you recommend “Amul” to your family and friends?

3. A series of attribute satisfaction measures (affective and cognitive):

   How satisfied are you with the “taste” of Amul fresh Dahi?

   How important is “taste” to you in selecting Amul fresh Dahi?

   Satisfaction and attitude are closely related concepts. The psychological concepts of attitude and satisfaction may both be defined as the evaluation of an object and the individual’s relationship to it. The distinction is that satisfaction is a "post experience" evaluation of the satisfaction produced by the product’s quality or value.

4. Intentions to repurchase (behavioural measures):

   Do you intend to repurchase Amul fresh Dahi?

   Satisfaction can influence post-purchase/post-experience actions other than usage (such as word of mouth communications and repeat purchase behaviour). Additional post-experience actions might include product or information search activity, changes in shopping behaviour and trial of associated products.

   As shown in Figure 1, Customer satisfaction is influenced by perceived quality of product and service attributes, features and benefits, and is moderated by customer expectations regarding the product or service. Each of these constructs that influence customer satisfaction need to be defined.
Satisfaction Measurement: Affective Measures of Customer Satisfaction

A customer’s attitude (liking/disliking) towards a product can result from any product information or experience whether perceived or real. Again, it is meaningful to measure attitudes towards a product or service that a customer has never used, but not satisfaction.

Satisfaction Measurement: Cognitive Measures of Customer Satisfaction

A cognitive element is defined as an appraisal or conclusion that the product was useful (or not useful), fit the situation (or did not fit), exceeded the requirements of the problem/situation (or did not exceed). Cognitive responses are specific to the situation for which the product was purchased and specific to the customer’s intended use of the product, regardless if that use is correct or incorrect.
**Satisfaction Measurement**: Behavioural Measures of Customer Satisfaction

It is sometimes believed that dissatisfaction is synonymous with regret or disappointment while satisfaction is linked to ideas such as, "it was a good choice" or "I am glad that I bought it."

When phrased in behavioural response terms, customers indicate that “purchasing this product would be a good choice” or “I would be glad to purchase this product.” Often, behavioural measures reflect the customer’s experience individuals associated with the product (i.e. customer service representatives) and the intention to repeat that experience.

![Figure 2: Behavioural response terms](image-url)
Satisfaction Measurement: Expectations Measures

Many different approaches to measuring satisfaction exist in the customer behaviour literature. Leonard Berry in 2002 expanded previous research to refine ten dimensions of satisfaction, including: Quality, Value, Timeliness, Efficiency, Ease of Access, Environment, Interdepartmental Teamwork, Front line Service Behaviors, Commitment to the Customer and Innovation. Berry’s dimensions are often used to develop an evaluative set of satisfaction measurement questions that focus on each of the dimensions of customer satisfaction in a service environment.

A diagnostic approach to satisfaction measurement is to examine the gap between the customer's expectation of performance and their perceived experience of performance. This “satisfaction gap" involves measuring both perception of performance and expectation of performance along specific product or service attributes dimensions.

Customer satisfaction is largely a reflection of the expectations and experiences that the customer has with a product or service. However expectations also reflect that influences the evaluation of the product or service. When we make major purchases, we research the product or service and gain information from the advertising, salespersons, and word-of-mouth from friends and associates. This information influences our expectations and ability to evaluate quality, value, and the ability of the product or service to meet our needs.

2.11.5 Types of Customer Expectations that Influence Satisfaction

Customer performance expectations for attributes, features and benefits of products and services may be identified as both explicit and implicit expectation questions.

Explicit expectations are mental targets for product performance, such as well identified performance standards. For example, if expectations for a color printer were for 11 pages per minute and high quality color printing, but the product actually delivered 3 pages per minute and good quality color printing, then the cognitive evaluation comparing product performance and expectations would be 11 PPM – 3 PPM + High – Good, with each item weighted by their associated importance.
Implicit expectations represent the norms of performance that reflect accepted standards established by business in general, other companies, industries, and even cultures.

Static performance expectations address how performance and quality for a specific application are defined. Each system’s performance measures are unique, though general expectations relate to quality of outcome and may include those researched by Berry, or others such as: accessibility, customization, dependability, timeliness, and accuracy, tangible cues which augment the application, options, cutting edge technology, flexibility, and user friendly interfaces. Static performance expectations are the visible part of the iceberg; they are the performance we see and -- often erroneously -- assume are all that exist.

Dynamic performance expectations are about how the product or service evolves over time and includes the changes in support and product or service enhancement needed to meet future business or use environments. Dynamic performance expectations may help to “static” performance expectations as new uses, integrations, or system requirements develop.

Technological expectations focus on the evolving state of the product category. For example, mobile phones are continually evolving. Mobile service providers, in an effort to deal with the desire to switch to new technology phones, market rate plans with high cancellation penalties. The availability of low profile phones with email, camera, MP3, email, and blue tooth technology changes technology expectations as well as the static and dynamic performance expectations of the product. These highly involving products enhance perceptions of status, ego, self-image, and can even invoke fear when the product is not available.

Interpersonal expectations involve the relationship between the customer and the product or service provider. Person to person relationships are increasingly important, especially where products require support for proper use and functioning. Expectations for interpersonal support include technical knowledge and ability to solve the problem, ability to communicate, time to problem resolution, courtesy, patience, enthusiasm, helpfulness, understood my situation and problem, communication skills, and customer perceptions regarding professionalism of conduct, often including image, appearance.
In building a customer satisfaction survey, it is also helpful to consider reasons why pre-purchase expectations or post-purchase satisfaction may or may not be fulfilled or even measurable.

1. Expectations may not reflect unanticipated service attributes;

2. Expectations may be quite vague, creating wide latitudes of acceptability in performance and expected satisfaction;

3. Expectation and product performance evaluations may be sensory and not cognitive, as in taste, style or image;

4. The product use may attract so little attention as to produce no conscious affect or cognition (evaluation), and result in meaningless satisfaction or dissatisfaction measures;

5. There may have been unanticipated benefits or consequences of purchasing or using the product (such as a use or feature not anticipated with purchase);

6. The original expectations may have been unrealistically high or low;

7. The product purchaser, influencer and user may have been different individuals, each having different expectations.

For each of these types of expectations that when fulfilled result in customer satisfaction (or when not delivered, result in dissatisfaction and complaining behaviour), the perceived quality and value are critical and directly influence intention to repurchase and loyalty.

**Satisfaction Measurement:** Perceived Quality Measures

Perceived quality is often measured through three measures: overall quality, perceived reliability, and the extent to which a product or service meets the customer’s needs. Customer perceptions of quality are the single greatest predictor of customer satisfaction.
**Satisfaction Measurement: Perceived Value Measures**

Perceived value may conceptually refer to the overall price divided by quality or the overall quality divided by price. Perceived value is measured in many ways including overall evaluation of value, expectations of price that would be paid, and more rigorous methodologies including the Van Westendorp pricing analysis, and conjoint analysis.

The customer behaviour literature shows that price is a primary indicator of quality when other attributes and benefits are relatively unknown. However when repeat purchases are made in some product categories, price may be reduced in importance.

**Satisfaction Measurement: Customer Loyalty Measures**

Customer loyalty reflects the likelihood of repurchasing products or services. Customer satisfaction is a major predictor of repurchase, but is strongly influenced by explicit performance evaluations of product performance, quality, and value.

**2.11.6 Models of Expectations and Customer Satisfaction**

Expectations are beliefs (likelihood or probability) that a product or service (with certain attributes, features or characteristics) will produce certain outcomes (benefits-values). These expectations are based on previous affective, cognitive and behavioural experiences.

Expectations are seen as related to satisfaction and can be measured in the following ways:

1. Importance-Value of the product/service fulfilling the expectation;
2. Overall Affect-Satisfaction Expectations: The (liking/disliking) of the product/service;
3. Fulfilment of Expectations: the expected level of performance vs. the desired expectations. This is “Predictive Fulfilment” and is a respondent specific index of the performance level necessary to satisfy.
4. Expected Value from Use: Satisfaction is often determined by the frequency of use. If a product/service is not used as often as expected, the result may not be as satisfying as anticipated. For example a Harley Davidson motorcycle that sits in the garage, an unused year subscription to the local fitness centre/gym or a little used season pass to the local ski resort or amusement park may produce more dissatisfaction with the decision to purchase than with the actual product/service.

Expectancy Value Measures of Behavioural Intention (BI), Attitude (A) and Satisfaction (SAT)

Expectancy value models have been found to perform well in predicting both satisfaction/dissatisfaction and behavioural intention (intention to try, purchase, recommend, or re-purchase a product or service).

The Expectancy value model using attitudes and beliefs reads:

\[ B \approx DI \approx A_o = w_1 \sum_{i=1}^{k} a_i \ast b_i + w_2 \left( \sum_{i=1}^{k} n_i b_i \ast n_i c_i \right) \]

- where: \( w_1, w_2 \) = weights that indicate the relative influence of the overall attitude toward the object and the normative influence to purchase the product
- \( A_o \) = Attitude toward the object (brand, product, service or company)
= the overall attitude toward the object. The overall attitude is formed by the multiplicative product of $a_i$ (the person's affective evaluation of attribute $i$), and $b_i$ (here defined as the importance of attribute $i$ in the purchase decision). The sum is taken over the $k$ attributes that are defined as salient in the purchase decision.

= The overall normative component of the decision process. This is computed as the multiplicative product of $nb_i$ (the norms governing attitude $i$), and $mc_i$ (the motivation of the respondent to comply with those norms).

**Behavioural Intention (BI)**

Behavioural intention is measured using a question such as "Indicate the likelihood of you buying sometime during the next year" with a five or seven-point Likert or semantic differential scale labelled "definitely will purchase" and "definitely will not purchase" at the endpoints.

**Satisfaction**

Overall satisfaction or dissatisfaction with an object is often measured using a five-point satisfaction scale. As an example, "Overall, how satisfied are you with Sparkle toothpaste?" could be measured with a "Very Satisfied, Somewhat Satisfied, Neither Satisfied Nor Dissatisfied, Somewhat Dissatisfied, Very Dissatisfied" scale. More examples are provided below.

The like-dislike measure is used as an overall measure of respondent satisfaction with a product or service (after purchase). Satisfaction leads to favourable feelings and dissatisfaction leads to unfavourable feelings.

The evaluative dimension may be measured in terms of like-dislike, favourable-unfavourable; approve-disapprove; good-bad; and delight-failure scales.

**Attitude ($a_i \times b_i$)**

$b_i$ - the probability that attribute $i$ is associated with performing behavior B. The concept "Crest toothpaste prevents decay" could be rated on a seven point scale with endpoints labelled "Very Likely" and "Very Unlikely".
a_i - the evaluation of belief i. A representative measure of ai would be "In terms of
buying Crest toothpaste, decay prevention is …" with a five or seven point scale with
"good" and "bad"; or "Excellent" and "Poor" at the endpoints.

In building a customer satisfaction survey, it is also helpful to consider reasons why
pre-purchase expectations or post-purchase satisfaction may or may not be fulfilled or
even measurable.

1. Expectations may not reflect unanticipated service attributes;
2. Expectations may be quite vague, creating wide latitudes of acceptability in
   performance and expected satisfaction;
3. Expectation and product performance evaluations may be sensory and not cognitive,
   as in taste, style or image;
4. The product use may attract so little attention as to produce no conscious affect or
cognition (evaluation), and result in meaningless satisfaction or dissatisfaction
measures;
5. There may have been unanticipated benefits or consequences of purchasing or using
the product (such as a use or feature not anticipated with purchase);
6. The original expectations may have been unrealistically high or low;
7. The product purchaser, influencer and user may have been different individuals, each
   having different expectations.

2.11.7 When to Conduct Customer Satisfaction Surveys

The best timing for measuring customer satisfaction and building customer satisfaction
surveys depends on the kind of product or service provided, the kinds of customers
served, how many customers are served, the longevity and frequency of
customer/supplier interactions, and what you intend to do with the results.

As discussed in detail earlier there are three very different approaches that produce
meaningful and useful findings:

- Post Purchase Evaluation Surveys
• Periodic Satisfaction Surveys
• Continuous Satisfaction tracking Surveys

Satisfaction surveys are developed to provide an understanding of customers' expectations and satisfaction. Satisfaction surveys typically require multiple questions that address different dimensions of the satisfaction concept. Satisfaction measurement includes measures of overall satisfaction, satisfaction with individual product and service attributes, and satisfaction with the benefits of purchase. Satisfaction measurement is like peeling away layers of an onion—each layer reveals yet another deeper layer, closer to the core.

All three methods of conducting satisfaction surveys are helpful methods to obtain customer feedback for assessing overall accomplishments, degree of success, and areas for improvement.

2.11.8 Building a Customer Satisfaction Survey

Customer satisfaction surveys often include multiple measures of satisfaction, including:

• Overall measures of customer satisfaction
• Affective measures of customer satisfaction
• Cognitive measures of customer satisfaction
• Behavioural measures of customer satisfaction
• Expectancy value measures of customer satisfaction

General Measures that are part of a customer satisfaction analysis usually involve product fulfilment and will often include product use scenarios where and how is the product used?

2.11.9 Common Ingredients of a Customer Satisfaction Survey

Product Use
• Frequency of product use
• Primary use location
• Primary precipitating events or situations for product use or need
• Usage rates and trends

**Product Familiarity**
• Degree of actual product use familiarity
• Knowledge (read product information, read product label, etc.)
• Knowledge and Involvement with product and the purchase process
• Awareness of other brands
• Reasons for original product purchase (selection reasons)
• Primary benefits sought from the product

**Product Evaluation**
• Attribute evaluation matrix: (quality, price, trust, importance, performance, value)
• Perceived benefit associations matrix
• Importance, performance
• Identification of primary benefits sought
• Comparison to other brands (better, worse)
• What is the best thing about the brand, what could be done better

**Message and Package Evaluation**
• Packaging size, design
• Advertising Promise, message fulfilment evaluation

**Value Analysis**
• Expectation of price
• Expectation of relative price (full price, on sale)
• Current price paid
Satisfaction Measurements

- Overall Satisfaction
- Reasons for Satisfaction Evaluation
- Satisfaction with attributes, features, benefits
- Satisfaction with use
- Expected and Ideal Satisfaction-Performance Measures
- Likelihood of recommending
- Likelihood of repurchasing

2.11.10 Kano model of Customer Satisfaction

According to the Standish group research on average 45% of software features are never used and only 20% of features are used always or often. It means that on average you could develop two times simpler product and sell it for the same price. Potentially gains can be even bigger, for the enterprise scale systems two times simpler product often means four times shorter schedules and ten times simpler integration and testing.

There is no other way to discover what features would be actually used, than to ask the real or at least potential customers, preferably after letting them to try some features live. One of the tools for aiding the feature categorization is the Kano model of customer satisfaction.

The Kano model separates features into three broad categories:

Must-have mandatory features

It is necessary to develop these features just to enter the market. However, once the basic requirement is satisfied, customer almost doesn't care about the further improvement of the feature. For example, the modern web processor has to contain the spell-checker feature to be sell. However, most customers won't even notice if the spell-checker contains 50 or 200 thousand words
**Linear or performance features**

The better this kind of features is developed, the more customer is satisfied. For example, the more storage space a file storage server provides, the more customers would be satisfied.

**Excitement or "wow" features**

Customer won't be disappointed too much if these features are missing. However, the couple of exciter features can provide great customer satisfaction often adding a price premium to a product.

The Kano model is a theory of product development and customer satisfaction developed in the 80s by Professor Noriaki Kano which classifies customer preferences into five categories:

- Attractive
- One-Dimensional
- Must-Be
- Indifferent
- Reverse

**Attractive Quality:**

These attributes provide satisfaction when achieved fully, but do not cause dissatisfaction when not fulfilled. These are attributes that are not normally expected, for example, a thermometer on a package of milk showing the temperature of the milk. Since these types of attributes of quality unexpectedly delight customers, they are often unspoken.

**One-dimensional Quality:**

These attributes result in satisfaction when fulfilled and dissatisfaction when not fulfilled. These are attributes that are spoken of and ones which companies compete for. An example of this would be a milk package that is said to have ten percent more
milk for the same price will result in customer satisfaction, but if it only contains six percent then the customer will feel misled and it will lead to dissatisfaction.

**Must-be Quality:**

These attributes are taken for granted when fulfilled but result in dissatisfaction when not fulfilled. An example of this would be package of milk that leaks. Customers are dissatisfied when the package leaks, but when it does not leak the result is not increased customer satisfaction. Since customers expect these attributes and view them as basic, then it is unlikely that they are going to tell the company about them when asked about quality attributes.

**Indifferent Quality:**

These attributes refer to aspects that are neither good nor bad, and they do not result in either customer satisfaction or customer dissatisfaction.

**Reverse Quality:**

These attributes refer to a high degree of achievement resulting in dissatisfaction and to the fact that not all customers are alike. For example, some customers prefer high-tech products, while others prefer the basic model of a product and will be dissatisfied if a product has too many extra features.[1]

The Kano model offers some insight into the product attributes which are perceived to be important to customers. The purpose of the tool is to support product specification and discussion through better development team understanding. Kano's model focuses on differentiating product features, as opposed to focusing initially on customer needs. Kano also produced a methodology for mapping customer responses to questionnaires onto his model.

![Figure 3: Kano model](http://ayushveda.com/blogs/business/kano-model-tool-for-measuring-customer-satisfaction/)
Quality Function Deployment (QFD) makes use of the Kano model in terms of the structuring of the Comprehensive QFD matrices. Mixing Kano types in QFD matrices can lead to distortions in the customer weighting of product characteristics. For instance, mixing Must-Be product characteristics—such as cost, reliability, workmanship, safety, and technologies used in the product—in the initial House of Quality will usually result in completely filled rows and columns with high correlation values. Other Comprehensive QFD techniques using additional matrices are used to avoid such issues. Kano's model provides the insights into the dynamics of customer preferences to understand these methodology dynamics.

**Threshold or Basic Attributes**

One of the main points of assessment in the Kano model is the threshold attributes. These are basically the features that the product must have in order to meet customer demands. If this attribute is overlooked, the product is completely incomplete. If a new product is not examined using the threshold aspects, it may not be possible to enter the market. This is the first and most important characteristic of the Kano model. The product is being manufactured for some type of customer base, and therefore this must be a crucial part of product innovation. Threshold attributes are simple components to a product. However, if they are not available, the product will soon leave the market due to dissatisfaction. The attribute is either there or not. An example of a threshold attribute would be a steering wheel in a vehicle. The vehicle is no good if it is not able to be steered.

The threshold attributes are most often seen as a price of entry. Many products have threshold attributes that are overlooked. Since this component of the product is a necessary guideline, many customers do not judge how advanced a particular feature is. Therefore, many times companies will want to improve the other attributes because customers remain neutral to changes in the threshold section.

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Performance Attributes

A performance attribute is defined as a skill, knowledge, ability, or behavioural characteristic that is associated with job performance. Performance attributes are metrics on which a company bases its business aspirations. They have an explicit purpose. Companies prioritize their investments, decisions, and efforts and explain their strategies using performance attributes. These strategies can sometimes be recognized through the company’s slogans. For example Lexus’s slogan is “The Passionate Pursuit of Perfection” (reliability) and WalMart; “Always low prices. Always” (cost). In retail the focus is generally on assuring availability of products at best cost.

Performance attributes are those for which more is better, and a better performance attribute will improve customer satisfaction. Conversely, a weak performance attribute reduces customer satisfaction. When customers discuss their needs, these needs will fall into the performance attributes category. Then these attributes will form the weighted needs against the product concepts that are being evaluated. The price a customer is willing to pay for a product is closely tied to performance attributes. So the higher the performance attribute, the higher the customers will be willing to pay for the product. Performance attributes also often require a trade-off analysis against cost. As customers start to rate attributes as more and more important, the company has to ask itself, “how much extra they would be willing to pay for this attribute?” And “will the increase in the price for the product for this attribute deter customers from purchasing it.” Prioritization matrices can be useful in determining which attributes would provide the greatest returns on customer satisfaction.\(^{14}\)

\(^{14}\) http://www.scortalk.com/talks/2008/01/15/performance-attributes/
Excitement Attributes

Not only does the Kano Model feature performance attributes, but additionally incorporates an “excitement” attribute as well. Well what is an “excitement” attribute? Excitement attributes are for the most part unforeseen by the client but may yield paramount satisfaction. Having excitement attributes can only help you, in some scenarios it is ok to not have them included. The beauty behind an excitement attribute is to spur a potential customers’ imagination, these attributes are used to help the customer discover needs that they’ve never thought about before.[15]

The key behind the Kano Model is for the engineer to discover this “unknown need” and enlighten the customer, to sort of engage that “awe effect.” Having concurrent excitement attributes within a product can provide a significant competitive advantage over a rival. In a diverse product assortment, the excitement attributes act as the WOW factors and trigger impulsive wants and needs in the mind of the customer. The more the customer thinks about these amazing new ideas, the more they want it.[16]

Out of all the attributes introduced in the Kano Model, the excitement ones are the most powerful and have the potential to lead to the highest gross profit margins. Innovation is undisputedly the catalyst in delivering these attributes to customers; you need to be able to distinguish what is an excitement today, because tomorrow it becomes a known feature and the day after it is used throughout the whole world.[17]

16. ^ The Kano Model Illustrated Report
17. ^ Discovering the Kano Model
2.11.11 Kano Model Analysis

Threshold attributes are not typically captured in QFDs (Quality Function Deployment) or other evaluation tools as products are not rated on the degree to which a threshold attribute is met, the attribute is either satisfied or not.

**Performance Attributes**

Performance attributes are those for which more is generally better, and will improve customer satisfaction. Conversely, an absent or weak performance attribute reduces customer satisfaction. Of the needs customers verbalise, most will fall into the category of performance attributes. These attributes will form the weighted needs against which product concepts will be evaluated.

The price for which customer is willing to pay for a product is closely tied to performance attributes. For example, customers would be willing to pay more for a car that provides them with better fuel economy.

**Excitement Attributes**

Excitement attributes are unspoken and unexpected by customers but can result in high levels of customer satisfaction, however their absence does not lead to dissatisfaction.

Excitement attributes often satisfy latent needs – real needs of which customers are currently unaware.

In a competitive marketplace where manufacturers’ products provide similar performance, providing excitement attributes that address “unknown needs” can provide a competitive advantage. Although they have followed the typical evolution to a performance then a threshold attribute, cup holders were initially excitement attributes.
Other Attributes

Products often have attributes that cannot be classified according to the Kano Model. These attributes are often of little or no consequence to the customer, and do not factor into customer decisions. An example of this type of attribute is a plate listing part numbers can be found under the hood on many vehicles for use by repairpersons.

Application of the Kano Model Analysis

A relatively simple approach to applying the Kano Model Analysis is to ask customers two simple questions for each attribute:

1. Rate your satisfaction if the product has this attribute?; and
2. Rate your satisfaction if the product did not have this attribute?

Customers should be asked to answer with one of the following responses:

A) Satisfied;
B) Neutral (It’s normally that way);
C) Dissatisfied;
D) Don’t care.

Basic attributes generally receive the “Neutral” response to Question 1 and the “Dissatisfied” response to Question 2.

Exclusion of these attributes in the product has the potential to severely impact the success of the product in the marketplace.

Eliminate or include performance or excitement attributes that their presence or absence respectively lead to customer dissatisfaction. This often requires a trade-off analysis against cost. As Customers frequently rate most attributes or functionality as important, asking the question “How much extra would you be willing to pay for this attribute or more of this attribute?” will aid in trade-off decisions, especially for
performance attributes. Prioritisation matrices can be useful in determining which excitement attributes would provide the greatest returns on Customer satisfaction.

Consideration should be given to attributes receiving a “Don’t care” response as they will not increase customer satisfaction nor motivate the customer to pay an increased price for the product. However, do not immediately dismiss these attributes if they play a critical role to the product functionality or are necessary for other reasons than to satisfy the customer.

The information obtained from the Kano Model Analysis, specifically regarding performance and excitement attributes, provides valuable input for the Quality Function
2.12 Conclusion
After studying various Customer Satisfaction Models and other Satisfaction Measurement Models, in the present study the researcher identifies the following ‘Four specific factors’ as the most important factors on which a focused ‘Customer Satisfaction model’ is developed.

1. Network Coverage
2. Call Charges
3. Value Added Services
4. Instinct & Impulse

In addition to this, the researcher also attempts to measure customer satisfaction on a separate scale of “Perceived Customer Satisfaction Levels”

Hence the researcher has prepared a detailed Questionnaire which includes Question No.5 specifically related to the important factors on which Customer Satisfaction is measured and Question No.20 targeted to evoke responses related to “Perceived Customer Satisfaction Levels”.

This Questionnaire is included in the Appendices.
Further to this the Research Methodology is described in the subsequent Chapter.