Expectations And Perceptions Of Mobile Phone Users
Abstract

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The main objective of the undertaken research is to study the **Expectations and Perceptions of Customer's towards mobile phones.** It is important to study and analyze whether there is a gap in the expectations and perceptions of the respondents which indicates that there is scope for improvement on behalf of the mobile phone brand or there is no significant difference between the expectations and perceptions of the respondents which is indicative of the fact that the customers are satisfied with the services of their mobile phone provider. The tool used for data analysis in this research has been the Z-Test whereby it is found that there is a significant difference in the expectations and perceptions of the respondents which leads us to believe that the customers are not fully satisfied with the functionality of their handsets

Conceptual Framework of Cellular Mobile Telephony

The total number of mobile phones used in India today is more than 28 million. The number of mobile phone users has risen at a high-speed and in 2003 surpassed the number of users in the United States; becoming the second largest market in the world after China.

Moreover, due to the affiliation of India with the World Trade Organization and the policy of economic liberalization, the enormous market of India's mobile phone service has been of common interest to various companies. For those companies who are starting to enter India's mobile telecommunication market, service will be a central point as they attempt to expend their market. The threat of new competitors will encourage established companies to pay more attention to their services.

For the importance of service quality in mobile phone service industry, this study investigates the "perceptions and expectations of mobile phone users in India" towards aspects of service quality; such as its degree of perceived importance and their perceived satisfaction, and then group them by their degree of satisfaction. Furthermore, an attempt to elucidate the differences in service offered by three major player's viz. Nokia, Sony Ericsson and Motorola is made. This result will contribute to mobile phone service companies investigating the service quality perception of Indian mobile users and, by characterizing the features of each group, helping in the provision of suitable services.

With the liberalization and internationalization in telecommunications, service quality has become an important means of differentiation and path to achieve business success. Such differentiation based on service quality can be a key source of competitiveness for many Indian firms and hence have implications for leadership in such organizations.

For the past few years, cellular mobile service sector in India has been experiencing the highest growth rate (www.nationmaster.com) in terms of subscribers and revenues. With the increasing demands of the customer, Cellular mobile sector has become very competitive. Despite this, most of the cellular mobile service providers in India are primarily focusing on expanding the customer base and tend to overlook investing in service quality.

In India, rapid diffusion of telecom, at least in the urban areas, has been progressing, thanks to the hyper-competitive telecom markets with the post liberalization entry of several Indian and global players. In such a competitive milieu, survival and success of the Indian players will solely depend on competitiveness. For service providers, the pursuit of service quality is essential for competitiveness and is gaining momentum. As a result, service quality has become an important means of differentiation and is critical for achieving corporate success.

A review of the literature reveals that most of the studies reported on service quality focus on the service delivery aspects, ignoring the role of technical quality. The present service strives develop a valid and reliable instrument to measure customer perceived service quality incorporating both service delivery as well as technical quality aspects.

Previous studies in this area primarily focused on the functional quality aspects (i.e., pertaining to service delivery process or how the services are delivered) and inadequately addressed technical quality aspects (i.e., issues concerning what is actually delivered). However, researchers in cellular mobile communication (Wang and Lo, 2002; Johnson and Sirikit, 2002) emphasized that technical quality attributes play an important role in forming service quality perceptions of customers. In light of this, the objective of the study is to investigate the service quality structure by combining both functional as well as technical quality (i.e. network quality in cellular mobile context) attributes. In addition to this, the study also aims at finding the relative importance of service quality dimensions from the customer's perspectives. This would enable the service providers to understand and focus on customer's quality requirement.

Over the last few years, there has been a considerable research on different aspects of service quality leading to a sound conceptual base for both practitioners and researchers. Authors (Parasuraman, Zeithaml and Berry, 1985, 1988; Carman, 1990) agree that service quality is an abstract concept, difficult to define and measure. Some of the contemporary views of service quality are listed in the literature overview.

Thus, in this study, combining both functional as well as technical aspects, service quality in cellular mobile communication can be defined as "an indicator of customer's overall impression of services (concerning functional and technical) delivered by an organization.

Researchers have tried to operationalize service quality from different perspectives for different service applications. Based on their conceptual / empirical studies, researchers have derived and proposed different service quality dimensions for various service applications.

As **service** is the most critical issue for the mobile phone service industry to carry on, it is very important to know the expectations and perceptions that customers have towards mobile phones. This study aims to investigate the service quality perceptions of mobile phone users in India, to know which items they value and are satisfied with, and to understand if there is a gap between the **perceived importance and perceived satisfaction.**

Company Profile:
Nokia

Nokia Corporation is a Finnish multinational communications corporation, headquartered in Keilaniemi,Espoo, a city neighboring Finland's capital Helsinki. Nokia is focused on wireless and wired telecommunications, with 128,445 employees in 120 countries, sales in more than 150 countries and global annual revenue of 50.7 billion euros and operating profit of 5.0 billion as of 2008. It is the world's largest manufacturer of mobile telephones: its global device market share was about 37% in Q4 of 2008, down from 40% in Q4 2007 and down from 38% sequentially. Nokia produces mobile phones for every major market segment and protocol, including GSM, CDMA, and W-CDMA(UMTS). Nokia's subsidiary Nokia Siemens Networks produces network equipments, solutions and services.

Nokia has sites for research and development, manufacture and sales in many continents throughout the world. As of March 2008, Nokia had R&D centers in 10 countries and employed 30,415 people in research and development, representing approximately 27% of Nokia's total workforce. The Nokia Research Center, founded in 1986, is Nokia's industrial research unit of about 800 researchers, engineers and scientists. It has sites in seven countries: Finland, Denmark, Germany, China, Japan, United Kingdom and United States. Besides its NRCs, in 2001 Nokia founded (and owns) INdT – Nokia Institute of Technology, a R&D institute located in Brazil. Nokia's production facilities are located at Espoo, Oulu and Salo, Finland; Manaus, Brazil; Beijing,Dongguan and Suzhou,China; Fleet,England; Komárom,Hungary; Chennai,India; Reynosa, Mexico; Jucu, Romania and Masan,

South Korea. Nokia's Design Department remains in Salo, Finland.

Nokia plays a very large role in the economy of Finland: it is by far the largest Finnish company, accounting for about a third of the market capitalization of the Helsinki Stock Exchange (OMX Helsinki) as of 2007; a unique situation for an industrialized country. It is an important employer in Finland and several small companies have grown into large ones as Nokia's subcontractors. Nokia increased Finland's GDP by more than 1.5% in 1999 alone. In 2004 Nokia's share of the Finland's GDP was 3.5% and accounted for almost a quarter of Finland's exports in 2003. In 2006, Nokia generated revenue that for the first time exceeded the state budget of Finland.

Finns have ranked Nokia many times as the best Finnish brand and employer. The Nokia brand, valued at $35.9 billion, is listed as the fifth most valuable global brand in Interbrand / Business Week's Best Global Brands list of 2008 (first non-US company). It is the number one brand in Asia (as of 2007) and Europe (as of 2008), the 23rd most admirable company worldwide in Fortune's World's Most Admired Companies list of 2008 (tied with Exxon Mobil; second in Network Communications, fifth non-US company), and is the world's 88th largest company in Fortune Global 500 list of 2008, up from 119 of the previous year. As of 2008, AMR Research ranks Nokia's global supply chain number two in the world.

Sony Ericsson

Sony Ericsson is a joint venture established on October 3, 2001 by the Japanese consumer electronics company Sony Corporation and the Swedish telecommunications company Ericsson to make mobile phones. The stated reason for this venture is to combine Sony's consumer electronics expertise with Ericsson's technological leadership in the communications sector. Both companies have stopped making their own mobile phones.

The company's global management is based in Hammersmith, London, and it has research & development teams in Sweden, Japan, China, Germany, the United States, India, Pakistan and the United Kingdom. By 2007, it was the fourth-largest mobile phone manufacturer in the world after Nokia, Motorola and Samsung. The sales of

products largely increased due to the launch of the Walkman and Cyber-shot series.

Motorola

Motorola, Inc. is an American, multinational, Fortune 100, telecommunications company based in Schaumburg, Illinois. It is a manufacturer of wireless telephone handsets, also designing and selling wireless network infrastructure equipment such as cellular transmission base stations and signal amplifiers. Motorola's home and broadcast network products include set-top boxes, digital video recorders, and network equipment used to enable video broadcasting, computer telephony, and high-definition television. Its business and government customers consist mainly of wireless voice and broadband systems used to build private networks and public safety communications systems.

Objectives of the Investigation

- To study the **Expectations and Perceptions of Customer's towards mobile phones.**

- To study the **combination of both functional and technical aspects of service quality** in cellular mobile communication.

- To study the **customer preferences of mobile phones on the basis of gender**.

- To study the **customer preferences of mobile phones on the basis of age group.**

- To study which **mobile corporation is providing the best functional and technical service quality in mobile communication**.

Literature Overview

Sasser, Olsen and Wyckoff (1978) suggested that quality could be evaluated either by products or services. Haley (1968), Yoram (1978), Calantone and Sawyer (1978) suggested that benefit-based segmentation is the best system of behavioral variables to predict consumers' behavior.Haley

(1968) also proposed that the aim of consumers to buy a product or service is based on whether the function and service can satisfy them.

Churchill and Suprenant (1982) considered that service quality is involved in subjective cognition. In other words, consumers decide it subconsciously instead of by an objective judgment.PZB service model (Parasuraman, Zeithaml and Berry, 1985, 1988) emphasized that if companies want to improve the aspects of customers toward service quality companies provided; it should be the first step to diminish the gap between "expected service" and "perceived service". Sato and Kataoka (1995) performed a survey of services provided by Telecommunication companies and indicated that a consumer's perceptions toward the service qualities 'importance' and 'satisfaction' are independent. Because the products of a service industry are characterized as intangible and highly involvement of customers, the attributes determine whether a service company can survive in the competition (Barcia & Striuli, 1996).

Kotler (1994) considered that customer needs are diverse and this diversity requires that managers identify groups of customers with similar characteristics. Moreover, Kotler (1999) divided the basis of segmentation into geographic variables, demographic variables, psycho-graphic variables and behavioral variables.

Life style represents the living traits of a society or a community (Lazer, 1963) and it describes many psychological aspects and multiple dimensionalities.Traditional demographic variables provide limited information and do not provide a clear insight into customer behavior. A number of studies have been conducted using customer lifestyle as a means of segmenting customers and clarifying customer behavior (Evans & Berman, 1982). Engel, Blackwell and Kollat (1982) proposed that customers with different lifestyles show variation in their consuming attitudes. Because culture, social status, reference group and family all influence lifestyle, people in difference lifestyles have distinct values, personalities and perceptions. On service quality modeling, Gronroos (1984) model provides the customer's perceptions of any particular service into two dimensions, namely technical and functional quality. Carman (1990) proposed the gap model of service quality that operationalized service

quality as the gap between expectations and performance perceptions of the customer. Murfin, Sclegelmilch and Diamanto-poulos (1995) developed the service quality model for medical services. Soteriou and Stavrindes (2000) developed the service quality model for bank branch in order to optimally utilize its resources. Zhu, Wymer and Chen (2002) proposed the service quality model highlighting the Information Technology (IT) based service options to investigate the relationship between IT based services and customer's perceptions of service quality.

One of the most widely used service quality measurement tool includes SERVQUAL (Parasuraman, Zeithaml and Berry, 1998) and SERVPERF (Cronin and Taylor, 1992). The SERVQUAL scale measures service quality based on the difference between expectations and performance perceptions of customers using twenty-two items and five-dimensional structures. In the SERVPERF scale, service quality is operationalized through performance only scores based on the same twenty-two items and five-dimensional structure of SERVQUAL. Further, researchers Mangold and Babakus (1991) and Richard and Allaway (1993) agree that both SERVQUAL and SERVPERF scales may not be comprehensive in capturing the service quality construct, as both of them focus only on the functional quality and not on the technical quality aspects. Bitner, Booms and Tetreauly (1990) studied the customer's overall impression of the relative inferiority/superiority of the organization and its service. Asubonteng, McCleary and Swan (1996) studied the difference between customer's expectations and service performance prior to the service encounter and their perceptions of the service received. Hannikainen (2002) studied the capability of a network to provide services and fulfill users expectations. TRAI (2002) defined service quality as an indicator of performance of a network and of the degree to which the network conforms to stipulated norms. Rosen and Karwan (1994) studied the technical aspects of service quality & concluded built to be an important service measure.Johnson, Tsiros and Lancioni (1995) undertook a research on the bank customers of UK about their expectations and perceptions of service quality and prioritized the service expectations.

Siu and Cheung (2001) studied service quality delivery of a departmental store

chain.Alzola and Robaina (2005) studied the expectations and perceptions of customers towards service quality of electronic commerce B2C. Leisen and Vance (2001) studied upon the fixed line of cellular telephony and their impact on service quality & concluded network to be most important factor.Johnson and Sirikit (2002) studied upon both the fixed line of cellular telephony and telephones and their impact on service quality & concluded network to be most important factor. Van Der Wal, Pampallis and Bond (2002) studied cellular mobile services on service quality. Primary data was gathered via telephonic interviews from a sample of 583 customers. The total scale reliability for this study is 0.95, indicating an overall higher reliability factor than the Parasuraman et al. study. The findings further indicated that two of the dimensions, namely, tangibles and reliability are loading into separate factors. The remaining three dimensions, responsiveness, assurance and empathy all load into one factor, indicating that there is no real differentiation amongst the three dimensions in the customer's mind.

Wang and Lo (2002) studied cellular mobile services on service quality & concluded after sales services and network to be most important factors. Ranaweera and Neely (2003) studied and researched on the fixed line telephone services and their impact on service quality. This paper presents a holistic model of customer retention incorporating service quality perceptions, price perceptions, customer indifference and inertia. Data from a large-scale postal survey of telephone users in England showed that perceptions of service quality have a direct linear relationship with customer retention even in mass services with low customer contact. Price perceptions and customer indifference too were found to have a direct linear effect on retention. Furthermore, it was also seen how both price perceptions and customer indifference moderated the relationship between service quality perceptions and customer retention. A linear relationship between inertia and customer retention was not found. Furthermore, there was evidence to indicate that inertia was a relatively unstable condition and that reliance by service providers on inertia to retain customers could indeed be a risky strategy. Kim, Park and Jeong (2004) studied cellular mobile services and expectations and perception of customers towards service quality & concluded innovation and network to be of prime importance.

Research Design

The Research Design of the undertaken study is "Multiple Cross Sectional" in nature and falls under the category of a Descriptive Research methodology. The target population for the study is mobile phone users residing in New Delhi. The study follows a Random Sampling Frame technique. The study follows a Non – Probability Sampling Technique. The sample element for the undertaken study is Individuals using mobile phones. The selected sample size for the study is 200 samples.The tool used for data collection is a 'Questionnaire'. The tools used for data analysis is 'application of Z Test'.
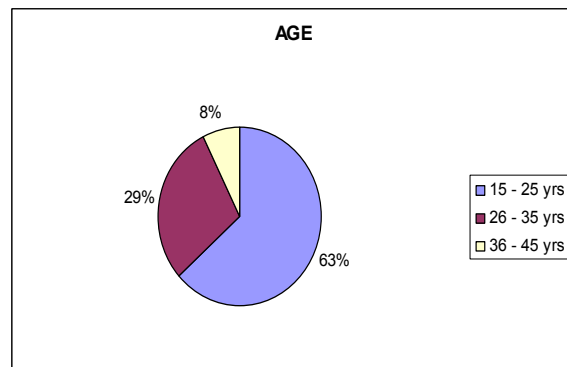
Results And Discussions

Pie Chart I:
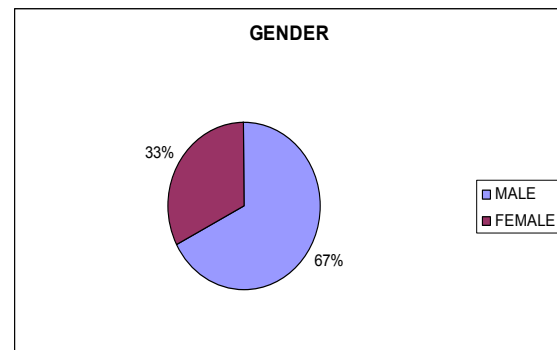
Interpretation: 33% of the mobile phone users taken in the sample size are females whereas 67% majority is constituted by males.
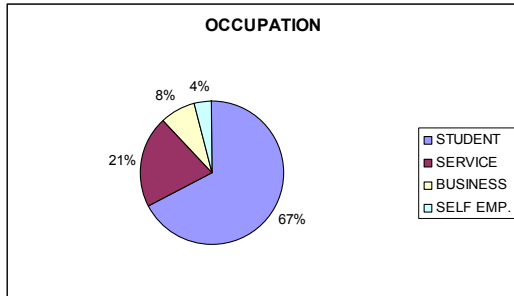
Pie Chart Ii:

Interpretation: 63% of the sample population belongs to the 15-25 years age group which means that majority of the respondents are either teenagers or the young working class. On the

other hand, 29% of the respondents are executives or working class which belongs to the 26-35 years age group. 8% of the respondents are above 36 years of age.

PIE CHART III:

OCCUPATION

- STUDENT
- SERVICE
- BUSINESS
- SELF EMP.

Interpretation: 67% of the respondents are students. 21% of the respondents belong to the service class, 8% constitute business class while the remaining 4% constitute self employed respondents.

Pie Chart Iv:

ANNUAL INCOME

- 1LAKH - 3LAKH
- 3LAKH - 6LAKH
- 6LAKH - 9LAKH
- ABOVE 9LAKH
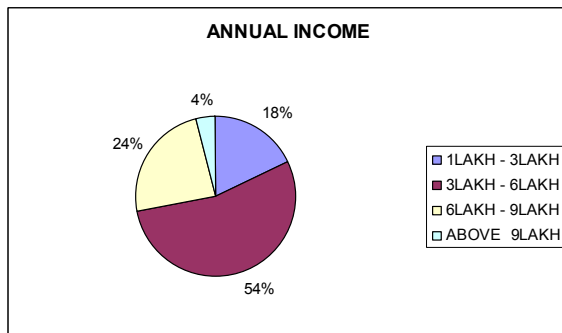
Interpretation: The annual income of 54% respondents is between 3-6 lakh rupees, 24% of the respondent's income comprised of 6-9 lakh, 18% respondent's income is between 1-3 lakh while the remaining 4% had incomes of 9 lakh and above

Pie Chart V:

BRAND

- MOTOROLA
- NOKIA
- SONY ERRICSSON
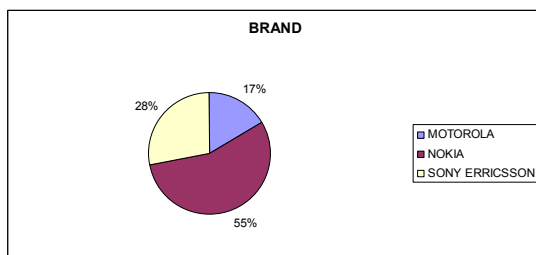
Interpretation: Nokia has the most market share at 55% and is the best selling brand, followed by Sony Ericsson at 28% and 17% market share by Motorola.

Analysis

- Grand Mean of Respondents (Expectation) = 6.4413
- Grand Mean of Respondents (Perception) = 5.8393
- Standard Deviation of Respondents (Expectation) = 0.5172
- Standard Deviation of Respondents (Perception) = 0.8676
- Z = Difference of Grand Mean/ Standard Error
- Standard Error = 0.0822
- Difference of Grand mean = 0.602
- Z = 7.32
- Z > 1.96.
- Therefore Null hypothesis (H_o) is rejected i.e. **there is a significant difference** in the expectations and perceptions of mobile phone users.

Recommendations

The results of the applied Z Test on the respondent's answers are conclusive evidence of the fact that there exists a significant difference in the expectation and perception of mobile phone users. Also, it has been concluded that Nokia is the leading mobile brand which holds the largest market share, i.e. 55% followed by Sony Ericsson and Motorola respectively.

Therefore, the recommendations for Nokia, Sony Ericsson and Motorola include the following factors:

➢ Nokia should endeavor to continue to hold the market and possibly increase its market share by knowing exactly what the customer requires in the mobile phone.

➢ Sony Ericsson & Motorola on the other hand must try to be competitive and reach at least at par with the services provided by Nokia and must understand the need for providing basic services to users. In case of Motorola specially, the customer's pointed out low battery time in cell phones which must be addressed immediately.

➢ Sony Ericsson should not only be multimedia oriented but also strive to make their phones ideal for business solution and

for executives. Also, quality of parts of the phone is one of its USP's.

➢ Nokia must try and innovate their devices without compromising on their build quality and functionality.

Conclusion

The study has taken into account major variables such as gender, occupation, annual income and age with respect to the Marketing Research on "expectation and perception of customers regarding mobile phones" has thrown light on some very interesting facts.
Here it is clearly observed that majority of the mobile phone users are males and moreover maximum number of respondents using mobile phones are young and working people.

Students hold a major share in the respondents who own a mobile phone and majority of respondents own a Nokia handset.
Along with this respondents having an annual income of 3-6lakh are the ones who spend the maximum amount while purchasing a handset.
Lastly after conducting a Z-Test, it can be concluded that there is a significant difference between the expectation and the perception of the mobile phone users. Moreover, Null Hypothesis does not accept it.

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