A Study of Customer Segments and Its Influence on the Selection of the Brand in Reference of Telecom Service Providers

Deepa Kumari
MBA, School of Management, Amity University, Gurugram, Haryana, India

ABSTRACT

In this study researcher has attempted to analyze the brand value of various mobile service providers in Karnataka by collecting data from various customers. Valuable information about the loyalty of the customer towards various mobile service providers, user perception with respect to the brand, advertisement recall, perceived quality of various brands and also the highest brand which has got the brand equity were collected and analyzed.

Keywords: Customer Segment, Telecom Service Provider, Brand Choice, Brand Loyalty

I. INTRODUCTION

Telecommunication is one of the most vital of all infrastructure services today. It is not only essential for the growth and development of every other sector of the economy with the interest of the world. Indian mobile industry is growing at a rate of 82.2%. The all GSM subscriber base continued to grow aggressively in, achieving a subscriber base of 115.3 million in February 2007 up from 110.5 million in January 2007. The cellular industry all over the world has been witnessing very high growth rates in subscriber base in recent years. Brand equity is sustainable value added to brand name in the market and in the customers mind. Measuring brand equity is important because understanding why consumers choose a particular brand and the extent to which consumers are loyal to brand is crucial to successful branding strategies. This market research of brand equity was undertaken to analyze the brand equity of various service providers in Bangalore.

In the present Indian scenario the booming industry in the service sector is telecommunication. The expansion of the telecom industry in India has been fueled by massive growth in mobile phone users which had reached to a level of 53.38 million users in May 05. There are many service providers competing each other to hold the highest market share in this particular domain. Henceforth the very purpose of this research is to identify the brands which have the high brand equity in Karnataka.

This research is organized to analyze the Brand equity of cellular service providers in Karnataka and to suggest various strategies to improve the brand image of the various brands. Analysis helped to revealed the present market potential and trend in the market.

The method developed during the study is unique for various companies. Companies can repeat the study in the future using the same statistical methods developed by the researcher. Recommendations and suggestions consist of interpretation of meaningful statistical information and views of the researcher. Business Research is a continuous process; it does not end with one study because business environment is changing exponentially.

Brand equity is sustainable value added to brand name in the market and in the customers mind measuring brand equity is important because understanding why consumers choose a particular brand and the extent to which consumers are loyal to brand is crucial to successful branding strategies. This market research of brand equity was undertaken to analyze the brand equity of various service providers in Bangalore.

Cellular Market Structure in India

As in other countries, in India, the Cellular Mobile Service Providers (CMSPs) are licensed to operate in designated geographical operating areas. The service areas include four metro areas and 18 circles.
categorized as A, B and C. The categorization is based on the revenue potential with category C circles in the lower end of the scale. For example the metros account for 40% of the subscriber population, with Category-A, B and C accounting for 33%, 23% and 4% respectively. As in most of the other countries, Indian cellular market adopted a duopoly market with licenses given to two Cellular Mobile Service Providers (CMSPs). The first digital cellular service started in the metros in 1995. A year later, licenses were awarded to two CMSPs in each of the 18 circles. The third and fourth operator licenses have been issued recently and the license holders are expected to commence their services soon. Currently, only 900 MHz of the Global Systems for Mobile (GSM) band has been allocated for cellular services, though the government is considering the Release of 1800 MHz band for cellular operations soon. The CMSPs had to pay an entry fee and subsequently annual license fee as a percentage of their revenue to the Department of Telecommunications. The entry and license fees varied according to the service area, highest for metros and lowest for Category-C circles. Some of the CMSPs could not fulfill their licensing obligations and their licenses were revoked leading to a monopoly situation in certain areas. Apart from these charges, each CMSP has to share the revenue with the long distance operators for carrying inter-service area calls.

In profitable metros and circles, the competition is severe and the market is split between the two operators. In a price-cap regulated market, the operators use appropriate pricing strategy to win customers and win market share. In highly price-elastic markets, such as in India, as the service provider reduces the price, the subscriber base increases considerably, and so is the network traffic. The increased network traffic decreases the performance and the quality of service, inviting customers to switch. Recently being a new entrant in a metro area, the government operator reduced the airtime charges to such an extent that the subscriber base increased suddenly leading to poor network performance. The operator did not have enough network capacity to handle calls leading to blocking of calls, with frustrated customers switching over immediately to competitors. The operators also have to resort to non-pricing competition strategies to win customers. In India, CMSPs offer a variety of service plans as a means to attract new customers. Different service plans include: pre-paid calling card schemes, discounted airtime rates for evening and night time calls, discounted roaming charges, no or minimum activation fees, and reduced mobile to mobile long distance call rates. The service providers incur additional advertising and infrastructure cost for implementing these plans. Short Message Service (SMS) and Wireless Application Protocol (WAP) service are fast catching up. For example, in India, about 500,000 SMS messages are being carried by a service provider in one metro area alone. When the sector moves over to an oligopoly market, the operators have to provide improved quality of service and value added services in order to survive and gain market share. Larger operators who have experience and infrastructure may be able to provide a higher quality of service and other value-added service at a lower price. They also have access to larger project financing for enlarging their networks and services. For example, a single large operator now has license to operate in 14 service areas in the country with the largest footprint to cover most of the areas of the country. Mergers and acquisitions are commonplace as the operators are consolidating their revenues to survive in the market places.

II. Brand Equity

The value of a brand
From a consumer perspective, brand equity is based on consumer attitudes about positive brand attributes and favorable consequences of brand use. There are many different definitions of brand equity, but they do have several factors in common:

Monetary Value. The amount of additional income expected from a branded product over and above what might be expected from an identical, but unbranded product. For example, grocery stores frequently sell unbranded versions of name brand products. The branded and unbranded products are produced by the same companies, but they carry a generic brand or store brand label like Kroger’s or Albertson’s. Store brands sell for significantly less than their name brand counterparts, even when the contents are identical. This price differential is the monetary value of the brand name.

Intangible. The intangible value associated with a product that cannot be accounted for by price or features. Nike has created many intangible benefits for their athletic products by associating them with star athletes. Children and adults want to wear Nike’s products to feel some association with these star athletes (“be like Mike” - for Michael Jordan). It is not the physical features that drive demand for their products, but the marketing image that has been created. Buyers are willing to pay
extremely high price premiums over lesser known brands which may offer the same, or better, product quality and features.

**Perceived Quality.** The overall perceptions of quality and image attributed to a product, independent of its physical features. Mercedes and BMW have established their brand names as synonymous with high-quality, luxurious automobiles. Years of marketing, image building, brand nurturing and quality manufacturing have lead consumers to assume a high level of quality in everything they produce. Consumers are likely to perceive Mercedes and BMW as providing superior quality to other brand name automobiles, even when such a perception is unwarranted.

The overall description of brand equity incorporates the ability to provide added value to company’s products and services. This added value can be used to company’s advantage to charge price premiums, lower marketing costs and offer greater opportunities for customer purchase. A badly mismanaged brand can actually have negative brand equity, meaning that potential customers have such low perceptions of the brand that they prescribe less value to the product than they would if they objectively assessed all its attributes/features. One of the best examples of brand equity is in the soft drink industry. Without a brand name and all of the marketing dollars that have gone into it, Coca-Cola would be nothing more than flavored water. Due to the company’s long-term marketing efforts and protection, enhancement and nurturing of their brand name, Coke is one of the most recognizable brands in the world. However, even this marketing giant has trouble capitalizing on its own brand equity when handled improperly (e.g. New Coke). If someone suddenly took their brand name and brand equity away from them, Coke would lose hundreds of millions, if not billions, of dollars. This includes lost sales, lost marketing dollars and lost promotions, additional marketing costs to promote a new brand, and significantly lower awareness and trial rates for their new brand.

**Brand Equity and Customers Choice**

Brand equity does vary across individuals, as we would expect, and we can measure these differences. The data collected in brand equity studies can also be used to segment the market into various groups based on the benefits they seek. Using the utility estimates from the conjoint models, we can identify benefit segments in your market. These segments can then be compared to each other to highlight differences in brand equity between various types of product users, different levels of price-sensitivity, and different levels of feature importance. Demographic and psychographic profiles of these benefit segments can ultimately be used to target specific advertising messages to groups of potential purchasers based on the desires of those groups. Coupons might be sent to those in the most price-sensitive segments, while detailed product literature might be sent to those who place more value on specific features of your products.

Brand equity refers to the inherent in a well-known brand name from customer’s perspective. Brand equity is a added value bestowed on the product by the brand name .it can be conceptualized from three different perspective.

At the firm level it is the incremental cash flow arising from the use of the brand name. At the trade level, it is the leverage from the use of brand name. At the consumer level, it occurs when the customer is familiar with the brand and holds some favorable, strong and unique association in the memory consumer based brand equity arises from consumer being more likely to be aware of some brands in addition to possibly preferring some brands over others .brand equity can also be defined as a set of assets (liabilities) linked to a brand’s name symbol that adds to (or subtracts from) the value provided by the product/service to a firm and/or to that of firm’s customers. The major associations are,

![Figure 1. Brand Equity](image-url)

Individual determining factors can help increase brand equity or they can influence it negatively, as happens with products with low perceived quality. Determining factors are also heavily interrelated, for example, brand perception is an assumed precursor to effectiveness in other determining factors. A well-known brand encourages the perception of high quality (long-term brand survival brings us to conclude that the product must be well made, just as we would assume for services). Consequently, perceived quality significantly
influences brand loyalty. In highly competitive situations, high brand equity represents a positive differential that ensures certain stability in a company's product strategies over time. A brand’s protective shield allows products to be constantly reinvented within an environment providing credibility, legitimacy and affection for the product - thus helping to reduce risk and uncertainty for the company. Furthermore, the presence of brands with strong personalities means that benefits (to the purchaser/user as well) go well beyond the simple values communicated by the brand. These benefits are essentially seen as the simplification of information processing, greater confidence in product selection and as brand satisfaction. In highly competitive systems, therefore, demand analysis expressed for a given market becomes essential in order to define the brand identity to pursue through suitable brand policies aimed at developing solid brand equity.

III. RESEARCH METHODOLOGY

Research Objectives
To identify the customer segment s and its influence on the choice of service providers

Hypothesis
H0a: The customer segment does not influence the brand choice. $\chi^2 \geq \chi^2$ (critical)

Method of analysis
The data collected through questionnaire and the records available was examined in detail. It was further classified and tabulated with the help of Microsoft Excel for the purpose of analysis to generalize percentages

Statistical tools

<table>
<thead>
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<th>BRANDS</th>
<th>SPICE</th>
<th>AIRTEL</th>
<th>HUTCH</th>
<th>BSNL</th>
<th>TATA INDICOM</th>
<th>RELIANCE</th>
<th>TOTAL</th>
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<td>19</td>
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<td>3</td>
<td>2</td>
<td>66</td>
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<td>BUSINESS</td>
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<td>7</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>36</td>
</tr>
<tr>
<td>EMPLOYEES</td>
<td>4</td>
<td>10</td>
<td>9</td>
<td>10</td>
<td>6</td>
<td>9</td>
<td>48</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
<td>42</td>
<td>33</td>
<td>28</td>
<td>16</td>
<td>19</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: Primary Data

$\chi^2 = \sum [(Oij-Eij)^2 / Eij]$  
O = Observed number of cases categorized in the category

$\chi^2$ test and Sign test are used for testing the hypothesis
The non-parametric tests used for the testing the hypothesis is “Chi-square test” (m*n tables) and Sign test. It is suitable for the test for independence of attributes.

Chi-square test
$\chi^2 = \sum [(O-E j)^2 / E j]$  
O = Observed number of cases categorized in the category  
E = Expected number of cases in the i th category under Ho

Sample Size
A sample was chosen keeping in mind the objectives of the research and time constraints, convenience-sampling method was usual for choosing this sample size. With the use of a series of focus survey of One Hundred and fifty (150) samples were chosen.

Data Analysis and Interpretation
To find out whether the customer segments influences the selection of brands.

Hypothesis testing
Step 1
H0: The customer segment does not influence the brand choice  
$\chi^2 \leq \chi^2$ (critical)  
H1: The customer segment influences the brand choice  
$\chi^2 \geq \chi^2$ (critical)

Step 2
The level of significance is 5%

Step 3
Test statistics
The correction factor is being used because some of the values in the chi square table are below 5

\[ \chi^2 = \sum [(O_{ij} - E_{ij})^2 / E_{ij}] \]

### TABLE 1(B) : With Correction Factor

<table>
<thead>
<tr>
<th>O(Observed frequency)</th>
<th>E(expected frequency)</th>
<th>Oij-Eij</th>
<th>Oij-Eij SQUIRE</th>
<th>Oij-Eij ROOT</th>
<th>(O-E) - .5</th>
<th>(O-E) - .5SQU</th>
<th>(O-E) - .5/2/E</th>
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<td>0.5184</td>
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<td>2.92</td>
<td>2.42</td>
<td>5.8564</td>
<td>0.96322368</td>
</tr>
</tbody>
</table>

**Source:** Primary Data

**Step 4**

Degrees of freedom = (r-1). (c-1), here r= number of rows and c = number of columns

\( (3-1). (6-1) = 10 \)

**Critical value = \( \chi^2 \) (Probability under Ho, Degrees of freedom)\]

\( \chi^2 (.05, 10) = 18.31 \)

**Step 5**

Since \( \chi^2 \) value calculated is less than the critical value, \( H_0 \) is accepted.

\( \chi^2 \) (calculated) < \( \chi^2 \) (Critical value)

16.00 < 18.31

**IV. RESULT**

From the above test we can conclude that the customer segments does not influence the brand choice. As per the responses analyzed, the attributes of the product is the major factor leads to the choice of mobile service provider.

**V. CONCLUSION**

After the liberalization of the Indian telecom sector in 1994, the Indian cellular market witnessed a surge in cellular service. The attraction of mobile service is increasing day by day because of the continued expansion of the services and facilities made available by the cellular operators through mobile telephony which are made possible by technological upgradation as well as information technology revolution.

Future growth will most certainly come as much from technology driven value additions as from expanded coverage. Competition has forced the cellular companies to reduce their tariff and budget has reduce the custom duty on hand sets and spare parts
advertisements through the brand ambassadors has changed the mindset of the customers.

This study helps one to not only understand the brand equity of various brands but also the preferences of the customers and the need of the most advanced technology in the modern times.

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