

HISTORY OF MOBILE PHONES

The mobile phone is becoming ubiquitous even in India. With a user base of more than 18 million today, and growing at a rate of 900,000 every month, one expects India's mobile phones to match the installed base of 50 million land lines in the next couple of years. But even this growth is dwarfed by a cellular user base of more than 300 million and growth of nearly four million per month in China. With global sales of 523 million phones in the year 2006 and 212 million in the first quarter of year 2006, mobile phones reach nearly a billion people today. Naturally, the mobile with its potential to touch practically every human being on earth, is a remarkable invention in human history.

What is amazing about the cell phone is that it is just 34 year old. It was on April 3, 1973, that Martin Cooper of Motorola invented a device which had the functionality of what is known today as a cellular phone. At that time, AT&T, the global leader in telecom, was focusing on the car phone — a bulky device targeted at the up-market user who could afford to spend thousands of dollars. Motorola engineers, on the other hand, under the pioneering leadership of Marty (who at age 74 continues to invent next generation telephony through his company Array.com) focused on a device that allowed people to talk as they moved to those who were also on the move. Of course, the first version of the cellular phone was a bulky instrument weighing 30 ounces, measuring 3" deep and 1.5" wide and with a huge height (compared to today's instruments) of 10". Several independent developments have created an amazing maturation of the original invention.

These include millions of dollars devoted to R&D (Motorola alone spent \$150 million over 10 years); creative companies like Nokia & Ericsson which systematically perfected the technology through several innovations; universal standardization (GSM) and the widespread adoption of standards by global telecom companies; amazing developments in micro- electronic devices that include micro-processors, DSP and memory devices; display technology such as color

LCD; electronics and semiconductor manufacture expertise of Japanese, Korean and Taiwanese companies; unbelievable economics of manufacture, logistics and retail; and, of course, the IT/internet hype of the last decade.

Just as plain telephony evolved over the years — from mechanical, electro- mechanical, electronic, and finally to digital telephony — mobile telephony has evolved from first generation (1G) analog phones to second generation (2G) digital phones (GSM, CDMA and WLAN phones). The next generation phones such as GPRS (2.5G) and third generation (3G) phones are round the corner too. Different countries adopt different frequency standards, the dominant ones being 800/1800/1900 MHz . Thanks to the falling prices of cell phones, countries like China, India and Vietnam could bridge the digital divide.

Mobile phones today have gone beyond simply telephony. They combine PDA (personal digital assistant) functions, Internet browsing/e-mail functions and optionally even a camera, FM radio receiver or MP3 player, and games. Special features of mobile phones that are widely used include SMS (short messaging service), MMS (multimedia, messaging, and service), and WAP/Bluetooth/Infrared/USB connectivity and ring tones. Advanced feature phones include GPS (global positioning system) and GIS (geographic information system) to provide location- aware services for tracking, navigation and positioning.

Cell phones today are available in a variety of sizes, shapes, colors, weight, features, and battery. You have inexpensive varieties in the Rs 2,000 to Rs 4,000 range; slim phones with color cost Rs.5,000 to Rs.15,000; feature-rich, high resolution, color display-equipped, with mp3,camera phones cost in the Rs 8,000 to Rs 30,000 range; integrated PDA/internet/office features, night lenses, autofocus, digital zoom,800-1024 resolution, camera, MP3,MP4 player functionality pushes prices to the Rs 16,000 to Rs 40,000 range; for the super-rich there are platinum phones with diamond-studded keys in the \$20,000 to \$1 million range. There are throwaway phones too, that cost just about Rs 1,000. Truly the 30-year “young” cell phone has changed the world.

Today, Mobile phones have already started functioning as more than just communication devices. No wonder, lately these devices are becoming

indispensable. In addition to making or receiving calls, SMS, mobile users are now able to read e-mail, news headlines, weather forecasts, click pictures and listen to music.

That's not all. These features could sound routine. The Japanese have now found another use for cell phone. Sometime later, one could pore over full-length novels on the tiny screens. Japanese have begun to import novels of considerable size on the mobile phone memory. Thus making them readable on the cell display. But only a few lines pop up at a time due to the small size of the phone screen. However, improvements in the quality of liquid-crystal displays and features such as automatic page-flipping, or scrolling, make the endeavor far more enjoyable.

Several surveys indicate that most users take advantage of this offer in order to read classical novels, previously abandoned during school, and that they find that the small displays not only induce less fatigue, but they also enable them to read in darker conditions, for instance when reading bedtime stories to their children at home. However few ponder on how feasible it would turn out to be. Well, one has to wait and see on how an increasing number of users will adopt this habit.

▪ **WHAT IS MARKETING?**

Most people think that marketing is only about the advertising and/or personal selling of goods and services. Advertising and selling, however, are just two of the many marketing activities. In general, marketing activities are all those

associated with identifying the particular wants and needs of a target market of customers, and then going about satisfying those customers better than the competitors? This involves doing market research on customers, analyzing their needs, and then making strategic decisions about product design, pricing, promotion and distribution.

In other words, the five categories listed on the MOTI home page represent the broad scope of marketing. This view is consistent with the following definition of marketing found in a popular marketing textbook.

▪ **DEFINITION OF MARKETING**

"Marketing is the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, services, organizations, and events to create and maintain relationships that will satisfy individual and organizational objectives".

Consumer:

Consumer Attitude toward Privacy:

Privacy refers to the degree to which personal information is not known by others (Rust, Kannan and Peng, 2002). Customer privacy has always been a critical issue in marketing, but has assumed a greater significance in recent years with the rise of Internet-based commercial transactions (Rust, Kannan and Peng, 2002). Most consumers are still quite uncomfortable with the concept of mobile business and they are skeptical whether these businesses are feasible and secure (Siau and Shen, 2003).

Originally meant to connect the world of business, the mobile phone has been increasingly applied by private households and therewith entered the domestic sphere. Accordingly, the mobile phone has changed its identity: it has lost its internal coherence and its connotations of being a mobile technology (Fortunati, 2001). Consumers regard their mobile phone a very private item. Mobile technologies are considered "personal" technologies, attached to a particular body

or person (Green, Harper, Murtagh and Cooper, 2001). Consequently, they are very sensitive about receiving messages from unknown persons or organizations. Data control by unknown individuals can easily lead to annoyance among receivers (Whitaker, 2001). Moreover, advertising via electronic communications media like telephone, fax or e-mail is prohibited by law in several Western European countries unless the consumer agrees explicitly to receive the message. Privacy issues are therefore very important when using mobile devices in addressing the consumers.

This calls for application of permission marketing (Kent and Brandal, 2003; Krishnamurthy, 2000; Tezinde, Smith and Murphy, 2002). Before receiving advertising messages via a mobile device, consumers need to empower a marketer to send promotional messages in certain interest categories to them. Typically, this is done by asking the consumer to fill out a survey indicating his or her interest when registering for a service.

After that, the marketer can match advertising messages with the interests of the consumer (Krishnamurthy, 2001). These processes allow a new kind of interactivity, which often leads to marketers collecting, compiling, and using information about customers (Stewart and Pavlou, 2002).

- Relevance of privacy is negatively correlated with a “positive” attitude toward advertising via Mobile devices.
- Relevance of privacy is negatively correlated with a high advertising value.

▪ **Relevant Demographic Variables**

Besides the above-mentioned influencing factors that are mainly related to the message and its attributes itself as well as to related privacy issues, we also assume that demographic variables also can affect perceived advertising value and attitude toward advertising.

- **Age:**

Generally, young people are heavy users of mobile services (Dickinger, et

al., 2004). For the mobile devices have become as much as a fashion accessory as they are a communication device (Robins, 2003). Younger consumers also show a more favorable attitude toward traditional advertising in a number of dimensions. They like looking at ads and they feel more comfortable when doing so (Shavitt, Lowrey and Haefner, 1998). Not surprisingly, they also show a very positive attitude toward mobile ads, whereas older consumers are also positive about mobile ads, but more prudent (Kaasinen, 2003). Considering these facts we come to the conclusion that younger consumers value advertising messages via mobile devices to a higher extent than older consumers and also show a more positive attitude toward them.

- Age of the consumer is negatively correlated with a “positive” attitude toward advertising via Mobile devices.
- Age of the consumer is negatively correlated with a high advertising value.

- **Gender:**

Gender has shown to be relevant in forming overall attitudes on mobile phones. Women and men perceive mobile phones and their usage differently (Ozhan Dedeoglu, 2004). Ling reports that the role of the mobile phone differs between genders (Ling, 2001). Generally male consumers show a more favourable attitude toward ads than female consumers (Shavitt, Lowrey and Haefner, 1998).

Since there is so far no research done on the attitude of the genders toward advertising via mobile devices, we can only conclude that there are differences in their attitude toward this form of marketing and its value.

- Attitudes toward advertising via mobile devices differ between men and women.
- Advertising value differs between men and women.

- **Education:**

Ozhan (2004) reports that as educational level increases, the level of

negative attitude toward mobile phones increases also. These findings are supported by Sarker and Wells (2003) who consider economic conditions as an influencing factor on adoption and usage of mobile phones (Sarker and Wells, 2003). Persons with less education and lower income generally report a more favorable attitude toward advertising in general (Shavitt, Lowrey and Haefner, 1998). We therefore conclude that interviewees with a higher level of education show a more negative attitude toward advertising via mobile devices and perceive a lower value.

- A high level of education is negatively correlated with a “positive” attitude toward advertising via mobile devices.
- A high level of education is negatively correlated with a high advertising value.

▪ **Consumer Behavior and Marketing Strategy**

The study of consumers helps firms and organizations improve their marketing strategies by understanding issues such as how

- The psychology of how consumers think, feel, reason, and select between different alternatives (e.g., brands, products);
- The psychology of how the consumer is influenced by his or her environment (e.g., culture, family, signs, media);
- The behavior of consumers while shopping or making other marketing decisions;
- Limitations in consumer knowledge or information processing abilities influence decisions and marketing outcome;
- How consumer motivation and decision strategies differ between products that differ in their level of importance or interest that they entail for the consumer; and
- How marketers can adapt and improve their marketing campaigns and marketing strategies to more effectively reach the consumer.

Understanding these issues helps us adapt our strategies by taking the consumer into consideration. For example, by understanding that a number of different messages compete for our potential customers’ attention, we learn that to be

effective, advertisements must usually be repeated extensively. We also learn that consumers will sometimes be persuaded more by logical arguments, but at other times will be persuaded more by emotional or symbolic appeals. By understanding the consumer, we will be able to make a more informed decision as to which strategy to employ.

- **Definition of Market Research:**

Market Research is a systematic, objective collection and analysis of data about particular target market, competition, and/or environment. It always incorporates some form of data collection whether it be secondary research (often referred to as desk research) or primary research which is collected direct from a respondent.

The purpose of any market research project is to achieve an increased understanding of the subject matter. With markets throughout the world becoming increasingly more competitive, market research is now on the agenda of many organizations, whether they be large or small.

- **The Market Research Process**

To conduct market research, organizations may decide to undertake the project themselves (some through a marketing research department) or they might choose to commission it via a market research agency or consultancy. Whichever, before undertaking any research project, it is crucial to define the research objectives i.e. what are you trying to achieve from the research? And what do you need to know?

After considering the objectives, Market Researchers can utilize many types of research techniques and methodologies to capture the data that they require. All of the available methodologies either collect quantitative or qualitative information. The use of each very much depends on the research objectives but many believe that results are most useful when the two methods are combined.

- **Quantitative Research**

Quantitative research is numerically oriented, requires significant attention to the measurement of market phenomena and often involves statistical analysis. For example, a bank might ask its customers to rate its overall service as excellent, good, poor or very poor. This will provide quantitative information that can be analyzed statistically. The main rule with quantitative research is that every respondent is asked the same series of questions. The approach is very structured and normally involves large numbers of interviews/questionnaires.

Perhaps the most common quantitative technique is the 'market research survey'. These are basically projects that involve the collection of data from multiple cases – such as consumers or a set of products. Quantitative surveys can be conducted by using post (self-completion), face-to-face (in-street or in-home), telephone, email or web techniques. The questionnaire is one of the more common tools for collecting data from a survey, but it is only one of a wide ranging set of data collection aids.

- **Qualitative Research**

Qualitative research provides an understanding of how or why things are as they are. For example, a Market Researcher may stop a consumer who has purchased a particular type of bread and ask him or her why that type of bread was chosen. Unlike quantitative research there are no fixed set of questions but, instead, a topic guide (or discussion guide) is used to explore various issues in-depth. The discussion between the interviewer (or moderator) and the respondent is largely determined by the respondents' own thoughts and feelings.

As with quantitative techniques, there are also various types of qualitative methodologies. Research of this sort is mostly done face-to-face. One of the best-known techniques is market research group discussions (or focus groups). These are usually made up of 6 to 8 targeted respondents, a research moderator whose role is to ask the required questions, Draw out answers, and encourage discussion, and an observation area usually behind one way mirrors and video and/or audio taping

facilities. In addition, qualitative research can also be conducted on a 'one on one' basis i.e. an in-depth interview with a trained executive interviewer and one respondent, a paired depth (two respondents), a triad (three respondents) and a mini group discussion (4-5 respondents).

- **Using Market Research Data**

After compiling the data, Market Researchers evaluate it and make conclusions and recommendations to their client or employer based upon their findings. They provide an organization's management with information needed to make decisions on the promotion, distribution, design, and pricing of products or services – information that meets the initial research objectives

PLAN OF THE STUDY

This studies on consumer attitudes towards mobile phones in Bangalore city, this research is to identify the satisfaction level of the product and the buying behavior of the consumer towards the brands, cost, quality, featuresetc.

STATEMENT OF THE PROBLEM

Specifically, the research investigation will convey the following focus:

- The study will bring out the extent of consumer satisfaction as a result of their experience
- The consumer expectations from the mobile phones they are using or intending to buy

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RESEARCH DESIGN

The research designs to find out the consumers' needs while using a mobile phone and his/her buying behavior when he/she decides to purchase a mobile phone. The various consumer needs and his/her buying decisions are found out based on survey with the aid of a structured questionnaire with both open ended and close- ended questions.

LITERATURE REVIEW

Because mobile end-user adoption is studied by researchers of different traditions, a simple way to categorize perspectives may be by research area or tradition. However, our review indicates that researchers often use the methodology of one tradition when applying the theoretical perspectives of another (see Dahlbom and Ljungberg, 1999). Instead, different "schools of thought" may be identified. In these schools of thoughts researchers of different areas agree on a *set* of relevant theories, methodologies, levels and purposes of research. Not surprisingly, these three schools of thought correspond to the three traditional schools found in studies of the adoption and use of technology in general: The diffusion, adoption and domestication schools of thought. *Diffusion* researchers typically describe the aggregate adoption

process a posteriori as an S-shaped function of time that may be used to categorize adopters of different kinds (Mahajan, Muller and Bass, 1990). Rogers (1995) tries to explain the observed adoption behavior using characteristics of the technology being introduced. He also describes the diffusion process as consisting of four elements; an innovation or new technology, a social system, the communication channels of the social system, and time. Of these elements, Rogers (1995) focus on the innovation, the social system and the communication channels when explaining the observed adoption behavior.

Adoption researchers typically describe and explain the adoption decision of individual end-users applying different individual and social theories of decision making, but three models stand out as the most widely applied - the technology acceptance model (TAM) originally proposed by Davis (1989), the theory of reasoned action (TRA) originally proposed by Fishbein and Ajzen (1975), and the extension of TRA into a theory of planned behavior (TPB) originally proposed by Ajzen (1985). Several hundred studies may be found applying one of these three theories to explain end-users' adoption and acceptance of different kinds of ICT-systems and applications (see Venkatesh and Davis, 2000). *Domestication* research has a long tradition of studying the adoption and use of technology in everyday life (see Silverstone and Hirsch, 1992). Examples of technologies studied are fixed telephony (see Fisher, 1988), television (Silverstone and Haddon, 1996a) and personal computers (Silverstone and Haddon, 1996b). The perspective is dominated by sociologist researchers and consequently, descriptive studies often characterize the adoption and use of technologies by demographic variables such as sex, age and gender. However, the main focus of domestication research is on the societal consequences of the domestication of technology; that is the process in which the use of technology becomes integrated into our everyday life.

The three schools of thought may be characterized by their applied level of analysis and purpose of study. The simplest way to categorize the level of analysis is to distinguish between *macro-level* studies of aggregate groups and *micro-level* studies of individual end-users.

We suggest categorizing studies based upon their purpose in three categories, i.e. descriptive studies, explanatory studies and studies of consequences. Descriptive adoption studies try to *describe* and characterize the adoption and usage patterns of end users. Thus, these studies focus on the observed behavior of end-users. Other

studies, however, go beyond pure description, and provide *explanations* of why a certain adoption behavior is observed. Thus, these studies focus on identifying the antecedents and determinants of the observed behavior. Finally, some studies take certain usage patterns for given, and are more interested in predicting what *consequences* this behavior may have in society. Combining these two categorizations, we suggest a typology of studies.

Diffusion studies of mobile end- user services focus on describing adoption processes at the aggregate level. Typically, these studies classify adopters as belonging to different categories (segments), such as early adopters, early majority, late majority, laggards and non-adopters. For example, Tjøstheim and Boge (2001) studied the demographic characteristics of early adopters of mobile commerce when compared to non-adopters, while Mante-Meijer and Haddon (2001) did the same for general mobile services like voice and messaging. Both of these studies also did comparative analysis of the diffusion of Internet and mobile services, illustrating the opportunities for and limitations in generalizing diffusion research on one kind of technology to another.

Diffusion research also explains the aggregate adoption process by the characteristics of the technology or by the characteristics of the channels used to communicate information about the technology. For example, Mahler and Rogers (2000) suggest that the difference in the adoption processes of mobile and fixed telephony may be explained by differences in network effects (externalities) between the two technologies. Both these types of comparative and explanatory diffusion research may also be highly relevant when trying to generalize diffusion models from simple mobile end-user services to 3G services. *Adoption studies* of mobile end-user services focus on describing and explaining adoption processes at the individual adopter level. Some descriptive studies focus on the decision to adopt mobile services only (see Green et al., 2001), while other studies also investigate the attitudes towards using mobile services as use is habituated (see Palen et al., 2001).

Explanatory studies apply individual level adoption models. While a large number of explanatory studies may be found on traditional ICT-adoption, we have only been able to identify a few explanatory mobile end-user services adoption studies. One example is an adoption study of mobile telephony applying Davis' (1989)

TAM-model (Kwon and Chidambaram, 2000) and some studies applying the TAM-model to study the adoption of telemedicine (e.g. Hu, et al., 1999). Even though these studies suggest extensions of the TAM-model are necessary to explain the adoption of mobile ICT, the simple TAMmodel also proved promising. For example, the Hu et al. (1999) study showed that the TAM-model explained 44 percent of the variance in intention to use a telemedicine application among physicians.

In a study of early adopters, a modified version of the decomposed theory of planned behavior explained 49 percent of the early adopters' intention to use mobile commerce services (Pedersen, 2001b). In a situation of 3G services with increasing complexity and similarity to other ICT-applications adopted for functional reasons, these studies indicate a potential for adoption research when studying mobile end-user services. *Domestication studies* of mobile end-user service adoption focus on studying service use and the consequences of use. However, domestication studies are not limited to studies of individuals or aggregates, but are found describing both the adoption and usage patterns of groups in society (e.g. Townsend, 2000) as well as individual end-users (e.g. Ling, 1997). As indicated above, domestication research also investigates the societal consequences of adoption and use, both at the aggregate and individual level. For example, Townsend (2000) analyze the consequences of mobile telephony on the planning of cities, while Fortunati (1998) analyze the consequences for the family as an institutions and for individuals using the mobile telephone as a way of expressing their individuality.

All these are examples of findings that are likely also to be important for understanding the consequences of new mobile end-user services, such as network mediating services contributing further to the mobile terminal as an instrument in increasing accessibility, flexibility and individuality. Studying consequences is also relevant because they can be reinterpreted as reasons for adopting mobile services. For example, increasing individuality is both a determinant and a consequence of using mobile end-user services for social network management (Palen et al., 2001). The

OBJECTIVE OF THE RESEARCH

- To analyze the buying behavior of consumers
- To assess the consumer's expectations from the product
- To examine the consumer's attitudes towards different mobile phones
- To estimate the level of consumer satisfaction after using the product

SCOPE OF THE STUDY

The results of the study is to understand the consumers attitudes towards the different brands in mobile phones and his/her expectations from the product and, then estimate their level of satisfaction after using the product

RESEARCH METHODOLOGY

The target respondents of the survey are the mobile phone users in Bangalore city. The study being qualitative, survey is the focal point. The primary data will be collected through in-depth interview technique with the aid of a structured questionnaire. The choice of this technique is based on the assumption that the responses are relatively true. It is proposed to take a sample of 100 respondents in Bangalore city and to draw the inferences depending upon the data distribution obtained after the survey

Survey Research

Surveys are best suited for exploratory and descriptive research. Companies should take up surveys to learn about consumers' expectations,

tastes and preferences, and their level of satisfaction.

Sample technique

Simple Random Sampling technique is used. This type of sampling. Avoids any bias in choosing the sample

Sample size

The chosen sample size for research is 100. The sample is derived from respondents within Bangalore city.

Sample description

The sample is chosen at random from among a number of respondents.

Tools and techniques

The questionnaire technique is used for the survey and the reason for using this approach is.

- It covers wide area
- It is not an expensive affair
- Original data could be obtained
- It is free from all bias
- Easy to tabulate and understand

Plan of Analysis

The collected data will be analysed with the help of statistical tools and techniques. Wherever possible to make the presentation effective tables, charts, diagrams and graphs will be used

Collection of data

Data has been collected from both primary and secondary sources. Primary data is collected using the questionnaires and Secondary data is collected from books, internet, magazines, etc,

Limitation

- Responses are made as authentic as possible.
- Time and cost constraints
- Response errors have not been estimated
- The study is exploratory
- The study is limited to consumer s within Bangalore city.
- Research findings were susceptible to respondents' bias/prejudice

CHAPTER SCHEME

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Chapter 05	:	Summary of findings, conclusions and Recommendations Bibliography Annexure

INDUSTRIAL PROFILE

Indian The Cellular Market is entering a boom period after years of quasi stagnation. Gartner estimates that by 2010, cellular subscribers in the country will number 80 million, up from 32.8 million at the end of September 2006. By then, India will be the fastest growing cellular market in Asia Pacific (in 2005, it was the Philippines and China) with 44 percent growth over the previous year.

Mobile operators will provide an estimated 48 per cent of additional telephone connections during the year. Cellular subscribers are expected to grow 80 per cent by the end of financial year 2008 to touch 1.40 crore, up from 76 lakh subscribers in fiscal 2007, according to an ICRA report on telecom industry.

This would mean that cellular telephones would account for 26.5 per cent of the total telephone connections in India compared to 16.4 per cent last year. However, the cellular density would still remain a low 1.1 per cent compared to the fixed density of 4.3 per cent. However, the report points out that, growth in cellular telephony could vastly exceed these projections, if the system of calling party pays is implemented.

Doing some more crystal ball gazing, the ICRA report points out that the cellular subscriber figure is expected to touch four crore by 2009. At the same time, the fixed line network is expected to expand to about eight crore by 2009 from 4.84 crore lines by 2006. Revenue growth, however, will lag the growth in subscriptions. Such is the massive demand for SMS globally that the GSM Association's, a wireless and cell-phone organization envious forecast of 12 Billion messages a month by end 2006 was achieved during September - three months earlier than predicted. The association has now revised its year-end forecast for December to 18 Billion messages per month.

According to the GSM Association, text messages sent across the world hit a staggering 50 billion in Q1 this year. This represents an impressive rise. During the same period in 1999 there were only 3 billion text messages sent, Q1 2000 saw

around 10 billion, and now there's eight times that figure being sent across more than 500 million global GSM users.

In India also, Mumbai peoples are also sending more than 38 Lakh SMS messages per day. SMS reached its peak on New Year's Day (2008) when cell phone users were flooded with New Year greetings. The AirTel network in New Delhi handles around 8 Lakh SMS messages on an average. Just before the arrival of the New Year, the network handled more than 92,000 calls between 11 p.m. (31 Dec 2007) and 1 a.m. (1 Jan 2008). Vodafone Cell phone claims that it handled more than 12 Lakh SMS messages on that day.

In Mumbai on New years day over 38 Lakh SMS Messages were sent between 10pm and 3am. On Valentines day 26 Lakh messages were sent. Over weekends Vodafone witnessed traffic to the extent of 12 Lakh messages daily, with the number peaking in the evening. Of an average traffics of 96 Lakh cellular calls a day, SMS accounts for 8 Lakh messages a day 2 Lakhs messages flow down the AirTel channel and another 1.2 Lakhs gets processed through Spice Telecom. In short, it is rush hour for SMS traffic in Karnataka.

In Manipal, SMS is believed to be doing roaring business as some 80 per cent of cellular users in the town are students. When AirTel launched SMS in April 2000, the initial average response was around 18,000 messages. Similarly, when Spice Telecom had carried out a study two months ago it was found that 60,000 SMS messages were received per day. The big jump has happened over the last couple of year. And emoticons - those symbol denoting emotions - have helped. BPL Mobile which conducted a consumer research survey across its Kerala circle found that 75 per cent of its total subscriber base used SMS as a frequent mode of communication. It was found that 60 per cent of the users were youngsters, and that 50 per cent of them used the facility for romance.

BPL Mobile today clocks 8 lakh messages a day across all its circles. Shopping is moving to the mobile world, giving everybody with a mobile phone access to a real-time shopping experience, regardless of his or her location. But there's much more to mobile e-commerce than just on-line shopping. It presents a new way to compare deals; pick-up impulse purchases and

reaches the consumer wherever they are making their buying decision, be that, in the local high street, on the bus, at a friend's home with a catalogue in hand. For operators and mobile portals advancing the boundaries of mobile internet services the search is on to create innovative new sources of revenue.

Mobile Marketing and Advertising is the way to invest money today, and is projected as the optimum source of high growth revenue combined with high appeal to users. The current competitive business environment has led to a growing demand for mobility, and for 24/7 access to information and services. Organizations which capitalize on this demand will be leaders in the Internet market of the future. Indus Mobile is proven wireless solutions for business can gain your organization that competitive advantage.

- ABOUT NOKIA

The development of mobile phones has made the devices smaller, their technical design more complex and increased the number of available functions.

When Nokia Talkman was introduced in 1984, few people would have guessed that this bulky and heavy mobile phone would develop into a lightweight and versatile communications tool in the foreseeable future. Today, sending text

messages, playing games and picture taking are all part of the everyday life of mobile phone users.

Nokia is a world leader in mobile communications, driving the growth and sustainability of the broader mobility industry. Nokia connects people to each other and the information that matters to them with easy-to-use and innovative products like mobile phones, devices and solutions for imaging, games, media and businesses. Nokia provides equipment, solutions and services for network operators and corporations. Nokia is a broadly held company with listings on four major exchanges. Nokia comprises four business groups and two horizontal groups.

The first Nokia century began with Fredrik Idestam's paper mill on the banks of the Nokianvirta river. Between 1865 and 1967, the company would become a major industrial force; but it took a merger with a cable company and a rubber firm to set the new Nokia Corporation on the path to electronics.

The newly formed Nokia Corporation was ideally positioned for a pioneering role in the early evolution of mobile communications. As European telecommunications markets were deregulated and mobile networks became global, Nokia led the way with some iconic products.

In 1992, Nokia decided to focus on its telecommunications business. This was probably the most important strategic decision in its history.

As adoption of the GSM standard grew, new CEO Jorma Ollila put Nokia at the head of the mobile telephone industry's global boom – and made it the world leader before the end of the decade.

Nokia's story continues with 3G, mobile multiplayer gaming, multimedia devices and a look to the future.

▪ ABOUT SAMSUNG:

With the start of the second millennium, SAMSUNG begins its second century.

The digital age has brought revolutionary opportunities and changes to global business. The SAMSUNG Group has responded to these changes and is currently upgrading its business structure, management perspective, and corporate culture to meet global standards.

At SAMSUNG, we see every challenge as an opportunity, and believe that we are perfectly positioned to be one of the world's recognized leaders in digital technology. Our commitment to being "World's Best" has won us the number one global market share for thirteen of our products. Our target is to have thirty of our products rated "number one in world products" by 2006, adding digital TVs, IMT 2000, and printers to our current list of world market leaders: semiconductors, TFT-LCDs, monitors and CDMA mobile phones.

Always a step ahead, we're making historic advances in research and development of our overall semiconductor line, including flash memory and non-memory, custom semiconductors, DRAM and SRAM. An example of this is SAMSUNG Electronics, which remains one of the world's "top 10" in US patents for four consecutive years, with 14,000 researchers representing a US\$ 1.9 billion investment in Research and Development.

Financially, SAMSUNG is committed to being the World's Best, with the SAMSUNG Card, a payment solution selected as the "Best Card Company in the New Millennium" by MasterCard.

The SAMSUNG Card secured more than 1 million members within one year through the release of "Aha Loan Pass," the first loan-only card in Korea. Euro money has also selected SAMSUNG Securities as the "Best Security Company" for the 3rd consecutive year, and SAMSUNG Life Insurance was ranked as "10th Largest Company" by Fortune's "Global 500" in the Life/Health insurance category. We are also actively promoting our brand value, a key engine of business growth. SAMSUNG's brand value increased to US\$8.40 billion in 2002 from US\$6.42 billion in 2001 and was recognized by Interbrand Corporation as the fastest growing global brand.

Our success in achieving global competitiveness is achieved through continually improving our financial structure and profitability, as we examine the structure of our own organization. Reducing production costs and working hard to maintain our brand image has greatly contributed to our progress, and SAMSUNG Electronics has secured a nation's credit rating from S&P and Moody's, while SAMSUNG Fire also has been recognized by S&P for its stability and growth potential, receiving its second consecutive A rating.

The quick pace of our development is reflected in our management philosophy "We will devote our human resources and technology to create superior products and services, thereby contributing to a better global society.

Our active participation in sporting events has helped promote community spirit, as well as returning corporate profits to society. As a Worldwide Olympic partner in the wireless equipment sector for the 2000 Sydney Olympics, SAMSUNG provided 26,000 advanced digital wireless telecommunication devices including mobile phones. We have also served in that capacity at the 1999 Nagano Winter Olympics, was Worldwide Olympic Partner in the 2006 Torino Olympics and will be a 2008 Beijing Olympics. SAMSUNG is an active contributor to the Asian Games, SAMSUNG Nations Cup Riding Competition, SAMSUNG Running Festival, SAMSUNG World Championship (a U.S. LPGA Tour), and many other sporting events around the world.

In 2000, SAMSUNG started its management program with a new twist and aimed to stay ahead of the great waves of digital changes now engulfing the world. We expect nothing less than to lead the digitalization of society with our advanced technologies, competitive products, and professional human resources.

▪ ABOUT MOTOROLA

Since 1928, Motorola has been committed to innovation in communications and electronics. Our company has achieved many milestones in its 75-year history. We pioneered mobile communications in the 1930s with car radios and public safety networks. We made the equipment that carried the first words from the moon in 1969. We led the communications revolution with the first commercial handheld cellular phone in 1983 and the first all-digital high-definition television (HDTV) technical

standard in 1990. Today, as a global industry leader, excellence in innovation continues to shape the future of the Motorola brand.

- **Founding of Company**

On September 25, 1928, Paul V. Galvin and his brother, Joseph, incorporated Motorola's founding company—the Galvin Manufacturing Corporation—in Chicago, Illinois, USA

- **2007: Best Corporate Citizen Award**

Motorola ranked fourth among America's 100 Best Corporate Citizens, published by CRO magazine for performance in governance, environment, community and employment practices. The 2007 ranking marked the second year in a row that Motorola earned the fourth spot on the list and the fourth time that Motorola appeared in the top 10

- **2007: Symbol Technologies, Inc.**

Motorola and Symbol Technologies, Inc. merged in 2007 to provide products and systems for enterprise mobility solutions, including rugged mobile computing, advanced data capture and radio frequency identification (RFID).

MOBILE STRATEGY

- Capture maximum telecommunications revenue potential with minimum geographical coverage to maximize its revenues and margins.

- Build high quality mobile networks by deploying state-of-the-art technology to offer superior services.

- Use the experience it has gained from operating its existing mobile networks to develop and operate other mobile networks in India and to share

the expertise across all of its existing and new circles.

- Attract and retain high revenue generating consumers by providing competitive tariffs, offering high quality consumer support, proactive retention programs and roaming packages across all of its mobile circles.

- Provide affordable tariff plans to suit each segment of the market with a view to expand the reach, thereby increasing the mobile consumer base rapidly.

DOMESTIC SCENARIO

South Korea's Samsung and LG, already challenging top handset maker Nokia in the world's biggest markets, are taking the fight to the fastest-growing market, offering fancy phones and aggressive marketing in India. Rock bottom tariffs, a room-to-boom phone ownership rate of just four in 100 people and galloping demand have attracted global players such as Nokia, Motorola, Samsung Electronics and LG Electronics to India's \$3.8 billion market. The Indian market is growing rapidly and the mobile penetration rate is still low. It's got great potential. India is a market that Samsung and LG really care about because of the sheer volume that's involved.

About 1.6 million users sign up each month, and the 45-million subscriber base is forecast to more than double by December 2009, with call rates as low as 2 U.S. cents a minute. Song estimates more than 51 million mobile phones will be sold in India in 2009, with the annual number likely to rise to 150 million by 2015. Korean firms entered India late, but Samsung quickly built market share with stylish phones and color screens aimed at the high-margin sector, while LG aimed for the low- to middle range. Nokia's offerings cross the spectrum, but it has stuck mainly to low- to medium-priced bar phones. The Koreans are very serious contenders for the leadership position in India as they have demonstrated the ability to take share away in an exploding market.

FANCY PHONES SELL

Analysts say Samsung and LG have won a following by aggressively hawking flip-tops and clamshells with polyphonic ring tones and color screens. Both have a lot more advertising and marketing spend compared to other players. No precise market data is available, but analysts say Nokia, with an estimated 45 percent share, is still leading.

Even so, Samsung is the largest player in the color screens and photo-snapping handset niche, selling 100,000 units a month. With more than half of India's billion-plus population below age 25, the market is ripe for experimentation and new technologies. The future is color and cameras. Mobile phones are now a tool for entertainment as well as connectivity in terms of voice and data. Over the past two years, the Korean firms have piggybacked on

a huge expansion drive by Reliance Infocom Ltd., the CDMA-based mobile services arm of the Reliance group that tops the Indian market.

Reliance, which has more than 90 million users, is expanding its network to 5,000 towns from 1,100 at present, and analysts say half the firm's CDMA handset purchases are through LG. LG first shipped CDMA handsets to India in 2002, followed by color handsets in April 2003 and camera phones in January 2004. By March it had over half of India's CDMA market. LG aims to sell 3 million handsets in India in 2004, or about 7 percent of its global volume sales, said a spokeswoman. Samsung India expects to sell 2.8 million mobile phones in 2004, up from 2.5 million last year. Analysts expect handset revenue to rise 16.6 percent on the year to about \$350 million.

Nokia has fought back by entering the CDMA market and also by offering a larger menu of low-priced mobile phones in a market where more than 60 percent of phones sell for about \$70.

Samsung, the third-largest mobile phone maker after Nokia and Motorola, raised its global market share to 13.5 percent in the third quarter from 11.2 percent a year ago, according to Strategy Analytics. LG, meanwhile, overtook Japanese-Swedish joint venture Sony Ericsson as the fifth largest. Its share rose to 7 percent from 5.7 percent.

SALES NETWORK ADVANTAGE

The South Korean firms enjoy another edge -- their nationwide distributor and retail presence in the domestic consumer durables market. South Korean firms with leadership positions in the \$4 billion consumer electronics market have

changed the dynamics of the booming sector.

Both companies are now setting up plants to manufacture phones in India. Although Samsung's investment plans are not known, LG will plough \$60 million into a mobile phone plant that will make 20 million GSM and CDMA phones a year by 2010. Half of those would be earmarked for export. There is the huge domestic market to cater to and in the longer run; the opportunity to address the needs of the global market is there.

MOTOROLA TAKES AWAY MARKET SHARE FROM NOKIA

Nokia is the world leader when it comes to mobile phones. However, they are continuing to lose this advantage to competition as Motorola chips away some of their market share in the last couple of months. Finland based Nokia saw their market share fell to 30.4% during the first three months of the current year. This is a drop from 33% market share they had at the end of last year. The report was released by the market analysts Garner Incorporation. On the other hand, Motorola witnessed a growth in their market share as they now have captured 16.8% of the mobile market. This share is up from 16.3% at the beginning of the year. Samsung also did good as they now rule 13.3% of the market up from 12.2%. The market is continuing to see aggressive pricing from the various companies trying to woo the consumers away from each other. Nokia itself has taken a lot of measures to cut costs and lower the prices of their models. Some of the plans include opening manufacturing units in Asian countries to manufacture cheaper mobile phones. One of the major markets where they fail to penetrate is the North America and they would love to expand their range in the US to entice more consumers. Their long-term goal is to achieve a market dominance of 40%, which looks like a tough deal

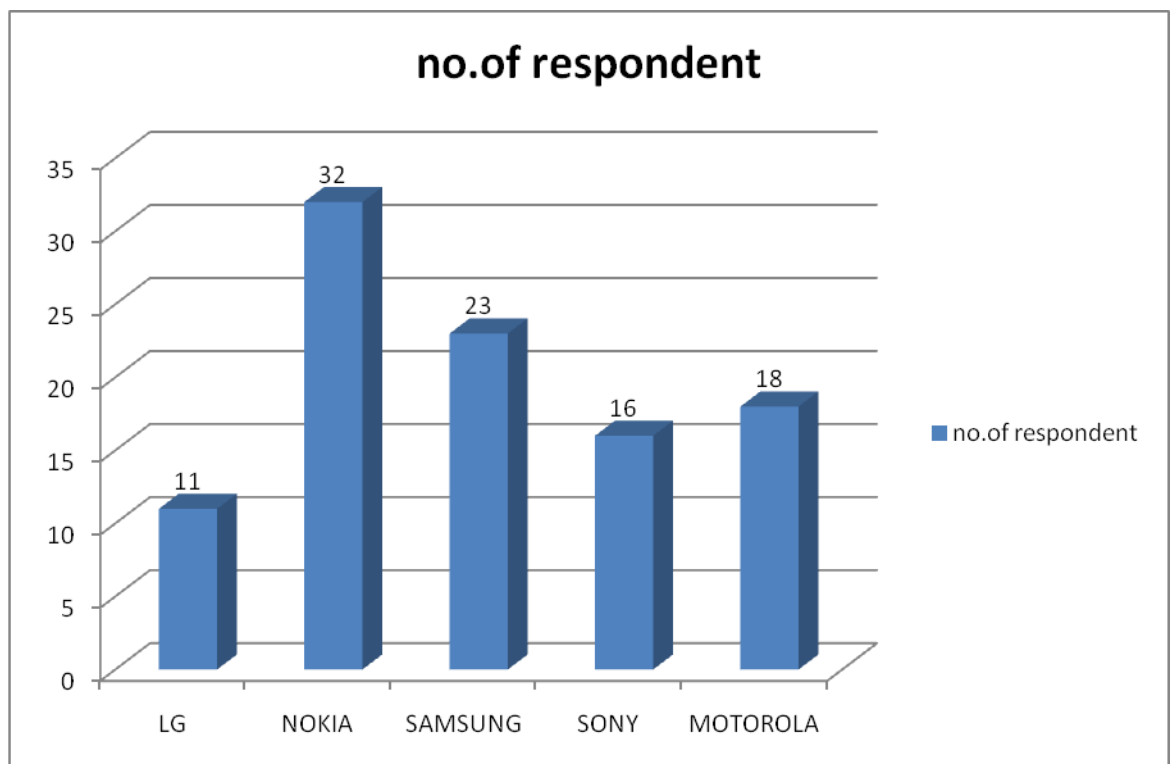
now.

1. Brand currently used by the respondent

T1-Table showing brand currently used by the respondent

Brands	No. of Respondents	Percentage
LG	11	11.0
Nokia	32	32.0
Samsung	23	23.0
Sony	16	16.0
Motorola	18	18.0
Total	100	100.0

G1-Graph showing brand currently used by the respondent



OBSERVATION:

Among the various companies manufacturing mobile phone, Nokia has the best Marketing Mix strategy and it is designed to suit specific segments to catch up with the world market. Consumers always prefer a reliable product at optimum cost, majority prefers products, which are widely advertised and are available at convenient locations. Nokia cell phones meet all this criteria and hence, from the user's angle it is the highest sold commodity in this competitive market. It is been observed that majority of the respondents use Nokia i.e. 32%. 23% are using Samsung, 18% are using Motorola , 16% are using Sony and a small percentage of respondents are interested in using LG.

INFERENCE:

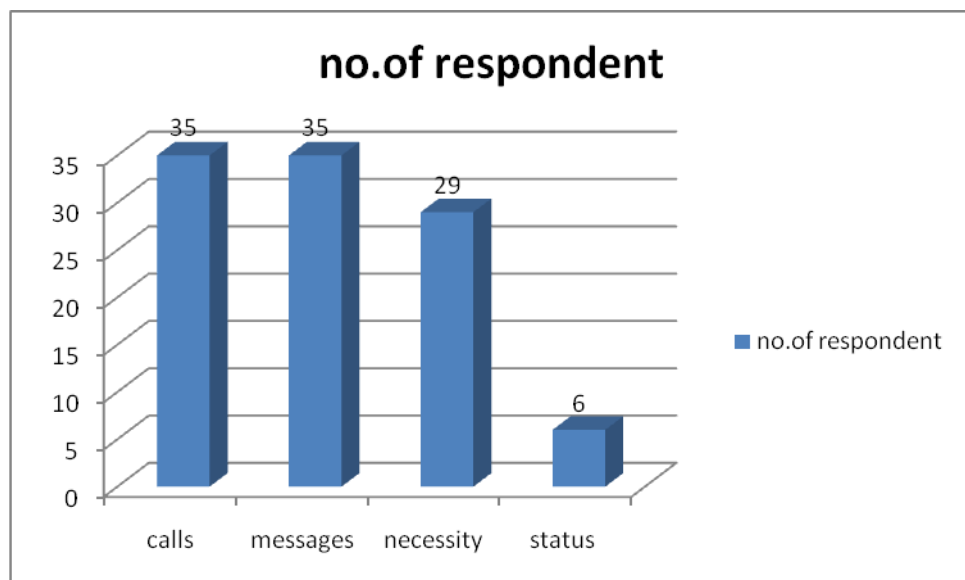
The performance criteria in terms of reliability, durability and maintainability appear to be the key factors in influencing consumers to buy the product. With continuous R&D efforts and cost-effective means of manufacturing the cell phones, Nokia's market share is quite high and undoubtedly Nokia is the market leader in this category. Consumers, who decide to buy a cell phone for the first time, prefer to go in for Nokia phones because of the availability in a wide range of variety and price ranges. It can be inferred from the above data that consumers are more inclined towards Nokia mobile phones than Samsung , Motorola and SonyEricsson.

2. The first thing that comes to the mind of the consumer when he hears the word 'Mobile Phone'.

T2 –Table showing consumer ‘mind set’

Particulars	No. of Respondents	Percentage
Calls	30	30.0
Messages	35	35.0
Necessity	29	29.0
Status Good	6	6.0
Total	100	100.0

G2-Graph show consumer ‘mind set’



OBSERVATION:

After the introduction of mobile phones a decade ago, accessibility of individuals within the city or outside the city became easier.

Initially, the cost of cell phones was quite high and as the sales volume picked up; the rates were brought down and were affordable by all income groups. With the mobility of persons in discharging their work, the need to contact consumers, office staff, and households became an important issue. The need for cell phone became a necessity right from the top executive of the company to a vendor on the street. The service providers like Airtel, Spice, Vodafone, etc also reduced the tariffs to attract more consumers. The incoming calls were made free about 8 years back. With this, the need for cell phones increased and today it is considered as an item of possession, even for students and professionals

INFERENCE:

Mobile phones facilitate making and receiving calls to any destination at any time. The facility of call registers enables users to know the called numbers in case they are unable to receive their calls while the phone rings. With caller identification facilities, a receiver has the option to either receive or reject a call according to his criteria. The latest version of the cell phones, which only weighs 55 to 80 grams, appears to have further increased the passion for the usage of a cell phone by many consumers. Most of the youths are using messages more than the calls, the necessity factor is augmented because of the availability of handsets on installments and low interest rates. For top-level executives, it is certainly a status symbol. For many others it is a necessity and for a few it is a pride.

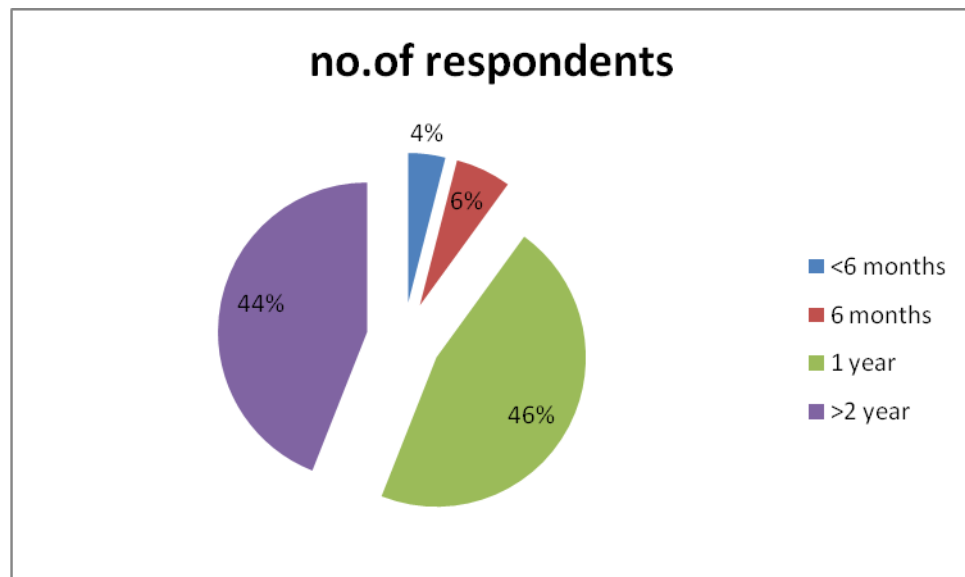
3. Frequency of changing the handset

T3- Table showing frequency of changing the handset

	No. of Respondents	Percentage

<6 months	4	4.0
6 months	6	6.0
1 year	46	46.0
> 2 years	44	44.0
Total	100	100.0

G3 –Graph showing frequency of changing the handset



OBSERVATION:

The advent of technological changes and continuous efforts by R&D Engineers result in introduction of handsets with newer and latest features. The pace at which new models are getting into is quite fast. A time period of 6 months to 1 year appears to be reasonably the life cycle of a mobile phone for many manufacturers. Although many consumers prefer to change the handset to satisfy their urge to go in for new models, many postpone the decisions since the exchange value is quite low. A usage period of 1 to 2 years appears to be normal before a consumer decides to go in for a new handset. This is one of the main reasons why 46% of the respondents have expressed their view that the frequency of changing handset is approximately 1 year. Many consumers prefer to retain their sets since they are used to various operations and might not have faced any problems with their present sets.

INFERENCE:

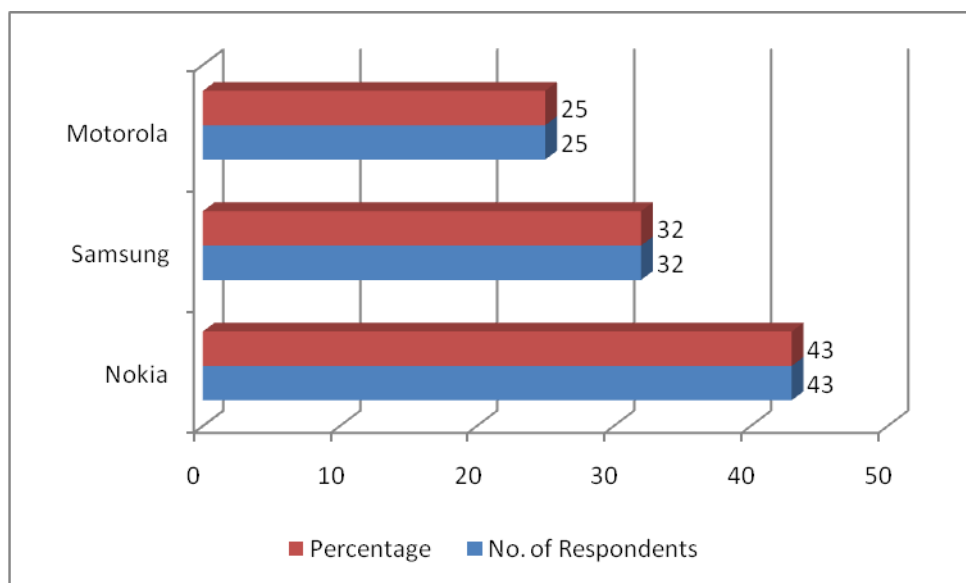
Companies manufacturing cell phones should openly advertise “Buy back schemes” which creates interest in the consumers to go in for a change. Enough awareness should also be created highlighting technological improvements and cost- advantage to initiate the buyers for changing the handset.

4. Top Brand that is most preferred by the consumers

T4-Table showing consumers' top preferred brand

Brands	No. of Respondents	Percentage
Nokia	43	43.0
Samsung	32	32.0
Motorola	25	25.0
Total	100	100.0

T4 – Graph showing consumer's top preferred brand



OBSERVATION:

Nokia phones have become popular through out the world. The company has started manufacturing these phones in India and also in other countries. The number of varieties and models available in Nokia is quite high. Keeping these factors in view, Nokia has also strengthened its distribution activities and have franchised many dealers who sell those phones at convenient locations. The media advertisement publicity as well as sales promotion has created the brand image. These are the reasons why 43% of the respondents feel that Nokia is one of the most preferred brands by consumers.

INFERENCE:

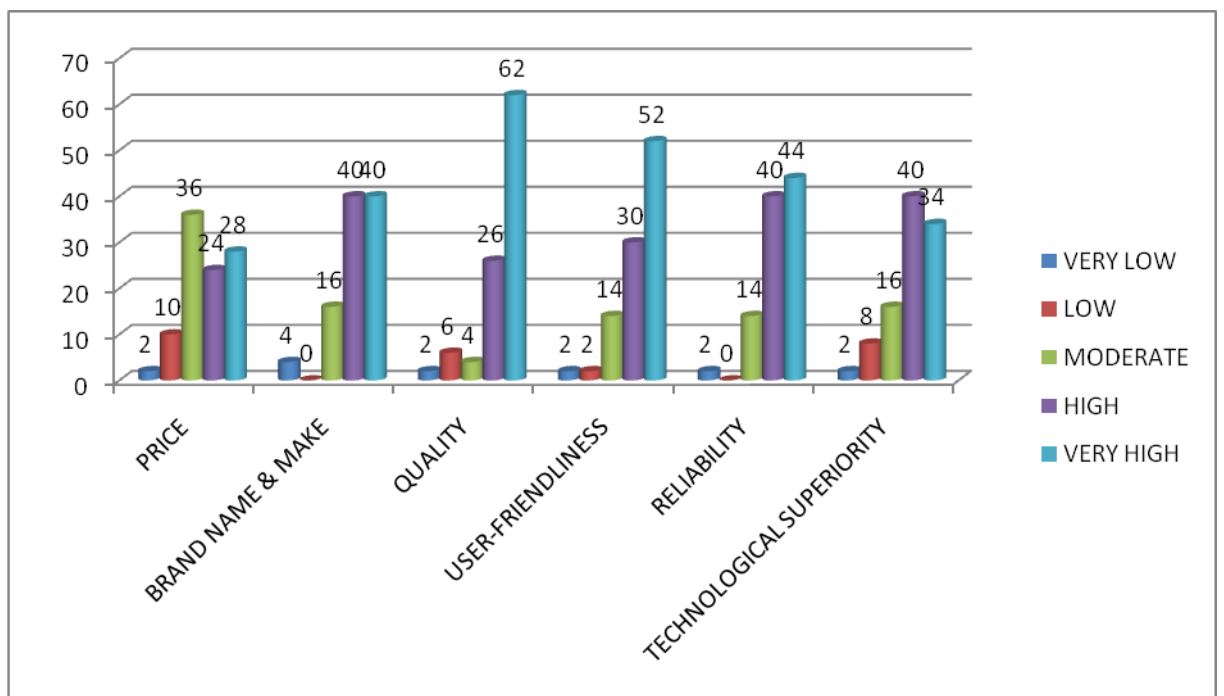
The marketing efforts by Nokia manufacturing company are extremely good. They make use of all forms of marketing such as Direct Marketing, Marketing through franchise distributors, dealers and retailers. The Hoardings and Advertisements on print and electronic media are very impressive and rewind the memory space of consumers for a very long time. It has become the most preferred brand because of technical superiority, marketing capabilities, price control and also effective after sales service.

5. Consumers' rating on the various parameters they take into account while purchasing a mobile phone

T5-Table showing rating different parameters

Parameter	Price	Brand name & make	Quality	User-friendliness	Reliability	Technological Superiority
Very low	2	4	2	2	2	2
Low	10	0	6	2	0	8
Moderate	36	16	4	14	14	16
High	24	40	26	30	40	40
Very high	28	40	62	52	44	34
TOTEL	100	100	100	100	100	100

G5-Graph showing rating different parameters



OBSERVATION:

The research carried out has brought out the fact that the consumers in the process of selecting a handset give importance for quality since it is one of the characteristics which influences product buying. Quality is defined a fitness for use and this aspect is incorporated in the handset made by most of the manufacturers.

Consistency in performance each time and all times is reliability. The phones need to be reliable and must be designed to operate under extremes of conditions such as high temperature, cold and rainy conditions, etc. Consumers' ultimate choice of buying a cell phone is based on cost competitiveness and brand popularity. The phones must be capable of being handled by all kinds of consumers irrespective of whether they are qualified or unqualified. The survey has brought out the fact that user-friendliness is the most important criteria in the selection of a mobile phone. Consumers are aware that, when they expect more or better features, they must be prepared to pay more cost and that is how cost is the least preferred factor.

INFERENCE:

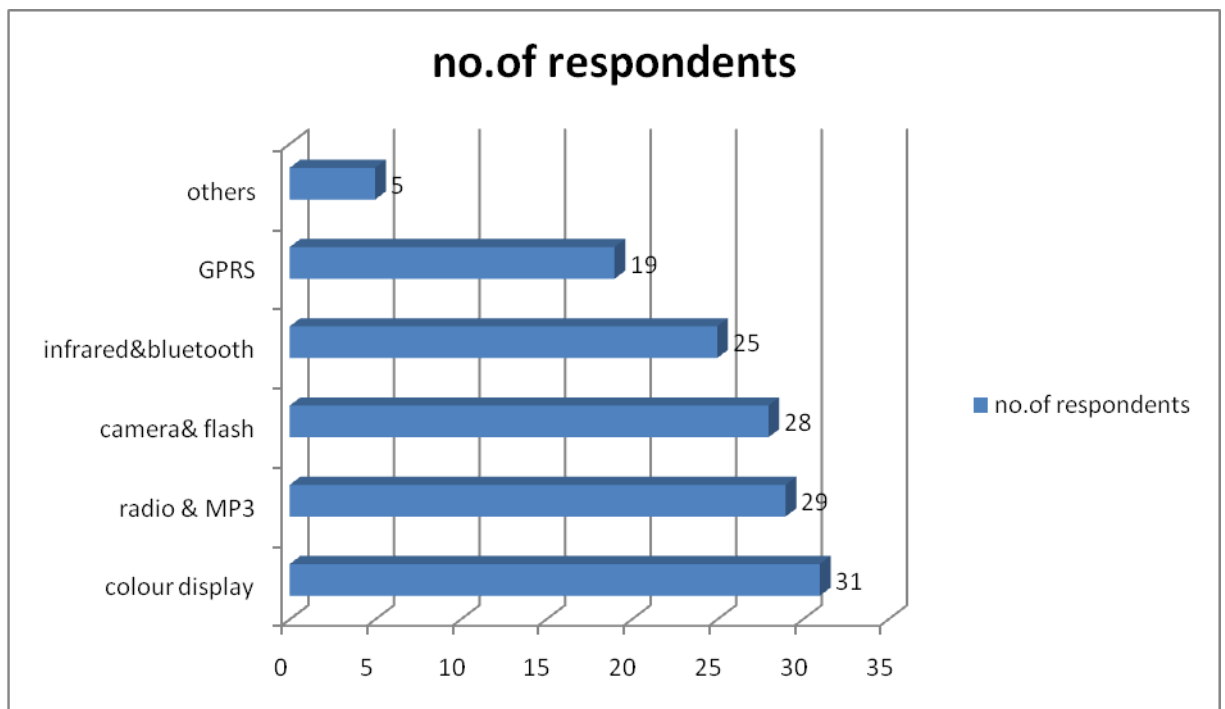
The above facts necessitates that all manufactures need to give due importance by incorporating quality in design to make the handset more and more robust. Before launching any new models, a pre-testing may be undertaken to ascertain that the users are comfortable in handling and using the cell phones. A one/two page voucher may also be supplied highlighting important facilities available. This reduces the monotony of the consumers to pick user manuals and understand the user-friendly characteristics. Since the volume of consumption is increasing gradually, manufacturers must be able to hold on to the present prices that extend more facilities. Continuous update to match the present and future technological changes and innovations must be considered by manufacturers .New models shall invariably be brought into the market but spares support must continue to be provided to the earlier models.

6. The features that are most preferred by the Mobile phone users

T6-Table showing features preferred by the consumer

Features	No. Of Respondents	Percentage
Color display	31	31%
Radio& MP3	29	29%
Camera	28	28%
Infra red & Blue tooth	25	25%
GPRS	19	19%
Others	5	5%
TOTEL	100	100%

G6-Graph showing features preferred by the consumer



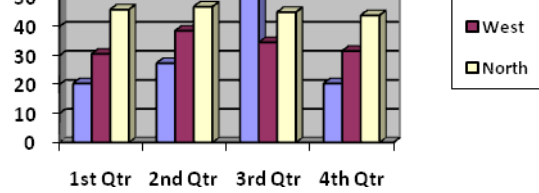
OBSERVATION:

It can be observed from the data given above that majority of the respondents prefer cell phones with Color display i.e. 62%. With the advent in technology, the consumers' demands keep increasing. Many of the respondents have also given good preference to other features like Radio, MP3&MP4, and Camera with flash, Infra-red, Blue-tooth, GPRS etc. These are the features that the consumers are basically looking forward to in future when they buy a mobile phone.

INFERENCE:

From the above data, it can be inferred that the consumers' needs are never ending. They always demand more and more. Nowadays, almost all the companies are coming up with phones with latest features. But the ones in this segment are priced very high. As a result, it cannot be afforded by the common man. Companies should make efforts to bring down the cost of such mobiles to increase its sales.

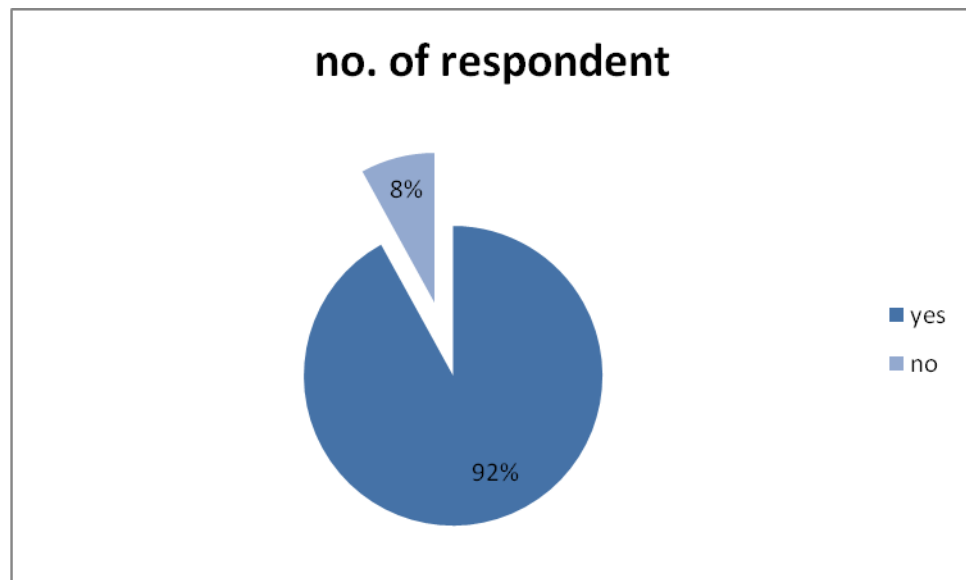
7. Consumers' satisfaction level with their present handset



T7 –Table showing consumers’ satisfaction level

Particulars	No. of Respondents	Percentage
Yes	92	92.0
No	8	08.0
Total	100	100.0

G7-Gable showing consumer’s satisfaction level



OBSERVATION:

Consumer satisfaction is one of the main objectives of marketing. The level of satisfaction is a combination of production, price, promotion,

distribution and after sales service. As per the earlier tables, majority of the cell phone users are using Nokia small percentages who use the other brands have generally expressed that they are satisfied with their handsets. This indicates that they are getting the value for the money spent.

INFERENCE:

It shall be the endeavor of manufacturers to delight the consumer by offering more facilities and also by continuous improvements; they can aim at higher levels of satisfaction.

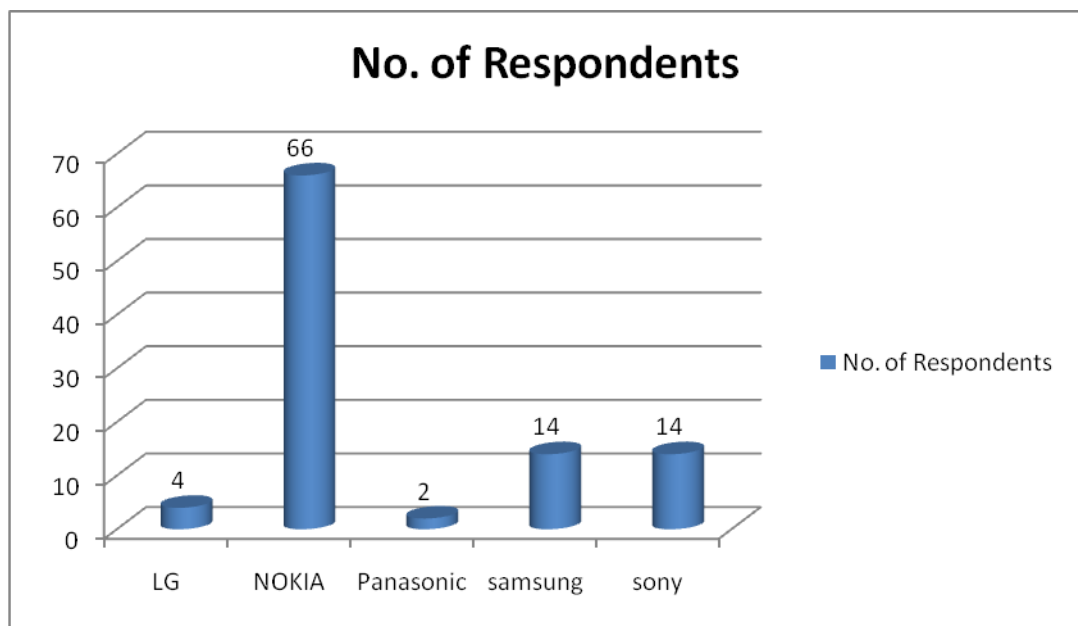
8. The handset that the consumers would prefer buying in future

T8 –Table showing other handset preference

Brands	No. of Respondents	Percentage

LG	4	4.0
Nokia	66	66.0
Panasonic	2	2.0
Samsung	14	14.0
Sony	14	14.0
Total	100	100.0

G8 –Graph showing other handset preference



OBSERVATION:

In order to know the views of consumers regarding their performance on any other brand other than what they possess, it was mentioned that consumers have once again preferred Nokia as the best choice. This shows the strong brand affinity and continues use of Nokia as the

preferred choice. A small percentage have only expressed that they prefer Samsung, Sony and LG.

INFERENCE:

Nokia as a market leader, enjoys the highest brand popularity, brand loyalty and brand image. The first preferred of any consumer is Nokia which markets its product on the keyword “Connecting people”. The ergonomic features and aesthetic characteristics have enabled this brand to enjoy the highest market share. The other brands like Samsung and LG may adopt a total shift in their marketing approach to compete with the present market.

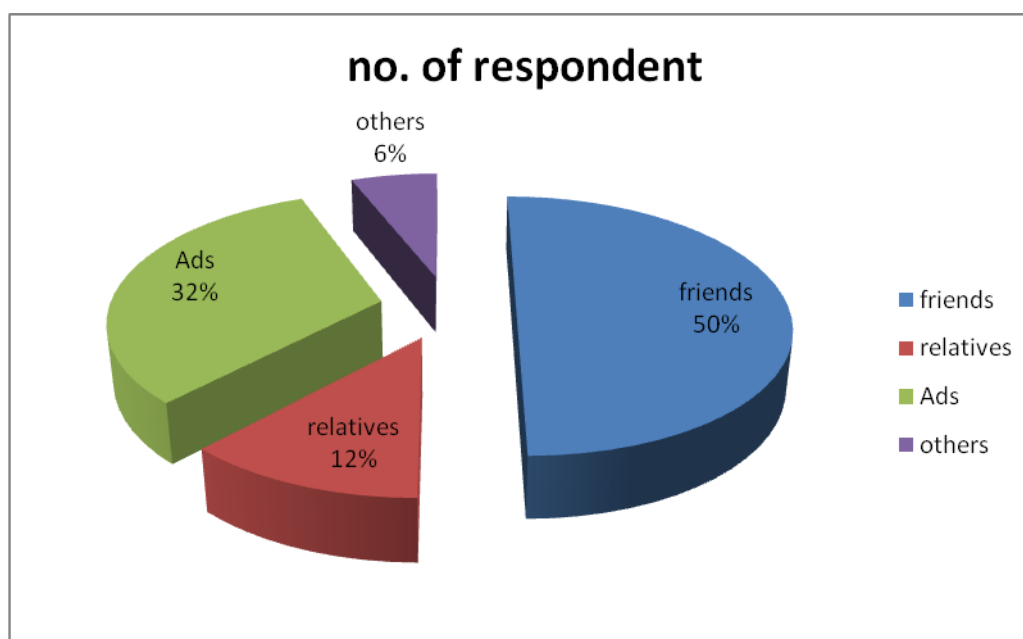
9. Medium for consumers’ awareness about their handset

T9 –Table showing Source of awareness

SOURCES	No. of Respondents	Percentage
Friends	50	50.0
Relatives	12	12.0
Ads	32	32.0

Others	6	6.0
Total	100	100.0

G9-Graph showing source of awareness



OBSERVATION:

The source of awareness of the brands selected by the users is through Word of Mouth advertising. Friends and family members play a dominant role in influencing buyers. Advertisement in print and electronic media creates awareness on the availability of brands .The out door advertisement through Hoardings provides additional information and helps the consumers to select their brands.

INFERENCE:

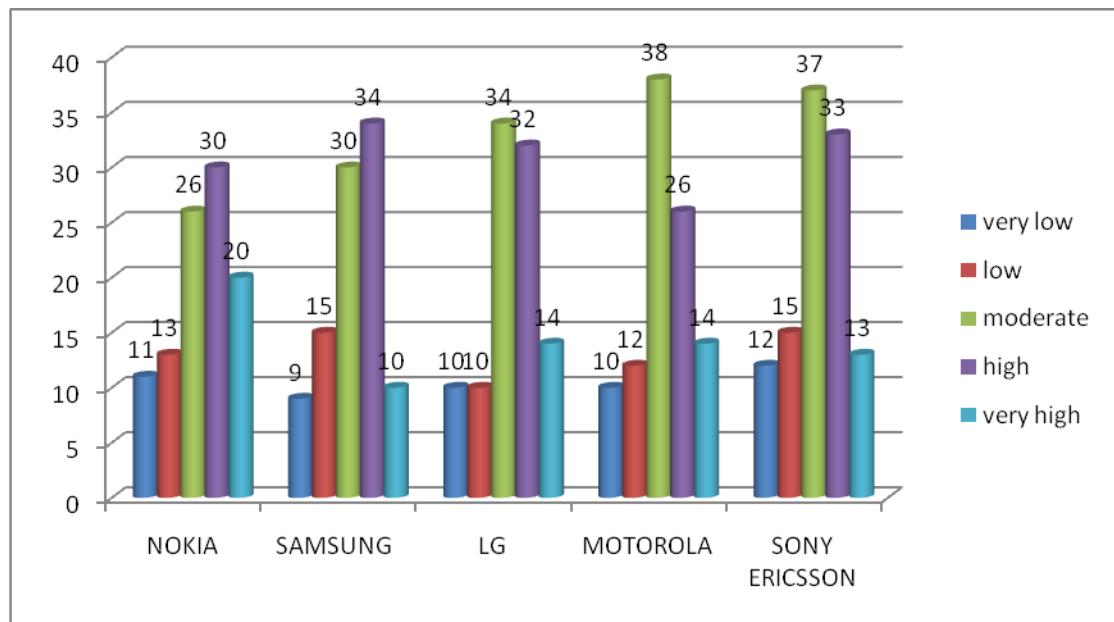
Brand popularity is a direct measure of the attitudes, beliefs and perception of users. Satisfactory performance of the handsets initiates the buyers to influence others to buy the same brands owned by them. This creates a chain effect in a few people telling many and many telling many more. It also depends on how the dealers and retailers help the buyers in the process of selection and decision making. Manufacturers should give equal importance not only for media advertising but also for sales promotion and personal selling. Sufficient resources should be provided towards advertising budget to make the brands popular and stand out in the market.

10. CONSUMER ATTITUDES TOWARDS DIFFERENT BRANDS

T10-Table showing CONSUMER ATTITUDES about different brands

Ranks	Nokia	Samsung	Motorola	Sony Ericsson	LG
Very low	11	9	10	12	10
Low	13	15	12	15	10
Moderate	26	30	38	37	34
High	30	34	26	33	32
Very high	20	10	14	13	14
Total	100	100	100	100	100

G10-Graph showing CONSUMER ATTITUDES about different brands



OBSERVATION:

It can be observed from the above given data that most of the respondents found the Price of Nokia and Samsung high i.e. 30% and 34%, respectively. They found the Price of Motorola, Sony Ericsson and LG moderate. 34%, 37% and 38% respectively felt so. Very few people felt that the prices of these brands are either very low or very high.

INFERENCE:

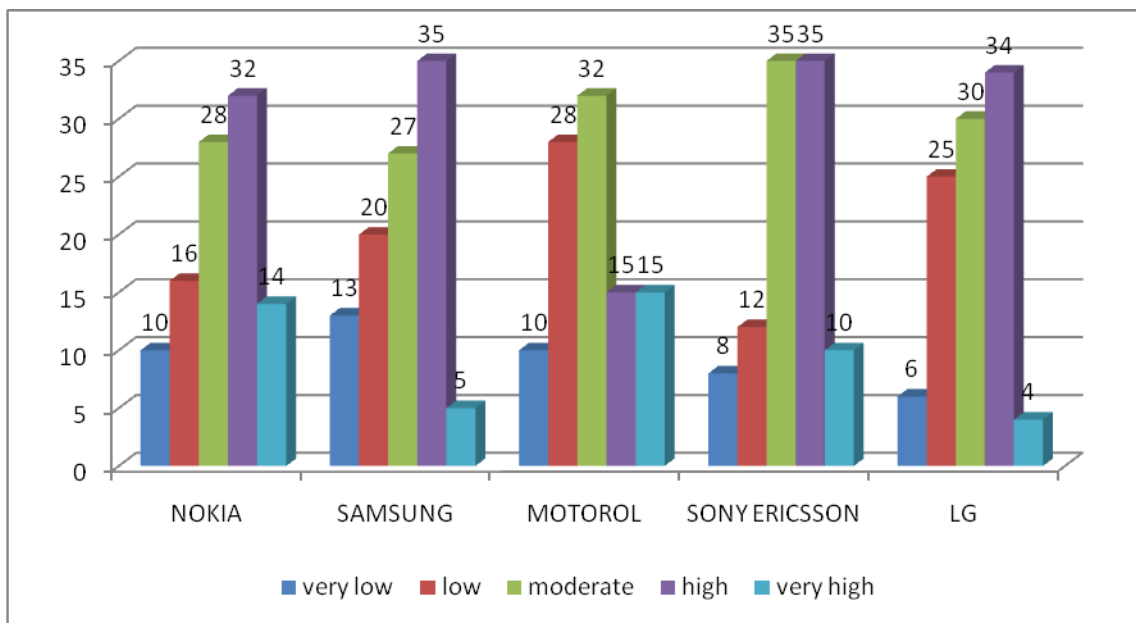
Price is one of the most important factor consumers take into consideration when purchasing a mobile phone. They prefer products that are priced optimum. The price of the product measures their ability to pay. Companies should make efforts to ensure that their products are priced optimum so that it can be afford by the common man.

11 Consumers' attitude about their Ability to pay for the below listed brands of mobile phones

T11-Table showing consumer attitude for ‘Ability to pay’

Ranks	Nokia	Samsung	Motorola	Sony Ericsson	LG
Very low	10	13	10	8	6
Low	16	20	28	12	25
Moderate	28	27	32	35	30
High	32	35	15	35	34
Very high	14	5	15	10	4
Total	100	100	100	100	100

G11-Graph showing consumer attitude for ‘Ability to pay’



OBSERVATION:

It can be observed from the above given data that the consumers

generally have a high and moderate ability to pay for the different mobile phone brands. It shows that most of the brands are placed at an optimum price. Even quite a number of respondents have mentioned that they have a very high ability to pay for these brands. People saying that they have either a very low or low ability to pay are very few.

INFERENCE:

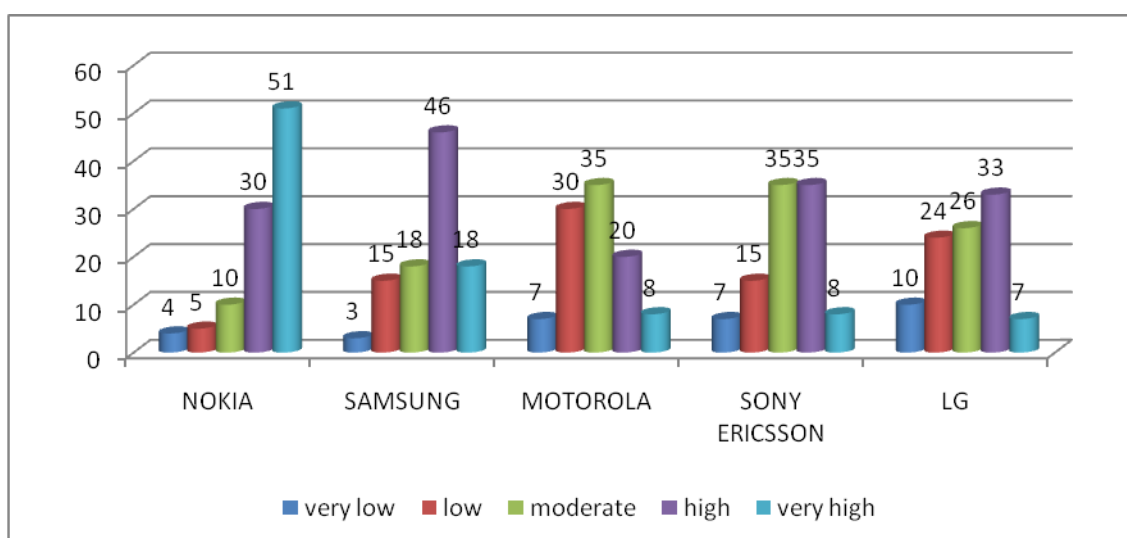
It can be inferred from the facts given above that most of the mobile phone brands are priced properly and can be afforded by most of the people. However continuous efforts have to be made to reduce the costs of phones that technologically very superior.

12 .Consumers' attitude about the Brand name and Make of some of the top brands of mobile phone

T12-Table showing brand name and Makes

Ranks	Nokia	Samsung	Motorola	Sony Ericsson	LG
Very low	4	3	7	7	10
Low	5	15	30	15	24
Moderate	10	18	35	35	26
High	30	46	20	35	33
Very high	51	18	8	8	7
Total	100	100	100	100	100

G12 –Graph showing brand name and Make



OBSERVATION:

It can be observed from the above data that most of the respondents felt that Nokia has a very good Brand name and make i.e. about 51% of them felt so. They felt that the other brands normally have a moderate Brand name and make. Consumers always prefer a reliable product at optimum cost, majority prefers products, which are widely advertised and are available at convenient locations. Nokia cell phones meet all this criteria and hence, from the user's angle it is has a very superior Brand name in this competitive market.

INFERENCE:

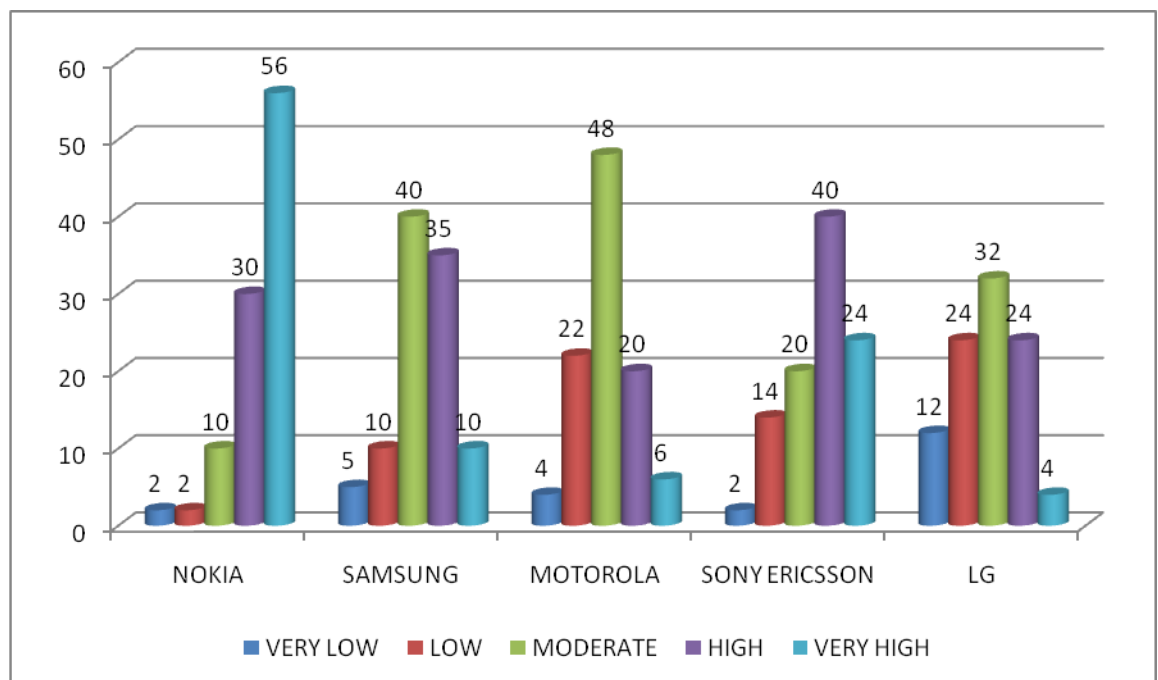
One of the key factors that influence consumers to buy a product is its Brand name and make. Nokia's market share is quite high and undoubtedly Nokia is the market leader in this category. Consumers, who decide to buy a cell phone for the first time, prefer to go in for Nokia phones because of the availability in a wide range of variety and price ranges. It can be inferred from the above data that consumers are more inclined towards Nokia mobile phones than Samsung and Sony.

phone brands

T13-Table showing consumer attitude about the quality

Ranks	Nokia	Samsung	Motorola	Sony Ericsson	LG
Very low	2	5	4	2	12
Low	2	10	22	14	24
Moderate	10	40	48	20	32
High	30	35	20	40	24
Very high	56	10	6	24	4
Total	100	100	100	100	100

G13-Graph showing consumer attitude about the quality



OBSERVATION:

The research carried out has brought out the fact that almost 56% of the consumers feel that the Quality of Nokia phones are much more superior when compared to Samsung, Sony Ericsson, LG, and Motorola. In the process of selecting a handset, consumers give utmost importance for quality since it is one of the characteristics which influence product buying. Quality is defined a fitness for use and this aspect is incorporated in the handset made by most of the manufacturers. The phones must be capable of being handled by all kinds of consumers irrespective of whether they are qualified or unqualified.

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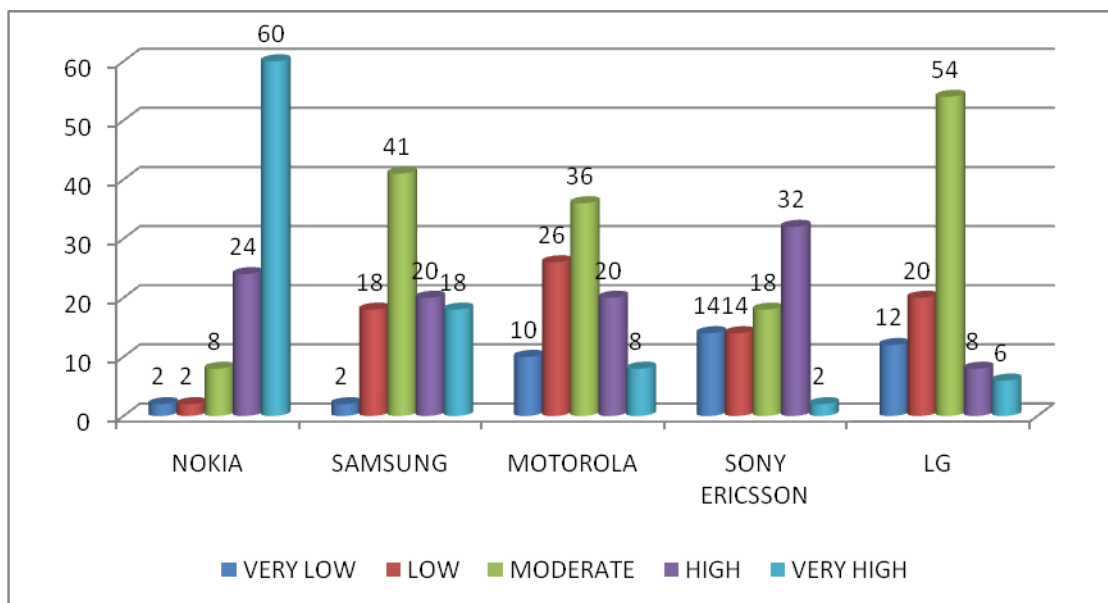
The above facts necessitates that all manufacturers need to give due importance by incorporating quality in design to make the handset more and more robust. Continuous updating to match the present and future technological changes and innovations must be considered by manufacturers. New models shall invariably be brought into the market but spares support must continue to be provided to the earlier models.

14. Consumers' attitude about the User - Friendliness of some of the major mobile phone brands

T14-Table showing consumer's attitude about the user-friendliness

Ranks	Nokia	Samsung	Motorola	Sony Ericsson	LG
Very low	2	2	10	14	12
Low	2	18	26	14	20
Moderate	8	41	36	18	54
High	24	20	20	32	8
Very high	60	18	8	2	6
Total	100	100	100	100	100

G14-Graph showing consumers' attitude about the user-friendliness



OBSERVATION:

It can be observed from the above data that Nokia is more user-friendly when compared to the other brands. 60% of the respondents felt so. They feel that the user-friendliness of the other brands is quite moderate and not exceptional. People prefer using phones that are user-friendly so that anybody can easily operate.

INFERENCE:

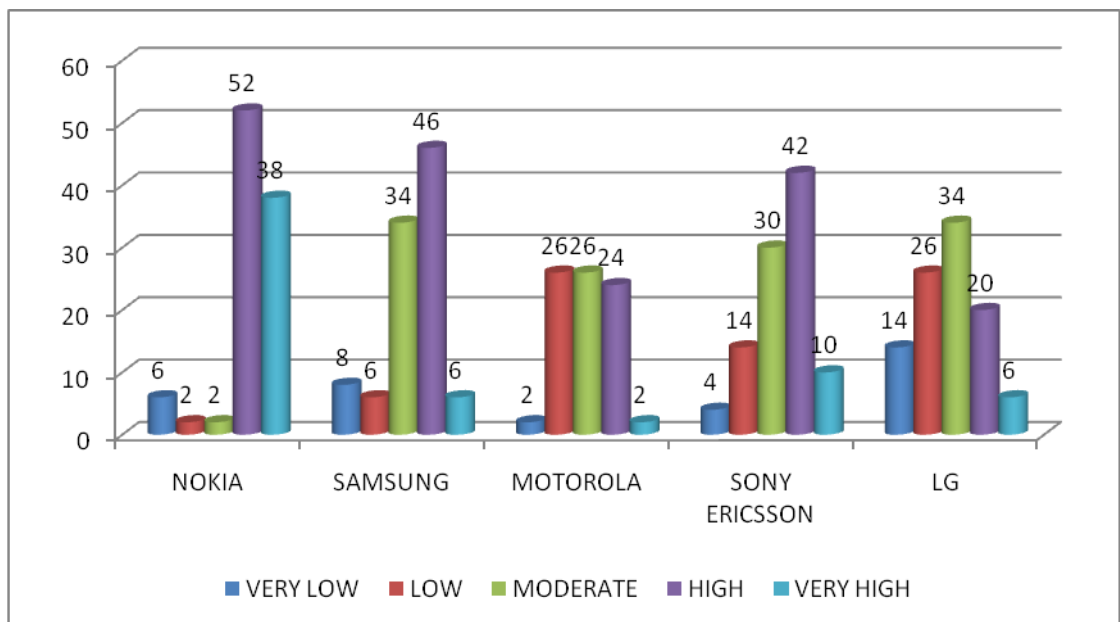
The above facts necessitates that all manufacturers need to give due importance by incorporating user-friendliness in the handset to make it more and more robust. Before launching any new models, a pre-testing may be undertaken to ascertain that the users are comfortable in handling and using the cell phones. A one/two page voucher may also be supplied highlighting important facilities available. This reduces the monotony of the consumers to pick user manuals and understand the user-friendly characteristics. Since the volume of consumption is increasing gradually, manufacturers must be able to hold on to the present prices that extend more facilities.

15. Consumers' attitude about the Reliability of some of the major mobile phone brands

T15- Table showing consumers' attitude about the Reliability

Ranks	Nokia	Samsung	Motorola	Sony Ericsson	LG
Very low	6	8	2	4	14
Low	2	6	26	14	26
Moderate	2	34	26	30	34
High	52	46	24	42	20
Very high	38	6	2	10	6
Total	100	100	100	100	100

G15- Graph showing consumers' attitude about the Reliability



OBSERVATION:

Among the various companies manufacturing mobile phone, Nokia has the best Marketing Mix strategy and it is designed to suit specific segments to catch up with the world market. Consumers always prefer a reliable product at optimum cost, majority prefers products, which are widely advertised and are available at convenient locations. Nokia cell phones meet all this criteria and hence, from the user's angle it is the highest sold commodity in this competitive market. It is been observed that majority of the respondents feel that Nokia is highly reliable i.e. 52%. 38% feels that Nokia's reliability is very high. Around 46% of the respondents feel that Samsung is also highly reliable. Regarding the reliability of Sony Ericsson, LG and Motorola, they feel that is either moderate or low.

INFERENCE:

The performance criteria in terms of reliability, durability and maintainability appear to be the key factors in influencing consumers to buy the product. With continuous R&D efforts and cost-effective means of manufacturing the cell phones, Nokia's market share is quite high and undoubtedly Nokia is the market leader in this category. Consumers, who decide to buy a cell phone for the first time, prefer to go in for Nokia phones because of its high reliability and also its availability in a wide range of variety and price ranges. It can be inferred from the above data that consumers are more inclined towards Nokia mobile phones than Samsung and Sony Ericsson.

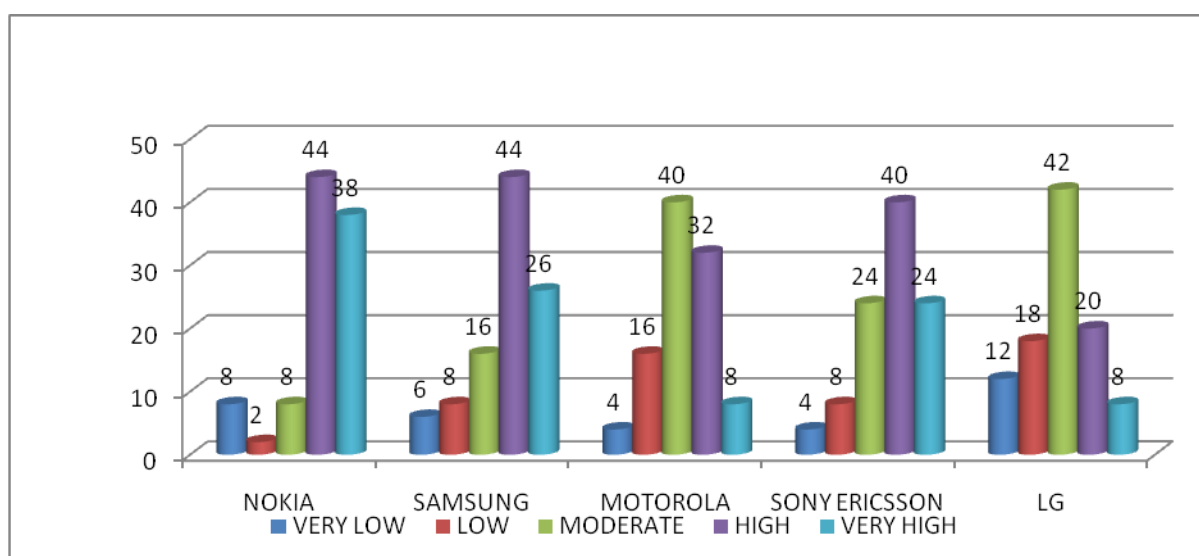
16 Consumers' attitude about the Technological Superiority of

some of the major mobile phone brands

T16-Table showing consumers' attitude about the Technological superiority

Ranks	Nokia	Samsung	Motorola	Sony Ericsson	LG
Very low	8	6	4	4	12
Low	2	8	16	8	18
Moderate	8	16	40	24	42
High	44	44	32	40	20
Very high	38	26	8	24	8
Total	100	100	100	100	100

G16-Graph showing consumers' attitude about the Technological superiority



OBSERVATION:

The advent of technological changes and continuous efforts by R&D Engineers result in introduction of handsets with newer and latest features. The pace at which new models are getting into is quite fast. A time period of 6 months to 1 year appears to be reasonably the life cycle of a mobile phone for many manufacturers. It can be observed from the data that about 44% of the respondents feel that both Nokia and Samsung have got a highly superior technology when compared to others which the respondents felt has a moderately superior technology. 38% feels that Nokia has got a very high superior technology. That is why it has become the most preferred brand.

INFERENCE:

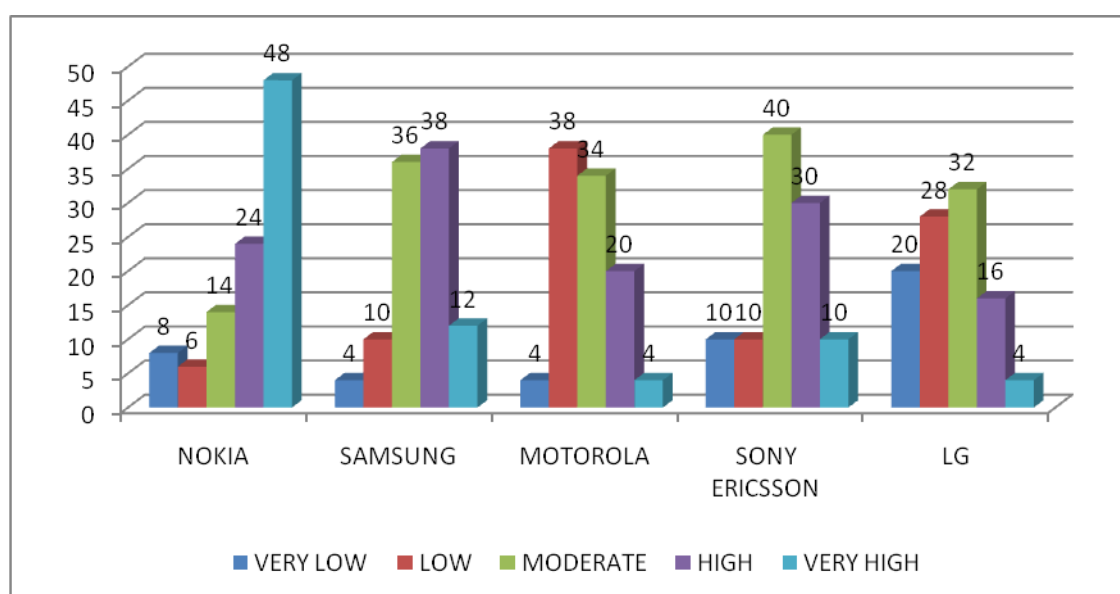
Continuous updating to match the present and future technological changes and innovations must be considered by manufacturers. New models shall invariably be brought into the market but spares support must continue to be provided to the earlier models. Enough awareness should also be created highlighting technological improvements and cost-advantage to initiate the buyers for changing the handset.

17. Consumers' attitude about the Pride of some of the major mobile phone brands

T17-Table showing Consumers' attitude about the Pride about the major brands

Ranks	Nokia	Samsung	Motorola	Sony Ericsson	LG
Very low	8	4	4	10	20
Low	6	10	38	10	28
Moderate	14	36	34	40	32
High	24	38	20	30	16
Very high	48	12	4	10	4
Total	100	100	100	100	100

G17-Graph showing Consumers' attitude about the Pride about the major brands



OBSERVATION:

After the introduction of mobile phones a decade ago, accessibility of individuals within the city or outside the city became easier. With the mobility of persons in discharging their work, the need to contact consumers, office staff, and households became an important issue. The need for cell phone became a necessity right from the top executive of the company to a vendor on the street. It can be observed from the data above that almost 48% of the respondents feel that owning a Nokia handset is a matter of very high Pride. 38% feels that Samsung handset brings about a sense of Pride in you. Most of them have rated owning a Motorola or a Sony Ericsson or an LG phone as a matter of Moderate pride. With this, the need for cell phones increased and today it is considered as an item of possession, even for students and professionals.

INFERENCE:

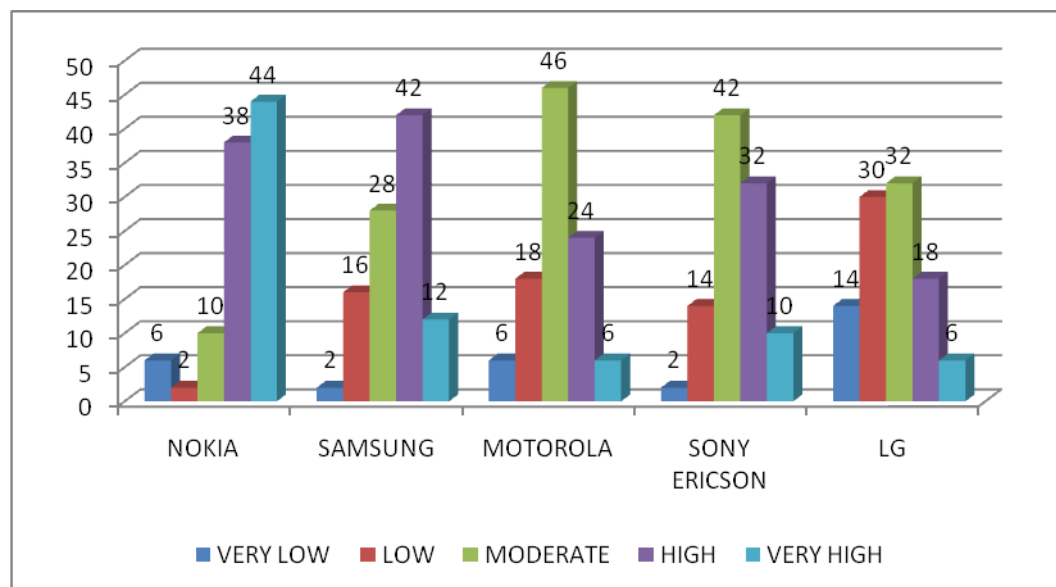
The latest version of the cell phones, which only weighs 55 to 80 grams, appears to have further increased the passion for the usage of a cell phone by many consumers. For top-level executives, it is certainly a status symbol. For many others it is a necessity and also a matter of pride.

18. Consumers' attitude about the Utility of some of the major mobile phone brands

T18-Table showing Consumers' attitude about the Utility of the major brands

Ranks	Nokia	Samsung	Motorola	Sony Ericsson	LG
Very low	6	2	6	2	14
Low	2	16	18	14	30
Moderate	10	28	46	42	32
High	38	42	24	32	18
Very high	44	12	6	10	6
Total	100	100	100	100	100

G18-Graph Table showing Consumers' attitude about the Utility of the major brands



OBSERVATION:

It can be observed from the above data that 44% of the respondents have rated the Utility of Nokia phones as very high and about 38% have rated it high. 42% of them feel that Samsung handsets are highly useful and around 46% feels that the utility of Motorola is moderate. Most of them have rated the utility of other brands to be moderate. After the introduction of mobile phones a decade ago, accessibility of individuals within the city or outside the city became easier. Initially, the cost of cell phones was quite high and as the sales volume picked up; the rates were brought down and were affordable by all income groups. With the mobility of persons in discharging their work, the need to contact consumers, office staff, and households became an important issue. The need for cell phone became a necessity right from the top executive of the company to a vendor on the street. The service providers like Airtel, Spice, Vodafone, etc also reduced the tariffs to attract more consumers. The incoming calls were made free about 8 years back. With this, the need for cell phones increased and today it is considered as an item of possession, even for students and professionals.

INFERENCE:

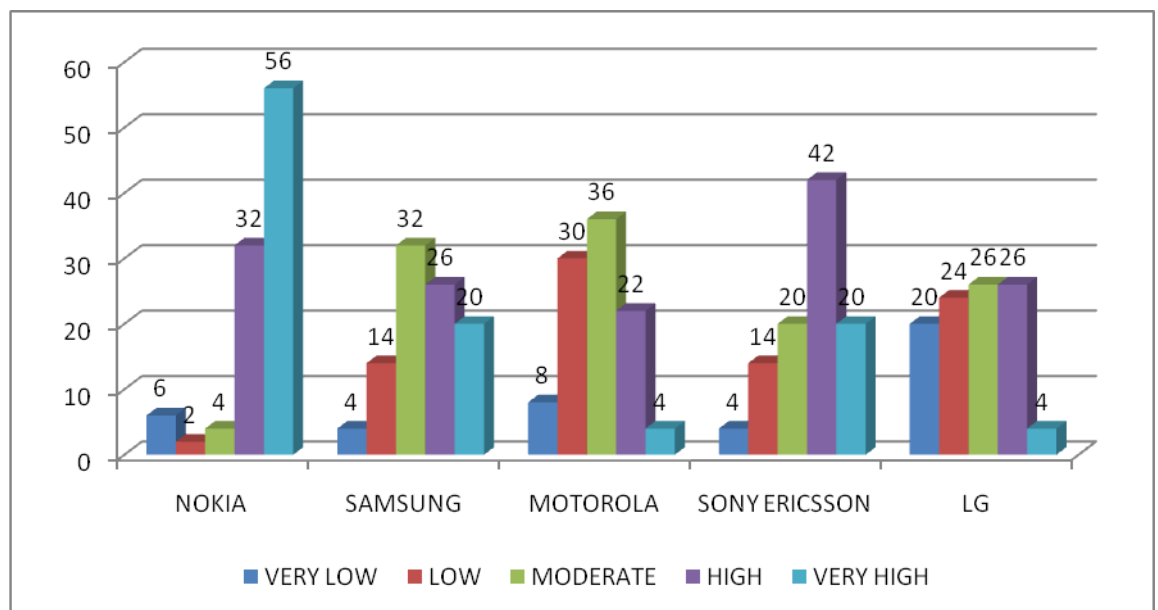
Mobile phones facilitate making and receiving calls to any destination at any time. The facility of call registers enables users to know the called numbers in case they are unable to receive their calls while the phone rings. With caller identification facilities, a receiver has the option to either receive or reject a call according to his criteria. The latest version of the cell phones, which only weighs 55 to 80 grams, appears to have further increased the passion for the usage of a cell phone by many consumers. The necessity factor is augmented because of the availability of handsets on installments and low interest rates. For top-level executives, it is certainly a status symbol. For many others it is a necessity and for a few it is a pride.

19. Consumers' attitude about the Brand Power of some of the major mobile phone brands

T 19 –Table showing Consumers’ attitude about the Brand Power some of the major brands

Ranks	Nokia	Samsung	Motorola	Sony Ericsson	LG
Very low	6	4	8	4	20
Low	2	14	30	14	24
Moderate	4	32	36	20	26
High	32	26	22	42	26
Very high	56	20	4	20	4
Total	100	100	100	100	100

G 19-Graph showing Consumers’ attitude about the Brand Power some of the major brands



OBSERVATION:

It can be observed that 56% of the respondents felt that Nokia has got a very high Brand Power when compared to its competitors. Most of them have rated the Brand power of other brands as either high or moderate. Among the various companies manufacturing mobile phone, Nokia has the best Marketing Mix strategy and it is designed to suit specific segments to catch up with the world market. The media advertisement publicity as well as sales promotion has created the brand image. Consumers always prefer a reliable product at optimum cost, majority prefers products, which are widely advertised and are available at convenient locations. Nokia cell phones meet all this criteria and hence, from the user's angle it is the highest sold commodity in this competitive market.

INFERENCE:

The performance criteria in terms of reliability, durability and maintainability appear to be the key factors in influencing consumers to buy the product. With continuous R&D efforts and cost-effective means of manufacturing the cell phones, Nokia's market share is quite high and undoubtedly Nokia is the market leader in this category. Consumers, who decide to buy a cell phone for the first time, prefer to go in for Nokia phones because of its quality, user-friendliness and reliability and also its availability in a wide range of variety and price ranges. It can be inferred from the above data that consumers are more inclined towards Nokia mobile phones than Samsung and Sony. The marketing efforts by Nokia manufacturing company are extremely good.

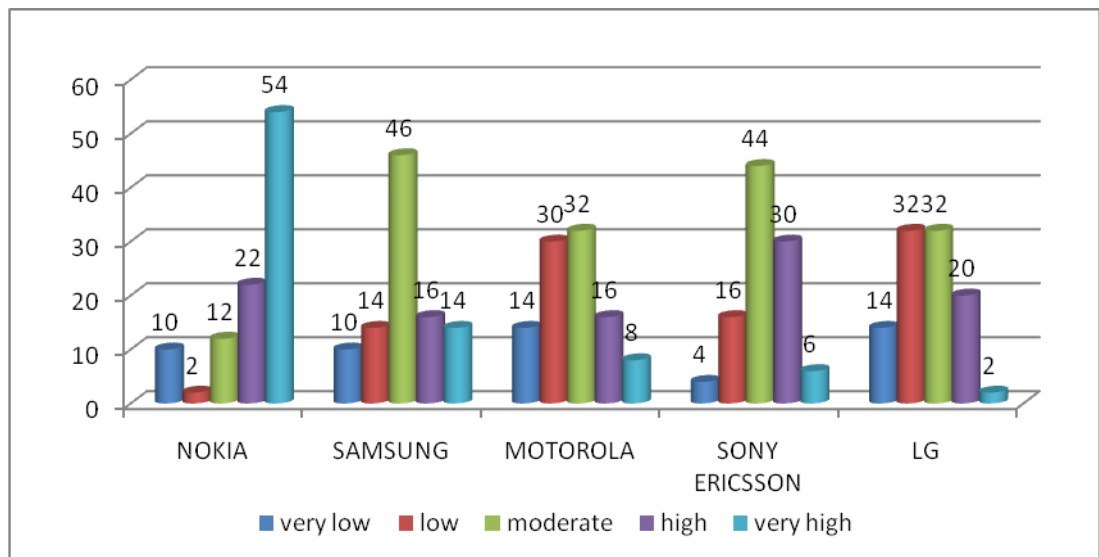
They make use of all forms of marketing such as Direct Marketing, Marketing through franchise, distributors, dealers and retailers. The Hoardings and Advertisements on print and electronic media are very impressive and rewind the memory space of consumers for a very long time. It has become the most preferred brand because of technical superiority, marketing capabilities, price control and also effective after sales service.

20. Consumers' attitude about the Spread Effect of some of the major mobile phone brands

T 20-Table showing consumers' attitude about the Spread Effect of some of the major brands

Ranks	Nokia	Samsung	Motorola	Sony Ericsson	LG
Very low	10	10	14	4	14
Low	2	14	30	16	32
Moderate	12	46	32	44	32
High	22	16	16	30	20
Very high	54	14	8	6	2
Total	100	100	100	100	100

G 20- Graph showing consumers' attitude about the Spread Effect of some of the major brands



OBSERVATION:

It can be observed from the data that 54% of the respondents feel Nokia has got a very high spread effect when compared to others which they felt have got a moderate spread effect. This shows the strong brand affinity of Nokia and continuous use of Nokia as the preferred choice. The source of awareness of the brands selected by the users is through Word of Mouth advertising. Friends and family members play a dominant role in influencing buyers. Advertisement in print and electronic media creates awareness on the availability of brands. The out door advertisement through Hoardings provides additional information and helps the consumers to select their brands. Satisfactory performance of the handsets initiates the buyers to influence others to buy the same brands owned by them. This creates a chain effect in a few people telling many and many telling many more.

INFERENCE:

Nokia as a market leader, enjoys the highest brand popularity, brand loyalty and brand image. The ergonomic features and aesthetic characteristics have enabled this brand to enjoy the highest market share. The other brands like Samsung and LG may adopt a total shift in their marketing approach to compete with the present market.

Brand popularity is a direct measure of the attitudes, beliefs and perception of users. Satisfactory performance of the handsets initiates the buyers to influence others to buy the same brands owned by them. This creates a chain effect in a few people telling many and many telling many more. It also depends on how the dealers and retailers help the buyers in the process of selection and decision making. Manufacturers should give equal importance not only for media advertising but also for sales promotion and personal selling. Sufficient resources should be provided towards advertising budget to make the brands popular and stand out in the market.

FINDINGS

1. Consumers, who decide to buy a cell phone for the first time, prefer to go in for Nokia phones because of the availability in a wide range of variety and price ranges. It can be found from the study that consumers are more inclined towards Nokia

mobile phones than Samsung and Sony. This shows the strong brand affinity and continues use of Nokia as the preferred choice.

2. Consumers consider mobile phones as something very necessary and indispensable in their lives. They use it as the most important means of communication. Some people find cell phones as a status symbol and something they can be proud of.

3. A time period of 6 months to 1 year appears to be reasonable the life cycle of a mobile phone for many manufacturers. Although many consumers prefer to change the handset to satisfy their urge to go in for new models, many postpone the decisions since the exchange value is quite low. A usage period of 1 to 2 years appears to be normal before a consumer decides to go in for a new handset.

4. The marketing efforts by Nokia manufacturing company are extremely good. They make use of all forms of marketing such as Direct Marketing, Marketing through franchise distributors, dealers and retailers. The Hoardings and Advertisements on print and electronic media are very impressive and remind the memory space of consumers for a very long time. It has become the most preferred brand because of technical superiority, marketing capabilities, price control and also effective after sales service.

5. Consumers take in to account while purchasing a mobile phones on price, Brand name & makes, quality, user friendliness, reliability and technological superiority. So the consumer is focusing on all the sides, most of the peoples are considering on all the aspects in high and very high preference.

6. Features are mainly focused by most of the consumers, they think the features are the main characters in mobile phones that the necessity, most of the peoples are preferring the latest features that the old

7. If we see on the satisfaction level most of the peoples are satisfied with their handsets that shows almost of the consumers are having a good awareness about the brands and this indicates that they are getting the value for

the money spent.

8. Consumers regarding their performance on any other brand other than they possess, it was mentioned that consumers have once again preferred NOKIA, they feel that the NOKIA will be their best choice for ever

9. The source of awareness of the brands selected by the users is through Word of Mouth advertising. Friends and Ads play a dominant role in influencing buyers. Advertisement in print and electronic media creates awareness on the availability of brands. The out door advertisement through Hoardings provides additional information and helps the consumers to select their brands. Satisfactory performance of the handsets initiates the buyers to influence others to buy the same brands owned by the

10. When we see the attitudes towards other brands, nokia and Samsung are having high price, when we compare any other brands, even though there are different range of mobile phones, the technologies and the designs are there in high rated mobiles

11. Consumers find the price of brands like Nokia and Samsung a bit high when compared to others but taking into consideration the quality and performance of these handsets, most of them are able to pay for them.

12. Consumers are mainly concentrating on brand names and makes, especially for nokia the consumers have given very high, for Samsung its high and other brands its moderate.

13. Consumers in the process of selecting a handset give importance for quality since it is one of the characteristics which influence product buying. Quality is defined as fitness for use and this aspect is incorporated in the handset made by most of the manufacturers.

14. Most of the consumers prefer nokia as the best user friendly phones and that makes the nokia stronger in the Indian market.

15. Consumers always prefer a reliable product at optimum cost, majority prefers products, which are widely advertised and are available at convenient locations. Nokia cell phones meet all this criteria and hence, from the user's angle it is has a very superior Brand name in this competitive market

16. With the advent in technology, the consumers' also demands Keep increasing .Consumers prefer having the latest features in Their phones like Color display, Radio,MP3&MP4, Camera with flash, Infra-red, Blue- Tooth, GPRS etc. These are the features that the consumers are basically looking forward to in future when they buy a mobile Phone.

17. It can be observed that almost of the respondents feel that owning a Nokia handset is a matter of very high Pride. feels that Samsung handset brings about a sense of Pride in you. Most of them have rated owning a Motorola or a Sony Ericsson or an LG phone as a matter of Moderate pride.

18.The respondents have rated the Utility of Nokia phones as very high and high. Then the Samsung handsets are highly useful and around Motorola are moderate. Most of them have rated the utility of other brands to be moderate.

19. The media advertisement publicity as well as sales promotion has created the brand image. Consumers always prefer a reliable product at optimum cost, majority prefers products, which are widely advertised and are available at convenient locations. Nokia cell phones meet all this criteria and hence, from the user's angle it is the highest sold commodity in this competitive market.

20. The performance criteria in terms of quality, user-friendliness, reliability, durability and maintainability appear to be the key factors in influencing consumers to buy the product. Nokia's market share is quite

high and undoubtedly Nokia is the market leader in this category.

Consumers, who decide to buy a cell phone for the first time, prefer to go in for Nokia phones because of its high reliability and also its availability in a wide range of variety and price ranges.

RECOMMENDATIONS

1. The performance criteria in terms of reliability, durability and maintainability appear to be the key factors in influencing consumers to buy the product. With continuous R&D efforts and cost-effective means of manufacturing the cell phones, even though nokia leads the market other brands are also having the demands, so other brands has to concentrate on the price and technology.

2. The latest version of the cell phones, which only weighs 55 to 80 grams, appears to have further increased the passion for the usage of a cell phone by many consumers. Most of the youths are using messages more than the calls , the

necessity factor is augmented because of the availability of handsets on installments and low interest rates.

3. Companies manufacturing cell phones should openly advertise “Buy back schemes” which creates interest in the consumers to go in for a change. Enough awareness should also be created highlighting technological improvements and cost-advantage to initiate the buyers for changing the handset.

4. Continuous updating to match the present and future technological changes and innovations must be considered by manufacturers. New models shall invariably be brought into the market but spares support must continue to be provided to the earlier models

5. All manufactures need to give due importance by incorporating quality in design to make the handset more and more robust. Before launching any new models, a pre-testing may be undertaken to ascertain that the users are comfortable in handling and using the cell phones. A one/two page voucher may also be supplied highlighting important facilities available.

6. Now a days, almost all the companies are coming up with phones with latest features. But the ones in this segment are priced very high. As a result, it cannot be afford by the common man. Companies should make efforts to bring down the cost of such mobiles to increase its sales.

7. It shall be the endeavor for manufacturers to delight the consumer by offering more facilities and also by continuous improvements; they can aim at higher levels of satisfaction.

8. The ergonomic features and aesthetic characteristics have enabled this nokia brands are enjoy the highest market share. The other brands like Samsung and LG may adopt a total shift in their marketing approach to compete with the present market. If this has to be changed the manufacture should concentrate on the taste and preference of the consumer.

9. Manufacturers should give equal importance not only for media advertising but also for sales promotion and personal selling. Sufficient resources should be provided towards advertising budget to make the brands popular and stand out in the market.

10. Price is one of the most important factor consumers take into consideration when purchasing a mobile phone. They prefer products that are priced optimum. The price of the product measures their ability to pay. Companies should make efforts to ensure that their products are priced optimum so that it can be afford by the common man.

11. It can be inferred from the facts given above that most of the mobile phone brands are priced properly and can be afforded by most of the people. However continuous efforts have to be made to reduce the costs of phones that technologically very superior.

12. Consumers, who decide to buy a cell phone for the first time, prefer to go in for Nokia phones because of the availability in a wide range of variety and price ranges. This makes the consumer satisfaction so this strategy has to be followed by all the other brands to be in the market.

13. Continuous updating to match the present and future technological changes and innovations must be considered by manufacturers. New models shall invariably be brought into the market but spares support must continue to be provided to the earlier models and the quality should be mainly notified by the manufacturer.

14. A one/two page voucher may also be supplied highlighting important facilities available. This reduces the monotony of the consumers to pick user manuals and understand the user-friendly characteristics. Since the volume of consumption is increasing gradually, manufacturers must be able to hold on to the present prices that extend more facilities.

15. Consumers, who decide to buy a cell phone for the first time, prefer to go in for Nokia phones because of its high reliability and it is easy available, when we compare to all other brands nokia is having easy availability and service centers, so the other brands has to establish the service centers and the description centers to help the customers from the new technology changes.

16. New models shall invariably be brought into the market but spares support must continue to be provided to the earlier models. Enough awareness should also be created highlighting technological improvements and cost-advantage to initiate the buyers for changing the handset.

17. The latest version of the cell phones, which only weighs 55 to 80 grams, appears to have further increased the passion for the usage of a cell phone by many consumers. For top-level executives, it is certainly a status symbol. For many others it is a necessity and also a matter of pride.

18. Nokia mobile phone users are highly satisfied with the utilities which are provided by the manufacture. When we compare other brands the utilities which are provided by the manufacture's are lesser and complicated.

19. They make use of all forms of marketing such as Direct Marketing, Marketing through franchise, distributors, dealers and retailers. The Hoardings and Advertisements on print and electronic media are very impressive and rewind the memory space of consumers for a very long time. It has become the most preferred brand because of technical superiority,

marketing capabilities, price control and also effective after sales service.

20. Satisfactory performance of the handsets initiates the buyers to influence others to buy the same brands owned by them. This creates a chain effect in a few people telling many and many telling many more. It also depends on how the dealers and retailers help the buyers in the process of selection and decision making.

CONCLUSION

Consumers consider mobile phones as something very necessary and indispensable in their lives. They use it as the most important means of communication. Consumers in the process of selecting a handset give importance for quality since it is one of the characteristics which influence product buying. Quality is defined a fitness for use and this aspect is incorporated in the handset made by most of the manufacturers.

Some people find cell phones as a status symbol and something they can be proud of. Nowadays, almost all the companies are coming up with phones with latest features. But the ones in this segment are priced very high. As a result, it cannot be afforded by the common man. Companies should make efforts to bring down the cost of such mobiles to increase its sales. All manufactures need to give due importance by incorporating quality in design to make the handset more and more robust. Before launching any new models, a pre-testing may be undertaken to ascertain that the users are comfortable in

handling and using the cell phones. A one/two page voucher may also be supplied highlighting important facilities available.