A Report

On

Study of Mobile Phone Usage Among the Teenagers And Youth In Mumbai

By

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Market Analysis & Consumer Research Organisation

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CONTENTS

Background

In February 2004, a paper titled 'Mobile Phones and Youth: A look at the U.S. student market' was presented in the ITU/MIC Workshop on Shaping The Future for The Mobile Information Society. It was based on a survey, a primary research study, which was undertaken as a part of the case studies programme managed by Ms. Lara Srivastava of the ITU. The study was primarily designed to explore the relationships between gender, age, behavioral trends and mobile phone usage patterns of teenagers and young people, in the age group 12-29 years. Besides depicting the U.S. market, this paper also provides some international perspectives from Japan, China, Australia, United Kingdom and Italy.

This paper, by MACRO, is an attempt to replicate the study in the Indian context in order to arrive at the current trends, especially in metros like Mumbai where mobile telephony seems to have made an immense impact.

Scope

- To study the attitude of teenagers and youth, age group 15-30 years, towards cellular phones.

- Enumerate the usage patterns and arrive at peculiarities, gender-wise or age-wise, if any.

- Examine the way young people relate to the functionality of mobile phones as well as assess observable phenomena.

- Detail and document their triggers for purchase and influencers at the time of purchase.

- Identify the different associations with cellular phones.

- Investigate their awareness with regards to the recent launches of mobile handsets in the market.

- Understand their perceptions for issues like medical side effects and privacy implications.

Methodology

The entire primary research study was done in Mumbai and a Quantitative protocol was used. In order to provide a current snapshot of the youth market, this protocol involved data collection through a detailed opinion-questionnaire administered across suburbs, be it Central, Western or Harbour, with a requisite sample allocation to garner current comparative opinions on issues ranging from choice of handset, brand associations, triggers and apprehensions in relation to use of cellular phones.

The technique used for data collection was One-On-One Interviews. Individual responses thus obtained were then compiled, processed and analysed to arrive at the opinions on various issues. The Instrument for data collection, in the form of a 'Structured Questionnaire', was designed to elicit information on demographic and psychographic aspects of the respondents. The demographic aspects included age, gender, education, occupation and income. The psychographic variables included attitude towards usage of cellular phones, social issues and loyalty behavior. The questionnaire had a mix of open-ended and closed-ended questions in it. The open-ended questions, which gave an added 'qualitative feel' to the instrument, provided the logic or rationale for the behavioral patterns and thus helped generate insights.

The sample of survey respondents comprised of teenagers and youths in the age groups 15-30 years across all SEC households. In all 175 respondents, chosen on a random convenience-sampling basis, were interviewed. Out of these, 10 interviews were dropped from the analysis on counts of incomplete data entry at the respondent end. Therefore, the analysis presented is for the remaining 165 interviews i.e. n=165.

Today, along with the product, marketers have been using media to target specific age or sex groups (e.g. cartoons for children, sport programs for men, etc.). So the importance of identifying target groups in terms of age or sex is self-evident. For analysis purposes, the three most important variables considered are age, gender and socio-economic level[*].

In addition to the primary research, secondary data was collated from articles published in dailies, magazines and industry reports through visits to libraries and also from the worldwide web.

[*] Refer Annexure 'A'

Limitations

- The study seeks to provide a helicopter view of the field reality and hence inferences drawn do not provide conclusive evidence to any social characteristics in particular albeit they aid us in spotting an underlying trend.

- The findings are based entirely upon the research conducted in Mumbai and hence may not be applicable directly to other metropolitan areas on counts of socio-cultural diversity and contextual factors.

- With a larger sample size spread across other metropolitan cities in India one might arrive at results with higher confidence levels and also at trends for urban India in particular.

- Such a survey needs to be undertaken periodically to gauge the exact consumer perceptions that they keep changing with time.

- Due to constraints of time, certain topics have not been touched upon at all during the course of the study while some of them like the actual purchase pattern have been explored in a 'limited' manner. An in-depth analysis may be further taken up in each of the sub-topics covered.

DETAILED RESEARCH FINDINGS

The cell phone bang

Today, a cell phone isn't just a rich man's fashion accessory in India. It's transforming the way millions of people do business in a country where even landlines were a luxury barely a decade ago. Across the country people with low incomes are now adopting cellular phones as tools for enhancing their business.

According to Oxford English Dictionary one of the earliest uses of word 'mobile' was in association with the Latin phrase 'mobile vulgus', i.e. excitable crowd. Today's mobile phones live up to these origins. Cell phone technology introduces new senses of speed and connectivity to social life. If the fixed line telephone has brought communication links into the workplace and homes, the 'mobile' puts them straight into the hands of unprecedented numbers and varieties of individuals.

Global Landscape

All round the world cell phone sales have exceeded the expectations. In fact for mature markets, including the United States, Western Europe and Japan, replacement sales was the strongest driver of growth in 2003. Colour screens and camera phones were high on consumers' shopping lists, but there was also a high level of demand for inexpensive voice-centric handsets. In emerging markets like China, India, Russia and Brazil, the sale was due to availability of low-priced handsets and aggressive strategies by service providers to win subscribers.[1]

On the basis of early positive indicators during the first quarter of 2004 in the global mobile handset market, Gartner, the research firm, forecast mobile phone sales to 560 million for year 2004.[2] In 2003 worldwide mobile phone sales totaled to 520 million units, an increase of 20.5% over the previous year.[3]

Table (I): Cellular standings

In 2003, Nokia accounted for more than one-third of handset shipments worldwide.		
Company	**Units (millions)**	**Market share (%)**
Nokia	180.7	34.7
Motorola	75.2	14.5
Samsung	54.5	10.5
Siemens	43.8	8.4
Sony Ericsson	26.7	5.1

Source: Gartner

The Indian scenario

India too has joined in the bandwagon. Mobile phone services were introduced in India about 10 years ago. Then, barely one in 10 homes in cities had a landline and public phones were few. From those late 1980s, India has come a long way today. It has emerged as the second-largest market after China for mobile-phone handsets. Nearly 1.63 million people signed up for mobile phone services in February 2004, taking the total number of customers in the world's fastest growing market to 31.4 million.[4]

The subscriber base grew by many folds after the service providers made the incoming calls free. As per the research firm Gartner, the domestic cellular market is projected to reach a subscriber base of 70 million by the year 2007 as companies cut tariffs and more new players enter the market.[5]

Players

The Indian telecom sector was thrown open to the private sector in the mid-nineties. This industry, along with IT, was labelled as one of India's sunrise industries. Sensing the opportunity, a number of private players like Bharti Enterprises, Hutchinson, BPL Mobile, the Tatas and, most recently, Reliance Infocomm have ventured into this sector.

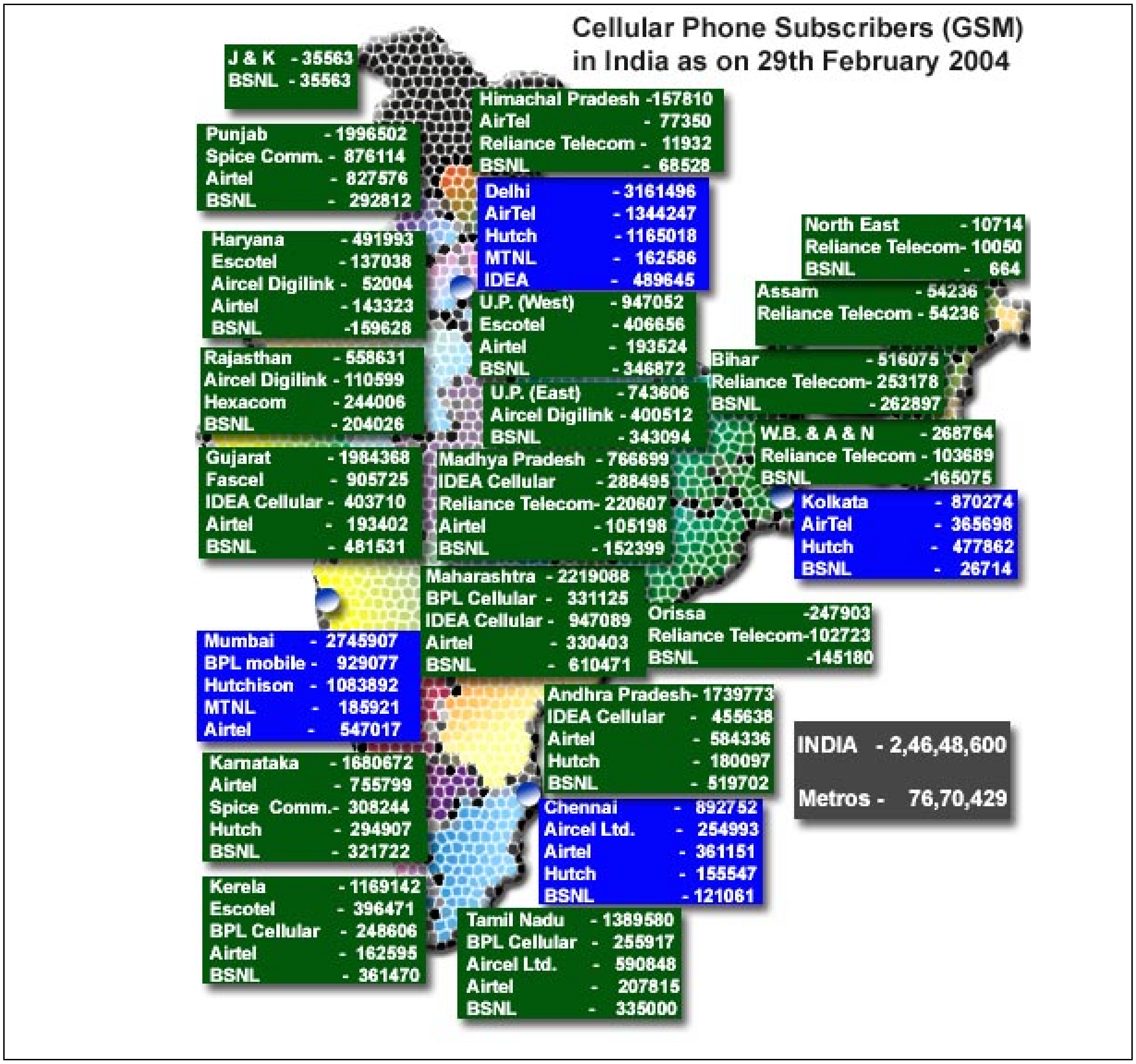
Indian telecom companies basically offer two types of services:

- *Cellular services*. The major players in this segment are Bharti, Hutchinson and BPL Mobile — companies that use the global satellite management (GSM) standard. With this standard, telephone calls can be made to and received from any place.
- *Basic services*. The major players are BSNL, the Tatas and Reliance, using the code division multiple access (CDMA) standard, which offers limited mobility. Calls can be made to and received from certain fixed areas.[6]

Today there are as many as 11 service providers across the country. These days the surge of new entrants like Sagem, Kejain, Bird, Pantech and BenQ into the handset manufacturing segment has offered mobile purchasers not only a choice of which operator to select from and which technology but also what handsets they want.

Market Characteristics

18 million cell phones were sold in India in 2003. The Cellular penetration, which stood at 2.7 per cent at the end of 2003, is expected to increase to about 5.2 per cent by 2004 end.[7] As per Reuters agency, in March 2004, the ratio of mobile ownership in India is less than three in every 100 people compared with more than 20 in China and more than 60 in Europe.[8]



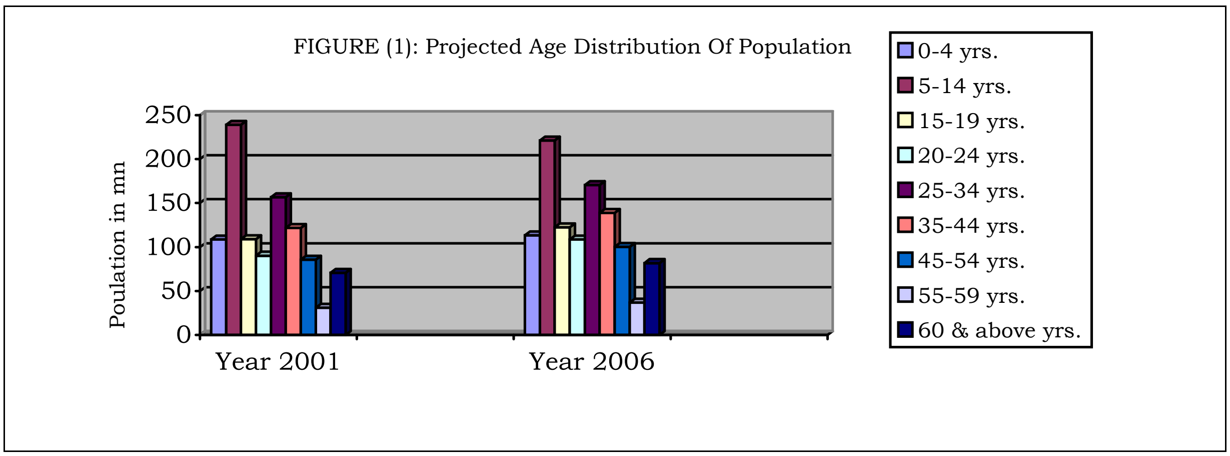
Source: COAI

These figures are an indicator of the growing nature of the market and also a pointer to the fact that there lies a big opportunity for all the telecom players, large or small.

Focus on Youth Market

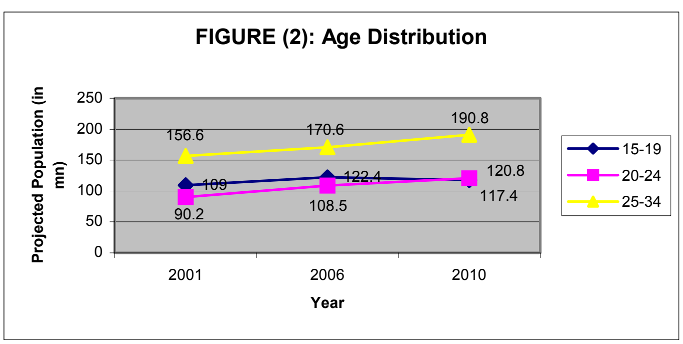
Companies have practically created a youth market by launching in items like cool ring tones, games, screensavers and e-mail alerts. As a result, more and more people in the under 30-age group are using wireless applications for organizing their lives better. On the other hand, older people haven't spent much time or money on mobile content. The primary reason behind this could be that most of the content on the 'wireless web' has been youth and entertainment-oriented. Then there are other reasons like - the buttons on the handset are small and reading the tiny screens can be a strain on the eyes.

Figure (1) below reflects the population across different age groups and the prediction over coming years. Nearly 54% of the population is below the age group of 24 yrs and therefore it is the market with the most attractive demographic profiles.



Source: Statistical Outline Of India 2002-2003

The growth predicted in population of age groups of 15-19 yrs., 20-24 yrs and 25-34 yrs over the coming years is as shown in figure (2).



Source: Statistical Outline Of India 2002-2003

Sunil Sinha, a consultant with the National Council for Applied Economic Research quoted that - “Young Indians are going to create a huge market for goods and services. They want clothes, shoes, music, cell phones, computer games, DVD players, cars and entertainment.” [9] Sandip Das, the head of Orange phones in Bombay, reiterated the same sentiment when he said that–“The younger generation is the latest consumer of the mobiles phones. The under 25s are in a majority in India and they are mobile phone savvy.”

As per Rama Bijapurkar, a Mumbai-based marketing consultant, out of the teenage population about 22 million belong to the urban middle class and are in a position to influence the economy dramatically as they grow older. Management consultants KSA Technopak estimated youth’s annual spending power to the extent of US$10.5 billion, which is growing, annually with the rate of 12%.[10]

With these large numbers, an inclination to emergent technologies and a high propensity to purchase among the majority, the youth segment definitely forms a sizeable proportion of the future market.

The Boom in Metros

Total cellular subscriptions in the four metros of Mumbai, Delhi, Bangalore and Kolkata grew at a healthy clip of 72.8% during the period of April ‘02 to March ‘03. During these twelve months, the number of total cellular subscriptions increased from 25.68 lakhs in the beginning of April ‘02 to 44.4 lakhs by the end of March ‘03. Delhi and Mumbai continued to account for a lion’s share of these subscriptions with a collective market share of 78.7% by the end of April ‘03. Delhi continued to be the leader in terms of market share cornering 40.7% of the market, although Mumbai was not far behind with a 38.0% contribution.[11]

As per Cellular Operators Association of India (COAI), with new additions of 9.9 lakhs in April 2004, the all India mobile subscriber base grew to 3.4 crores. The Mumbai market registered a growth of 67.55% in March 2004 over the previous year.

Table (II)

Mobile subscriber base in	**March 2004**	**March 2003**
Mumbai	28,30,141	16,89,036

In order to understand the present state of affairs a primary research study was conducted in Mumbai. The attempt was to study perceptions of the teenagers and youth, age group 15-30 years, towards using a cellular phone, their common triggers for purchase, the actual usage patterns and related concerns, if any. Hence this research study can be seen as a model (with certain inbuilt limitations) for all other metro towns (like Mumbai) in India.

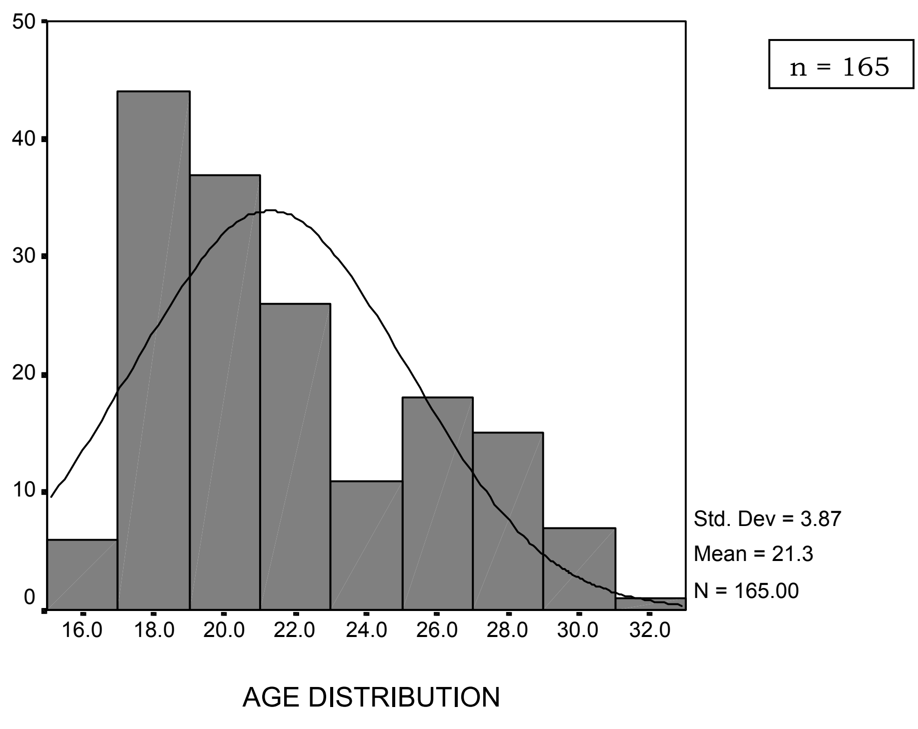
Primary Research Findings

Out of the total 165 respondents 58% were male and balance 42% were female. 34% of the respondents possessed their own cell phones for more than 2 years while 64% of the respondents had purchased it in the year 2003-2004. Age-wise split-up and distribution is as shown below: -

Table (III.) Sample split up

Age Groups (yrs)	**%**	**No. Of respondents**
15-19	35.15	58
20-24	40.00	66
25-29	24.85	41
TOTAL		**165**

Fig. (3.): Age-Distribution



The bi-modal distribution of age reflects that there is a slight skew towards the 15-19 year old age bracket.

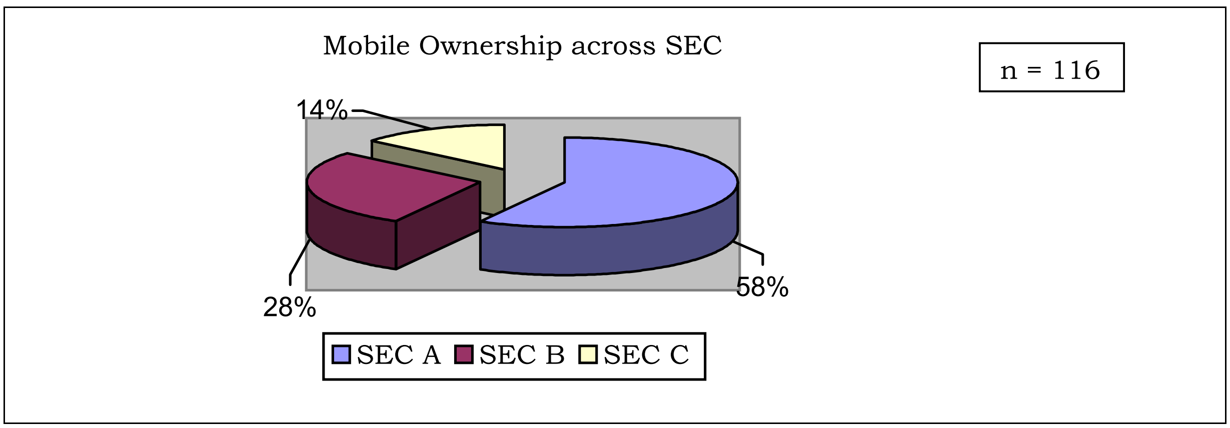
MOBILE PHONE OWNERSHIP

Overall, out of the total 165 respondents interviewed, the ratio of mobile owners to non-mobile owners was found to be 7:3. And out of the 116 mobile phone owners, 55% were male while 45% were females. A within-group gender analysis revealed that the proportion of cell phone owners among female respondents (75%) was marginally higher than in the case of males (66%).

Further, cellular phone ownership was found to be independent of the working status and age of the respondent. This is evident from the fact that there is no significant difference in the no. of respondents owning a cell phone across the three age groups; 33%, 39% and 28% in 15-19, 20-24 and 25-29 years respectively.

But SEC[#] of the household was indeed a determinant factor at the time of ownership of a cellular phone. Refer figure (4). Within each SEC level, the penetration was highest in SEC 'A' (84%) while across SEC 'B' and 'C' it was almost equal, 57% and 59% respectively.

Figure (4): Mobile ownership across SECs



In majority of the instances (72%), Nokia's handsets were found to be the first choice with its 3310 and 3315 being the frequently used models. Its other models like 2100, 1100, 6610 and 8250 have been reported as the second preference. This finding, in its own limited manner, is certainly an indicator of Nokia's supremacy in the handset market over other players like LG, Samsung, Motorola, Panasonic, Siemens and Reliance. Chi-square analysis shows that the choice of handset (Nokia and other than Nokia) depends on age and gender parameter of the respondent.

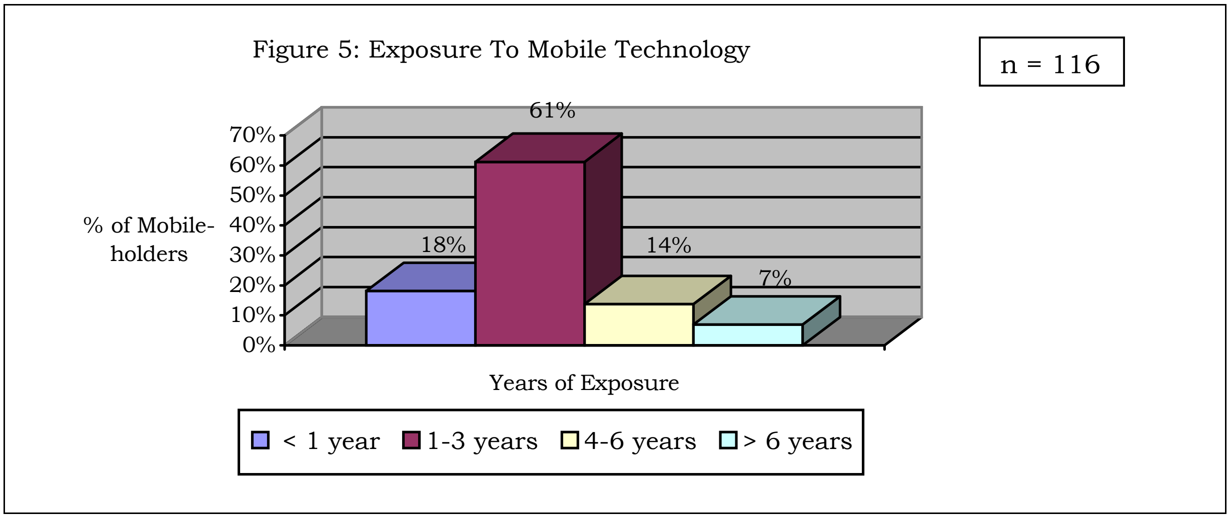
[#] SEC defined on the basis of CWE's occupation and educational qualification and ownership of vehicle.

And among the service providers, Orange reportedly had an upper hand (55%) over other players, namely Airtel (16%), Reliance (15%), BPL (7%), Trump (4%), Dolphin (2%) and Tata (1%).

The most frequent combinations of 'handset used and service provider chosen' seen were Nokia-Orange and Nokia-Airtel.

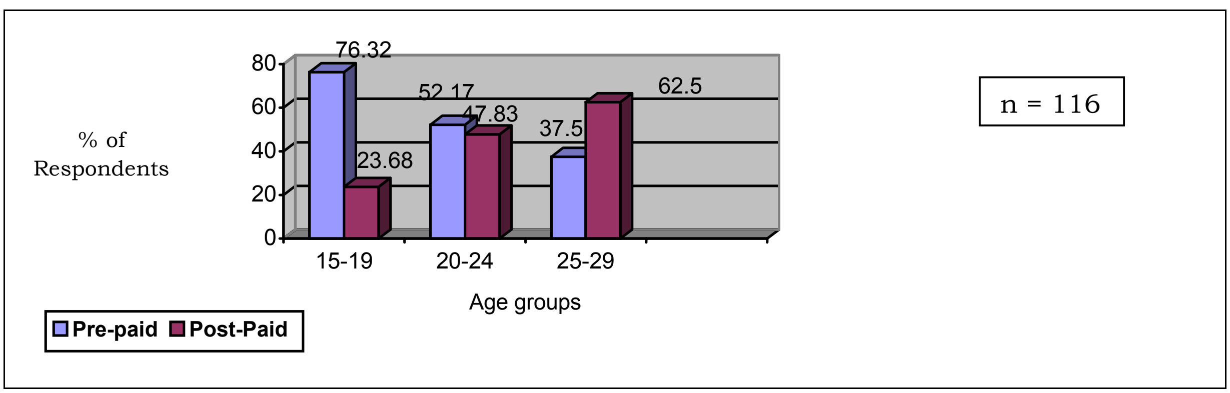
MOBILE PHONE USAGE

Out of the total 116 mobile owners a substantial number had adequate exposure to the technology prior to their actual purchase as can be seen in the figure (5) below: -



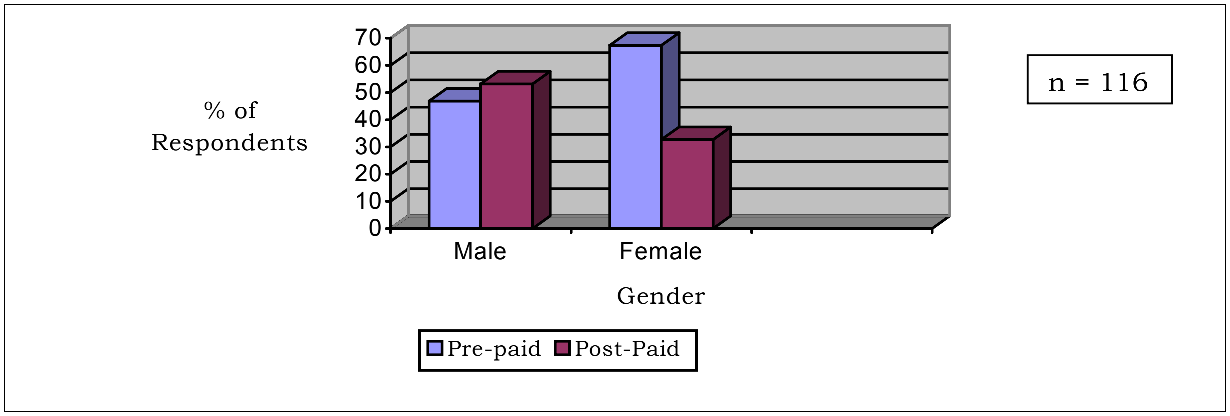
The choice of pre-paid or post-paid is essentially linked to their actual consumption, whether it is high or low. In all 56% were pre-paid users while 44% were into billing. Further analysis revealed that usage varies across age groups. Teenagers, in the age group 15-19 years, used pre-paid services while majority of the respondents in the 25-29 year age group were into post-paid services. Refer fig. (6) below.

Fig. (6) Age-based Usage



Another interesting finding was that, females had an inclination towards pre-paid than post-paid services. (Refer fig.7 below) According to a few respondents, the prepaid concept helps them budget their telephonic expenses.

Fig. (7) Gender-based Usage



Usage Among The Pre-Paid Users

68% of the prepaid users used their talk-time in toto. A gender-wise analysis yields that total usage of talk-time is higher in females (71%) than in male (63%). A similar trend has been observed in case of working and non-working respondents. Higher number of respondents from the working class reported that they used the entire talk time offered. Also 81% of the pre-paid users refilled their SIM cards on a monthly basis and the refill slip was of Rs. 324/-.

Usage Among The Post-Paid Users

For majority of the respondents billing amount per month was reported as Rs. 700-1000/-. (Refer Table (IV) below.) Nearly one-third of the post-paid users reported a billing of more than 1000 Rs./-. These respondents (70%) primarily belonged to the SEC 'A' households.

Table IV: The Split-up of Post-paid users on basis of billing amount per month

Billing Per Month	**Total No. Of Respondents**	**% Of the Respondents**
>Rs. 500	2	3.92 %
Between Rs. 500-700/-	12	23.53 %
Between Rs. 700-1000/-	20	39.22 %
Between Rs. 1000-1500/-	10	19.61 %
Between Rs. 1500-2000/-	2	3.92 %
> Rs. 2000	5	9.80 %

Both these findings, related to choice of pre-paid or post-paid and actual usage, are in line with those published by Telecom Regulatory Authority of India (TRAI). As per TRAI, the minutes of usage (MOU) in the pre-paid segment has grown at 22% in year 2003, which is more than that recorded in post-paid cellular services-15%. On an all-India basis, the average MOU per pre-paid subscriber is less than one-third of the MOU of a post-paid subscriber.[12]

Secondary research indicates that the pre-paid average revenue per user (ARPU) had risen by 8% during July-December '03 quarters while the ARPU for the post-paid had been almost unchanged. The ARPU's were lower for cellular services by 1% at Rs. 516 per month during the quarter ending September '03, as compared to the previous quarter (April-June 2003).[13] Latest figures were not available.

PURCHASE RELATED

In 79% of the instances it was the end user's need that resulted into purchase of the mobile phone. Balance 21% respondents mentioned other reasons like 'availability of an extra handset at home' and 'somebody gifted it' for having a mobile phone. While this result indicates that the extent to which external factors act as drivers for purchase is small, it may or may not be applicable for the population at large.

Table V: Motivation to purchase the cell phone.

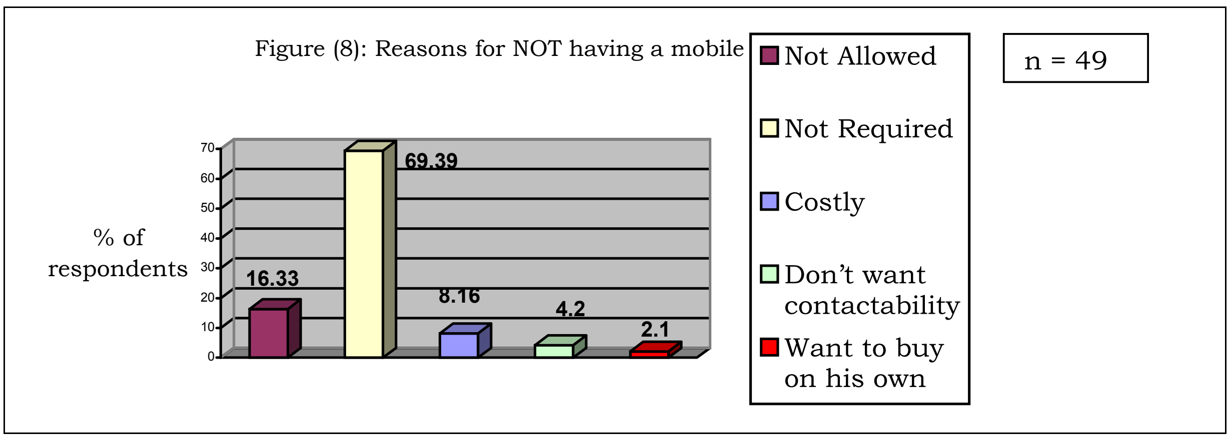
Motivations to purchase a cell phone	**Age of the Respondent**		
	15-19 Yrs.	**20-24 Yrs.**	**25-29 Yrs.**
Everybody around you had one with them	68.42%	73.19%	0%
You wanted to buy it	13.16%	6.52%	56.25%
Somebody (friend/parents) asked you to get one for yourself	2.63%	0%	3.13%
Passed on to me	2.63%	6.25%	0%
Gifted to me	13.16%	2.17%	6.25%
Extra set available	0%	2.17%	0%
Business purpose	0%	2.17%	6.25%
Convenience	0%	2.17%	0%
Work required it	2.63%	0%	28.13%

As seen in Table (V), in teenagers, peer group compliance was found to be the major influencing factor for the cell phone purchase. The finding that 68% respondents in the 15-19 year age group and 73% respondents in the 20-24 year age group cited 'Everybody around them had mobile with them' as the major reason behind their cell phone purchase holds testimony to the same. In the 25-29 years age category, be it a salaried or businessman, a mobile phone is a 'work pre-requisite'.

Apart from the need for communication, 'convenience of calling' and 'better accessibility' offered by a mobile phone, were reported as the main reasons for purchase. In the 15-19 year age group the need for communicating with friends came foremost while in the older age group of 25-29 years it was their need to remain accessible. Likewise security concerns seem to be the determinant factor in case of girls who expressed their need to be accessible or connected much more profoundly than the boys. For the boys, it was more to do with communication with friends that triggered the purchase.

On the other hand 'No requirement' was stated as the most common reason for not owning a mobile, be it the working class or the non-working class. Some other reasons stated are as shown in fig. (8) below: -

Figure (8): Reasons for NOT having a mobile



As per research conducted by Gartner, by year 2004 end, with introduction of full mobility CDMA cellular services and competitive response from GSM camp, Indian cellular market is estimated to register a 96 percent growth to reach 56 million connections and overtake fixed phone lines in third quarter of year 2004.[14] Year 2003, witnessed a growth of 160 percent in mobile phone subscribers while the fixed line phone subscribers grew in number by 3 percent. Every month, there is an addition of near about 1.5 million mobile subscribers.[15] This trend also reflected in our study where we found that in 6% of the cases, the household preferred to have a mobile phone vis-à-vis a landline.

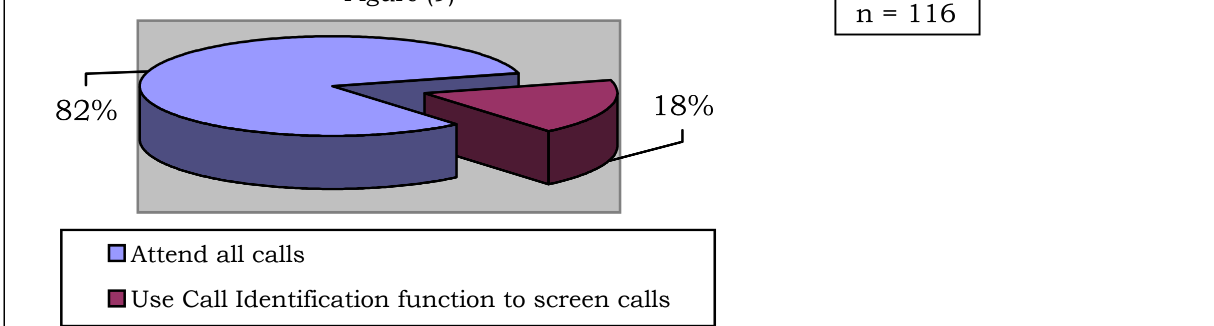
In 56% instances, especially for the 15-19 and 20-24 year age groups, it was the parents, be it either the father or mother, who had purchased the mobile phone for the individual. On the other hand, 32% of the respondents, who primarily constituted young businessmen or in-service teenagers, majority from the 25-29 year age group, had purchased a mobile phone on their own.

49% of the cell phone owners did not have even a single accessory with them, while the balance 51% had at least one accessory like the plastic cover or the chord or the waist pouch. 40% owned a hands-free kit and the most commonly purchased accessory was 'plastic cover'.

In response to the whether their cell phone was always ON, 72% respondents indicated that more often than not their phones were indeed on, which in turn also reflects on their underlying need to be constantly connected. This tendency is higher in females than males.

As seen in figure (9), the call identifier function to screen the incoming calls was availed by a select few (18%) respondents only.

Figure (9)



These 18% respondents, who are selective in answering their calls, comprise mainly of females in the age groups 20-24 and 25-29 years. Males, on the other hand, were 'not choosy' about answering phone calls.

CALLING PATTERN

60% of the respondents reported the primary usage of mobile to keep in touch with friends and to call up their residence whenever they are out. The proportion of business calls is relatively low, 24%. Gender-wise analysis shows that the tendency to call home is more in females than in males, while the habit of calling friends is more common in males, essentially teenagers, age group 15-19 years.

One-third of the total phone calls are directed to their family. Females have this tendency more than males. As per the study, the ratio of calls directed to family in females and males, is one in every 2 to 3 calls versus one in every 5 to 10 respectively. Whether the individual is working or not was also a major determinant for the same.

The workplace, in this case-college campus or their classes, was noted as the most common place where the mobile phone usage was the highest. Nearly 61% reported of the same. A significantly large number of individuals, 51%, use their mobile phone when they are in transit. 30% reported usage even when they were at home.

MOBILE FUNCTIONALITY

SMS (Short message services) were first introduced as peripheral features on mobile phones in the early 1990s. It has established a new kind of contact, opening a channel, which has been described as being somewhere between making a call, sending an e-mail and making no contact at all. It is a unique way of saying something without saying too much. In our study 'Making local calls' and 'text smsing' were reported as the most common activities. On the other hand activities like sending picture messages, downloading or forwarding ring tones, getting news updates and making STD calls were seen less frequently. This trend remains more or less the same across gender for all functions except "getting news updates" where boys have a tendency to use it more frequently than girls.

Interestingly, even playing games was seen as a 'regular' activity among 40%. This percentage may seem small given the fact that the study was conducted among the teenagers and younger people. Several industry reports indicate that mobile gaming is the 'next big thing' after SMS and ring tones. Though most gamers at present are content having a go at the pre-installed games available on their handsets, industry analysts predict that it is only a matter of time before they start downloading games.

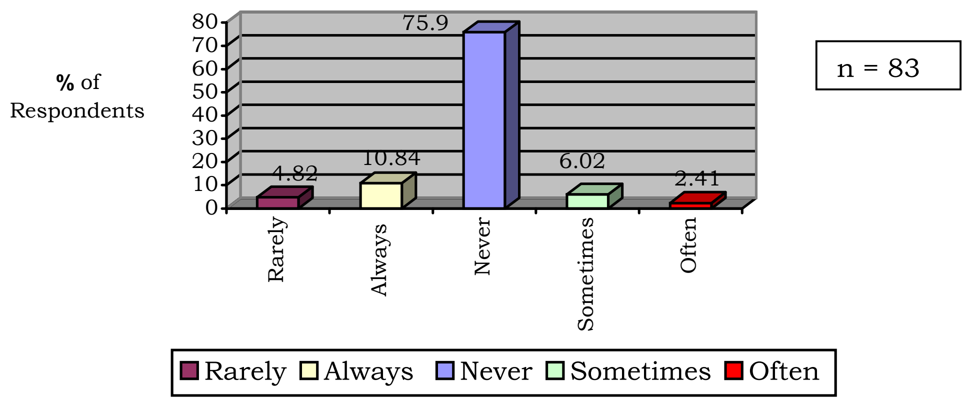
An incoming call usually provokes a sense of expectation, urgency that is why usually one feels compelled to answer a ringing phone. Ringing mobile demands a response. Public uses of mobile spread this tension to all those within the earshot, while leaving them powerless to intervene. When respondents were asked whether they were bothered by 'loud talk' by some mobile-holder around them, nearly 60% reported 'no irritation'. However further analysis revealed that, female respondents were prone to get more irritated than males. This in turn was the principal cause behind the female tendency to set their mobile on 'silent mode' more often than their male counterparts.

HABITS

In response to novel physical and psychological demands made by mobile, people have introduced new stances, gestures and bodily movements to their everyday behaviour. The tendency to stroll while talking over the mobile phone is one such practice found most commonly. As per our primary study 67% respondents had this habit. It was more so in males than females and that too in the younger age groups.

The 'No mobile while driving' doctrine was reportedly followed by 76% of those who owned a vehicle as shown in the graph below.

Fig. (10) Habit of using a mobile while Driving



Research indicates that the only harmful effects that can be positively pinned down, so far, on mobile phones are behavioral ones rather than biological one. For a car driver, the risk of a collision while using a cell phone is four times higher than while not using it. This makes it as dangerous as driving while being drunk. Like other countries, in India there is a ban on mobile use while driving. The ban also includes the use of hands- free kit. [11]

Out of the 116 mobile owners, only 28% respondents considered the info stored in their handsets as 'not private'. Out of the balance 72%, 47% considered it as 'somewhat private' while 25% termed the information stored in their handsets as 'very private'. This perception of privacy is pre-dominantly among the teenagers (especially in the 15-19 year and 20-24 year age groups) and among the females.

ADDICTION

58% reported that they couldn't manage without a mobile even for a day. The need to be constantly accessible and connected with friends or colleagues was cited as the main reason for the same while some of the respondents said that they were 'simply used to having their mobile everyday'. The extent of addiction is equal across age or gender and is also independent of the individual's total years of exposure (to the mobile phone).

Quotes: -

- "I am used to having one."
- "You get important messages…so can't afford not having it."
- "(I) Just like carrying it."

AWARENESS ABOUT LATEST HANDSET MODELS

There was high awareness about 'new model launches' by various companies like Nokia, Motorola, Samsung and LG. This phenomenon can be explained more pertinently on the basis of the age and gender rather than on mobile ownership status.

Gender analysis revealed that the awareness level was much higher in boys than in the case of girls. In other words they seem to keep a track of the market trends much more than what the girls do.

Age-wise trends indicate that younger people, teenagers in the age group 15-19 years, were more aware of the 'market events' than their senior counterparts.

PERCEPTIONS

Majority of the respondents perceive cell phone as the technology that offers convenience and makes their life easier. This perception holds true universally i.e. it remains same among all respondents irrespective of their working status, gender or mobile ownership status.

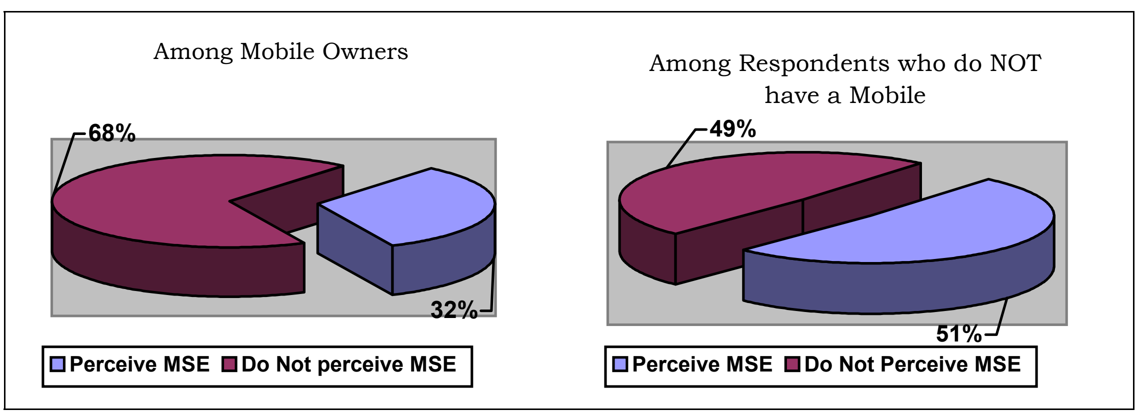
There seems to have been a transformation of the cell phone from 'a status symbol' to a 'necessity'. This is evident from the fact that nearly 85% respondents agreed, either totally or partially to the statement- 'Mobile phone has become a necessity today'. A possible outcome of this consumer perception is development of a desire to buy a mobile phone among those who don't have one. (61% of the respondents who didn't have a mobile said that they were planning to buy mobile in the near future out of which 60% were planning to buy it within the next 6 months. Majority of this prospective buyer group comprised of the 20-24 year age group.)

There was a mixed response to the statement-'The model you buy tells how fashionable you are'. While nearly 37% felt that their cell phones are 'a style statement' almost an equal number of respondents 43% declined to accept this sentiment.

Chatting for longer periods over the cell phone was perceived to be 'ok' by majority of the respondents, be it from any age group. Females echo this sentiment much more than the males, who feel that the conversation should be short. Only some of the respondents disagreed with this opinion.

Majority of the respondents (63%) said that they did not perceive any medical hazards of using a cellular phone. This could primarily be attributed to a dearth of proven information at their end. However remaining 37% admitted their belief that using a mobile phone is harmful to their health. Among these, reference to 'harmful radiations' and 'brain cancer' featured prominently. Some of them also felt that it could lead to damage to the heart, headache and loss of hearing. These apprehensions thus form a major barrier at the time of purchase. As seen in figure (11) below, the notion that 'there are medical side effects of using a mobile' is pre-dominant among those who do not have a mobile than among the mobile owners. The difference between these two is statistically significant.

Figure (11): Perception of Medical side effects (MSE)



ANNEXURE - A: What is SEC?

The notion of Socio-Economic Class is useful for a large number of products and services. Yet the fact still remains that not all products and services are driven by socio-economic considerations. In these cases, the marketing researcher must look for other characteristics that define the users e.g. age or sex.

The fact of the matter is that different countries have different definitions of socio-economic level, as is only proper, which reflect their own historical trajectories and circumstances. For our pan-regional study, we came up with an appropriate definition in order to have comparable results. But before coming to our definition of SEC let us understand what SEC stands for.

The SEC categories are broad consumer categories drawn on the basis of the educational background of consumers and their occupations. These categories usually correlate strongly with the income classification of consumers and are conventionally used by marketers to segment the consumer community. Market planners use the SEC groupings extensively for establishing the target market segments for their goods and services. For e.g. for many luxury consumer goods, the target audience is likely to be only from the upper socio-economic strata. Identifying the socio-economic level is important because of the significant differences in spending power among different socio-economic levels. Socio-economic levels are rational consequences of the need to be more efficient and effective in marketing applications.

Looking across the world, we find that many socio-economic level systems are based upon the consideration of economic characteristics of products and services as well as social standing (such as profession and education). In many cases, the system is a precise numerical point-scoring system where a short inventory of products and services are taken (e.g. automobiles, computers, vacuum cleaner) and then points are awarded (e.g. 10 points for one automobile, 15 points for 2 or more automobiles; 2 points for vacuum cleaner, etc). Eventually, people are placed into groups based upon their point totals.

In the United States, market researchers use household income as *de facto* definition of socio-economic class. This is feasible because most people have a good sense of what their annual household income is, as everyone is supposed to file an 'income tax return' each year that will state the official household income for the past year.

Elsewhere in the world, it is by no means easy to get a handle on income even if the survey respondents are dutiful cooperators. There could be many reasons for it, which we will not get into here. To state a few there is a lot of complexity as to what constitutes personal income. (Apart from wages, there are tips, bonuses, commissions, stocks, stock options, subsidies, pensions, interests, gifts, alimony, etc.) We should not be using personal income to characterize consumption. So is the case when it comes to constituents of household income too. (Apart from the sum of the personal incomes of the household members, there are taxes, dividends, interests, depreciation, capital gains, rental income, barter income, etc). Household income is problematic due to a variety of reasons:- hyper-inflation, non-cash and barter activities, unsteady cash flows, absence of household financial book-keeping, differences in costs of goods and services, as well as a general reluctance to reveal household wealth.

In any case, if the purpose is to capture consumerist behavior, it is more logical to base the definition on actual consumption behavior rather than on some hypothetical driver such as income. This classification is more stable than one based on income alone and being reflective of lifestyle it is more relevant to the examination of consumption behaviour.

Market research industry in India has developed a Socio-Economic Classification system for households and individuals, which clubs all the people who are likely to behave similarly. This Socio-Economic Classification system identifies people and households of following types -

1. SEC (socio-economic class) – A1 and A2 collectively known as SEC-A
2. SEC (socio-economic class) – B1 and B2 collectively known as SEC-B
3. SEC (socio-economic class) – C
4. SEC (socio-economic class) – D
5. SEC (socio-economic class) – E1 and E2 collectively known as SEC-E

The socio-economic classes have been developed on the basis of the two parameters- 'highest education of the main (chief) wage earner of the family and his/her 'profession'.

The following grid gives information on the SEC-classes: -

CWE / Education	Illiterate	School up to 4th	School 5th–9th	SSC/ HSC	SSC / HSC but not Graduate	Graduate /Post Graduate general	Graduate/Post Graduate Professional

CWE Occupation	1	2	3	4	5	6	7
Unskilled - 1	E2	E2	E1	D	D	D	D
Skilled Worker - 2	E2	E1	D	C	C	B2	B2
Petty Traders - 3	E2	D	D	C	C	B2	B2
Shop Owners - 4	D	D	C	B2	B1	A2	A2
Businessmen / Industrialist with No. Of Employees							
None - 5	D	C	B2	B1	A2	A2	A1
1 - 9 - 6	C	B2	B2	B1	A2	A1	A1
10 + - 7	B1	B1	A2	A2	A1	A1	A1
Self –Employed /Professionals - 8	D	D	D	B2	B1	A2	A1
Clerical /Salesman- 9	D	D	D	C	B2	B1	B1
Supervisory Level - A	D	D	C	C	B2	B1	A2
Officers/Executives Junior - B	C	C	C	B2	B1	A2	A2
Officers/Executives Middle/Senior - C	B1	B1	B1	B1	A2	A1	A1

Consumers in the SEC 'A' category view things in a far brighter light than their counterparts in the SEC 'B' and 'C' categories on virtually every parameter put forth to them.

For purposes of our study, the SEC of the respondent is defined on the basis of the chief wage earner's (CWE's) 'occupation', 'educational qualification' and 'vehicle ownership'. The latter was considered as a determinant parameter. Other parameters like 'proportion of total number of working members w.r.t. total number of members in the family' and 'area of residence' (locality) were used to arrive at SEC 'B' and SEC 'C' specifically.

Detail split-up is as given in the table below: -

Parameters	***Categorised As***		
	SEC A	***SEC B***	***SEC C***
CWE's Education	Graduate/Post-Graduate/Under-Graduate	Graduate/Double Graduate/Post-Graduate/Undergraduate	Undergraduate / /Below SSC/ Illiterate
CWE's Occupation	Self- Employed/ Service/ Business	Self- Employed/ Service/Business	Service/ Business

Vehicle Ownership	Owns 4-Wheeler, Or Both (4-wheeler & 2-wheeler)	Owns a Two wheeler Or has No vehicle.	No Vehicle.
Area of Residence	------	Central /Harbour /Western suburbs	Central / Harbour suburbs

ANNEXURE - B: Questionnaire

Good ___________. I'm from MACRO, a market research and consulting unit, based in Mumbai, with a pan-Indian network. We are currently conducting a study on mobile usage patterns among the youth. I would like to assure you that there are no right or wrong answers and we are only interested in YOUR OPINION. Would it be convenient for you to speak to us for a few minutes right now? Thank you.

Name of Respondent: -____

Sex: _____ Age: - ___________ Educational Qualification: - _____________________

At present: - A Student / In Service / In Business

Address: ____

____

Suburb: ____________________________ Tel. No.: _____________________

Dad's Occupation: - _________________ Dad's Education: - _________________

Number of members in the household: ____ No. of WORKING members: ______

Vehicle: - YES (2-wheeler / 4-wheeler)

NO

Section I

1. Do YOU own a mobile (i.e. a cell phone)?
    - Yes
    - No

    If YES, CONTINUE If NO, directly GOTO **Section IV** i.e. Qn. No. 23

2. Currently you own a –

Company	Model	Purchased in (year)
NOKIA		
SONY Ericsson		
Reliance		
Motorola		
Panasonic		
Samsung		
LG		
Siemens		
(Any other then specify) ________		

3. The service provider is -
    - Airtel
    - BPL
    - Orange
    - Reliance

- Trump
- Any other _________

4. You are into –
    - Pre-paid
    - Post-paid / Billing

<table>
<tr><td>If you are a PRE-PAID USER</td><td rowspan="4">OR</td><td>If you are a POST-PAID USER</td></tr>
<tr><td>♦ Do you fill the card -
o Monthly
o Every two months
o Every 3 months
o Yearly
o Any other ___________________</td><td rowspan="3">♦ What is your average billing per month (in Rs.)?
o Less than Rs. 500/-
o Between Rs. 500/- to Rs. 700/-
o Between Rs. 700/- to Rs. 1000/-
o Between Rs. 1000/- to Rs. 1500/-
o Between Rs. 1500/- to Rs. 2000/-
o More than Rs. 2000/- (Kindly state the approximate amount _______)</td></tr>
<tr><td>♦ Refill Amount: Rs. ________</td></tr>
<tr><td>♦ Do you typically use up all your 'talk time'?
o Yes
o No</td></tr>
</table>

Section II

5. Who bought the mobile for you?
    - Father
    - Elder Brother / Sister
    - Self
    - Company
    - Any other (please specify) __________
6. You took a mobile because –
    - Everybody around you already had one with them
    - You wanted to buy it
    - Somebody (friend/parents) asked you to get one for yourself
    - Any other (please specify) __________
7. What is the most important reason for purchasing the mobile?
    - Gives you the 'Convenience' of calling anytime

- It makes you ‘easily accessible’ (to other people) i.e. It is a better medium to get messages
- It is easy to communicate with friends
- No Landline, so preferred a mobile
- Any other (please specify) ____

8. What 'accessories' have you bought with your mobile?
    - Only A Plastic Cover
    - Only A Waist Pouch
    - Only A Chord/String
    - Two of these items
      (Please specify which two items do you own- a) ____________ b) ___________)
    - All the 3 items mentioned above
    - None so far
    - Any other ___________________
9. Do you have a hands-free kit?
    - Yes
    - No

Section III

10. At what AGE did you start using a mobile phone? _________ Years
11. Is your mobile (or cell) phone always ON (i.e. at night also)?
    - Yes
    - No
12. When the cell phone rings you answer –
    - 'All' the calls
    - 'Only selective calls'
13. Generally, you use the mobile phone for –
    - Calling your friends
    - Calling home whenever you are out
    - Business/Office-related work
14. How much of your usage is directed towards "family calls" only?
    - One in every 2 calls (50%)
    - One in every 3 calls (One-third or 33%)
    - One in every 5 calls (20%)
    - One in every 10 calls (10%)
15. The most common places where you use your mobile are –
    - At home
    - In Public transport (car, taxi, bus, rickshaw, railway)
    - At a place of worship
    - In Stores while shopping
    - On the Bus-stand

- At work (office / college CAMPUS)

16. While talking over the phone do you –
    - Stand at one place and complete the conversation
    - Roam around
17. How 'private' do you consider the information stored in your mobile phone?
    - Very private
    - Somewhat private
    - Not private

18. How frequently do you use your mobile phone for -

Function	Always	Often	Sometimes	Seldom/Rarely	Never
a) Sending text messages					
b) Sending picture messages					
c) Downloading or forwarding 'ring tones'					
d) Playing Games					
e) Getting News Updates (Sports or other)					
f) STD calling					
g) Local calls					

19. While you are talking over the mobile, does it bother you when others around you talk on their cell phones too?
    - No, never
    - Seldom/Rarely
    - Sometimes
    - Often
    - Yes, Always
20. How often do you place your phone on "SILENT" **OR** "VIBRATE" mode?
    - No, never
    - Seldom/Rarely

- Sometimes
- Often
- Yes, Always

21. Do you use your mobile while driving?
    - NO, Never
    - Seldom/Rarely
    - Sometimes
    - Often
    - YES, Always
    - I DON'T HAVE A VEHICLE

22. Can you do without a mobile for a day?
    - Yes
    - No

    If NO, why not? ____

Section IV

23. Are you aware of the latest models (or handsets) available in the mobile market?
    - Yes
    - No

If YES, Kindly name **atleast 3** models that you know –

1. ______________
2. ______________
3. ______________
4. _____________

24. According to you, the best part of having a mobile is –
    - It is 'stylish'
    - It makes your life easier i.e. it is 'convenient'
    - You feel 'safer'
    - Any other ____

25. I will read out some statements for you. Kindly tell us TO WHAT EXTENT you Agree or Disagree to each one of these statements. (Tick mark in the appropriate column)

Statements	Totally Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Totally Disagree
a) The mobile has become a 'necessity' today.					

Statements Contd..	Totally Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Totally Disagree
b) The 'model' you buy tells how fashionable you are.					
c) Lengthy conversations on a mobile are 'ok'.					
d) Phone numbers / Messages stored in mobile are 'private'.					
e) Using a mobile phone while driving is 'ok'.					

26. Do you think there are any medical side effects of using a mobile?
    - Yes
    - No

If YES, what can be the possible side effects? ____

END (IF RESPONDENT HAS A MOBILE)

<u>Instruction</u>: ASK THE FOLLOWING ONLY IF HE / SHE IS NOT A MOBILE USER -

27. If you don't have a mobile phone, kindly tell us why not?
    - It is not allowed
    - You don't require it
    - It is costly
    - You don't want contactability i.e. you do not want to be reached all the time.
    - Any other ____

28. Are you planning to buy a mobile phone in near future?
    - Yes
    - No

If YES –

i.) When?

- Within the next month (Already in process)
- Sometime in the next 3–6 months
- May be when I start working / earning
- May be when I start going to senior college

ii.) Which model are you planning to buy? __________

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