

**A STUDY ON CUSTOMER PERCEPTION AND PATORNAGE OF  
FORTHCOMING 3G TECHNOLOGY BY BSNL IN TIRUPUR WITH  
SMALL AND MEDIUM SCALE INDUSTRY**

**A PROJECT REPORT**

**Submitted by**

**M.SATHIS KUMAR**

**Reg. No. 0820400044**

**In partial fulfilment of the requirements  
for the award of the degree**

**Of**

**MASTER OF BUSINESS ADMINISTRATION**

**AUGUST -2009**

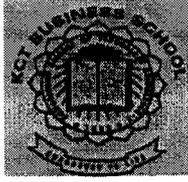
**KCT Business School**

**Department of Management Studies**

**Kumaraguru College of Technology**

**(An autonomous institution affiliated to Anna University, Coimbatore)**

**Coimbatore – 641 006**



**KCT BUSINESS SCHOOL**

**DEPARTMENT OF MANAGEMENT STUDIES**

Kumaraguru College of Technology

Coimbatore.

**BONAFIDE CERTIFICATE**

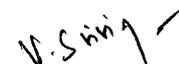
Certified that this project report entitled as "A STUDY ON CUSTOMER PERCEPTION AND PATORNAGE OF FORTHCOMING 3G TECHNOLOGY BY BSNL IN TIRUPUR WITH SMALL AND MEDIUM SCALE INDUSTRY" is the work of Mr.M.SATHIS KUMAR (0820400044) carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award as conferred on an earlier occasion on this or any other candidate.

  
FACULTY GUIDE

  
DIRECTOR

Evaluated and viva-voice conducted on ..... 11.09.09 .....

Examiner 1

  
Examiner 2



भारत संचार निगम लिमिटेड  
(भारत सरकार का उद्यम)  
Bharat Sanchar Nigam Limited  
(A Govt. of India Enterprise)

**Marketing Cell, Saibaba Colony Telephone Exchange, Coimbatore-641 011**

**Mktg/Project/2009-10/ dated @ Coimbatore the 30/6/2009**

**CERTIFICATE**

**Certified that Sri/Smt. *M. SATHISKUMAR - COIMBATUR***  
**is entrusted with the project work on behalf of BSNL &**  
**Kumaraguru College of Technology, Coimbatore Combined**  
**Survey on "3G Services"**

सहायक महाप्रबंधक (विपणन)  
Asst. General Manager (Marketing)  
भा.सं.नि.लि. BSNL  
Saibaba Telephone Exchange Building  
1st Floor, Coimbatore - 641 011

## CONTENT

CHAPTER NO	PARTICULARS	PAGE NO
1.	Introduction	1
	Background of study	1
	Introduction of study	2
	Objective of study	3
	Research methodology	3
	Literature Review	4
	Limitation of study	10
2	Organisation profile	11
3	Analysis and Interpretation	14
4	Findings	31
5	Suggestions	33
6	Conclusion	34
7	Annexure	35
8	Bibliography	43

## LIST OF TABLES

CHAPTER NO	PARTICULARS	PAGE NO
1	Age group	15
2	Gender and Age	16
3	Education	17
4	Occupation	18
5	Monthly income	19
6	Age & Telecome	20
7	Awareness of 3G Technology	21
8	Motivation Factors	22
9	Usage of Mobile services	23
10	Sufficient speed	24
11	Charges of mobile	25
12	Issue of 3G Growth	26
13	Compare to Foreign Awareness	27
14	Suitable Telecom services	28
15	Migration of 2G to 3G	29
16	Success in India	30

## LIST OF CHART

CHAPTER NO	PARTICULARS	PAGE NO
1	Age group	15
2	Education	17
3	Occupation	18
4	Monthly income	19
5	Awareness of 3G Technology	21
6	Motivation Factors	22
7	Usage of Mobile services	23
8	Sufficient speed	24
9	Charges of mobile	25
10	Issue of 3G Growth	26
11	Compare to Foreign Awareness	27
12	Suitable Telecom services	28
13	Migration of 2G to 3G	29
14	Success in India	30

## DECLARATION

I, hereby declare that this project report entitled as “A STUDY ON CUSTOMER PERCEPTION AND PATORNAME OF FORTHCOMING 3G TECHNOLOGY BY BSNL IN TIRUPUR WITH SMALL AND MEDIUM SCAL INDUSTRY”, has undertaken for academic purpose submitted to Anna university in partial fulfilment of requirement for the award of the degree of master of business administration. The project report is the record of the original work done by me under the guidance of prof: K.AYYASWAMY lecturer during the academic year 2008-2009

I, also declare hereby, that the information given in this report is correct to the best of my knowledge and belief.

PLACE: COIMBATORE

DATE: 11.09.09



(SATHIS KUMAR.M)

## **EXECUTIVE SUMMARY**

This project work is about “a study on customer perception and patronage of forthcoming 3g technology by BSNL in Tirupur with reference to small and medium scale industry”; the project is under taken to study the perception of the consumer towards certain 3G technology and services.

The pilot survey was done by taking 20 samples. Survey on 100 customers was taken and the necessary data was collected by distributing questionnaires among them. Analysis of the data is done by using percentage analysis, chi square test.

The project is centred on the different opinions of the customer on existing service and the future anticipation.

The study helps to know the market potential for the launch of 3G technology and services by BSNL at Tirupur with reference to small and medium scale industry.

## ACKNOWLEDGEMENT

I thank our respected Chairman Arutchelavr Dr. N. Mahalingam, who helped us to undergo this master's degree and acquire a lot of knowledge.

I express my sincere gratitude to our beloved Co-Chairman B.K.Krishnaraj Vanavarayar, Kumaraguru college Of Technology, for his kind blessings and moral support for carrying out this project.

I express my sincere to our believed Correspondent Mr.M.Balasubramaniam, Kumaraguru College of Technology, for his kind blessings and moral support for carrying out this project.

I express my sincere thanks to our Principal in-charge Prof. A. Annamalai , Kumaraguru College of Technology, for allowing us to carry out this project.

I express my sincere thanks to our Director Prof. S.V. Devanathan Kumaraguru College of Technology, Department of Management Studies, for allowing us to carry out this project work.

I take privilege and immense pleasure in expressing my sincere gratitude to my guiding spirit, K..AYYASWAMY, Senior Lecturer, Department of Management Studies, for his in-depth guidance, motivation and encouragement in executing this project right from beginning and making it a success.

My special Acknowledgements and thanks to Department of Management studies,faculty members, my friends and family members who helped me in the completion of this project Successfully.

# INTRODUCTION

## BACKGROUND OF THE STUDY

## DEFINITION OF PERCEPTION

Perception is defined as “the process by which the individual selects organizes, and interprets stimuli into a meaningful and coherent picture of the world”. Thus perception is the opinion he forms about a product or service seeing its packaging, the colours used, the quality of service, the symbol of the brand, and the logo associated with the brand in the market.

## ELEMENTS OF PERCEPTION

### SENSATION

When a person is exposed to any of the marketing stimuli or ad, the first reflex that is initiated in him is known as sensation.

### ABSOLUTE THRESHOLD

The lowest degree of sensory inputs at which the consumer becomes aware of a sensation is called the absolute threshold.

### DIFFERENTIAL THRESHOLD OR JUST NOTICEABLE DIFFERENCE

The minimum level of difference that a consumer can make between two stimuli that he receives is called the differential. In other words, it is the minimal amount of change in a stimulus that can be consciously detected by a person.

### SUBLIMINAL PERCEPTION

It can be literally termed as subconscious. When the marketers try to stimulate the subconscious of the consumer towards their products, it is known as subliminal perception..

## **3G TECHNOLOGY AND SERVICE**

3G is the third generation of mobile phone standards and technology, superseding 2.5G. It is based on the International Telecommunication Union (ITU) family of standards under the IMT-2000

3G networks enable network operators to offer users a wider range of more advanced services while achieving greater network capacity through improved spectral efficiency. Services include wide-area wireless voice telephony, video calls, and broadband wireless data, all in a mobile environment. Additional features also include HSPA data transmission capabilities able to deliver speeds up to 14.4Mbit/s on the downlink and 5.8Mbit/s on the uplink.

3G technologies enable network operators to offer users a wider range of more advanced services while achieving greater network capacity through improved spectral efficiency.

3G wireless technology represents the convergence of various 2G wireless telecommunications systems into a single uniform global system which includes terrestrial and satellite components in its functioning.

3G or the third-generation wireless refers to near future developments in personal & business wireless technology, especially relating to mobile communications. 3G or The Third Generation will usher in many benefits as roaming capability, broad bandwidth and high speed communication (upwards of 2Mbps).

## **OBJECTIVE :**

### **Primary objective**

To study whether the launch of 3G technologies help full to Small medium scale enterprises(SME'S).

### **Secondary objectives**

- 1.Ensure whether 3G technologies is affordable to SME'S
- 2.To study about what are the critical success factors in implementing 3G technologies.
- 3.To ensure whether 3G technologies is affordable to SME'S.
- 4.To suggest the features and benefits of 3G technologies to SME'S.
5. To know the customer's resource capabilities and preferences

## **RESEARCH METHODOLOGY:**

### **Descriptive Research**

The research is descriptive in nature as the study was done to find out the customer expectation of 3G technology in BSNL. the researcher has no control over the variable and they are independent of the state of affairs.

### **Sample size and area of data collection**

sample of 100 BSNL customer in Tirupur district.

### **Tools of Analysis**

The analysis has been done with the percentage calculation and chi-square test. The percentage method has been chosen because the method provides the accurate result and chi-square test is done to find the relationship between two different variables.

## REVIEW OF LITERATURE

### **3G Choice Could Roil Europe's *Mobile* Players**

China has yet to award *3G mobile* licenses. Who will benefit when it does is an open question, says Bengt Nordström of in Code. It's not really a question of "will they or won't they?" but more a matter of "when?". The long-running saga of China's decision regarding licensing and adoption of third-generation *mobile services* has filled many a column inch. What is certain is that there will be *3G* in China, sometime. Vendors such as Alcatel (ALA) and merger partner Lucent (LU), Nortel (NT), and Siemens/NEC (SI) (NIPNY), are relying on Chinese contracts to create sustainable positions in the worldwide *3G* market. Then, of course, there are the rising Chinese stars, Huawei and ZTE, who are justified in expecting a cut of the deal from their own government. After all, *3G* doesn't deliver much today that *2G* -- especially enhanced versions such as GPRS and EDGE -- cannot. If most customer needs can be satisfied with *2G*, why rush to lay out all that money on building new networks simply because the rest of the world thinks it's the right thing to do. The future of the *mobile* industry is now being driven by the mass market. China is a huge economic force -- its very size, like India's, gives it tremendous market muscle. And while demographics may not allow *3G mobile* penetration across the whole of Chinese or Indian society, it's only a matter of time until the economies of scale in these massive emerging markets give *3G* the success that it has not achieved elsewhere.

## AUSTRALIAN 3G AUCTION TO BEGIN IN MARCH

MELBOURNE, Australia--The Australian Communications Authority (ACA) will hold the keenly awaited auction of third-generation (3G) spectrum in the 2 GHz radio-frequency band in early March. The new *3G mobile services* are expected to combine popular communications forms, such as *mobile* phones, the Internet and computers, into a single *mobile* device able to support voice, data and a range of new multimedia information and entertainment *services*. The success of *3G services* is likely to rest as much with content providers as with network operators. Telstra, Cable & Wireless Optus and Vodafone Holdings have been touted as almost certain bidders in the auction. It is likely that AAPT, Hutchison Telecommunications and One.Tel will participate as they already have spectrum that can be used for *3G services*. While it is possible to use the 800 MHz, 1800 MHz and 900 MHz bands for *3G services*, it is likely handsets will initially be made for the 2 GHz radio frequency band.

One.Tel, backed by media magnates Kerry Packer and Rupert Murdoch, has already indicated it will not involve itself in the auction, saying it does not need extra spectrum to offer *3G services*. One.Tel's share price, which took a hammering last year, rose on the news. Initially, the company asked for a 12-month delay to the *3G* spectrum auction. Analysts think One.Tel's financial position prohibits it from bidding for *3G* spectrum. It already spent more than A\$500 million (US\$286 million) last year on 1800 MHz *mobile*-phone spectrum. Although the company said it does not plan to sell the *mobile* network it is building at a cost of A\$1.1 billion (US\$629 million), speculation circulated in October that it might do so to concentrate on the delivery of second-generation (2G), and ultimately, *3G mobile services*.

Optus, too, has made it clear it will not pay unreasonable prices but has indicated it will take part in the auction. There is speculation that Optus might form a consortium rather than bid alone. Rumors have also surrounded the sale or partial sale of Optus' *mobile* business, because its major shareholder, Cable & Wireless in Britain, sold its *mobile* interests to Deutsche Telekom in 1999. However, Paul O'Sullivan, Optus managing director of *mobiles*, was reported in August 2000 to favor an international alliance with a global *mobile* operator. Telecom New Zealand, as part of a consortium including NTT DoCoMo, has expressed interest in Optus' *mobile* business. The ACA is also hopeful it will be able to attract offshore bidders. To facilitate overseas interest, the ACA has enlisted the *services* of Deutsche Bank. Potential bidders worldwide have been sent marketing material.

Deutsche Bank has come under criticism because, in addition to advising the ACA, it is also assisting potential bidders to raise finances for licenses. Furthermore, it is advising possible suitors for the Optus *mobile* business. But Australia will face competition for overseas investment with more than 80 3G licenses available worldwide this year. Last year, the Australian government budgeted a return of A\$2.6 billion (US\$1.5 billion) in its 2001 estimates, although pundits now believe that figure optimistic. Results for the last two auctions of 3.4 GHz and 27 GHz spectrum were a little disappointing. While the United Kingdom and Germany reaped handsome returns of nearly US\$35 billion and US\$46 billion, respectively, other 3G auctions in countries such as Switzerland and New Zealand have produced disappointing results.

In Australia's favor, though, is a pro-competition environment, strong consumer interest and high *mobile* penetration. Importantly, Australia is seen as a launching pad into the key Asia-Pacific markets. The Australian Telecommunications Users Group, however, has warned the days of *mobiles* as "gee-whiz" gadgets are gone, and users are only interested in sensibly priced *services* that provide real value. ACA Chairman Tony Shaw said, "It is up to the auction participants themselves to decide what spectrum is worth to them based on their own business cases." In metropolitan areas, 60 megahertz of paired spectrum and 20 megahertz of unpaired spectrum will be auctioned, except in the nation's capital, Canberra, where 45 megahertz of paired and 20 megahertz of unpaired spectrum will be offered. In regional areas, 20 megahertz of paired spectrum will be available.

The auction, which will divide spectrum into 58 lots with two lots offering national licenses, anticipates a minimum of four competitors in the metropolitan auction and two in the regional. The 15-year licenses will be auctioned over the Internet, as the ACA has done on previous occasions. The 2 GHz spectrum is expected to be cleared by October 2002.

PHOTO (COLOR): The World Youth Sailing Championships Laser Class were held in Sydney Harbor in December

Yan Hui, Aalborg university<sup>3</sup> in his study entitled "The discussion of 3G mobile systems in china –Technology standards and National interests says about The development of 3G service is perceived to have important economic and social impact. In addition, 3G is an important stake especially for developing countries. Successful development of 3G service can help developing countries shorten technology gaps with developed countries. But failure to do so could widen the digital gap further. Although most European countries and some East Asian counties have already launched 3G services, China's allocation of 3G operations was postponed again and again, until it promulgated TD-SCDMA as a 3G standard on January 20, 2006.

Source: *web.rollins.edu/~tlairson/asiabus/china3g2.pdf*

Xinhua News agency(2005)<sup>4</sup> in an article "china to use 3G technology for mobile telecom before 2008 says that The Chinese government will begin to provide 3G (third generation) based mobile telecommunications service before 2008, said Minister of Information Wang Xudong on Wednesday at the 2005 Fortune Global Forum in Beijing. He said China has always paid a lot of attention to the development of the 3G telecom, and that it will continue to keep pace with growth trend for the technology and will devote great efforts to research and development in this respect.

International operators track China's 3G technology <sup>5</sup>(2008). An executive from one of China's largest telecom equipment vendors said international mobile network operators have expressed interest in the country's homegrown third-generation (3G) mobile technology, TD-SCDMA, the *South China Morning Post* reported. Isaac Liang, international marketing director of TD-SCDMA at ZTE, claimed that at least 10 overseas carriers have shown interest in the technology.

**Source:** South china morning pos

India to review market conditions for 3G auction(oct 2008)<sup>9</sup> explains that India plans to review market conditions for a planned auction of radiowaves for next generation wireless services, but hopes to start on schedule by December 2009.

Source: in.reuters.com

Rise of 3G technology( July 2009) <sup>8</sup> explains that International Mobile telecommunication program launched the 3G technology which allows various network operators to provide better services to their customers. This technology supports various hi-end features like VoIP services, video calls and hi-speed broadband. The main function of 3G technologies is to provide high speed internet access and video telephony to cellular networks.

Source: RAJPUTBROTHERHOOD.com

## **LIMITATION OF THE STUDY**

Following limitations during the survey.

1. Most of the Tirupur customers are not aware of 3G technology in BSNL.
2. The survey conducted only Tirupur customers.
3. The sample size is only 100 customers.

## ORGANISATION PROFIL

### HISTORY OF THE ORGANISATION

Bharat Sanchar Nigam Limited (known as **BSNL**, India Communications Corporation Limited) is a public sector telecommunication company in India. It is India's largest telecommunication company with 24% market share as on March 31, 2008. Its headquarters are at Bharat Sanchar Bhawan, Harish Chandra Mathur Lane, Janpath, New Delhi. It has the status of Mini Ratna, a status assigned to reputed public sector companies in India.

**BSNL** is India's oldest and largest Communication Service Provider (CSP). Currently has a customer base of 90 million as of June 2008.[1] It has footprints throughout India except for the metropolitan cities of Mumbai and New Delhi which are managed by MTNL. As on March 31, 2008 **BSNL** commanded a customer base of 31.55 million Wireline, 4.58 million CDMA-WLL and 54.21 million GSM Mobile subscribers. **BSNL**'s earnings for the Financial Year ending March 31, 2007 stood at INR 397.15b (US\$ 9.67 b) with net profit of INR 78.06b (US\$ 1.90 billion). **BSNL** has an estimated market value of \$ 100 Billion. The company is planning an IPO with in 6 months to offload 10% to public in the Rs 300-400 range valuing the company at over \$100 billion.

## **3G TECHNOLOGY**

3G is the third generation of mobile phone standards and technology, superseding 2.5G. It is based on the International Telecommunication Union (ITU) family of standards under the IMT-2000

3G networks enable network operators to offer users a wider range of more advanced services while achieving greater network capacity through improved spectral efficiency. Services include wide-area wireless voice telephony, video calls, and broadband wireless data, all in a mobile environment. Additional features also include HSPA data transmission capabilities able to deliver speeds up to 14.4Mbit/s on the downlink and 5.8Mbit/s on the uplink.

3G technologies enable network operators to offer users a wider range of more advanced services while achieving greater network capacity through improved spectral efficiency.

3G wireless technology represents the convergence of various 2G wireless telecommunications systems into a single uniform global system which includes terrestrial and satellite components in its functioning.

3G or the third-generation wireless refers to near future developments in personal & business wireless technology, especially relating to mobile communications. 3G or The Third Generation will usher in many benefits as roaming capability, broad bandwidth and high speed communication (upwards of 2Mbps).

### **3G Technology In India**

From the time of telegraphs Indian telecom sector has witnessed an immense growth and has diversified into various segments like, Fixed Line Telephony, mobile telephony, GSM, CDMA, WLL etc. The telecom industry is growing at a fast pace introducing newer technologies. Even the network operators and handset providers are also coming up with newer value added services and advanced technology cell phones with multimedia applications. Now it's time to welcome the much-awaited 3G Technology. Bharat Sanchar Nigam Limited is all set to launch the technology by December 2007. Not only the network providers but also the handset providers in India are waiting eagerly for the launch of 3G to earn very high revenues from the value added services provided by the technology.

The technology is initially being launched on CDMA platform. The technology is being tested over various platforms and cellular networks. 3G or Third Generation technology is a convergence of various Second Generation telecommunication systems. The technology is intended for SMARTPHONES - multimedia cell phones. Video broadcasting and other e-commerce services such as, stock transactions and e-learning will now be made possible much faster. It offers 3 Mbps speed for downloading, which is very high as compared to that of the 2G technology. The 3G technology provides for internet surfing, downloading, e-mail attachment downloading, audio-video conferencing, fax services and many other broadband applications. 3G Technology was implemented in Japan for the first time in the world. Today the technology is serving 25 countries over more than 60 networks having its existence in Asia, Europe and USA. Video conferencing has been a major factor in the success of the technology.

## **DATA ANALYSIS AND INTERPRETATION**

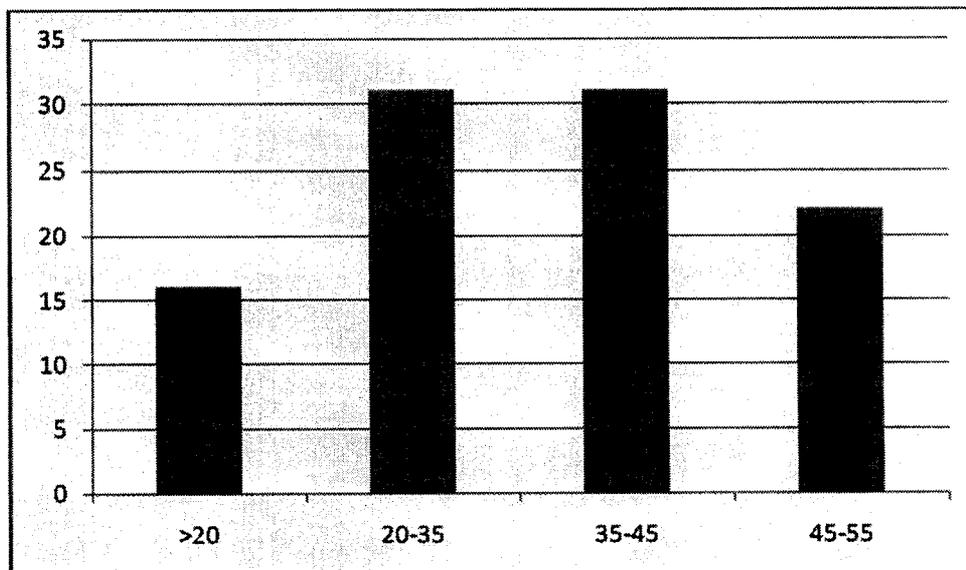
**TABLE-1**  
**AGE GROUP OF CUSTOMER**

	Frequency	Percent	Cumulative Percent
<20	16	16.0	16.0
20-35	31	31.0	47.0
35-45	31	31.0	78.0
45-55	22	22.0	100.0
Total	100	100.0	

Note :

The Table.1 represent age group of the BSNL user 31% of the people are belongs to 35 -45 age group and 22%of the people are 45-55 age group people, remaining 31% of the 20-35 age group peoples are using BSNL network.

**CHART-1**  
**AGE GROUP OF CUSTOMER**



**TABLE-2**

**GENDER \* AGEGROUP**

		AGEGROUP				Total
		<20	20-35	35-45	45-55	
GENDER	Male	11	24	20	16	71
	Female	5	7	11	6	29
Total		16	31	31	22	100

Note : in this Table 24% of male customers are using 3g services in age group of 35-45,and20% of the customers are belongs to the 35-45 age group,only11% of the customers are belongs to the age of less than 20.and female customers are mostly 35-45 age group. and remaining in all age group customers.

Below the age group of 20 only using 16% of the customer because they are very interest to use other services and only 20-35,and 35-45 of the age group customers are only prepare to the BSNL services because they feel their services are very good.

**TABLE-3**  
**EDUCATION DETAILS OF CUSTOMERS**

Education	Frequency	Percent	Cumulative Percent
Non graduate	8	8.0	8.0
Graduate	23	23.0	31.0
Postgraduate	46	46.0	77.0
Doctoral	23	23.0	100.0
Total	100	100.0	

Table-3 the BSNL customer 46% of the customer have a post graduate, and 23% of the customers are graduate, and same 23% of the customers are doctoral, only 8% of the customers are uneducated .

46% of the post graduated customers are interest to using 3G technology.

**CHART-2**  
**EDUCATION DETAILS OF CUSTOMERS**

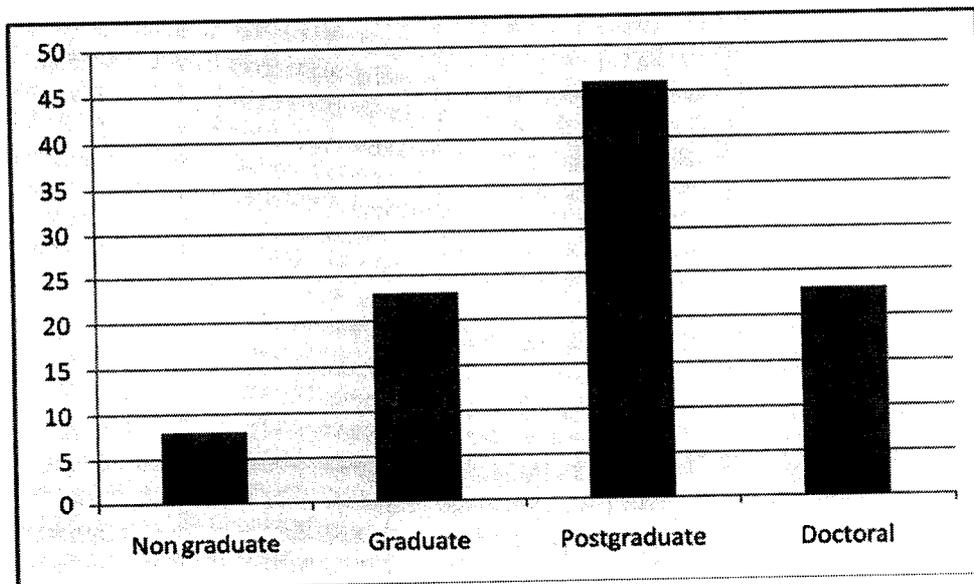


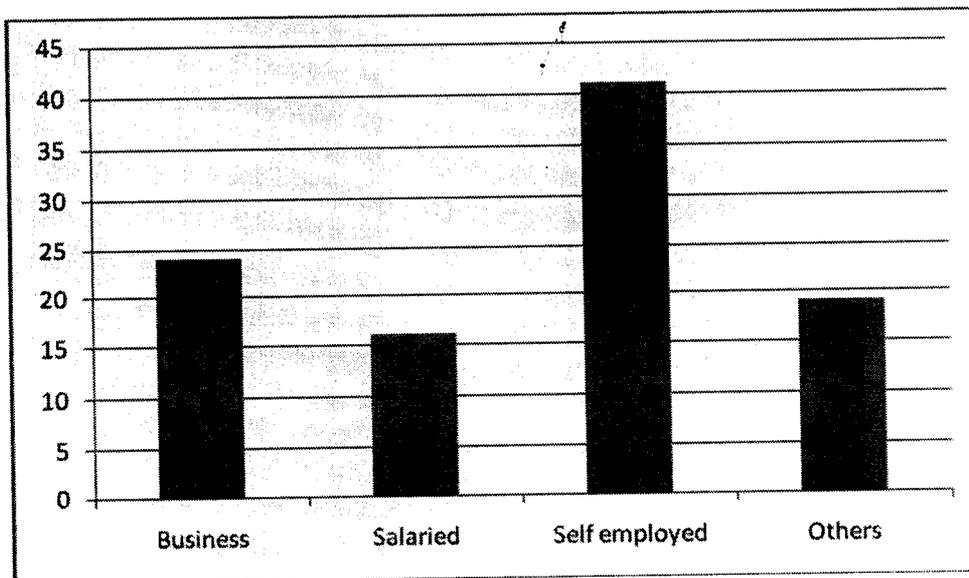
TABLE-4  
**OCCUPATION OF CUSTOMERS**

Occupation	Frequency	Percent	Cumulative Percent
Business	24	24.0	24.0
Salaried	16	16.0	40.0
Self employed	41	41.0	81.0
Others	19	19.0	100.0
Total	100	100.0	

Note : table-4 analysis about occupation of BSNL customer mostly 41% of the customers are self employed and 24% of the customers are business people and 16% of the customer are salaried ,remaining 19% people belongs some other jobs.

65% the customers belongs to the self and own employed .because they use in their own business.

CHART-3  
**OCCUPATION OF CUSTOMERS**



**TABLE-5**  
**MONTHLYINCOME DETAILS**

Income	Frequency	Percent	Cumulative Percent
<5000	14	14.0	14.0
5000-15000	28	28.0	42.0
15000-25000	37	37.0	79.0
>25000	21	21.0	100.0
Total	100	100.0	

Note : The monthly income of the BSNL customer 37% of the BSNL customer have a monthly income in above 15000-25000, and 28% of the customer have 5000-15000 income groups, and 14%of the customer only have below 5000 income in monthly.

**CHART-4**  
**MONTHLYINCOME DETAILS**

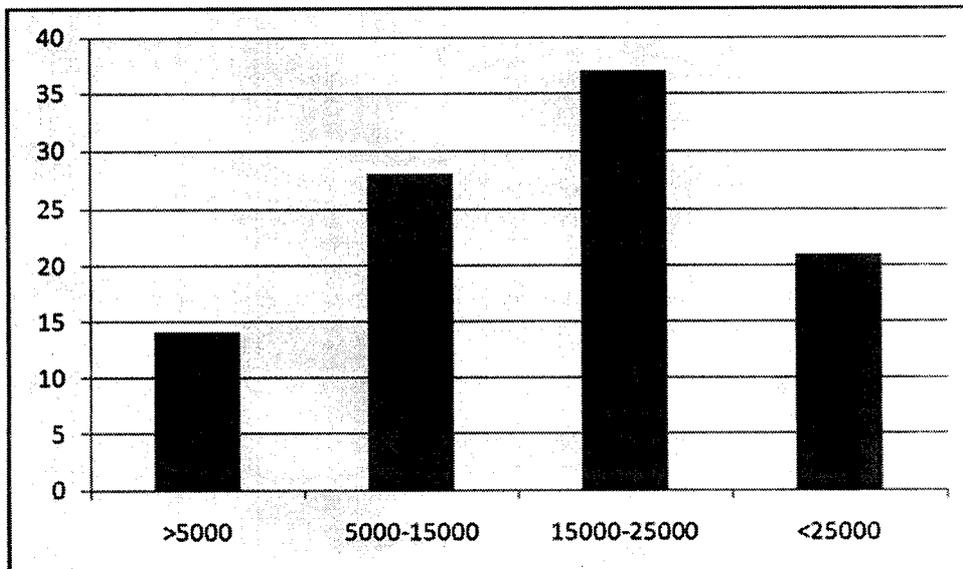


TABLE-6

AGEGROUP \* SUITABLE TELECOM SERVICE

		SUITABLETELECOMESERVICE				Total
		Tata	Bsnl	Reliance	Airtel	
Age group	<20	1	4	3	8	16
	20-35	1	10	8	12	31
	35-45	4	10	6	11	31
	45-55	1	8	4	9	22
Total		7	32	21	40	100

Note : in the age group of 20-35 and 35-45 age group of the customers are use BSNL services and at the same time same age group of the customers are using airtel services in 23%.

Bsnl target group customer is 20-35 age group customer and 35-45 age group, and total usage of the mobile services also in the same group is mostly used.

MONTHLY INCOME & CHARGES OF MOBIL PHONE

		MONTHLYINCOME	OVERCHARGE
MONTHLYINCOME	Pearson Correlation	1	.89
	Sig. (2-tailed)		.478
	N	100	100
OVERCHARGE	Pearson Correlation	.89	1
	Sig. (2-tailed)	.478	
	N	100	100

Note : The monthly income and price rang of the mobile phones are closely correlated in this survey .

TABLE-7

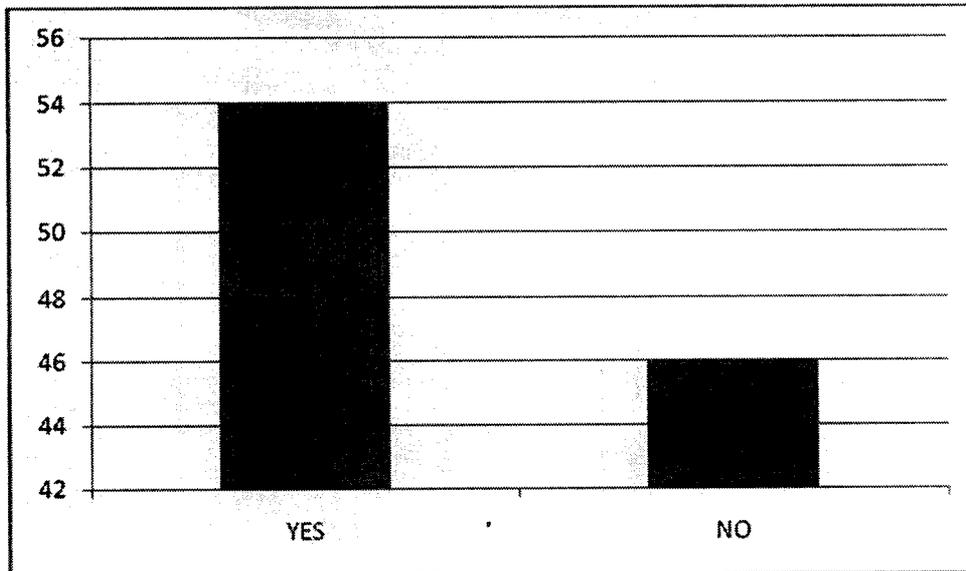
**AWAR OF FORTHCOMING 3G TECHNOLOGY**

Awareness	Frequency	Percent	Cumulative Percent
YES	54	54.0	54.0
NO	46	46.0	100.0
Total	100	100.0	

Note : In Tirupur SME's are 54% of the customers are only know about 3g technology in BSNL, and remaining 46%of the customers are don't know about the 3g services in Tirupur. 54% of the customers are very much know about the BSNL services because they are using services in their business everyday, but remaining customers are not using BSNL services in their business in frequently .

CHART-5

**AWAR OF FORTHCOMING 3G TECHNOLOGY**



**TABLE-8**  
**WHAT MOTIVATING FACTORS OF BSNL CUSTOMERS**

Services	Frequency	Percent	Cumulative Percent
Enhanced multimedia	20	20.0	20.0
All popular mode	27	27.0	47.0
Broadband speed	36	36.0	83.0
All above	17	17.0	100.0
Total	100	100.0	

Note : some of the customers are motivated in this factors that is 36% of the customers are very much interest to broadband speed ,and 27% of the customers are motivated by their popular mode,20% of the customers are satisfied by multimedia service of BSNL service.

**CHART-6**  
**WHAT MOTIVATING FACTORS OF BSNL CUSTOMER**

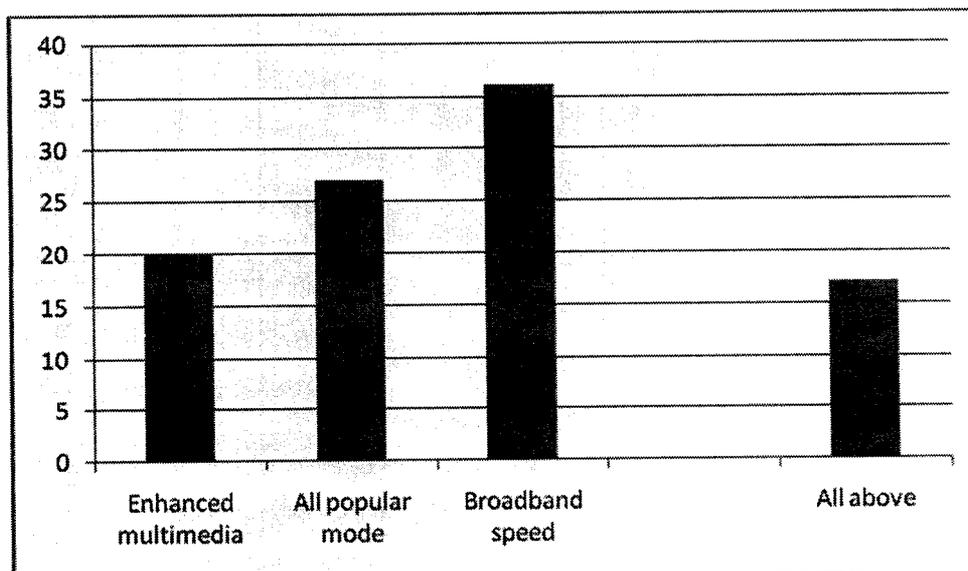


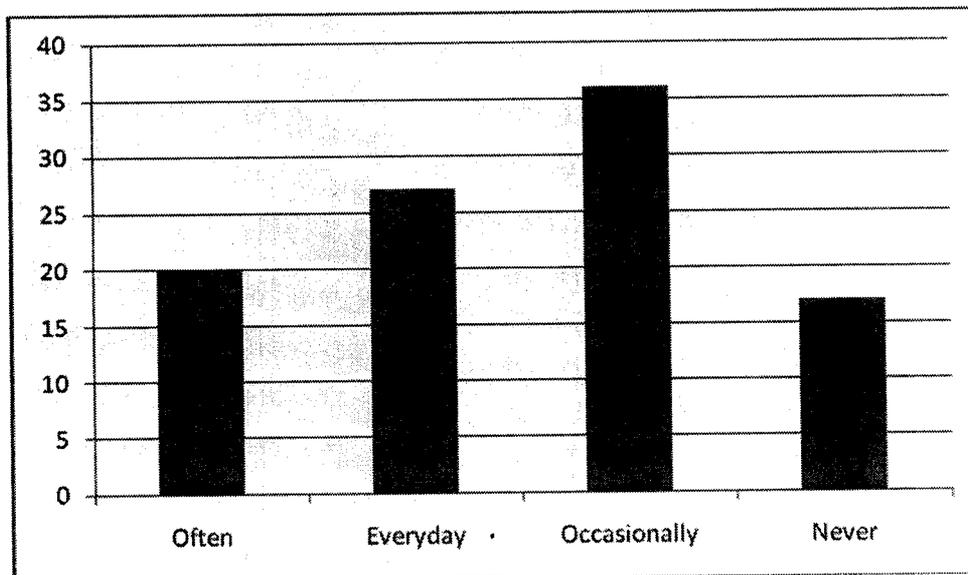
TABLE-9  
**USAGE OF MOBILPHONE**

Usage	Frequency	Percent	Cumulative Percent
Often	20	20.0	20.0
Everyday	27	27.0	47.0
Occasionally	36	36.0	83.0
Never	17	17.0	100.0
Total	100	100.0	

Note : In Tirupur 27% of the customers are everyday using the BSNL mobile 2g and internet facility. And 36% of the customers are using occasionally in their business, and 20% of the customers are use in often period only. and only 17% of the customers are not using internet technology in BSNL.

The 36% of the customers are occasionally using the BSNL services because they are mostly in student. and 27% of the customers are using daily in their business .

CHART-7  
**USAGE OF MOBILPHONE**

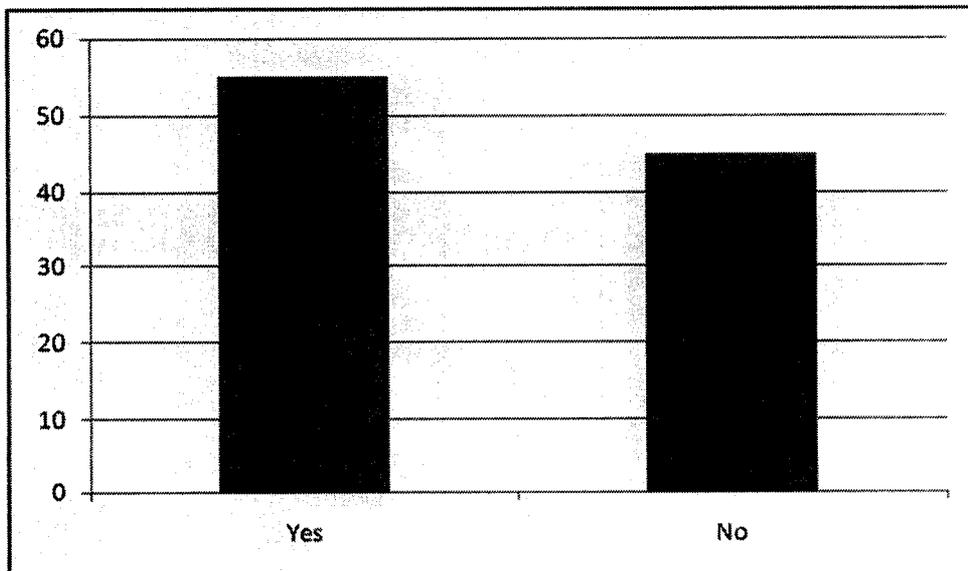


**TABLE-10**  
**SUFFICIENT SPEED OF GPRS**

Speed	Frequency	Percent	Cumulative Percent
Yes	55	55.0	55.0
No	45	45.0	100.0
Total	100	100.0	

Note : BSNL customers in Tirupur 55% of the customers are they feel sufficient net service and speed .and remaining 45 % if the customers are not feel to not sufficient speed in internet and GPRS service.

**CHART-8**  
**SUFFICIENT SPEED OF GPRS**



**TABLE-11**  
**OVER CHARGES**

Opinion	Frequency	Percent	Cumulative Percent
Strongly disagree	14	14.0	14.0
Disagree	15	15.0	29.0
No idea	34	34.0	63.0
Agree	37	37.0	100.0
Total	100	100.0	

Note : Tirupur customer 37% of them agree with BSNL charging over for their service and 34% of the customer they don't feel about their charges ,and 15% of the customers are not agree the charging details , at the same time 14% of the customer strongly disagree the over charging complaints.

**CHART-9**  
**OVERCHARGE**

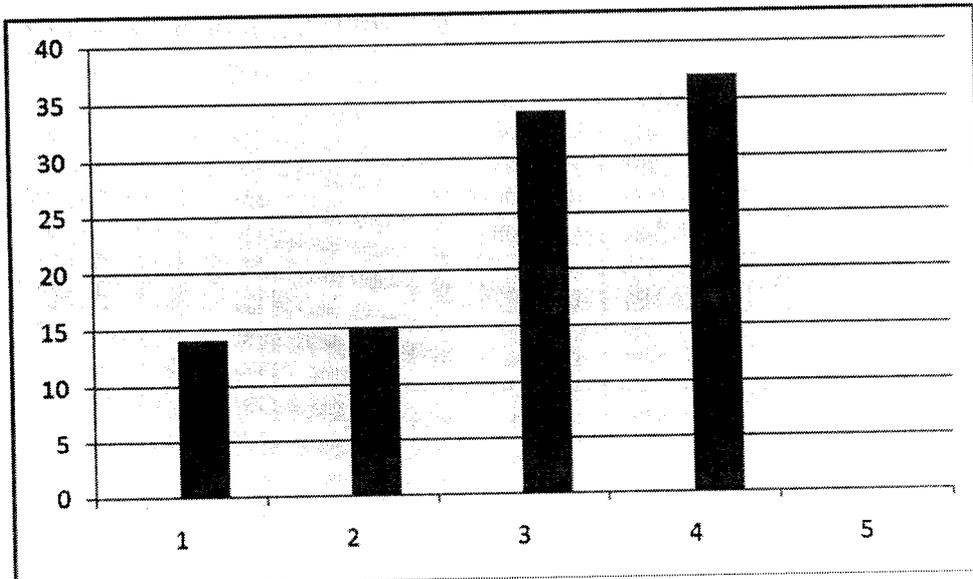


TABLE-12  
ISSUE OF GROWTH

ISSUES	Frequency	Percent	Cumulative Percent
Expensive	31	31.0	31.0
Infrastructure difficult	16	16.0	47.0
Expensive phone	30	30.0	77.0
All the above	23	23.0	100.0
Total	100	100.0	

Note :The launch of 3G technology in got some issue in growth. 31% of the customers are feel it very expensive ,30% of the customers are the 3g mobile phones are very costly,16% of the customers are says all the above factors are give some issues in 3g growth, and 16% of the customers are says infrastructure is become very difficult .

31% of the customers are feel the implementation of 3G is very expensive and others are want more time to implementing 3G in Tirupur.

CHART-10  
ISSUE OF GROWTH

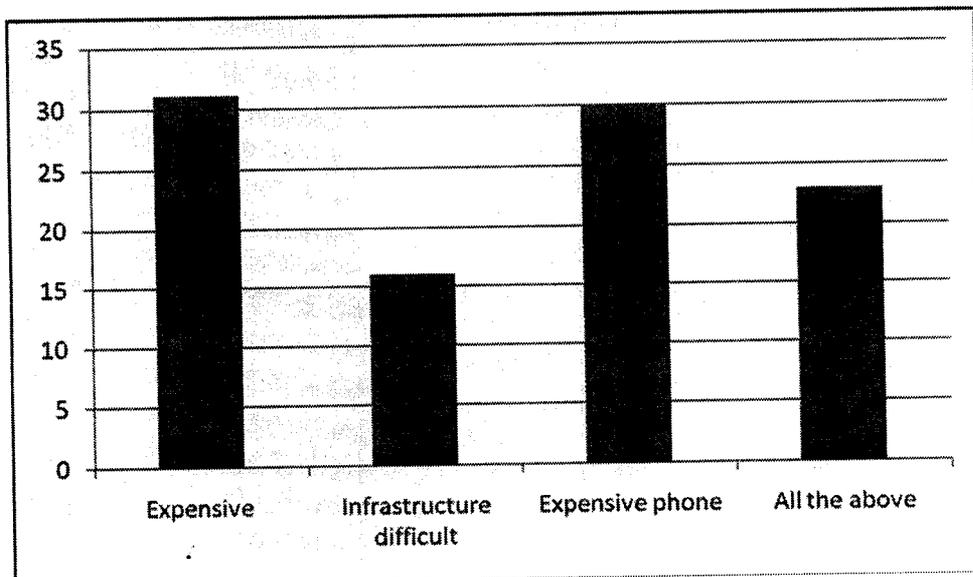


TABLE-13

**AWAERNESS IN INDIA COMPARE TO FOREIGN COUNTRY**

OPINION	Frequency	Percent	Cumulative Percent
Strongly disagree	18	18.0	18.0
Disagree	19	19.0	37.0
Uncertain	33	33.0	70.0
Agree	30	30.0	100.0
Total	100	100.0	

Note : Tirupur BSNL customers have less awareness about the 3g technology .but 37% of the customers are not agree this point ,30% of the customers are only agree this point ,and remaining 33% of the customers are feel uncertain this point .

In the survey 30% of the customers are there is no awareness about 3G in india compare to foreign country's, because of education qualification.

CHART-11

**AWAERNESS IN INDIA COMPARE TO FOREIGN VERY LESS**

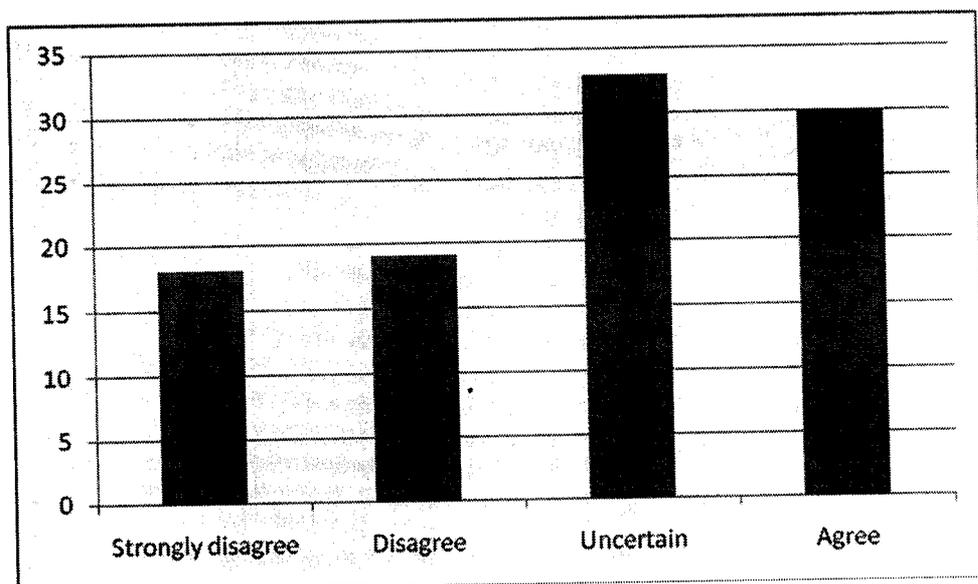


TABLE-14

**SUITABLE TELECOM SERVICE FOR 3G**

Services	Frequency	Percent	Cumulative Percent
RELIANCE	21	21.0	21.0
BSNL	32	32.0	53.0
AIRTEL	40	40.0	93.0
Tata	7	7.0	100.0
Total	100	100.0	

Note :The customers are mostly prepare airtel service 40% and 32% of the customers are choose BSNL service and 21% of the customers are wants to select the reliance services ,remaining 7% of the customers are select tata services .

32% of the BSNL customers are interest to use BSNL because they are feel bsnl give sufficient services in telecommunication.

CHART-12

**SUITABLE TELECOM SERVICE FOR 3G**

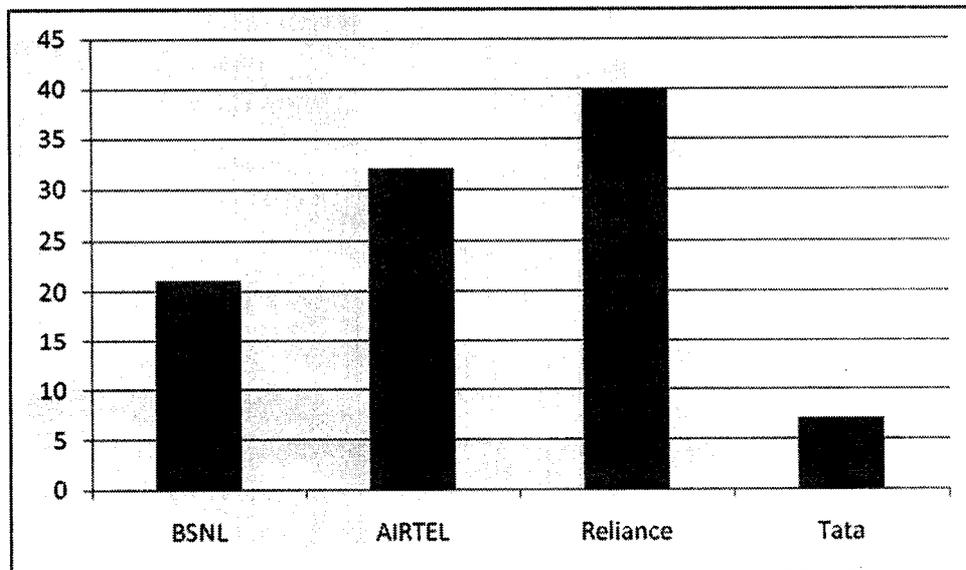


TABLE -15

**MIGRATE FROM 2G TO 3G**

Migration	Frequency	Percent	Cumulative Percent
Yes	76	76.0	76.0
No	24	24.0	100.0
Total	100	100.0	

Note :the migration of the BSNL technology in 2g to 3g 76% of the customers are ready to migrate 2g to 3g technology, and remaining 24% of the customers are satisfied in 2g in BSNL.

76% of the customers are wants more changes in the BSNL services they want more services through BSNL.

CHART -13

**MIGRATE FROM 2G TO 3G**

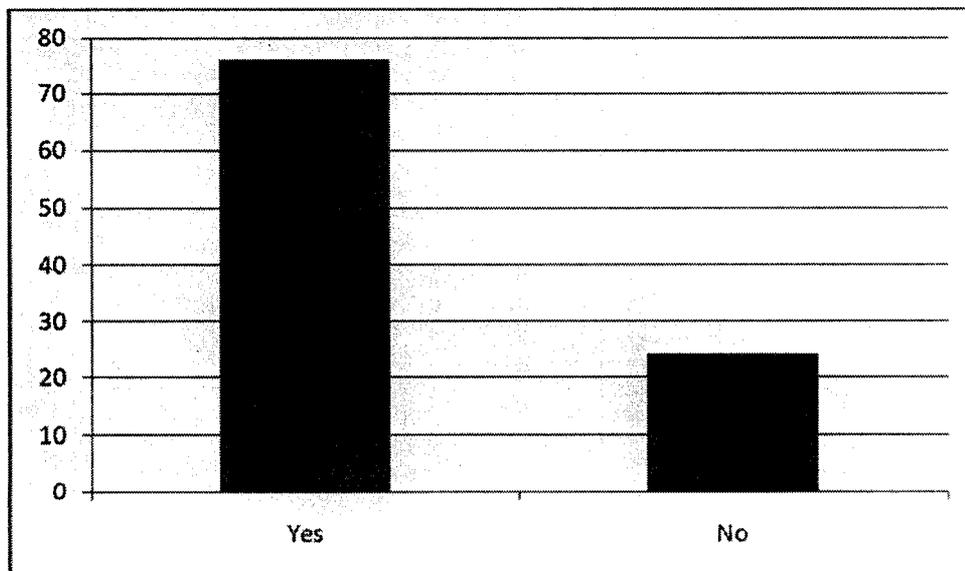
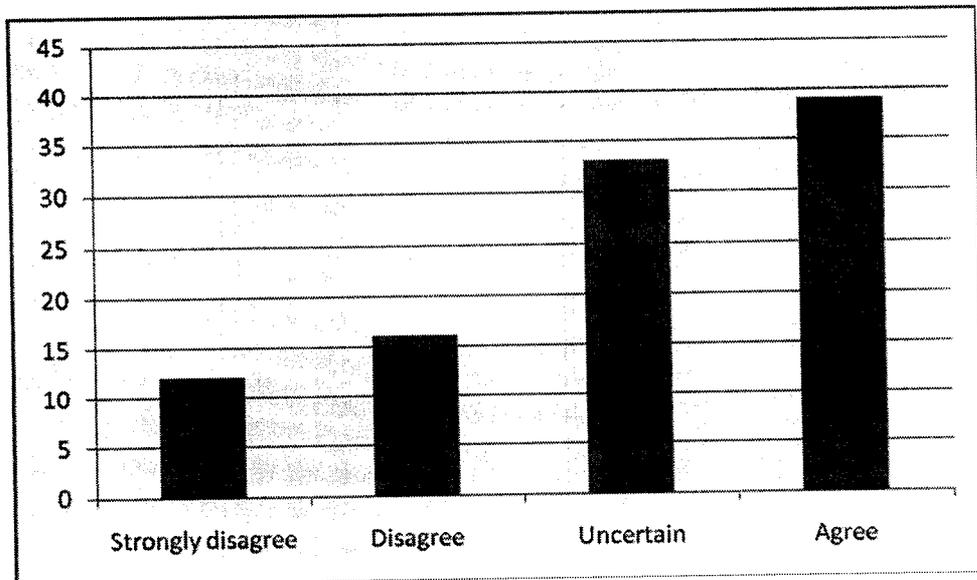


TABLE-16  
SUCCEES IN INDIA

Opinion	Frequency	Percent	Cumulative Percent
Strongly disagree	12	12.0	12.0
Disagree	16	16.0	28.0
Uncertain	33	33.0	61.0
Agree	39	39.0	100.0
Total	100	100.0	

Note : 3G technology in Tirupur customers are feel success in india ,only 39% of the SME'Sare agree this point and 33% of the customers are uncertainly it success in india ,but 28% of the customers are it not success in india it will take some more time . 39% of the BSNL users are 3G will be success in india based on their services.

CHART-14  
SUCCEES IN INDIA



## **FINDINGS :**

1. Most of the customers are belongs the age group of 35-45.
2. In the sample size 71% male customers
3. 46% of the customers are have a post graduate qualification and most of them 45% of the customers also educated but only 8% of customer are not educated.
4. Occupation of the customers 41% of the customers are business holders and remaining customers are employees in organisation.
5. Mostly high income group of the customers are use bsnl services in their business 37%
6. The 100 sample size customers 60% of the customers are have a awareness of 3g technology
7. 40% of the customers are satisfied bsnl net speed and charging of the services .
8. More than 40% of the customers are daily using bsnl services in their business.
9. At the same time more customers are feel bsnl charge more amount in their services
10. The bsnl customers are feel about the 3G mobile have more costly.

11. There is a positive sign of migration from 2G/2.5G technology to 3G technology if offered in coimbatore and Tirupur.
12. No other telecom provider about 3G technology has approached to the respondents.
13. In India awareness about 3g technology is less when compared to other foreign countries is agreed by most of the respondents.
14. The telecom service provider most suitable for implementing 3G technology is BSNL and AIRTEL.
15. 3G services most likely to succeed in India.

## **SUGGESTION**

- 1.The bsnl must reduce their cost of services.
- 2.bsnl must conduct awareness programme about 3G in Tirupur.
3. Proceed ahead and implement as soon as possible because private players come in to role.
- 4.creat more infrastructure in 3G services .
5. Enhance customer service.

## **CONCLUSION:-**

1. Thus the study concludes that 3G technology most likely to succeed and would bring revolutionary in both communication and teaching field.
2. Also awareness programs should be initiated by BSNL in order throw the light of knowledge about 3G technology in customer's mind.
3. The cost of 3G phones should be taken in to account because it plays a vital critical factors in launching 3G technology.

# **ANNEXURE**

## A Study on Customer Perception and Patronage of Forthcoming 3G Technology in Coimbatore and Tirupur

(Please choose your options wherever necessary)

### Personal details:

1. Please indicate your gender.
  - a) Male
  - b) Female
2. Please indicate your age group.
  - a) Less than 20 yrs
  - b) 20 - 35 yrs
  - c) 36 - 45 yrs
  - d) 46-55 yrs
  - e) more than 55 yrs
  - f)
3. Please indicate your marital status.
4.
  - a) Single
  - b) Married
5. Please indicate your highest level education you have completed
  - a) Non graduate
  - b) Graduate
  - c) Post graduate
  - d) Doctoral
6. Please indicate one category that best describes your occupation
  - a) Business
  - b) Salaried
  - c) Self employed
  - d) Student
  - e) Others(please specify
7. Please indicate your monthly income.
  - a) Less than RS. 5000/-
  - b) Rs. 5000/- to Rs. 15000/-
  - c) Rs. 15001/- to Rs. 25000/-
  - d) More than Rs. 25000/-

## 3G TECHNOLOGY

1. Are you aware of forthcoming 3G technology?
  - a) Yes
  - b) No
  
2. If you know about 3G technologies, how did you come to know?
  - a) Through print media [newspaper / magazine]
  - b) Through Electronic Media [Radio / television]
  - c) Through Internet website
  - d) Through Verbal [Friends / Family]
  
3. Will you consider using 3G mobile service?
  - a) yes
  - b) no
  
4. If yes, what motivates you to think for migration from 2G / 2.5G technology to 3G technology?
  - a) Enhanced multimedia (voice, data, video and remote control)
  - b) Usability on all popular modes (cellular telephone, e-mail, paging, fax, Video conferencing and web browsing)
  - c) Broad bandwidth and high speed (upwards of 2 mbps)
  - d) All above
  - e) Others (pl. specify)
  
5. How often do you use mobile phone in order to access online content?
  - a) Often
  - b) Everyday
  - c) Occasionally
  - d) Never

6. Are you satisfied with the prevailing speed of GPRS while browsing internet?

- a) Yes
- b) No

8. If answer to previous question is No, do you expect implementation of 3G soon for faster access?

- a) Yes
- b) No

8. Which facility of 3G services do you prefer more?

- a) Video call facility
- b) Remote control
- c) High speed internet
- d) All the above
- e) None

9. Which type of smart phone do you prefer for 3G service usage?

- a) Apple's iphone
- b) Nokia's N95
- c) Sony Ericsson's W950
- d) LG's KE850
- e) Others (please specify)

10. "3G services are being overcharged for new services and phones". Do you agree with the statement?

- a) Strongly disagree
- b) Disagree
- c) No idea
- d) Agree
- e) Strongly agree

11. "In due course of the tariff structure of 3G services will be reduced by the operators". Do you agree with the statement?

- a) Strongly disagree
- b) Disagree
- c) Uncertain
- d) Agree
- e) Strongly agree

12. "In due course the cost of 3G mobile handsets will reduce". Do you agree with statement?

- a) Strongly disagree
- b) Disagree
- c) Uncertain
- d) Agree
- e) Strongly agree

13. What type of tariff do you prefer / recommend for 3G services?

- a) Usage tariff
- b) Fixed tariff
- c) Flat tariff
- d) Fixed tariff plus usage tariff
- e) No idea

14. Do you feel that the discount/fee waiver is an important factor for telecom service provider for capturing 3G service market?

- a) Strongly disagree
- b) Disagree
- c) Uncertain
- d) Agree
- e) Strongly agree

15. In your opinion, point out the issues that will most critically affect the growth of 3G services?

- a) Expensive input fees required to earn a 3G license
- b) Necessary infrastructure for 3G is very difficult to build
- c) The 3G phones are really expensive
- d) All the above
- e) None

16. In India awareness about 3G is less when compared with other foreign countries. Do you agree this statement?

- a) Strongly disagree
- b) Disagree
- c) Uncertain
- d) Agree
- e) Strongly agree

17. Whether any other telecom service approached you to get opinion about 3G technologies?

- a) Yes
- b) No

18. In your opinion, which telecom service provider is most suitable for implementing 3G technology?

- a) BSNL
- b) AIRTEL
- c) Reliance
- d) Tata
- e) Vodafone

19. "Implementing of 3G technology in India will bring a tremendous change in communication field positively". Do you agree with this statement?

- a) Strongly disagree
- b) Disagree
- c) Uncertain
- d) Agree
- e) Strongly agree

20. "The 3G mobile telephony can revolutionise education in India by providing universal access to the world – quality teachers. Do you agree?"

- a) Strongly disagree
- b) Disagree
- c) Uncertain
- d) Agree
- e) Strongly agree

21. Mobile numbers can become India's social security or national ID number .Do you agree?

- a) Strongly disagree
- b) Disagree
- c) Uncertain
- d) Agree
- e) Strongly agree

22. Better experience of existing services rather than the new services will be the main driver behind 3G adoption. Do you agree?

- a) Strongly disagree
- b) Disagree
- c) Uncertain
- d) Agree
- e) Strongly agree

23. Will you migrate from 2G/2.5G to 3G technology if offered in Coimbatore / Tirupur?

- a) Yes
- b) No

24. Will you recommend your family and friends to use BSNL 3G services?

- a) Yes
- b) No

25. 3G services most likely to succeed in India. Do you agree with this statement?

- a) Strongly disagree
- b) Disagree
- c) Uncertain
- d) Agree
- e) Strongly agree

26. We welcome your opinion / valuable suggestions for implementation of 3G services.

-----  
-----  
-----  
-----

SIGNATURE

## **BIBLIOGRAPHY**

## **BIBLIOGRAPHY**

- [www.bsnl.co.in](http://www.bsnl.co.in)
- [www.cosmos.org](http://www.cosmos.org)
- [www.consumerbehaviour.com](http://www.consumerbehaviour.com)
- [www.letsgomobile.com](http://www.letsgomobile.com)
- [www.RAJPUT BROTHERHOOD.COM](http://www.RAJPUT BROTHERHOOD.COM)
- <http://Ezinearticles.com>
- [www.marketstrategy.com](http://www.marketstrategy.com)