



RESEARCH ARTICLE  
Vol.9.Issue.2.2022  
April-June



---

**INTERNATIONAL JOURNAL OF BUSINESS, MANAGEMENT  
AND ALLIED SCIENCES (IJBMAS)**  
*A Peer Reviewed and refereed Journal*

---

**A STUDY ON CONSUMER SATISFACTION AND PREFERENCE  
TOWARDS 4G CONNECTIVITY WITH SPECIAL REFERENCE TO  
TEMPLE CITY, BHUBANESWAR**

**Dr. Sonam Subhadarshini<sup>1</sup>, Dillip Kumar Mishra<sup>2</sup>**

<sup>1</sup> Assistant Professor, Trident Academy of Creative Technology,

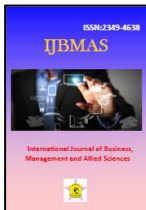
Email:[sonam.subhadarshini@gmail.com](mailto:sonam.subhadarshini@gmail.com)

<sup>2</sup> Associate Professor, NMIET

Email:[dillipkumarmishra@gmail.com](mailto:dillipkumarmishra@gmail.com).

DOI: 10.33329/ijbmas.9.2.20

---



**ABSTRACT**

At present when 5G has already come up and 6G is about to come, 4G technologies is still relatively new that provides high speed data rate to mobile devices in a nation like India with a population more than 1.3 billion. It consists of the Voice-over-LTE network which is the foundation for evolving mobile voice and communication services for packet switching 4G. This article's concentrations are on variables such as age group, gender income, occupation, which are having less impact on the factors of consumer's satisfaction. The research outcome also indicates that, most of the consumers were satisfied towards 4G. This study also indicates that the consumer's satisfaction is comparatively slight advanced. In India the market potential of 4G is growing in a fastest way, so make attractive packages, connectivity, and network coverage, for getting more new consumers to the 4G world. Most of the consumers are satisfied with the 4G rather than 3G. One of the main problems is that the network coverage is only available in urban areas, and another one is heavy traffic among network. So, intensifying the network coverage is the better idea to resolve this problem.

Keywords: Customer Satisfaction, 4G, Mobile Internet, Customer Preference.

---

**1.INTRODUCTION**

The incredible growth of the telecommunication companies in India over the last two decades has made a history. The economic recovery affected in the early 1990s brought around a paradigm shift on the overall business scenario of India. With the arrival of private telecommunication companies in

---

India, the industry observed introduction of mobile phones into the Indian market and it became extremely popular amongst the Indian crowds. India's telecom sector has shown massive expansion in the recent years in all respects of industrial growth due to liberalization in Government policies after 1991. Removal of restrictions on foreign capital investment and industrial de-licensing has allowed various private players to enter into the Indian telecommunication market. The Indian telecom market is regulated by Telecommunication Regulatory Authority of India (TRAI) which acts as an independent regulator was set up in 1997 by the Indian Government. Despite several controversies, the TRAI has earned a reputation for transparency and competency. Presently India has nearly 0.5 Billion mobile subscribers making it the third largest network in the world after China and USA. With a growth rate of 65%, Indian telecom industry has the highest growth rate in the world.

'**Mobile Internet**' refers to access to the Internet via a cellular telephone service provider. 4G uses advanced protocol spectrum up to 4 times as effective & efficiently as 3G systems, have better ways of handling dynamic load changes, creating more bandwidth than 3G systems. **4G** an abbreviation for **Fourth-Generation**, is a term used to describe the next complete evolution in wireless communications. A 4G system will be able to provide a comprehensive IP solution where voice, data and streamed multimedia can be given to users on an "Anytime, anywhere" basis, and at higher data rates than previous generations.

As Internet plays a vital role in all business services and in the process of providing information, facilitating customer service, facilitating financial transactions, managing decisions, management, and more. The Internet is changing the style and type of work, sharing, creating and sharing information and organizing the movement of people, ideas, and things around the world. However, the magnitude of this change is still undermined in terms of detecting negative implications in terms of speed, communication, quality and price. The consumer attitude is constantly changing and the company wants to satisfy the needs of the consumers and the demands according to their needs. This survey assists online users with their level of satisfaction by accepting a list of questions and accepting various tools such as a Pie chart, graphs, simple percentages, chi-Square analysis.

The current study aimed at examining the influence of service quality (internet service quality) on consumer Loyalty through the mediating effect of consumer satisfaction. Through employing the questionnaire on a convenient sample of consumer; the results indicated that internet service quality has a positive influence on consumer satisfaction which in its turn can influence the level of consumer loyalty. The study also reached to the results that good and well-built service quality may lead to consumer satisfaction which in its turn can lead to a better level of consumer loyalty.

## 2. OBJECTIVES OF THE STUDY

- To measure the customer satisfaction level towards 4G networks.
- To measure the perception level of customers while selecting 4G internet service.

## 3. SCOPE OF THE STUDY

This article attempts to identify the factors which may influence the customers awareness, preferences, satisfaction and expectation towards 4G internet services in the city of Bhubaneswar Odisha. The study gives a clear image about the availability of different 4G internet services, and it also provides an insight towards the perception level of the customers while selecting the 4G internet services.

## 4. LITERATURE REVIEW

Singh, (2017) in his article highlighted about the non-preference of customers towards Reliance Network (Rodrigues, 2015) which put the customers in dilemma to find a suitable network. Reliance jio Infocomm Limited announced the launch of its digital service with jio in Mumbai on 1st September 2016 with jio Welcome offer. The permission of TRAI has enabled users the access to unlimited LTE

data and national voice, video, messaging, services, Jio applications and content, free of cost up to 31 December 2016.

Franklin. S (2018) indicates that customers' satisfaction is comparatively slight advanced. In India the market potential of 4G is growing in a fastest way, so make attractive packages, connectivity, and network coverage, for getting more new customers to the 4G world. Most of the customers are satisfied with the 4G rather than 3G. One of the main problems is that the network coverage is only available in urban areas, and another one is heavy traffic among network. So, expanding the network coverage is the better idea to resolve this problem.

Nazir (2015) highlighted on the importance of customer satisfaction in marketing and it also has a strong impact on the profits and the future of an organization. Daikh (2012) and Sekyere (2015) suggest that satisfied customers usually repurchase the company's products and services and customer satisfaction has developed into a vital competitive strategy for many companies (Duong, 2016).

Harish and Raman Kumar Sharma (2010) in highlighted the use Of 3G & 4G Network for Marketing point out that very high download speeds are of great benefit to both retailers and consumers. 3G and 4G Technology have transformed the marketing concept from far away with SMS. Harish and Raman Kumar Sharma said 3G and 4G offer a wide range of services such as Location based service, Geo-Fencing (Virtual field for creating mobile marketing message), customized coupons, Mobile Website, Mobile TV, Mobile -MMS is a great help in Mobile Marketing.

Muhammad Mohsin Butt and Ernest Cyril de Run (2009) pointed out that measuring customer satisfaction is one of the most important steps in improving service quality and retaining customers in the telecommunications industry. Research shows that there are a number of factors that affect the satisfaction of Internet Service Provider users. Price and network installation are two of the most important factors contributing to customer satisfaction. Service providers must realize that in addition to competitive prices, they must carefully monitor service delivery in terms of signal quality and network coverage

Oliver (2010) is the result of a comparison between expectations and tangible performance. When the apparent performance is above expectations, then the customer is satisfied. On the other hand, if the apparent performance is below expectations, the customer is not satisfied. This means that the customer can judge the performance of a product as good or bad, or equal to expectations. The consistency between customer perceptions of the product and their initial expectations leads to satisfaction. Performance perception is considered an attribute of satisfaction level

## 5.RESEARCH METHODOLOGY

The current study was based on the quantitative approach where the questionnaire as a tool of the study. An online survey with the help of google forms was designed to find out customer satisfaction and preference towards 4G internet services. The data were collected from 150 users from Bhubaneswar city by the use of random sampling techniques. The data regarding perceptions and satisfaction of customers are collected in interval scales. Secondary data consist of no. of 4G users, market shares, their services were collected from Magazines, Books, Journals and from the relevant websites. Simple percentage analysis is used to analyze and interpret the data.

## 6.ANALYSIS AND INTERPRETATION

## Demographic Profile of Respondents

Demo Factors	Particulars	Number of Respondents	Percentage
Gender	Male	93	62
	Female	57	38
Age	Less than 20	16	10.66
	20-30	36	24
	30-40	47	31.33
	40-50	38	25.33
	Above 50	13	8.66
Education	Post-graduate	90	60
	Under graduate	39	26
	Others	21	14
Status	Employed	39	26
	Business	31	20.66
	Student	42	28
	Unemployed	38	25.33

## Respondents using various internet service providers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Airtel	29	19.3	19.3	19.3
JIO	108	72	72	91.3
Bsnl	9	6	6	97.3
Others	4	2.6	2.6	100
Total	150	100.0	100.0	

**Interpretation:** Above table reflects the 72% of the customers are using JIO, 19% are using Airtel, 6% customers are using BSNL and approx. 2 % customers are using Others 4G internet.

## Use of internet

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Work	42	28.0	28.0	28.0
Social Networking	57	38.0	38.0	66.0
Website	18	12.0	12.0	78.0
Study	24	16.0	16.0	94.0
Other	9	6.0	6.0	100.0
Total	150	100.0	100.0	

**Interpretation:** from the above analysis it is inferred that 38% of respondents using internet for social networking, 28% for work, 16% for study purpose, and 6% for other purposes.

#### Factors affecting customer preference

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Price	24	16.0	16.0	16.0
Speed	63	42.0	42.0	58.0
Network Coverage	33	22.0	22.0	80.0
Offers	18	12.0	12.0	92.0
Others	12	8.0	8.0	100.0
Total	150	100.0	100.0	

**Interpretation:** from the above analysis it is found that 42% of the respondents prefer the brand of 4G network based on the internet speed, where as 22% for network coverage, 16% for the price.

#### Tariff plan influence the customers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Free Usage	54	36.0	36.0	36.0
Tariff(Usage)	21	14.0	14.0	50.0
Tariff (Fixed)	18	12.0	12.0	62.0
Tariff(Call+Intern et)	54	36.0	36.0	98.0
Other	3	2.0	2.0	100.0
Total	150	100.0	100.0	

**Interpretation:** from the above analysis it is found that the tariff plan contains free usages and the tariff plan that give dual usages (call and internet) influence the consumer most. 14% and 12% customers are also given their preference for tariff based on usages and tariff based on fixed.

#### Customer satisfied with the available 4G Network

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	129	86.0	86.0	86.0
No	21	14.0	14.0	100.0
Total	150	100.0	100.0	

**Interpretation:** From the above table it is concluded that 86% of customers are satisfied with their 4G connectivity which they have chosen with their preference. But still 14% of customers are not satisfied with their 4G connectivity.

## 7. CONCLUSION

In today's competitive business, customers are considered as the backbone of the company. Treating the customer like friends is the best way to attract them and make them always come back. Customer satisfaction will help business build stronger relationship.

This study explored the customers' satisfaction and preference towards 4G internet service providers. The study was limited with 150 internet users. In this study it was aimed to find out the customers' satisfaction and preference by considering various factors like speed, network coverage, tariff plan etc. Majority of the customers are using JIO 4G network for better speed, network coverage. Now a days while choosing a 4G network, price is not affecting as there is hectic competition among the service providers rather customers are giving emphasis on internet speed. It is found that customers

are more attracted towards free usages along with the dual tariff scheme of the service provider. In a concluding note the study revealed that maximum customers are satisfied with their service providers.

## REFERENCE

- [1]. R. Harish and Raman Kumar Sharma (2010), Use of 3G and 4G in Mobile Marketing, Marketing Mastermind, May 2010, Page No. 27-31
- [2]. Ashish Das and Sukesh Kumar, (2011), Understanding Users of Mobile services in Rural area: A case of Bishalkhinda Village in Odisha, The IUP Journal of Marketing Management, Issue February 2011, Page No 54 to 63
- [3]. Shirshendu Ganguly (2008), Drivers of Customer Satisfaction in the Indian Cellular Services Market, Icfai Journal of Management Research, Volume VII, Page No 51-69
- [4]. Muhammad Mohsin Butt & Ernest Cyril de Run (2009), Modeling customer satisfaction in cellular phone services, Journal Kemanusiaan bil, Issue -2009,
- [5]. Abhishek kumar Singh and Malhar Panikar (2013) did a study titled "A study report .to find out Market Potential for 4G Business in pue".
- [6]. Dr Sandhya Joshi, Parveen Khurana, Shashi Khurana, (2010), Service Quality in Telecom Sector – A study of Telecom Service Providers of Chandigarh, Panchkula and Moholi, International Journal of Mgmt Marketing research, Vol.1, Issue 1 (December, 2010), Page No. 90 -98
- [7]. Mudi Ratna Bhalla and Anand Vardhan Bhalla (2010), "Generation of Mobile Wireless Technology: A Survey
- [8]. Ahmed Ishfaq, Nawaz Muhammed Musarraf, Usman Ahmed, Shaukat Zeeshan, Ahmed Naveed and Rahman Wasim. UI (2010). A mediation of customer satisfaction relationship between service quality and repurchase intentions for the telecom sector in Pakistan: A Case study of university students. African Journal of Business Management Vol.4 (16) 18 Nov. 2010 ISSN 1993-8233@2010 Academic Journals. Pp 3457-3462.
- [9]. Hanif Muzammil, Hafeez Sehrish, Riaz Adnan (2010). Factors Affecting Customer Satisfaction. International Research Journal of Finance and Economics ISSN 1450-2887 ISSUE 60(2010) pp 44-52.
- [10]. Ibrahim Maha Syed, Sadiq Naosheen, Sajjid Ali (2011). Impact of Ethical practices on Quality of Services of bile Telecom Companies: Case Study of Pakistan. African journal of Business Management Vol.8 (24), 2011 pp 357-362
- [11]. Ismali Hishamudi and Khatibi Ali (2004). Study of the Relationship between Perception of value and price and customer satisfaction: The case of Malaysian Telecommunications Industry. Journal of American Academy of Business, Cambridge; Mar 2004; 4, ½; ABI/INFOM pp 309-313.
- [12]. Khan Inamullah (2012). Impact of customers Satisfaction And Customers Retention on Customers Loyalty.
- [13]. International Journal of Scientific & Technology Research Volume 1, Issue 2, March 2012. ISSN 2277- 8616 pp 106-110.
- [14]. Khokhar Shahid Zaman, Hussain Farooq, Qureshi Tahir Masood, Anjum Ibrahim, Samran Ali and Arshad
- [15]. Rizwan (2011). Only customer satisfaction and customer loyalty is not enough: A study of Pakistan's telecom sector. A study of Pakistan's telecom sector. African Journal of Business Management Vol.5 (24), 14 October 2011. pp. 10176-10181.