



## Mobile phone network service providers in Bilaspur, Chhattisgarh: A study on consumer brand preference and selection

Harry George\*, Akriti Sharma, Priyanka Tiwari

Assistant Professor, Department of Hotel Management and Hospitality, Atal Bihari Vajpayee University, Bilaspur, Chhattisgarh, India

### Abstract

**Purpose:** This research aims to concentrate on identifying how customers perceive various mobile phone network service providers based on factors influencing them. It's crucial for service providers to comprehend the impact of these variables on customer perception and satisfaction to win customer loyalty.

**Theoretical framework:** The study provides summary on topics related to brand preference, brand selection, customer satisfaction and mobile networks.

**Design/methodology/approach:** To achieve this, a survey-based descriptive research design was employed for the study conducted in Bilaspur District, Chhattisgarh.

**Findings:** It is found that Bharti Airtel is the first choice of mobile network service users of Bilaspur Chhattisgarh as it has been ranked first with a score of 37. It is also found that Reliance Jio is the major competitor of Bharti Airtel and it ranked second with a very narrow difference. It is also found that Vodafone Idea and BSNL stood third and fourth in the ranking and are the least preferred networks among the users of Bilaspur, Chhattisgarh. The findings from this study can assist network providers in understanding and work to improve on the factors responsible for choosing a network service.

**Conclusion:** In the competitive business environment, the primary objective of every business organization is to prioritize customer preferences. The telecommunications industry, being integral to various business activities, faces stiff competition among private operators. Therefore, it's vital for service providers to grasp the influence of various demographic variables on customer perception and satisfaction to gain their trust.

**Keywords:** Consumer brand, consumer satisfaction, Mobile network, services

### Introduction

It has been viewed that mobile phones have become an indispensable aspect of daily life for humans. In particular, unlike other technologies, mobile phones are utilized without the need for formal training in any location or situation, even while on the move. Consequently, it is crucial to design mobile phone interfaces that are user-friendly and intuitive. This has proven to be an effective tool for the advancement of developing economies, with this sector experiencing significant growth over the past decade (TRAI). The rapid expansion can be attributed to proactive and beneficial policy measures implemented by the government, as well as the innovative and entrepreneurial spirit of both private and public telecom service providers. The telecommunications industry is one of the fastest-growing sectors in India and ranks as the second-largest market in the world (TRAI). Telecommunication serves as the primary and sole means to connect the world, playing a vital role in the progress of social, cultural, commercial, and economic activities. Thus, advancing the telecommunications sector and building infrastructure is essential to play an increasingly significant role and meet the evolving needs of the people.

In today's highly competitive business environment, the central objective for every business organization is to understand and shape perceptions, with customer needs at the forefront of all activities. The telecommunications industry is particularly relevant in this context, where numerous private operators engage in intense competition. Service providers must gain a deep understanding of how various demographic factors influence customer perception

and satisfaction to earn customer loyalty (Robinson, H., 2003).

Each operator in this industry offers a range of calling plans, including both pre-paid and post-paid options, to cater to diverse needs and preferences. Factors such as the variety of services, network coverage quality, and network access influence customers' choices. Additionally, service providers face challenges related to various charges, including activation fees, monthly access charges, allotted minutes, extra minute fees, and contract terms (Alshurideh, Muhammad, 2016)<sup>[7]</sup>.

The primary objective of this study is to assess and identify customers' perceptions of different mobile phone network service providers based on factors influencing their preferences. To achieve this, a survey-based descriptive research design was employed in the Bilaspur District of Chhattisgarh state. The findings of this study could be valuable for network providers seeking to improve the quality of their services to better meet customer expectations and satisfaction. It can also be useful for people in understanding the priority factors while selecting a network.

According to Telecom Regulatory Authority of India (TRAI) as on 31<sup>st</sup> December 2021

- The total number of telephone subscribers in India reached 1173.83 million.
- The number of wireless subscribers is 1154.62 million
- The number of wire line subscribers is 23.79 million.
- There are 6 major mobile network service providers in India namely Bharti Airtel, Reliance Jio, Quadrant, Tata

Telecommunication, MTNL, Vodafone Idea, Reliance Communication.

- Out of 6 service providers only 4 are operational in Chhattisgarh namely: Bharti Airtel, Reliance Jio, BSNL and Vodafone Idea.

**Table 1:** Mobile network Service Provider-wise growth in Subscriber base in India

Service Provider	Subscriber base (in million)			Rate of Growth (%)	Market Share as On Dec-20 (%)	Market Share as on Dec-21 (%)
	Dec-20	Dec-21	Yearly Net Addition/decline			
Bharti Airtel	343.27	361.35	18.08	5.27	29.24	30.66
Reliance Jio	411.53	421.05	9.52	2.31	35.06	35.73
Quadrant	0.20	0.21	0.01	4.35	0.02	0.02
BSNL	125.88	121.95	-3.93	-3.12	10.72	10.35
Tata Tele.	1.66	1.60	-0.06	-3.56	0.14	0.14
MTNL	6.28	6.01	-0.27	-4.23	0.53	0.51
Vodafone Idea	284.78	266.05	-18.73	-6.58	24.26	22.58
Reliance Com.	0.23	0.19	-0.05	-19.78	0.02	0.02
Total	1,173.83	1,178.41	4.58	0.39	100	100

Source: trai.gov.in

**Table 2:** List of Cellular Mobile Service Providers currently providing service [As on 31st December, 2021] Source: trai.gov.in

Sl.No.	Service Provider	Area of Operation
1	Bharti Airtel Ltd	All India
2	Reliance Communications/ Reliance Telecom Ltd	All India (except Assam & North East)/Kolkata, Madhya Pradesh, West Bengal, Himachal Pradesh, Bihar, Odisha, Assam & North East
3	Vodafone Idea Ltd	All India
4	BSNL	All India (except Delhi & Mumbai)
5	MTNL	Delhi & Mumbai
6	Reliance Jio Infocom Ltd	All India

Source: trai.gov.in

**Literature Review**

In his 2012 study titled "Consumer Preferences for Mobile phone Service Provider," Chintan Shah, explores the factors that influence customers' choices of mobile phone service providers. The research involved surveying 150 mobile users in Bardoli city, revealing that service quality, brand image, service charges, plan offerings, and network quality are significant considerations in determining mobile service provider preference.

In a 2009 study, Karthik, investigated "Customer Satisfaction on Mobile Service Provider Networks" to understand and assess customer satisfaction levels among mobile service providers. The research, conducted in twin cities, concluded that the choice of mobile handset and services are intertwined factors influencing customer satisfaction.

Myilswamy and Ratheesh Kumar (2013), found that both post-paid and prepaid customers favored using Airtel mobile services due to factors such as features, rental charges, tower coverage, talk time, advertising, and corporate schemes. They suggest that paying special attention to these factors can enhance business by satisfying consumers.

In their 2012 study, Jegan and Sudalaiyandi, explored consumer preferences and satisfaction toward mobile phone service providers. They found that factors like call tariffs, network coverage, and brand image significantly influence consumer preferences and satisfaction.

Debnath's 2008 [6] study emphasizes that service providers aim to create loyal customer bases by improving their performance and retaining existing customers. The study discusses the liberalization of the Indian telecom sector and its impact on the industry.

Bhatt's 2008 study, "A Study of Mobile Phone Usage among Postgraduate Students," focused on the importance of understanding mobile technology's key characteristics, especially for various stakeholders such as mobile carriers, service providers, content developers, equipment manufacturers, and parents. It also examined usage differences by gender.

Kalpana and Chinnadurai's research, titled "Promotional Strategies of Cellular Services: A Customer Perspective" delves into the changing customer preferences and the role of advertising in shaping customer opinions regarding cellular services in Coimbatore city.

Zafar's 2013 study examines how mobile service attributes, including call rates, service quality, availability, promotions, and brand image, and influence purchasing decisions. The results highlight gender differences in consumer preferences.

Raj Kumar Paulrajan and Harish Rajkumar's 2011 [1] study explores consumer preferences when selecting mobile telecommunication service providers. They found that communication and price significantly affect consumer choices, while product quality and its availability impact provider's selection.

Samuvel's 2002 observations reveal factors considered by respondents when selecting a landline set, including size, quality, price, and instrument servicing. Most respondents expressed satisfaction with payment systems, service quality, coverage, and complaint resolution regarding their mobile service provider.

In 2011, Zahari Ahmad Suffian Mohd, Momani Khaled Al, and Nor Azila Mohd studied customer loyalty in the context of mobile phone service subscribers. They found that privacy positively influences customer loyalty.

Petzer D. J. and Meyer C. F. De's 2011<sup>[8]</sup> research focused on generational differences in perceived service quality, satisfaction, and behavioural intent toward cell phone network service providers.

Dixit Sanjay, Shukla Harish *et al.*'s 2008 study aimed to determine the prevalence of monophobia among students of a medical college in Central India, considering the increasing number of mobile phone users in the past decade. The study found that this disorder is prevalent irrespective of gender.

Rajpurohit Prof. R.C.S. and Vasita Dr. M.L.'s 2011 research concentrated on "consumer preferences and satisfaction levels toward mobile phone service providers in Jodhpur city, Rajasthan." It concluded that consumers prefer prepaid plans and treat their mobile phones as a necessity, with BSNL being the most preferred service provider.

Kalavani's 2006 analysis revealed that while most respondents held favourable opinions about services, some issues required attention from service providers. The study stressed the importance of aligning promised and offered services.

P. Vijay and Dr. Krishnaveni's 2017 study focused on consumer preferences toward mobile phone network service providers in the rapidly growing Indian mobile telephony market. It found that Airtel, Idea, and Reliance were the most preferred service providers, with service quality, value-added services, and customer care playing influential roles in selection

**Research Gap**

Many studies have been undertaken to evaluate service quality, customer satisfaction, and customer preferences concerning mobile networks and their different aspects. However, the current study stands out due to its uniqueness; it is specifically carried out in Bilaspur city of Chhattisgarh State. The primary objectives are to identify customer preferences among the chosen mobile network service providers and to analyse the factors that drive customers to select a particular mobile network.

**Objectives of the study**

The main objectives of the research are as follows

- To know the consumer preference towards various mobile phone network service provider at Bilaspur city.
- To identify and analysing the factors that encourage customers to avail the services from mobile networks service providers at Bilaspur city.

**Significance of the Study**

Consumer preference in marketing pertains to the opinions, perceptions, and attitudes that customers have about a company, its products, and its brand. These preferences are influenced by various factors, encompassing both direct and indirect experiences with the offerings. A study was conducted to assess consumer preferences for different brand services in Bilaspur, Chhattisgarh. Consumer preference is a pivotal factor in business, irrespective of the

industry or the type of products and services being offered. Customers play a critical role in shaping a company's marketing strategy. In contemporary marketing concepts, the central idea is to tailor all aspects of the business to ensure customer satisfaction. This entails not only focusing on making sales but also on providing exceptional after-sales service to meet and exceed customer expectations.

Achieving customer satisfaction from every angle is of paramount importance. Given that the mobile service business in India is one of the rapidly evolving sectors, it is both crucial and intriguing to investigate the factors that drive consumer satisfaction in this industry, particularly in a context where free internet and unlimited calling services are widely available. To explore this, research was conducted in Bilaspur, Chhattisgarh.

The findings of this report reveal that with the introduction of free internet and unlimited calling services by almost all companies, customers have experienced higher levels of contentment and satisfaction. Moreover, it was observed that the key drivers that enable mobile service providers to attract and retain customers are competitiveness, trustworthiness, and network coverage. These elements are essential in building strong customer relationships in this competitive industry.

**Research Methodology**

A Descriptive research is carried out using random area sampling method by collecting 150 sample from the population using mobile network services where 120 samples were found valid and complete. The survey is conducted using close ended questionnaire through personal interview, telephone and e-mail from participants who are currently residing in different parts of Bilaspur city. 30 samples each were collected from north, south, east west and central Bilaspur.

**Weighted Average Rank Analysis**

It serves as a valuable instrument for evaluating the importance assigned by respondents to distinct categories concerning the study's various aspects. After collecting and consolidating opinions from respondents, we compute an average rank, and the final ranking is determined with the guideline "Higher average signifies greater priority."

The analysis encompasses the following elements: examining customer preferences regarding their choice of a mobile network service provider and identifying the factors that influence customers in selecting one. The outcomes are then conveyed with appropriate explanations and interpretations."

**Data Analysis and Interpretation**

**Preference of Customers in Choosing Mobile Network Service Provider**

The following service providers considered in the study Bharti Airtel, BSNL, Reliance Jio, Vodafone Idea.

**Table 3:** Preference of Customers in choosing mobile network service provider.

Weights	4	3	2	1	Total	Weighted Average	Rank
Rank	I	II	III	IV			
Mobile Network Service Providers							
Bharti Airtel	51	38	21	10	120	37	I
	204	114	42	10	370		

BSNL	09	11	46	54	120	21.5	IV
	36	33	92	54	215		
Reliance Jio	43	45	23	09	120	36.2	II
	172	135	46	09	362		
Vodafone Idea	17	26	30	47	120	25.3	III
	68	78	60	47	253		

Source: Primary Data

The above table shows Mobile service providers list and their ranking done by the respondents. Based on the ranking given by the respondents of Bilaspur, Chhattisgarh, weighted average analysis is done and weights are given to every service provider. It is found that Bharti Airtel ranked first with a score of 37, Reliance Jio is ranked second with a score of 36.2, Vodafone Idea holds third rank with 25.3 score and BSNL stood last with a score of 21.5. It is

concluded that Bharti Airtel is found to be most preferred mobile network service provider in Bilaspur, Chhattisgarh.

**Vital factors that influence the customers to select a mobile network service provider**

The following factors are considered in the study:

Service Quality, network Coverage, customer care service, value added services, value for money, Promotional offers. Speed, data plans

**Table 2:** Vital Factors that influence the Customers to select a Mobile Network Service Provider.

Weights Rank	8 I	7 II	6 III	5 IV	4 V	3 VI	2 VII	1 VIII	Total	Weighted Average	Rank
Factors that influence the Customers to select a Mobile Network Service Provider											
Quality of Service	35	23	15	9	11	20	4	3	120	19.1	V
	280	161	90	45	44	60	8	3	691		
Network Coverage	70	21	10	4	3	3	5	4	120	22.8	I
	560	147	60	20	12	9	10	4	822		
Customer Care	45	19	12	10	7	8	11	8	120	19.36	IV
	360	133	72	50	28	24	22	8	697		
Value Added Service	21	25	23	12	6	7	13	13	120	17.3	VII
	168	175	138	60	24	21	26	13	625		
Value for money	35	51	8	4	6	8	5	3	120	21.2	III
	280	357	48	20	24	24	10	3	766		
special offers	10	11	19	12	11	17	25	15	120	13.6	VIII
	80	77	114	60	44	51	50	15	491		
Speed	65	12	13	5	8	9	5	3	120	21.6	II
	520	84	78	25	32	27	10	3	779		
Recharge plans	42	12	15	9	2	6	17	17	120	17.5	VI
	336	84	90	45	8	18	34	17	632		

Source: Primary Data

From the above table it can be seen that from the various factors the respondents have chosen network coverage as their priority with the score of 22.8, Speed of the server stood second with a score of 21.6, value for money is the third most important factor while choosing a mobile network service provider with 21.2 score, Customer care services stands fourth with a score of 19.36, Service quality stood fifth in the rating with 19.1 score, recharge plans was the sixth choice of the respondents with a score of 17.5, value added service ranked seventh with 17.3 score and special offers stood last with 13.6 score with lowest priority. In conclusion it is found that the topmost factors for service user is network coverage as the priority followed by speed and value for money.

**Findings Suggestions and Conclusion**

**Findings**

**Bharti Airtel:** It is found that Bharti Airtel is the first choice of mobile network service users of Bilaspur Chhattisgarh as it has been ranked first with a score of 37. It is also found that Reliance Jio is the major competitor of Bharti Airtel and it ranked second with a very narrow difference. It is also found that Vodafone Idea and BSNL

stood third and fourth in the ranking and are the least preferred networks among the users of Bilaspur, Chhattisgarh.

**Network Coverage:** it is found that the service users have prioritize Network coverage, speed and value for money as their first, second and third priority among various factors related to mobile network service providers. Users are expecting a good coverage of mobile network from the service providers. It can be thus said that Bharti Airtel is providing better network coverage when compared to other networks, as it is ranked first by users in their preference.

**Suggestions**

It is found that Bharti Airtel and Reliance Jio are the major player and competitor in Bilaspur. Both have to focus on the network coverage, speed and value for money to lead the market as they are the prime factors chosen by the users while selecting a service provider.

Vodafone Idea and BSNL have to improve their network coverage, speed and tariff price in order to compete and survive in the market.

Network service providers should improve their customer care services and should respond to the customer's grievances.

The service provider should first focus on retaining their existing customers and then adding new customers.

Most of the customers are not aware of many additional facilities provided therefore, the service provider should take all necessary steps to create awareness among customers about the facility.

Network service providers should improve their network coverage as it is the most influential attributes for a customer for selecting a network.

### Conclusion

The research paper was undertaken with the objective to examine the result of the consumer perception towards the brand preferences of mobile phone network service providers and to find out the prime factors while choosing a mobile phone network service providers. As per the findings it can be stated that the respondents of Bilaspur, Chhattisgarh are prioritizing network coverage of mobile network. As the district is divided in to urban, semi urban and rural areas, it becomes vital to avail network connectivity in order to use the services. There are respondents who come to Bilaspur for work from nearby rural area and they look for a network which is consistent in city and village. The study shows that network speed and the value for money are the next important factors after network coverage which motivates the respondents while choosing a network. In this era, most of the people are using social media platform like Facebook, Intagram, whatsapp, telegram, twitter etc. on phone and their expectation is buffer free speedy network, (2021, May 3). They also expect the tariff rates to be pocket friendly.

Here from the result of the study, we can deliberately conclude that the respondents prefer Airtel and JIO for their varied services whereas Vodafone-Idea and BSNL were found to be dissatisfactory as percentage of preference for these brands were low. Consumer perception towards Airtel and JIO brand is comparatively very good and satisfactory among respondents who prefer to use Airtel and JIO brand of mobile phone network services providers.

### References

1. Paulrajan R, Rajkumar H. Service quality and customers preference of cellular mobile service providers. *Journal of technology management & innovation*,2011:6(1):38-45.
2. Shah C. Consumer preferences for mobile service providers: An empirical study in Bardoli. *International Journals of Marketing and Technology*,2012:2(8):269-288.
3. Aker JC, Mbiti IM. Mobile phones and economic development in Africa. *Journal of economic Perspectives*,2010:24(3):207-232.
4. Chakraborty S, Sengupta K. An exploratory study on determinants of customer satisfaction of leading mobile network providers—case of Kolkata, India. *Journal of Advances in Management Research*,2013:10(2):279-298.
5. Mobile network optimization market size, share Industry report, (n.d.), 2025. Retrieved from <https://www.grandviewresearch.com/industry-analysis/mobile-network-optimization-mno-market>
6. Debnath RM, Shankar R. An application of data envelopment analysis.
7. Alshurideh, Muhammad. Exploring the Main Factors Affecting Consumer Choice of Mobile Phone Service Provider Contracts. *International Journal of Communications, Network and System Sciences*,2016:09:563-581. 10.4236/ijcns.2016.912044.
8. Petzer DJ, De Meyer CF. The perceived service quality, satisfaction and behavioural intent towards cellphone network service providers: A generational perspective. *African journal of business management*,2011:5(17):7461.
9. Ismail M, Zhuang W, Serpedin E, Qaraqe K. A survey on green mobile networking: From the perspectives of network operators and mobile users. *IEEE Communications Surveys & Tutorials*,2014:17(3):1535-1556.
10. Rajan AP, Karthikeyan S. A study about the key service parameters influencing customer loyalty towards mobile service providers of Indian telecom industry. *IJAR*,2016:2(9):163-166.
11. Sathish M, Kumar KS, Naveen KJ, Jeevanantham V. A study on consumer switching behaviour in cellular service provider: A study with reference to Chennai. *Far East Journal of Psychology and Business*,2011:2(2):71-81.
12. Kim M, Noble B. Mobile network estimation. In *Proceedings of the 7th annual international conference on Mobile computing and networking*, 2001, 298-309.
13. Meddour DE, Rasheed T, Gourhant Y. On the role of infrastructure sharing for mobile network operators in emerging markets. *Computer networks*,2011:55(7):1576-1591.
14. Jegan, Sudalaiyandi. Consumer Behaviour towards Mobile Phone Services in Kovilpatti, Thoothukudi District (India) - A Case Study. *International Journal of Current Research*,2012:4(4):261-265
15. Kim M, Park M, Jeong D. The Effects of Customer Satisfaction and Switching Barrier on Customer Loyalty in Korean Mobile Telecommunication Services. *Telecommunications Policy*,2004:28(2):145-159.
16. Prasetyo YT. Consumer preference analysis on mobile service providers: A case study of foreign students in Taiwan. 2019 IEEE 6th International Conference on Engineering Technologies and Applied Sciences (ICETAS), 2019. doi:10.1109/icetas48360.2019.9117498
17. Providers in Coimbatore District. *International Journal of Business and Management Invention*,2013:2(9):1-5.
18. 2021. Retrieved from <https://www.trai.gov.in/>
19. The rise and rise of media on your mobile phone - in one chart, 2021. Retrieved from <https://www.weforum.org/agenda/2021/05/rise-of-media-on-mobile-phone-chart/>