Customer Behaviour On Mobile Phone Network Portability Services

Dr.SP.Mathiraj, Shetty Deepa Thangam Geeta, R. Saroja Devi

Abstract: This research paper attempts to measure the pull and push factors which influence portage and identify the extent of portability action among different categories of customers. The present study is about customer behaviour in mobile number portability (MNP) in Chennai City. The research is based on both secondary and primary studies. By using Osisioma et al. (1974) the formula, the sample size arrived at is 384. A sample size of anything above 384 is quite acceptable. The primary data from the 400 customers was collected using Convenience sampling technique for the survey. The study focuses mainly on examining the behaviour and factors influencing the mobile number portability.

Index Terms: Mobile Number Portability, Customer behaviour, Portability, Mobile network Services ,Mobile Portability.

———————————————— ◆ ————————————————

1. INTRODUCTION

The Mobile Phone Network service has been recognized throughout the world as an important tool for socio-economic development of a nation. As majority of people depend on mobile phone for communication, banking, internet and other activities, Mobile Phone service providers are offering various facilities to attract the customer along with updated technology. The challenge for the service providers is to find out the critical factors that influence the customer preference. A Customer always tries to buy a product which has many attributes fulfilling their need. As perception towards quality is more, customers are becoming harder to please, smarter, more demanding, less forgiving and they are approached by many service providers with more or less equal offers. The fundamental goal of service providers is to increase customer satisfaction and to maintain long term customer relationship. Nowadays, the mobile phones are progressively becoming cheaper and affordable for the people, the service providers are also introducing new schemes, offers and technology advancement in their service. This has resulted in more and more consumers buying mobile phones and Network Portability.

2 REVIEW OF LITERATURE

Abd-Elrahman Hassanein Abd-Elrahman (2018). 'A Review of Telecommunications Service Quality Dimensions ", The purpose of this paper is to review the service quality dimensions established in various empirical studies conducted across the world specifically referred to telecommunications services. This paper reviews only empirical studies based on survey data and statistical methods of analysis since 2001 till 2017. The critical review of different service quality models is intended to compile the various dimensions which emerged out of the studies, compare the commonality between them

———————————————————

- *Associate Professor, Dept. of Corporate Secretaryship, Alagappa University, Karaikudi, Tamil Nadu India.. Email: dramathiraj@gmail.com, Mobile:9442215552*
- *Ph,D Scholar, Department of Commerce, Alagappa University, Karaikudi, Tamil Nadu India. Email: dramrajsuji@gmail.com, Mobile:9585152515*
- *Assistant Professor, Dept. of Commerce, Karpagam Academy of Higher Education (Deemed to be University), Coimbatore-21, Tamil Nadu. Email: rajendransaro@gmail.com, Mobile:9787445226*

INTROand highlight the limitations of the studies. The findings revealed that the meaning of service quality may have some universal aspects, as demonstrated by the similarities in the underlying dimensions as proposed in the different studies. This paper lends support to the contention that the dimensionality of SERVQUAL and importance of the dimensions vary with the cultural and country context even within the telecommunication industry. It identifies eight service quality dimensions in the telecommunication services – reliability, tangibles, responsiveness, assurance, empathy, network, customer service and convenience. The findings are valuable to academics and practitioners in providing a direction for service quality improvement by indicating the common theme that emerges from the service quality models.

3 MOBILE PHONE NETWORK SERVICES IN INDIA

India is the world's second-largest telecommunication market, with around 1.19 billion subscribers as on September 2018. The telecom market can be split into three segments – wireless, wire line and internet services. The wireless market domination comprises 98.14 per cent of the total subscriber base, as on September 2018. Wireless subscriptions witnessed a CAGR of 19.61 per cent to reach 1,183.41 million in 2018. India is the second largest country in terms of internet subscribers also with 512.26 million internet subscribers in June 2018. India became the world's fastest-growing market for mobile applications in the first quarter of 2018 and remained as the world's second fastest growing market for Google Play downloads in the third quarter of 2018. Strong policy support from the government has been crucial to the sector's development. Foreign Direct Investment (FDI) cap in the telecom sector has increased to 100 % from 74 %. The Government of India has launched the National Digital Communications Policy in 2018, which envisages attracting investments worth US$ 100 billion in the telecommunication sector by 202.

4 IMPORTANCE OF THE STUDY

Network portability customer behaviour is based on customer satisfaction. It plays an important role, in bringing sales growth and market share. According to Philip Kotler, "Customer satisfaction is the level of a person's felt state resulting from comparing a product's perceived performance in relation to the person's expectation". Customer satisfaction includes quality, availability, after sales support etc., Technology advancement takes a prominent

position in the marketing management literature; it is the customer expectation from the service providers. Now a days, as the average revenue per users is decreasing from voice drops, the mobile phone service providers are increasingly looking for providing quality service with an additional revenue stream. The customers have every chance to portage the mobile phone network service provider due to dissatisfaction. This is an imperative study since its outcome will contribute valuable learning about the field of Network Portability Behaviour. This research may serve as a highly useful input to Mobile phone network service providers, researchers and media futurists. The advantage of this study is to contribute previously unavailable data to this field. This study is easy to replicate and scale- up, by retrieving similar data from other regions in Tamilnadu.

Statement of the Problem

In India among many network service providers, the major players   are Aircel, Airtel, BSNL, Reliance, TATA Docomo, Vodafone, Idea, etc. Though they provide new schemes, offers and technology advancement in their services, customers are not satisfied and they try to portage to other service providers to satisfy their service need. In TN, we find most of the people using mobiles, including male and female of different categories, i.e., professionals, business people, IT Company and other company workers, students and others. Every customer expects different service from mobile phone service provider to satisfy their wants, when they feel that their complaints are not responded, rejected and the service is not up to their expectation , immediately they portage to the another. The main reason for the dissatisfaction of a customer is that they expect Quality in service with advancement in technology. The customers expect various parameters like SMS pack, customer care, free talk time, festival offers, full talk time, free roaming etc., with good network coverage and technology advancement.   The Portability behaviour may be more among the students and business people than among others, as the students expect advanced approaches in the option to access internet i.e., Wi-Fi using mobile phone. Customers expect immediate response during dissatisfaction. But some mobile phone network service providers do not respond immediately. The network service providers exploit the customers by activating offers which are not required by them (or) without their intimation; even unwanted Messages and unnecessary advertisements create irritation among customers and make them move to portability behaviour. As, the portability behaviour plays an important role in the mobile phone network service sector, it is very much necessary to analyze the causes and reasons which make the people is portability behaviour. This study attempts to measure the pull and push factors which influence portage and identify the extent of portability action among different categories of customers in Chennai City.

5 OBJECTIVES OF THE STUDY

1. To study the emerging trends in mobile phone network services in India.
2. To explore the factors that influence portage of mobile phone network services.

6 HYPOTHESES OF THE STUDY

1. There is no significant difference between male and female with respect to the degree of importance given to reasons that encourage switching the cellular services
2. There is a difference between male and female with regard to the degree of importance given to the reasons that encourage switching the cellular services
3. There is no significant difference between their gender and their degrees of importance given to the reasons that encourage switching the cellular services.'
4. There is a difference between their gender and their degree of importance given to the reasons that encourage switching the cellular services.

7 RESEARCH METHODOLOGY

Research Methodology is a way of systematically solving the research problem. It is a science of studying how research is conducted scientifically. This study was both analytical and descriptive type of methodology, which includes the sampling technique, collection of data, period of the study, method of analysis, tools for analysis and measurement of variables. They were conducted with a preliminary pilot study followed by the main study.

Pilot Study and Pre-Testing

Before going for a final survey, a Pilot study was conducted to test the reliability and consistency of the scale items with 5-point Likert type values, the factors that influence portage of mobile phone network services, satisfaction of post portability and Value Added Services of mobile phone network services. For the pilot study survey, 50 respondents each from the population of customers were selected. The data were collected using a well-structured questionnaire which is incorporated with a scale with 31 items for measuring factors that encourage you to switch cellular service, another scale with 27 items for measuring customer satisfaction of mobile number portability and 21 items for measuring satisfaction of value added services in current service provider. The scale values range from 1 for 'Strongly Disagree, 2 for 'Disagree', 3 for 'Neutral', 4 for 'Agree' to 5 for 'Strongly Agree'. The collected data were subject to reliability / item analysis to calculate Cronbach's Alpha coefficient, which is a widely used benchmark for ascertaining the reliability and consistency of items in a scale measuring a particular aspect. The Cronbach alpha coefficients, 0.930 for items in the scale measuring factors that encourage you to switch cellular service, 0.893 for items in the scale measuring post portability in the current service providers and 0.796 for measuring satisfaction of value added services in current service providers in the questionnaire, were in good reliability / consistency level respectively.

8 SOURCES OF DATA

The present study comprises of both primary and secondary data. The Primary data are collected by conducting questionnaire based survey among the population of customers in mobile number portability in Chennai City. The Secondary data consist of information from various publications, Annual reports, books, Journals, Magazines, Seminar materials, Published and Unpublished reports, websites and libraries pertaining to Telecom Regulatory Authority of India (TRAI).

Sample Size and Sampling Technique

The sampling technique is a widely adopted technique when the size of the target population is quite large and unknown. As sample is quite large and unknown, customer behaviour of mobile number portability sample size for the present research work is determined based on the following formula as referred by Osisioma et al. (1974).

$$n = \frac{Z^2{}_{\alpha/2}}{4e^2}$$

Where, n is sample size, Z is standard value corresponding to 95% confidence level, and e is the proportion of sampling error in a given situation (allowance of error in sampling considered for the present study is 5%). Thus, using Osisioma et al. (1974) the formula, the sample size arrived at is 384. A sample size of anything above 384 is quite acceptable. For this study, the total sample respondents are 400.   To select the customers for the survey, Convenience sampling technique is used.

9 SCOPE OF THE STUDY

The present study is about customer behaviour in mobile number portability (MNP) in Chennai City. The study focuses mainly on examining the behaviour of MNP, factors influencing the mobile number portability, satisfaction of post mobile number portability and value added services in MNP.

Period of the Study

The study was undertaken during the period from 2015 to 2019. This period was divided and used in a systematic way. During the period from July 2015 to August 2016 the researcher collected review of literature relating to the study. From September 2016 to December 2016, the questionnaire was drafted for the pilot study. The pilot study and re-drafting the questionnaire ware done during the time from January 2017 to March 2017. The final field study survey was made, and analysis work was done during the period from April 2017 to July 2018. The report was prepared during the period from August 2018 to December 2018. In order to study the Mobile Number Portability, their financial performance related data were collected from TRAI websites.

10 EMERGING TRENDS IN MOBILE PHONE NETWORK SERVICES IN INDIA

India's telecommunication network is the second largest within the world by vary of Mobile users (both mounted and mobile phone) with one.418 billion subscribers as on April 2018. During the year 2017-18, wireless subscribers in the country increased the CAGR of 19.2% to reach 1183.4 million followed by the urban wireless tele-density reached 151.78 per cent while rural wireless tele-density which reached 56.31 per cent. It has one among the bottom call tariffs within the world enabled by mega telecommunication operators and hyper-competition among them. As on 31 May 2018, India is now the world's second largest Smartphone user but China had 1.3 billion users in 2018 followed by India having 530 million smart phone users. The Smartphone market will have almost one billion unique mobile subscribers by 2020 in our country. Revenues from the telecommunication system sector area unit expected to grow to US$ twenty six.38 billion by 2020. The upcoming National Telecom Policy of 2018 has envisaged attracting investments worth US$ 100 billion in the telecommunication sector by 2022. Our country's telecommunication market is expected to experience further growth, fuelled by increased non-voice revenues and higher penetration in rural market. Telecom penetration in the nation's rural market reached 56.68 per cent in April 2018. The emergence of Associate in Nursing affluent social class is triggering demand for the mobile and web segments. Government of India by increasing the policy in telecom industry developing for the Foreign Direct Investment (FDI) cap in the telecom sector has been increased to 100 % from 74%. Also, GOI is soon going to come out with a new National Telecom Policy 2018 in lieu of rapid technological advancement in the sector over the past few years. The following chart-1 shows the growth of wireless subscribers in India.

11 DATA ANALYSIS

Social Status-wise Classification of the Respondents
Gender: From the Table 2 it can be understood that out of 400 respondents 277 of them (69.3%) are male; and 123 of them (30.8%) are female. From this we understand that the male respondents take part in the study more than the female respondents.
Age: The researcher has chosen respondents from a wide range of age category from 20 years and above. From the Table 2 it is understood that most of the respondents i.e 46.8 per cent are in the age category of 20-30 years followed by 31-40 and 41-50 years who comprise 20.5 per cent and 20.0 percent, 51-60 years category of respondents constitute in the sample about 8.3 per cent, and finally the remaining 4.5 per cent respondents are in the age group of above 61 years old. Further the Table clearly shows that the younger age group of respondents i.e. 20-30 years constitutes 46.8 per cent only which means that young people are using mobile portability followed by 20.5 percent from 31 -40 years and20.0 per cent from 41- 50 years. Educational Qualification: In the present study out of 400 respondents, most of them (169) have completed their professional degree followed by 78 respondents who have completed their Post- Graduate education, 76 respondents are graduates, 45 respondents have completed only their Diploma/ITI education and 32 respondents have completed their school level education. In the study area, in the past year using the mobile phone was used only by rich persons especially professionals. But at present Aircel coverage is not successful in Tamilnadu. So, the Aircel customers were shifting to other networks. Occupation: In the present study out of 400 total respondents, most of them (120) are students followed by 61 respondents who are government employees, 142 respondents are private company employees, 15 respondents are businessmen and the remaining 62 respondents are professionals.   Monthly Income: The researcher has chosen his respondents from a wide range of income categories starting from the lowest income of single rupee to above Rs. 50001. From the Table 2 it is understood that most of the respondents i.e. 4.0 per cent come under the income category of Rupees Rs. 5000 -10000 followed by Rs. 50001-100000 earning category where the respondents comprises 23.5 per cent, Rs. 10,001- 20,000 income earning category respondents constitute in the sample about 15.3 per cent, Rs.20,001- 30,000 income earning category about 11.8 per cent, Rs.30,001 – 40,000 income earning category about 7.8 percent respondents, Rs. 40,001 – 50,000 and the remaining above 50,001 income earning

2362

category about 7.8 percent respondents, and finally the remaining 30 per cent respondents come under NIL income category.

TABLE 2
SOCIAL PROFILE OF THE RESPONDENTS

Social Factors	Classification	Frequency	Percentage (%)	Mean	S.D	C.V
Gender	Male	277	69.3	1.31	.462	.213
	Female	123	30.8			
Age	20-30 Years	187	46.8	2.03	1.185	1.405
	31-40 Years	82	20.5			
	41-50 Years	80	20.0			
	51-60 Years	33	8.3			
	Above 61 Years	18	4.5			
Educational Qualification	School level	32	8.0	3.77	1.35	1.73
	Diploma /ITI	45	11.3			
	Graduate	76	19.0			
	Post- Graduate	78	19.5			
	Professional Degree	169	42.3			
Occupational Status	Student	120	30.0	2.6	1.36	1.85
	Government Employee	61	15.3			
	Private Employee	142	35.5			
	Business	15	3.8			
	Professionals	62	15.5			
Monthly Income	Nil	120	30.0	4.39	2.09	4.399
	Rs. 5000 - 10000	16	4.0			
	Rs. 10,001-20,000	94	23.5			
	Rs.20,001-30,000	61	15.3			
	Rs.30,001 – 40,000	47	11.8			
	Rs. 40,001 – 50,000	31	7.8			
	Above Rs. 50,001	31	7.8			

Source: Primary Data

Family Profile of the Respondents

Members of Family: From the Table 3 it can be understood that most of the respondents i.e. 64.8 per cent have 3 to 4 family members in 31.3 percent have more than 4 family and the remaining 4.0 per cent respondents have 1 or two family members.

Use of mobile phone in family: In the present study out of 400 respondents, most of them i.e. 30.8 % are use mobile phone in the family of 1-2 members followed by 49.8 percent using mobile phone in 3-4 members and the remaining 19.5 percent use mobile phone in the family of more than 4 members.

Type of mobile phone: Most of the respondents i.e. 76.8 % use Andriod Os mobile phones, followed by 7.8 percent using Iphone & Mee Go OS and the remaining 4.0 percent use mobile phone Palm OS.

TABLE 3
FAMILY PROFILE OF THE RESPONDENTS

Profile	Classification	Frequency	Percentage (%)	Mean	S. D	C.V
Members of the family	1-2 member	16	4.0	2.27	.528	.279
	3-4 member	259	64.8			
	Above 5 Members	125	31.3			
Use of mobile phone	1-2 member	123	30.8	1.89	.701	.491
	3-4 member	199	49.8			
	Above 5 Members	78	19.5			
Type of mobile phone	Andriod Os	307	76.8	1.97	1.833	3.360
	Iphpone OS/iOS	31	7.8			
	Mee Go Os	31	7.8			
	Palm OS	16	4.0			

Source: Primary data

Current Use of Mobile Phone Networks

The following Table 3 shows the current use of network service in primary mobile, secondary mobile, service plan for primary and secondary mobile phone, and monthly expenditure in mobile phones, years of using mobile phone. The following statically tools are used for percentage analysis, Mean, Standard Deviation and Co- Variance.

TABLE 4
CURRENT USE OF MOBILE PHONE NETWORKS BY THE RESPONDENTS

Mobile Phone Networks	Classification	Frequency	Percentage (%)	Mean	S. D
Mobile network service in primary	Bharti Airtel	96	24.0	2.43	1.057
	Reliance Jio	115	28.7		
	BSNL	111	27.8		
	Vodafone/Idea	78	19.5		
Mobile network service in secondary	Bharti Airtel	78	19.5	2.35	1.079
	Reliance Jio	199	49.8		
	BSNL	46	11.5		
	Vodafone/Idea	61	15.3		
	Nil	16	4.0		
Monthly expenditure primary mobile phone	Below Rs.200	231	57.8	1.50	.708
	Rs.201-Rs.500	153	38.3		
	Rs. 501-Rs.1000	5	1.3		
	Rs.1001-Rs.2000	7	1.8		
	Above Rs.2001	4	1.0		
Monthly expenditure secondary mobile phone	Below Rs. 200	147	36.8	1.94	1.109
	Rs.201-Rs.500	191	47.8		
	Rs. 501-Rs.1000	35	8.8		
	Rs.1001-Rs.2000	9	2.3		
	Above Rs.2001	2	0.5		
	NIL	16	4.0		
Service plan package	Corporate	31	7.8	3.31	.993
	Family Pack	61	15.3		
	Individual Postpaid	62	15.5		
	Individual	246	61.5		

2363

	Prepaid				
Period of using mobile phone	Less than 1 year	23	5.8	3.03	.956
	2 -3 years	108	27.0		
	4-5 years	104	26.0		
	More than 5 years	165	41.3		

Source: Primary data

Mobile network service in primary: In this research the main number of the respondent is taken as his "Primary Mobile". Out of a sample size of 400, it is seen that Reliance Jio is used by 115 (28.7%) respondents followed by BSNL 111 (27.8%), Bharti Airtel 96 (24.0%) and Vodafone/ Idea (19.5%) have the least number of subscribers among the respondents. Mobile network service in secondary: In this research, the number of the respondent is taken as his "Secondary Mobile". Out of a sample size of 400, it is seen that Reliance Jio is used by 199 (49.8%) respondents followed by Bharti Airtel 78 (19.5%), Vodafone/Idea 61 (15.3%) and BSNL has the least number of subscribers among the respondents. Some customers are not using secondary mobile phone. Monthly expenditure of primary mobile phone: From the Table 4.3 it can be understood that out of 400 respondents 231 of them (57.8%) spend Rs. 200 followed by 153 respondents spending Rs. 201 – Rs. 500, 5 respondents spending Rs.501-Rs.1000, 7 respondents spending Rs. 1001 – Rs. 2000 and the remaining 4 respondents spending more than Rs.2001. Monthly expenditure of secondary mobile phone: From the Table 4.3 it can be understood that out of 400 respondents 147 of them (36.8%) spend below Rs. 200 followed by 191 respondents spending Rs. 201 – Rs. 500, 35 respondents spending Rs.501-Rs.1000, 9 respondents spending Rs. 1001 – Rs. 2000, 2 respondents spending more than Rs.2001and the remaining 16 per cent respondents do not use any secondary mobile phone. Service plan package: Mobile usage of individual respondent was categorized as per average mobile bill postpaid or prepaid usage per month. Out of 400 respondents, 246 respondents come under prepaid plan followed by 62 respondents under post paid plan, 61 respondents have usage in family pack and the remaining 31 respondents use mobile phones given by corporate. Period of using mobile phone: The Table 4 shows how long the selected 400 respondents use their mobile phones. Out of the total 400, 23 respondents are using mobile phone for less than 1 year followed by 108 respondents using for 2-3 years, 104 respondents have been using it for 4-5 years and 165 use them for more than 5 years. Important reasons Encourage Switching the Cellular Service-Comparison between Gender-Wise RespondentsThe following table shows that the degree of importance given to the reasons that encourage switching the cellular service between male and female customers (Mean scores are important and very important range and the differences in group means do not differ as t-values are not significant). The male customers have rated all services as important whereas the female customers considered them neither unimportant nor important (neutral). Further, there are significant differences in the perceived degree of importance between two groups in respect of mobile number portability. H0: There is no significant difference between male and female with respect to the degree of importance given to reasons that encourage switching the cellular servicesH1: There is a difference between male and female with regard to the degree of importance given to the reasons that encourage switching the

cellular services.

TABLE 7
INFLUENTIAL FACTORS FOR THE CHOICE OF SERVICE PROVIDER

Factors	1	2	3	4	5	Mean {SD}
Economy factors						
Call charges	62	39	74	151	74	3.34
	(15.5)	(9.8)	(18.5)	(37.8)	(18.5)	{1.313}
SMS charges	30	66	95	136	73	3.39
	(7.5)	(16.5)	(23.8)	(34.0)	(18.3)	{1.177}
Data Charges	52	47	74	169	58	3.34
	(13.0)	(11.8)	(18.5)	(42.3)	(14.5)	{1.238}
Validity period	0	90	51	164	95	3.44
	(0)	(22.5)	(12.8)	(41.0)	(23.8)	{1.441}
Performance factors						
Wide Network Coverage	41	39	130	116	74	3.36
	(10.3)	(9.8)	(32.5)	(29.0)	(18.5)	{1.189}
Voice clarity	14	42	42	200	102	3.84
	(3.5)	(10.5)	(10.5)	(50.0)	(25.5)	{1.035}
Timely SMS Delivery	60	56	57	169	58	3.27
	(15.0)	(14.0)	(14.2)	(42.3)	(14.5)	{1.293}
Quality of reception signal	24	82	83	104	107	3.47
	(6.0)	(20.5)	(20.8)	(26.0)	(26.8)	{1.248}
uninterrupted internet services	31	109	52	142	66	3.26
	(7.8)	(27.3)	(13.0)	(35.5)	(16.5)	{1.239}
Value added services						
Free number SMS/offer	45	57	98	124	76	3.26
	(11.3)	(14.2)	(24.5)	(31.0)	(19.0)	{1.25}
Downloads are Apps/ Games/ Video etc	29	69	119	110	73	3.32
	(7.2)	(17.3)	(29.8)	(27.5)	(18.3)	{1.169}
Caller tune services	29	95	62	111	103	3.41
	(7.2)	(23.8)	(15.5)	(27.8)	(25.8)	{1.293}
Updates other services	29	79	56	167	69	3.42
	(7.2)	(19.8)	(14.0)	(41.8)	(17.3)	{1.193}
Customer Care Services						
Quick Response to Customers Call/Query	48	50	148	98	56	3.16
	(12.0)	(12.5)	(37.0)	(24.5)	(14.0)	{1.178}
Conducive/Cordial response by the Customer Care Centre	80	56	104	129	31	2.94
	(20.0)	(14.0)	(26.0)	(32.3)	(7.8)	{1.254}
Instantaneous Problem Solving	72	82	68	92	86	3.10
	(18.0)	(20.5)	(17.0)	(23.0)	(21.5)	{1.418}
Availability of Customer Care Centre	51	56	92	124	77	3.30
	(12.8)	(14.0)	(23.0)	(31.0)	(19.3)	{1.282}
Status and Reputation of the service provider						
Prominence of service providers	16	26	134	167	57	3.56
	(4.0)	(6.5)	(33.5)	(41.8)	(14.2)	{.951}
Market Share	30	79	98	110	83	3.34
	(7.5)	(19.8)	(24.5)	(27.5)	(20.8)	{1.22}
Spectrum	47	106	81	83	83	3.12

2364

Allocation	(11.8)	(26.5)	(20.3)	(20.8)	(20.8)	{1.327}

Source: Primary Data

Figures in brackets are % to Row Total; Figures in curly braces are standard deviationThe above Table shows 20 influential factors for the choice of service provider. The highest mean score of 3.39 SMS charges in economy factor is followed by Call charges and Validity period (Mean = 3.44), Data Charges (Mean = 3.34). The highest mean Score of Voice clarity (3.84) in performance factor is followed by Quality of reception signal (3.47), Wide Network Coverage (3.36), Timely SMS Delivery (3.27) and uninterrupted internet services (3.26). The value added service factor with the highest mean score of Updates other services (3.42) is followed by Caller tune services (3.41), Downloads of Apps/ Games/ Video etc (3.32) and Free number SMS/offer (3.26). The customer care services factor with the highest mean score of Availability of Customer Care Centre (3.30) is followed by Quick Response to Customers Call/Query (3.16), Instantaneous Problem Solving (3.10) and Conducive/Cordial response by the Customer Care Centre (2.94) and the status and reputation of the service factor. The highest mean score of Prominence of service providers (3.56) is followed by market share (3.34) and Spectrum allocation mean score (3.12). The calculated mean scores are higher than voice clarity in performance factors. Hence, it is found that all factors are important and influential factors for the choice of service provider.

12. CONCLUSION

In Chennai region, current top players is telecommunication for Reliance Jio and Airtel is the next top player followed by Vodafone and BSNL. Subscribers at Chennai customers are willing to switch Service provider if they are given an option to switch with same mobile number. Mobile number portability System can modify the situation of the telecommunication industry. Earlier the sole means of a service provider was able to hold their customer was by the mobile number. But now with the advent of mobile number portability comes in to action customer will have freedom to switch with same number so customer will rule the market. In this battle between customers and service providers, service provider can have to be compelled to surrender against customers.

ACKNOWLEDGMENT

REFERENCES

Journals
[1] Abd-Elrahman Hassanein Abd-Elrahman (2018). 'A Review of Telecommunications Service Quality Dimensions", Scholar Journal of Applied Sciences and Research,1(1),10-18.
[2] Suresh A.S. (2011) Mobile Number Portability – Opportunities and Challenges. International Journal of Management Research and Development (IJMRD), 1(1) , 14-19. ISSN 2248 – 938X(Print) ISSN 2248 – 9398(Online),
[3] Aker, J. C., & Mbiti, I. M. (2010). Mobile phones and economic development in Africa. Journal of Economic Perspectives, 24(3), 207-32.
[4] Androulidakis, I., & Kandus, G. (2011). Mobile Phone Brand Categorization vs. Users' Security Practices. Engineering, Technology & Applied Science Research, 1(2), 30-35.
[5] Chen, J. V., Ross, W. H., & Huang, S. F. (2007). Responding to consumer fairness concerns about Number Portability policies. International Journal of Mobile Communications, 5(6), 661-676.
[6] Chweya, R. (2013). Mobile Number Portability: Is it worth in Kenya?. World Journal of Computer Application and Technology, 1(4), 121-126.
[7] D.S. Chaubey, Mr. Mayank Pant, (2012). "Psychological mapping of Consumer towards Mobile Number Portability: An Empirical Study. Management Convergence, 3(1), 10-28.
[8] Dave, D., & Vyas, M. C.(2011) Mobile Number Portability: Challenges and Opportunities for Network Service Providers. Journal of marketing vistas, 1(1), 1-20.
[9] Dutt and Sundaram,(2004). Indian Economy, Edition, 2004.
[10] Goodman, Paul S; Fichman, Mark; Lench, F Javer, Snyder, Pamela R,(1995). Customer Firm Relationships, Involvement, And Customer Satisfaction, Academy of Management Journal, 1995, Vol.38, Issue 5, pp 1310-1324.
[11] Hall, J., O'Mahony, B., & Gayler, J. (2017). "Modelling the relationship between attribute satisfaction, overall satisfaction, and behavioural intentions in Australian ski resorts",. Journal of Travel & Tourism Marketing, 34(6), 764-778.
[12] Israel, A. N., Emmanuel, A. T., & Rita, A. A. (2016). Customers 'preference Of Mobile Phone Service Providers in Ekiti State, Nigeria. British Journal of Marketing Studies, 4(2), 66-76.
[13] Karjaluoto, H., Karvonen, J., Kesti, M., Koivumäki, T., Manninen, M., Pakola, J., & Salo, J. (2005). Factors affecting consumer choice of mobile phones: Two studies from Finland. Journal of Euromarketing, 14(3), 59-82.
[14] Khan, R. A., Shaikh, A. A., & Shah, S. A. (2012). Prospect of switching mobile services in Pakistan. Journal of Emerging Trends in Computing and Information Sciences, 3(7), 1008-1012.
[15] Kim, M. K., Park, M. C., & Lee, S. W. (2010). Asymmetric regulation for fair competition: Focusing on the impact of the staggered MNP in Korea. In Technology Management for Global Economic Growth (PICMET), 2010 Proceedings of PICMET'10: (pp. 1-10). IEEE
[16] Lee, J., Lee, J., & Feick, L. (2001). The impact of switching costs on the customer satisfaction-loyalty link: mobile phone service in France. Journal of services marketing, 15(1), 35-48.
[17] Manjeet Kaur., Amit Kumar Badgujjar., (2015). A Study of Mobile Number Portability with Special Reference to Customers' Perception and Problems. International journal of Techno-Management Research, 3(2), 1-15, Sept.2015, ISSN:2321-3744.
[18] Martensen, A. (2007). Tweens' satisfaction and brand loyalty in the mobile phone market. Young Consumers, 8(2), 108-116.

[19] Matzler, K., Bidmon, S., & Grabner-Kräuter, S. (2006). Individual determinants of brand affect: the role of the personality traits of extraversion and openness to experience. Journal of Product & Brand Management, 15(7), 427-434.

[20] McDowell, S. D., and Lee, J. (2003). India's experiments in mobile licensing. Telecommunications Policy. 27(5–6), 371-382.

[21] McDowell, S. D., and Lee, J. (2003). India's experiments in mobile licensing. Telecommunications Policy. 27(5–6), 371-382.

[22] Nimako, S. G., Nyame, R. K. , & Oppong, A. (2016). Exploring Consumer Behaviour towards Mobile Number Portability (MNP) in Ghana: Pursuing Sustainable MNP Adoption. Journal of Business and Management Sciences, 4(5), 105-112.

[23] Ning, L., & Feng, X. (2014). The Analysis of Customer Switching Choice in China Mobile Market. Indonesian Journal of Electrical Engineering and Computer Science, 12(2), 1416-1423.

[24] O"Malley N. and Goodwin, N. (1991). It's Legal but It Ain't Right. Harmful Social Consequences of Legal Industries. University of Michigan Press. Michigan. 279.

[25] Ojiaku, O. C., Osarenkhoe, A., & Fjellström, D. (2017). Determinants of Customers' Intention to 'Port'Mobile Phone Numbers in Times of Proliferating use of Multi-Sims. International Journal of Applied Business and Economic Research, 15(22), 621-643.

[26] Olatokun, W. (2012). Determinants of users' choice of mobile service providers in the Nigerian Telecommunications Market. African Journal of Computing & ICT, 5(4), 19-32. ISSN 2006-1781.

[27] Oliver, Richard L,(1999). Whence Customer Loyalty, Journal of Marketing, Special Issue 1999, Vol. 63, pp 33-44.

[28] Otoo, B. K. (2015). Mobile number portability and its impact on service quality in Ghana telecommunication industry. International Journal of Research in Finance and Marketing, 5(7), 34-43. (ISSN 2231-5985)

[29] Palaniappan .G., Sengottaiyan. A., (2015). Customer Perception towards Mobile Services – A Case Study of BSNL in Bhavani Town. International Research Journal of Engineering And Technology (IRJET) 2(4), 469- 477. E-ISSN: 2395-0056 V P-ISSN: 2395-0072.

[30] Prahlad, C.K; Ramaswamy, Venkaitram (2000). "Co-opting Customer competence', Harvard Business Review". January/ February 2000, Vol. 78, Issue 1, pp 79-87.

[31] Robins, F. (2003). The marketing of 3G. Marketing Intelligence & Planning, 21(6), 370-378.

[32] Sarkar, D., Banerjee, A. K., & Datta, S. K. (2018). A Study on Customer Attitude Towards Full Mobile Number Portability in Kolkata City. International conference on recent innovation in management, engineering, science and technology, Rajshree Institute of Management & Technology Barely India, 275-289.

[33] Shin, D. H., & Kim, W. Y. (2007). Mobile number portability on customer switching behavior: in the case of the Korean mobile market. info, 9(4), 38-54.

[34] Shin, D. H., & Kim, W. Y. (2008). Forecasting customer switching intention in mobile service: An exploratory study of predictive factors in mobile number portability. Technological Forecasting and Social Change, 75(6), 854-874.

[35] Shin, D.H., and Kim, W.Y. (2008). Forecasting customer switching intention in mobile service: An exploratory study of predictive factors in mobile number portability. Technological Forecasting and Social Change. 75(6), 854-874.

[36] Singh, S. K. (2008). The diffusion of mobile phones in India. Telecommunications Policy. 32(9–10), 642-651.

[37] Suraj Kushe Shekhar.,(2015). "Mobile Number Portability and Consumer Behaviour: A Study With Reference to Bharat Sanchar Nigam Limited, India. Hyperion Economic Journal Year III, 3(3), pp: 19-23September 2015.

[38] Torres, A. I., & Martins, F. V. (2009). The Conflicting Role of Online Switching Costs: The Main and Interaction Effects on Customer Retention. E-COMMERCE 2009, 163.

[39] Venkatesakumar, R., Ramkumar, D., & Rajan, P. T. (2008). Perception of Product Attributes in Brand Switching Behaviour—An Explanation Through Multidimensional Scaling. Management and Labour Studies, 33(1), 142-156.

[40] Vijay, P., & Krishnaveni, V. (2016). Customer Preferences towards the mobile network service provider-A study with the special reference to Coimbatore City. International Journal of Management Research and Reviews, 6(10), 1386-1392.

[41] Wafa'N, M., & Abu-Al-Sha'r, A. M. (2009). University students' attitudes towards cell phone learning environment. International Journal of Interactive Mobile Technologies (IJIM), 3(4), 35-40.

Report

1. "Indian Telecommunication Statistics 2002", Ministry of Communications, Government of India.

2. TRAI, Operators, BMI India Telecommunications Report Q4, 2015. 16-17

3. TRAI, Retrieved 19 July 2018.

Websites

1. https://en.wikipedia.org/wiki/Mobile_number_portability

2. https://s3-eu-west-1.amazonaws.com/pfigshare-u-files/3573914/EJSS86 mobilephonesaddictionamonguniversitystudentsevidencefromtwincitiesofpakistan.pdf

3. http://giacomotamburini.it/elykpwk/huw5lrp.php?rwrnnmhkx=mobile-number-portability-service

4. https://link.springer.com/chapter/10.1007/978-3-319-94613-9_4

5. https://vdocuments.mx/mobile-number-portability-561815e8a7f63.html

6. http://pubs.sciepub.com/jbms/4/5/1/index.html

7. https://wwjournals.com/index.php/ijar/article/view/5674

8. https://www.slideshare.net/karkuvelraj/article-on-mobile-phone

9. https://journalissues.org/wp-content/uploads/2014/07/Addo.pdf

10. http://rohitbawankar.blogspot.com/2012/06/study-of-consumer-behaviour-towards.html

11. http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=A92C32D28C5BE70F83073061377C2D2C?doi=10.1.1.682.2284&rep=rep1&type=pdf

12. https://wwjournals.com/index.php/ijsr/article/download/13368/13285