December 2020

A Study on Factors Affecting Consumer Churn in The Indian Telecom Industry

Uday Arun Bhale
Vodafone Idea Ltd, India

Harpreet Singh Bedi
Mittal School of Business, Lovely professional University, Phagwada, Punjab, India

A STUDY ON FACTORS AFFECTING CONSUMER CHURN IN THE INDIAN TELECOM INDUSTRY

Uday Arun Bhale*
Harpreet Singh Bedi**

ABSTRACT

Factors affecting consumer churn is important to study in order to reduce the consumer churn for a particular brand in telecom industry. As per research by Verint® Systems Inc with 34000 consumers would wide published in the Forbes 2019, consumer retention is on declining trend, study shows that two third of customers are willing to change the product and service, which may results in churn for existing company. In mobile industry as per data by Telecom Regulatory Authority of India for March'20, 5.74 Million unique porting requests has been generated by Indian mobile consumers which shows the consumer's intention to change the existing mobile operator. Hence there is opportunity to review the factors affecting consumer churn. In the given paper author tried to find mobile consumer influencing factors that affects the churn and data analysis is done with exploratory factor analysis. Results showed that the Digital Experience, Service Delivery, Consumer interaction, Monitory benefits, and Product promotions significantly contributed in explaining consumer churn.

1. INTRODUCTION

After launch of Reliance Jio in India, mobile user consumer behaviour shift has been accelerated to data usage from traditional voice usage; many mobile operators like Aircel, Reliance communication, MTS, TATA DOCOMO, Videocon, Uninor mobile service operators have to shut their operations because of non-profitability mainly because of loss of consumer base. Mobile operator like Aircel, Reliance communication, Uninor was having 4G licenses still they were not able to sustain the market and forced to close their operations, in another development Vodafone India and Idea Cellular have

Scholar, Mittal School of Business, Lovely professional University, Phagwada, Punjab. Currently working with Vodafone Idea Ltd as General Manager.

****Professor, Mittal School of Business, Lovely professional University, Phagwada, Punjab***

decided to merge their operations to form Vodafone Idea Ltd resulting Indian telecom market limited to three private operators and one Government operator (BSNL & MTNL). Researchers agrees that industries have to make strategies to continue business in long term. The finest strategies is reducing the consumer churn that ensure a long run progress of the company, as cost of acquisition is always contribute to cash outflow for business but also by losing customer it will have a direct impact on the revenue earning for that business. As per researchers companies are aware of the advantages in retaining the consumers but struggle to recognise the details that have an influence on the brand excellent to decrease the churn.

The objective of this study was to find the variables that are having an impact on consumer churn in the telecom industry

2. LITERATURE REVIEW

2.1. Consumer churn

Churn in the telecommunication business is defined as the movement of existing consumer from one mobile service operator to another (Berson et al., 2000), same is explained as the intension of a consumer to leave a mobile operator (Coussement and Poel, 2008).

As per study by Wie and Chiu (2002) yearly near 27% of the consumers are moving from one operators to another operator, on the other hand cost of acquisition of new subscribers is 5-10times more than the cost of retention resulting consumer churn is impacting the profitability of the mobile service providers (Junxiang Lu, 2003).

Hence it's very important for mobile service providers to understand the consumer churn influencing factors.

2.2. Factors influencing consumer churn

A study by Rajeswari and Ravilochanan (2014) reviled that mobile coverage, consumer complaint resolution process; mobile internet speed and mobile technology are the key reasons for consumer churn. Consumer churn in Telecom industry is affected by multiple reasons like price, network, compliant resolution and mobile network consists of multiple key performance indicators voice network, data network, coverage, unwanted VAS (Joshi S., 2013). In other study by David et al. (2007) reviled that the price fairness and service quality plays critical role in consumer churn.

This study includes factors that causes the consumer churn in the telecommunication industry of India.
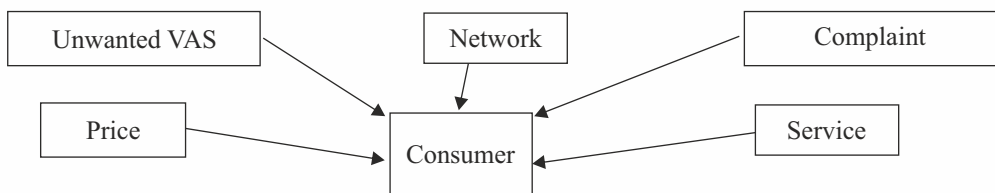
3. THEORETICAL FRAMEWORK AND RESEARCH MODEL:

Fig. 1: Consumer churn influencing factors

Uday Arun Bhale &
Harpreet Singh Bedi

4. HYPOTHESIS

Literature review has given the overview on the influencing factors of churn basis on this, following hypothesis was proposed. H1: Digital experienceis critical aspect of consumer churn

5. RESEARCH METHODOLOGY

5.1. Research Design

The study intend is to search consumer churn factors of mobile users .For the study exploratory research is done with the exploratory factor analysis, principal component analysis .The factors are derived from the literature review and then industry expert opinion is taken.

5.2 Data sampling

Study was concluded on a sample of 150 mobile phone consumers in Hyderabad city of Telangana state, with convenience sampling method. The responses were taken for18 attributes

Descriptive statistics, exploratory factor analysis methodology were used to analyse the data. The demographical analysis of the given data is summarized as below in table no. 02

5.3 Procedure

It was decided to gather at least 150 sample for inference therefore, questionnaires were dropped to participants among topics using a non-probability convenience sampling methodology. Fewattributes of the questionnaire were taken from Priyanka Gautam (2012) PhD on "Switching Behaviour Of Telecom Subscribers: A Case Study Of Subscribers In Punjab And Chandigarh "thesis with amendment and validation with industry experts. After collection of data, data was entered and analysed through SPSS.

6. DATAANALYSIS

6.1 Measures

The initial phase of questionnaire was covering of items to recognise the demography of the participants like age, gender, name, age on network with the mobile operators. The later phase containsitems to measure factors influencing consumer churn. 5 points Likert scale ranging from 1. Strongly Disagree to 5. Strongly Agree is used. Respondents were guaranteed about the privacy. Cronbach's Alpha values for response of the questionnaire is given in table 1.

Table 1: Cronbach's Alpha Reliability Coefficient

Reliability		
Construct	Cronbach's Alpha	Number of Items
Overall	0.81	18

6.2 Demographic details

Table 2: Demographical Analysis

Measure	Item	Frequency	Percentage
Age	18-25	25	17%
	26-35	85	57%
	36-45	15	10%
	45-60	15	10%
	60+	10	7%
Gender	Male	126	84%
	Female	24	16%
Age on a network of customer	Less than 3 month	5	3%
	3 months to 12 months	20	13%
	12 months to 60 months	95	63%
	60 Months	30	20%

6.3 Descriptive statistics

Descriptive statistics are used to find the central tendency of the collected database for mean, median, mode and standard deviation. The mean values are greater than 3.00 for all variables are showing the significant positive trend. Standard deviation (S.D.) is key point it is indicative the deviation from mean value. Here S.D. is greater than from 0.51 which reflects that the observations are near the mean value for the variables.

6.4 Factor analysis

Table 3: Total Variance data

Factors	Eigenvalue	Proportion var.	Cumulative
PC1	5.547	0.308	0.308
PC2	2.347	0.13	0.439
PC3	1.702	0.095	0.533
PC4	1.553	0.086	0.619
PC5	1.074	0.06	0.679

Table 4: Component loading

Component Loadings						
	PC1	**PC2**	**PC3**	**PC4**	**PC5**	**Uniqueness**
Data price	0.917		0.148	0.104		0.121
Voice pricing	0.723	0.136	0.100	0.436		0.258
Unwanted VAS		0.824	0.101			0.299
Better features	0.381	0.239	0.180	0.592	-0.194	0.377
Balance deduction	0.472		0.324		0.583	0.327
Update on new product	0.197	0.206	0.352	0.657		0.364
Product communication	-0.149	-0.132	-0.298	0.776		0.262
Time is taken to connect CC	0.536	0.186	0.558			0.363
Empathy by CC agent	0.156	0.268	0.775	0.148		0.273
Digital care	0.661	0.106	0.267			0.472
Ease of recharge	0.142		0.758			0.400
Complaint resolution		0.758			0.107	0.400
Data speed	0.880					0.222
Voice quality	0.228	0.811	0.283	0.124		0.189
Network coverage	0.236	0.799	0.244		-0.115	0.226
Other marketing communication		-0.104			0.799	0.335
TV advertisement					0.723	0.459
Outdoor promotion			0.103	-0.209	0.718	0.428
Note. Applied rotation method is varimax						

Table 5: Reliability of Factors

Reliability		
Construct	**Cronbach's Alpha**	**Number of Items**
Overall	0.81	18
Factor : Product Promotions	0.869	3
Factor : Digital Experience	0.831	3
Factor : Consumer interaction	0.795	3
Factor : Service Delivery	0.697	4
Factor : Monitory Benefits	0.622	4

Factor loading is done for the factors where eigenvalue values for these set of factors are more than 1. The correlation matrix for variable shows that cumulative 67.9% factors are explained by these variables which shows higher significance, hence we can conclude that we can perform the factor analysis for six factors.

Factor loading is done basis on the logical sequencing with min 50% factor score in each factor, while deciding the factor loading industry inputs were also taken.

7. FACTOR ANALYSIS FOR HYPOTHESES TESTING

Following hypothesis was studied: H1: Digital experience is a critical aspect of consumer churn

The factor analysis result shows that digital experience has influence on consumer churn. Three Digital experience attributes are data price, digital care, data sped. This factor counts for 30.70% of the total variation with Cronbach's Alpha of 0.831. And, all attributes have a factor score of more than 0.6 under this factor, which indicates that factors are significant. Shows the acceptance of the Hypotheses that H1 Digital experience is a critical inflecting factor that affects consumer churn for mobile service providers.

8. CONCLUSION

Reduction of consumer churn is key to success because that help to build loyal customers and subsequently help to increase organizational profitability. The research shows that these factors affect the consumer churn majorly. And digital care is emerging as a new powerful influencing factor while deciding the consumer churn.

9. RECOMMENDATIONS

In this research, influencing factors of mobile consumer churn was studied which is critical component for the success of service industry. The given findings can practically be used by mobile telecom industry while designing churn reduction strategy. 1. We recommend that by creating satisfied consumers with good digital experience, service delivery, network experience, &product promotion, company can reduce the churn 2. These findings may be applied by the service companies and industries that gives due prominence to relational marketing.

REFERENCES

Ahmad, S., Srivastava, A., & Sharma, S. (2019). Factors affecting attrition in cellular service subscription. International Journal of Business Excellence, 18(4), 570-581.

Akmal, M. (2017). Factor Causing Customer Churn: A Qualitative Explanation of Customer Churns In Pakistan Telecom Industry (Doctoral dissertation, MS Thesis], March).

Banda, P. K., & Tembo, S. (2017). Factors Leading to Mobile Telecommunications Customer Churn in Zambia. In International Journal of Engineering Research in Africa (Vol. 31, pp. 143-154). Trans Tech Publications Ltd.

Bhale, U., Harpreet, S., & Bedi. (2020). A Qualitative Study On Mobile Number Portability- 7 th Amendment In Indian Telecom. https://www.ijstr.org/final-print/feb2020/A-Qualitative-Study-On-Mobile-Number-Portability-7th-Amendment-In-Indian-Telecom.pdf

Berson A, Simith S, Thearling K.,(2000). Building data mining applications for CRM, McGrawHill, New York.

Caruana, A. (2003). The impact of switching costs on customer loyalty: A study among corporate customers of mobile telephony. Journal of Targeting, Measurement and Analysis for marketing, 12(3), 256-268.

Chang, Y.-T. (2009). Applying Data Mining to Telecom Churn Management. International Journal of Reviews in Computing, 67-77.

Chih Ping Wei & I-Tang Chiu (2002). Expert Systems with Applications. Volume 23, Issue 2, August 2002, Pages 103–112.

Chueh, H. E. (2013). Analysis of marketing data to extract key factors of telecom churn management. African Journal of Business Management, 5(20), 8242-8247.

Coussement, K., & Poel, D.V. (2008). Churn prediction in subscription services: An application of support vector machines while comparing two parameter-selection techniques. Expert Syst. Appl., 34, 313-327.

Deng, Z., Lu, Y., Wei, K. K., & Zhang, J. (2010). Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China. International journal of information management, 30(4), 289-300.

Eshghi, A., Haughton, D., & Topi, H. (2007). Determinants of customer loyalty in the wireless telecommunications industry. Telecommunications policy, 31(2), 93-106.

Estalami, H., Maxwell, S., Martín-Consuegra, D., Molina, A., & Esteban, (2007). An integrated model of price, satisfaction and loyalty: an empirical analysis in the service sector. Journal of Product & Brand Management.

Ferguson, R., & Brohaugh, B. (2008). Telecom's search for the ultimate customer loyalty platform. Journal of Consumer Marketing.

Gautam, P. (2012). Switching behavior of telecom subscribers A case study of subscribers in Punjab and Chandigarh.

Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. Journal of marketing, 69(4), 210-218.

Hennig-Thurau, T., & Klee, A. (1997). The impact of customer satisfaction and relationship quality on customer retention: A critical reassessment and model development. Psychology & marketing, 14(8), 737-764.

Hyken, S. (2019, October 11). Customer Loyalty And Retention Are In Decline. Retrieved from https://www.forbes.com/sites/shephyken/2019/10/13/customer-loyalty-and-retention-are-in-decline/

Jahanzeb, S., &Jabeen, S. (2007). Churn management in the telecom industry of Pakistan: A comparative study of Ufone and Telenor. Journal of Database Marketing & Customer Strategy Management, 14(2), 120-129.

Joshi, S. (2014). Customer experience management: An exploratory study on the parameters affecting customer experience for cellular mobile services of a telecom company. Procedia-Social and Behavioral Sciences, 133, 392-399.

Kayaalp, F. (2017). Review of customer churn analysis studies in telecommunications industry. Karaelmas Science and Engineering Journal, 7(2), 696-705.

Kim, M. K., Park, M. C., &Jeong, D. H. (2004). The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services. Telecommunications policy, 28(2), 145-159.

Mahajan, V., & Mahajan, R. (2018). Variable Selection of Customers for Churn Analysis in Telecommunication Industry. International Journal of Virtual Communities and Social Networking (IJVCSN), 10(1), 17-32.

Mattison, R. (2006). The telco churn management handbook. Lulu. com.

Mahajan, V., Misra, R., & Mahajan, R. (2017). Review on factors affecting customer churn in telecom sector. International Journal of Data Analysis Techniques and Strategies, 9(2), 122-144.

Rajeswari, P. &Ravilochanan, P. (2014). An Empirical Model on Customers' Perception in the Selection of Indian Prepaid Mobile Services. Indian Journal of Finance. 8. 28. 10.17010/ijf/2014/v8i7/71905.

TRAI(2020).Retrieved20 July 2020, from
https://www.trai.gov.in/sites/default/files/PR_No.49of2020_1.pdf

Uday, A., &Bhale, H. (2020). A Qualitative Study On Service Channels In The Indian Telecom Industry. https://www.ijstr.org/final-print/mar2020/A-Qualitative-Study-On-Service-Channels-In-The-Indian-Telecom-Industry.pdf

Uday, A., Bhale, H., & Singh Bedi. (2020). A Study On The Impact Of Engagement With Service Channels And Factors Affecting Mobile Number Portability.

https://www.ijstr.org/final-print/mar2020/A-Study-On-The-Impact-Of-Engagement-With-Service-Channels-And-Factors-Affecting-Mobile-Number-Portability.pdf