A Study to Identify and Profile Consumer Segments in the Mobile Telecommunication Services Market

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Abstract

Modern day mobile telecommunication network service business is quite challenging and complex. The consumer has been provided with a plethora of options and offers. Unlimited talk time plans, data packages, voice and SMS plans, etc. have changed the way the telecom business operates. Mobile number portability (MNP) has been the biggest game changer. An understanding of consumers at length is thus imperative. This research paper focused on proper segmentation and profiling of consumer segments with an aim to provide sharper and focused marketing programs. The paper highlighted the emergence of two different types of consumer segments namely, the Conventionalist and the Techi. It would be immensely useful for telecom companies to understand consumers' tastes, habits, preferences, and personality with a view to link them with consumer purchase patterns. Both the segments were found to exhibit quite a few contrasting features and as such could be exploited for concentrated marketing communications. The results indicated that unless and until consumers are regarded as lifetime prospects, companies would find it very difficult to retain consumers. From *chota* recharge to unlimited talk time, companies have leaped milestones and come a long way, and this has been only possible because of effective segmentation of consumers on geographic, demographic, psychographic, and behavioural bases/parameters. This study used elements of factor analysis and cluster analysis along with behavioural modelling to derive segments' personality traits.

Keywords : Telecom, mobile, competition, segmentation, profiling, behavioural

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Telecommunication primarily is the relay of signals over distances for the purpose of communication ; nevertheless, the technology applied in communicating has changed substantially over a period of time. Services related to sending and receiving phone calls, texts, etc. is broader than before. Telecommunication today has a significant impact on contemporary communities of the world. The telecom industry is growing very rapidly across the globe. The telecom industry in India was often compared to its Western counterparts and talked about as a laggard. However, it is now growing and changing (and getting better) at an impossible to imagine pace. Due to its profitability, the industry has, in the past, been owned and controlled by the state. But over the last 25 years or so, there has been a conscious strive to lessen government control. We are witnessing an ever increasing private participation in the mobile telecommunication business.

In the fast-moving contemporary world, people have started to excessively depend on mobile phones (cell phones). The mobile phone has become a necessity for people to carry out day – to – day activities. The mobile phone is a human innovation and works on a network. It can be used anywhere. We can use mobile phones at home or in the office. We can use it for a multitude of reasons. It can be used for mere communication or entertainment. It can be used for convenience or security. It can serve to provide us information or social connectivity. It is applied in a wide variety of settings. The mobile phone has become such an integral part of human life that it has almost

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enslaved it. Mobile phones know no age or gender. Be it a 10-year-old or a 75 year - old, it has captured the attention and fantasy of both. It does not differentiate between a boy and a girl. Both need it, and both use it. People in all regions and areas are using cell phones. It is the modern toy which is in everyone's hands.

The mobile telecommunication services sector across the globe has been seeing extremely rapid growth in the past few years so much so that it has captured a majority of the overall telecommunications market. India too is witnessing a rapid growth in this sector. The Indian telecommunication service market had grown from 13 million subscribers in 2003 to about 893.84 million subscribers in December 2011, registering a phenomenal annual growth rate (Geetha & Kumari, 2012).

Telecom companies aim to achieve a competitive advantage through continuous value modifications and strategically adjusting the terms of competition. The Indian telecom arena, however, also faces the nemesis of dishonest actions that ruin trust, ultimately leading to loss of revenue for the industry as a whole. New rules and policies introduced in the Indian telecom arena have really accelerated the pace of new connections and modified connections through MNP (mobile number portability). Introduction of the number portability facility and rules of changing service providers/operators anytime without changing the mobile number stirred a series of new measures and counter measures. The idea that customers are slow and unwilling to change their number is now obsolete. The focus has shifted to the quality of services delivered rather than mere number of connections. FDI in the telecom sector has also positively impacted the success of many companies owing to increased finances. The growing interference of TRAI has made the telecom operators stand prepared on their heels and deliver excellent customer service. The recent ruling to compensate customers for call drops is one such example of TRAI regulations and actions protecting customer's rights, and at the same time, providing them a platform for grievance redressal.

The primary issue surrounding the dynamics of mobile telecom business in the Indian market is customer relationship management, particularly customer acquisition and retention. Mobile telecommunication network providers are laying emphasis on gaining new customers and also maintaining loyal customers, who would keep on bringing revenue to firms. Acquiring new customers by service providers would be dependent upon knowledge about customers, including their choices of specific features. The more they know their customers, the better prospects of having a large consumer base. Some of the determinants of customer retention include courtesy and respect, security, and correct billing. Happy and satisfied customers are the biggest asset that mobile service providers could create and retain.

In the light of the above arguments, I see a paradigm shift in the mobile telecommunication market wherein the customer has now been provided with full control. It, therefore, becomes almost a necessity to identify some meaningful and viable segments in the mobile telecommunication market. The idea is to have fruitful segments, which can be targeted immaculately with appropriate marketing programs. Once the segments have been identified, it will be relatively easy to define and profile them. The research paper is an attempt in similar direction.

Review of Literature

Gautam and Chandhok (2011) studied switching behavior in the telecommunication sector. The study investigated factors that triggered reasons for mobile phone customers to shift/switch from one service provider to another. By investigating the factors of customer loyalty and customer switching, the findings indicated that switching may be the result of changes in new as well as old determinants. Brand switching behaviour of mobile phone subscribers has many reasons behind it and this study wanted to identify such reasons. Tariffs, customer service, and switching costs were some of the important factors that could trigger/prevent brand switch in the telecommunication sector.

Basha, Lakshmanna, and Fayaz (2011) made an attempt to study the role and importance of consumer choice in determining consumer behaviour for mobile phone usage. The results indicated that mobile phone usage propensity varied with people of differing age brackets. There was a substantial correlation between age and

monthly salary as far as mobile phone consumers were concerned. Educational qualification was not an important factor that could affect the choice of mobile phones. The final choice of mobile phones was made on the basis of services obtained and product quality.

Grünwald (2012) tried to construct a model of buying behaviour in the Czech mobile telecommunication market. The Czech mobile telecommunication market was predominantly an oligopoly comprising of three major operators. The arrival of a new player was being contemplated by the government since 2009. People expected the new entrant to decrease the prices. This was because Europe was already facing very high prices for mobile services. A careful analysis of data revealed that high price of services was a deterrent for unsaturated demand in the telecommunication market, which ultimately led to the finding that price was most critical and crucial in consumer decision-making.

Rao and Aruna (2012) wrote a research paper which aimed at studying the consumer satisfaction in the mobile telecommunication market and its possible future implications on socioeconomic changes. The study explored about consumers' awareness and attitude toward different mobile service providers in Visakhapatnam, Andhra Pradesh. A sample of 200 randomly selected mobile users of Visakhapatnam city was taken. From the analysis, it was observed that the level of consumer satisfaction, the perception of consumers on the prospects of mobile services in Visakhapatnam city, and the impact of mobile services in bringing about social change depended on the demographic characteristics of the respondents/consumers.

Khan, Kareem, and Zeeshan (2014) conducted a study in Hyderabad to study the consumer behavior for mobile services in the backdrop of various services like roaming, recharges, etc. The research study analyzed the buying behaviour and roaming recharge patterns of consumers. The major findings of the research were that good service connection, low roaming packs, availability, and awareness about roaming recharges had a direct impact on consumer behaviour and could be instrumental in preventing/triggering brand switch.

Mann and Jha (2015) conducted a research study based on the quality of services that were being floated by different mobile service providers and the levels of satisfaction that consumers felt. The objective of the study was to analyze the quality of services provided by basic and cellular mobile service providers for assessing the customers' perceptions of the services. The aim of this research was to measure the overall satisfaction of the customers with regard to network availability, billing problems, customer care services, usage, etc. The authors were of the opinion that in an attempt to reduce the consumer churn rate problem, companies constantly try to come up with innovative ideas and plans to retain their original customers and attract new customers.

Nandi and Pattanayak (2015) studied brand loyalty and switching in mobile phone usage among young Indian adults. The study emphasized on brand switching propensities of young Indians and effectively analyzed the resulting impact of various demographic variables on brand loyalty. The study suggested that Apple commanded maximum brand loyalty, although Samsung was found to be the most popular brand. Among the various demographic factors studied, it was found that only age had an impact on brand loyalty. Technical incompatibility and new technical and value added features were the major reasons for switching to a new handset.

Prasad and Kumar (2016) studied the consumer buying behavior for telecommunication services in Andhra Pradesh. Severe competition in the telecommunication industry force customers quite often to switch from one service provider to another. According to the authors, it is thus imperative for service providers to explore and understand the brand switching behavior of customers which, in turn, could be appropriately addressed by identifying and profiling consumer segments.

Uppal and Sharma (2016) tried to assess the consumption behavior and pattern for mobile internet. According to them, the advent of smart phones has revolutionized the internet accessibility and its usage. The research paper analyzed the attitude of mobile internet users, taking into account the use of mobile internet by pre-paid or post-paid customers. Usage pattern & frequency of use is a matter of personal choice. Major findings included difference in data usage among genders, variation in use of applications across different age groups, time spent by various groups of respondents on different applications through mobile internet data, and many more.

Abrahão, Moriguchi, and Andrade (2016) investigated people's tendency to adopt mobile payment and acceptance & use of technology. The study aimed to assess consumer intention of embracing a forthcoming mobile payment service from the perspective of Brazilian customers of cell phones, based on the Unified Theory of Acceptance and Use of Technology (UTAUT). Using relevant modeling, a large part of behavioral intention was explained through performance expectation, effort expectation, social influence, and perceived risk. Perceived cost was not found to be significant. These results indicated to players in the mobile payments market to create mobile payment services with better performance, ease of use, safety and security, and at the same time, being perceived to be fair priced.

Giovanis and Tsoukatos (2017) examined the relationships between service evaluation, corporate image, switching barriers, and customers' intentional loyalty. The proposed model was tested and valuated in the mobile services context. The findings indicated that service evaluation constructs had both direct and indirect effects, through customer satisfaction and corporate image, on customers' intentional loyalty. The outcomes indicated that marketers, in a struggle to create more customer-centric marketing plans, should contemplate both the pool-in factors, echoing the value of the services provided, customer satisfaction, and corporate image, and the interfaces between them, as well as the push-back factors, as all of them might have an impact on customers' behavioral intentions.

Islam (2017) inspected the critical components for the choice/selection of mobile internet services in Bangladesh. The study revealed that performance expectancy, effort expectancy, social influence, perceived risk, and personalization of services seemed to be significant among the six attributes to influence behavioral intention of consumers. The results provided prized advice to the service providers to craft out proper and better plans and marketing agenda.

Chakraborty (2018) studied the impact of celebrity endorsed advertisements on rural consumers' purchase intention towards mobile SIM cards in West Bengal. The study revealed that familiarity was the most influencing factor under celebrity endorsements which had a significant and positive effect on purchase intention of SIM cards among rural consumers of West Bengal. The results also indicated that congruence did not have any impact on rural consumers' purchase intention. The study helped service providers to enhance their subscriber base. The study was unique in the sense that it was conducted only in rural areas of West Bengal.

Babu and Sundar (2019) identified the switching determinants of mobile enterprise customers in the context of pull – push mooring model and mobile number portability. The objective of this study was to determine the critical determinants of switching behavior among enterprise customers of mobile network service providers founded on the pull – push mooring theory and to know the impact of mobile number portability on customer switching behavior. The study was conducted in the Tamil Nadu telecom circle. This study ultimately identified the push factors (network service, billing systems, service encounters, technology, and convenience) and pull factors (reputation, brand image, word-of-mouth recommendation, and pricing) that caused switching as well as the mooring factor (switching cost) that influenced the customers' decision to stay with or switch from the current in-use service provider.

Sathyanarayana, Gargesa, and Bhavya (2019) studied the effectiveness of the celebrity advertisement process and its impact on buying intention. The results of the study revealed that brand ambassadors played an important role in boosting the sales. The study further revealed that products advertised with celebrity brand ambassadors had a significant impact on purchase intention and behavior. Majority of the respondents perceived celebrities' physical attractiveness as the major factor in celebrity advertisements. The respondents wanted a celebrity to be attractive in his/her physical appearance, to wear stylish clothes according to latest fashion trends, and to have an elegant presence.

Reddy and Rao (2019) analyzed the moderating effect of gender on continuance intention toward mobile wallet services in India. A conceptual model was proposed to assess the impact of three significant variables – perceived usefulness, perceived ease of use, and confirmation on the post-adoption behaviour of mobile wallet customers. The analysis of data using structural equation modeling provided certain important insights, including the positive

and strong influence of perceived ease of use on both satisfaction and continuance intention, and satisfaction was found to be the key factor that motivated mobile wallet users to continue using a particular mobile wallet application. Finally, the moderating effect of gender on the hypothesized relationships proposed in the model was empirically supported.

Research Objectives

The main research question to be explored is : What are the key factors that guide end users in decision making in the mobile telecommunication sector, which in turn can help service provider companies to determine what steps need be to be taken to provide better services for end users ? This would be better facilitated by identifying and profiling segments in the mobile telecommunication service market.

The primary objectives of this research study are :

✤ To assess the needs/requirements of various kinds of consumers in the mobile telecommunication market.

✤ To gain an insight in consumer decision making process and purchase behaviour with respect to purchase of mobile telecommunication network service.

✤ To study consumers' functional and emotional evaluation of mobile service providers.

✤ To highlight the expectations of consumers of the mobile telecommunication market.

✤ To identify and profile probable segments in the mobile telecommunication market.

Research Design

Research design is a framework or blueprint for conducting the research study. It charts out the action plan needed to undertake the intended study. It paves the way for a focused and guided research.

The research design used in the study is descriptive design. This research study used quantitative methods to capture aspects of service providers and end user interactions in a way that we are able to understand the decision-making process. Quantitative methods enabled me to capture rich data that can reveal nuances of service providers' reasoning/logic/approach during communication with end users, which would help in more precise and accurate identification and profiling of segments.

(1) Research Study Location, Population, and Time Period : The research study population consisted of Airtel, Vodafone, Idea, Reliance, Aircel, etc. subscribers in Delhi & NCR (Table 1 and Table 2). The duration of the study was six months. The study was conducted in 2017 and revisited in 2018.

(2) Sample Size, Sample Design, and Sampling Technique : Sample size for the survey conducted in Delhi/NCR was determined by referring to similar such studies and in consultation with experts. Krejcie and Morgan formula was used to determine the sample size for the survey. The required sample size is given by the formula :

$$\frac{S = X^2 NP(1-P)}{d^2(N-1) + X^2 P(1-P)}$$

where,

S = Required sample size,
X = Z value (1.96 for 95% confidence level),

Table 1. Sample Respondents Covered in this Study

Area	Sample Size
Delhi	301
NCR	225
Total	**526**

Table 2. Sample Sizes Covered in this Study : Service Provider

Service Provider	Sample Size
Airtel	234
Vodafone	154
Idea	60
Aircel	39
Reliance	39
Total	**526**

N = Delhi/NCR population size,

P = Population proportion expressed as decimal (assumed to be 0.5 or 50%),

d = Degree of accuracy (5%), expressed as a proportion (.05). It is margin of error.

According to Krejcie and Morgan formula/table, for a population greater than 10,00,000, the required minimum sample size is 384. However, to make the research study more accurate, the total sample size for this study was taken to be 580 respondents. Structured questionnaires were administered/sent to 580 respondents. Out of 580 questionnaires, 54 questionnaires were incomplete/incomprehensible and 526 questionnaires were complete in all respects. So, the final sample size achieved was 526. The entire study is based on the findings of these 526 responses. The sampling method/technique applied to the research study is convenience and purposive in nature. Thereby, non - probability sampling technique has been applied.

✤ **Target Audience/Respondents :** Participants were selected based on the following criteria :

(i) Gender : Both male and female.

(ii) Age bracket ranging from 25 – 55 years.

(iii) Having at least one functional mobile connection.

Analysis and Results

(1) Methodology Applied for Behavioral Segmentation :

✤ Telecom service provider subscribers of the listed brands were segmented on a self-view or self-opinion on various behavioural parameters (see Figure 2).

✤ The respondents were asked to rate their selves on a list of attributes to capture their habits, nuances, values, attitudes, practices, beliefs, and personality (refer to Table 3, Table 4, and Figure 5).

✤ Attributes on similar aspects were clubbed to arrive upon broad factors. (refer to Table 3, Table 4, and Table 5).

✎ Clustering was done/run on these scores to arrive at distinct and clearly identifiable segments in the target group (refer to Figure 3 and Figure 4).

Caveats/Caution

✎ Since the ratings are based on self-view/self-opinion, it should always be borne in consideration that we are not talking about reality, but about self - perceptions. This means that a high score on 'being modern' means that the person considered himself/herself as 'modern.' In reality, he/she may or may not actually be 'modern.'

✎ This exercise was done on a limited set of customers. There are not likely to be many exclusive segments in a limited/lesser set of customers (see Table 6).

(2) SPSS Output – Factor & Cluster Analysis : The results reveal that a majority of the respondents come under the segment of Techi, while the segment of Conventionalist has a relatively smaller base (Figure 1). Considering the relevant parameters in terms of subscriber's views on technology, a framework for behavioral segmentation is obtained. The framework is depicted in Figure 2. The typical types of consumers have been identified as far as their approach towards technology is concerned. The typical types of consumers have been defined as Jittery, Advisor, Reviewer, Brunt, Enthralled, Bewildered, and Endorse (Figure 2).

✎ **Segment 1 : Conventionalist :** The first segment (Figure 3) that emerges from the applied framework is coined as "Conventionalist." This segment consists of people who are nervous in using new products and new technology coming into the market. They generally consult their friends and relatives before purchasing new

Table 3. Rotated Component Matrix (RCM)

Rotated Component Matrix		
	Component	
	1	2
Q1 - Can you tell me about your views on technology ? - [At first, I get nervous about using any product with new technology.]	0.611	0.255
Q2 - Can you tell me about your views on technology ? - [I always read reviews before buying new technology or electronic gadgets.]	–0.040	0.605
Q3 - Can you tell me about your views on technology ? - [I enjoy reading about new technology products or electronic gadgets.]	0.243	0.711
Q4 - Can you tell me about your views on technology ? - [I never buy a new product with new technology unless it is recommended by others (friends/colleagues/dealers, etc.).]	0.682	0.176
Q5 - Can you tell me about your views on technology? - [New products with new technology are too confusing to be of much use to me.]	0.814	0.044
Q6 - Can you tell me about your views on technology? - [Technology has little impact on my daily life.]	0.602	0.322
Q7 - Can you tell me about your views on technology? - [I give advice to others when they are looking to buy technology or electronic gadgets.]	0.215	0.744
Q8 - Can you tell me about your views on technology? - [I am among the first of my friends and colleagues to try new technology products or electronic gadgets.]	0.425	0.549
Q9 - Can you tell me about your views on technology? - [I always prefer conventional and tested products over new technology.]	0.679	0.186

		0.689	0.153
Q10 - Can you tell me about your views on technology? - [I restrain myself from buying products with new technology unless it is absolutely necessary.]		0.689	0.153
Q11 - Can you tell me about your views on technology? - [Technology helps me in making my life more organized.]		0.136	0.614
Q12 - Can you tell me about your views on technology? - [Technology has weakened family bonding.]		0.696	0.116
Q13 - Can you tell me about your views on technology? - [Technology has made us lazy.]		0.706	0.131
Q14 - Can you tell me about your views on technology? - [I just can't do without technology.]		0.467	0.463

Table 4. Component Matrix (CM)

Component Matrix[a]

	Component		
	1	2	3
Q1 - Can you tell me about your views on technology? - [I am highly fascinated by new technology.]	.453	.191	.423
Q2 - Can you tell me about your views on technology? - [At first, I get nervous about using any product with new technology.]	.661	−.092	.446
Q3 - Can you tell me about your views on technology? - [I always read reviews before buying new technology or electronic gadgets.]	.298	.542	.553
Q4 - Can you tell me about your views on technology? - [I enjoy reading about new technology products or electronic gadgets.]	.585	.455	−.285
Q5 - Can you tell me about your views on technology? - [I never buy a new product with new technology unless it is recommended by others (friends / colleagues / dealers, etc.)]	.668	−.227	−.307
Q6 - Can you tell me about your views on technology? - [New products with new technology are too confusing to be of much use to me.]	.712	−.394	.125
Q7 - Can you tell me about your views on technology? - [Technology has little impact on my daily life.]	.672	−.076	.068
Q8 - Can you tell me about your views on technology? - [I give advice to others when they are looking to buy technology or electronic gadgets.]	.578	.493	−.150
Q9 - Can you tell me about your views on technology? - [I am among the first of my friends and colleagues to try new technology products or electronic gadgets.]	.650	.220	−.172
Q10 - Can you tell me about your views on technology? - [I always prefer conventional and tested products over new technology.]	.673	−.206	−.038
Q11 - Can you tell me about your views on technology? - [I restrain myself from buying products with new technology unless it is absolutely necessary.]	.653	−.264	.022
Q12 - Can you tell me about your views on technology? - [Technology helps me in making my life more organized.]	.445	.437	−.209
Q13 - Can you tell me about your views on technology? - [Technology has weakened family bonding.]	.642	−.288	−.002
Q14 - Can you tell me about your views on technology? - [Technology has made us lazy.]	.664	−.272	.003
Q15 - Can you tell me about your views on technology? - [I just can't do without technology.]	.641	.132	−.175

Extraction Method : Principal Component Analysis.

[a.] 3 components extracted.

Table 5. Analysis of Variance (ANOVA)

	Cluster		Error			
	Mean Square	*df*	Mean Square	*df*	*F*	Sig.
REGR factor score 1 for analysis 3	112.148	1	.788	524	142.340	.000
REGR factor score 2 for analysis 3	135.915	1	.743	524	183.044	.000

Note. The *F* tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.
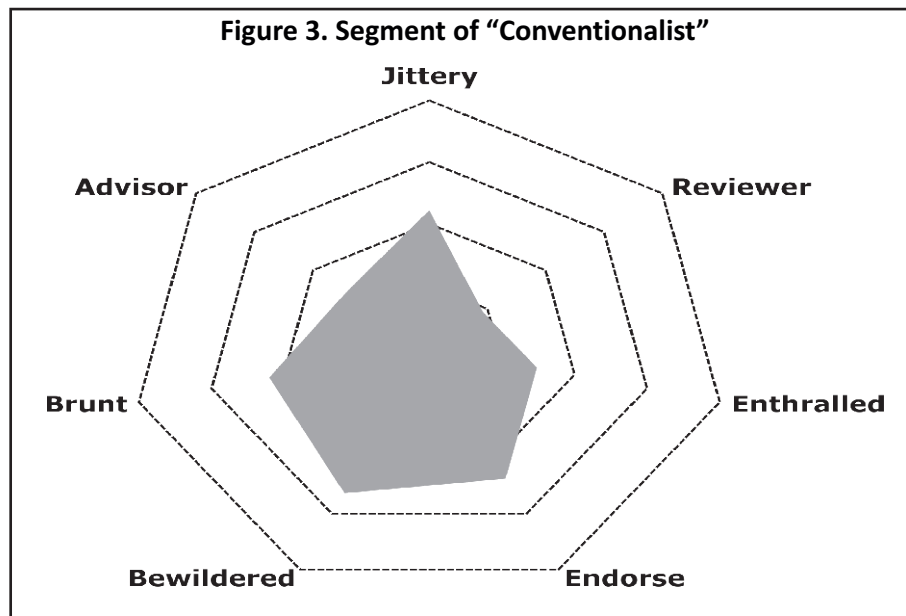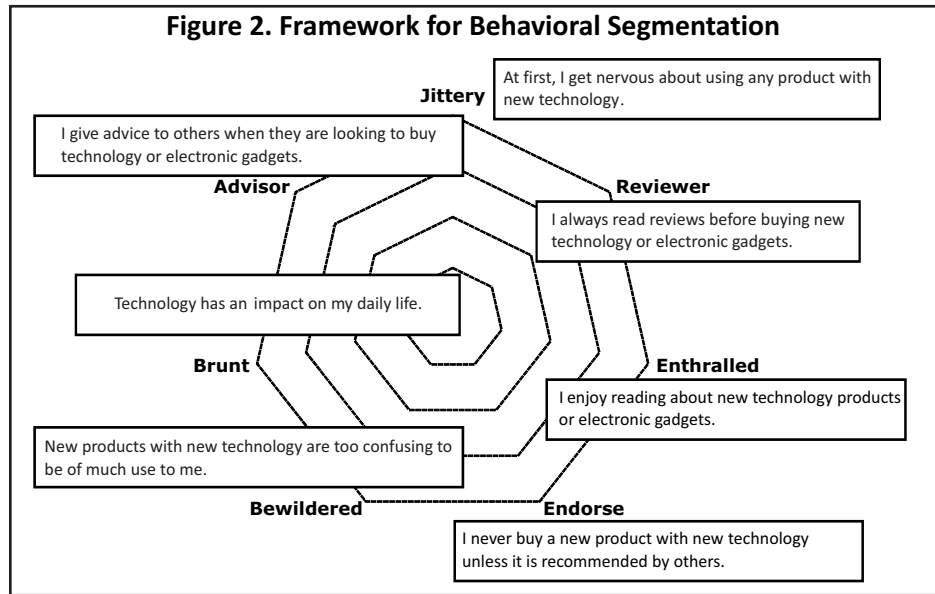
Table 6. Number of Cases

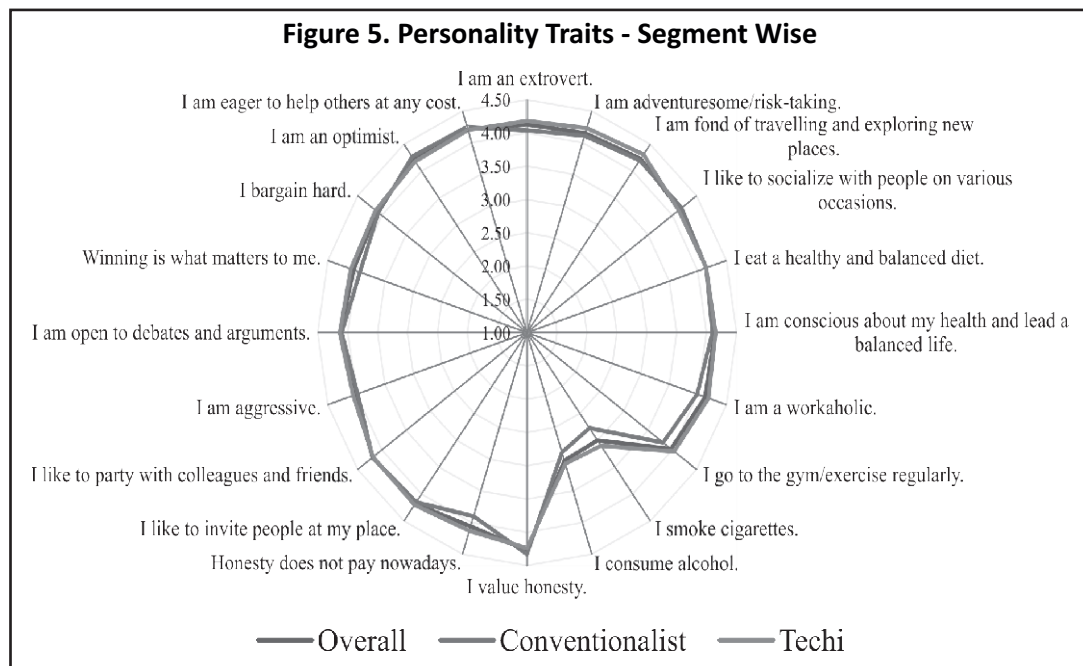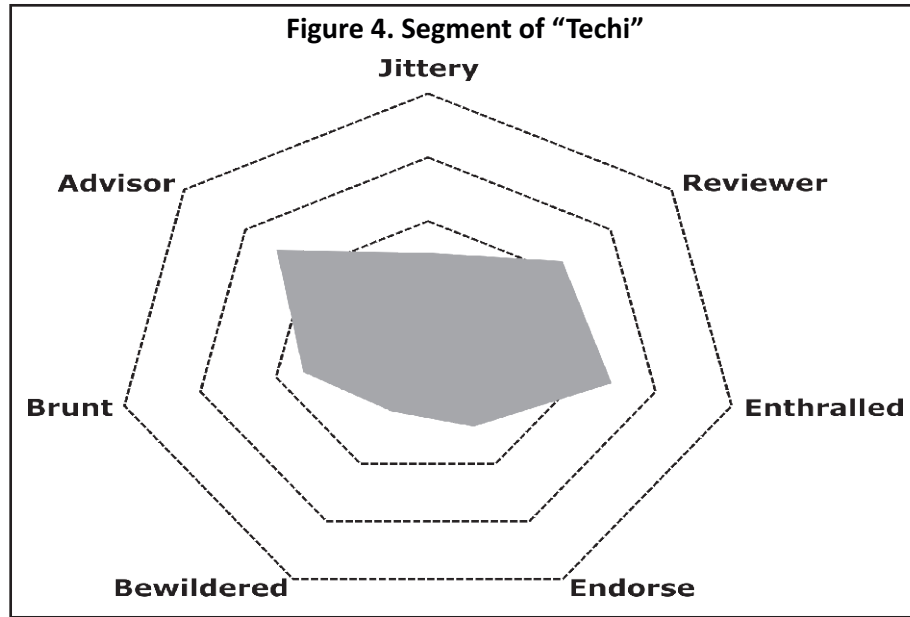| Number of Cases in each Cluster		
Cluster	1	162.000
	2	364.000
Valid		526.000
Missing		00.000

Figure 1. Segment Size
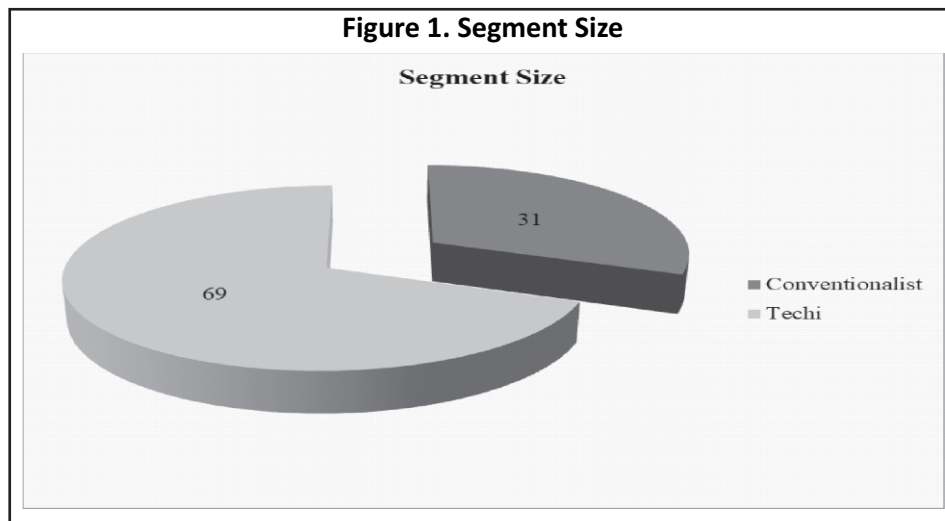
products and new technology. Such conventionalists initially find it difficult to use new products and technology, but gradually, they adapt to the new technology. After some time, they get hold of the new technology. However, technology does not play a vital role in their lives.

✎ **Segment 2 : Techi :** The second segment (Figure 4) that emerges from the applied framework is coined as "Techi". Such techies are people who always read latest reviews and updates about new products and new technology coming into the market. This means that they are quite fond of technology, and hence, the name is coined as "Techi." Techies play a pivotal role for their friends and family who want their opinion in buying new products and new technology. They are technology – savvy consumers. Techies are quick to experiment with freshly arriving products and technology. Technology is exciting for them. It makes their life more organized. Simply put, techies can't imagine a life without technology.

Figure 2. Framework for Behavioral Segmentation

Jittery — At first, I get nervous about using any product with new technology.

I give advice to others when they are looking to buy technology or electronic gadgets.

Advisor

Reviewer — I always read reviews before buying new technology or electronic gadgets.

Technology has an impact on my daily life.

Brunt

Enthralled — I enjoy reading about new technology products or electronic gadgets.

New products with new technology are too confusing to be of much use to me.

Bewildered

Endorse — I never buy a new product with new technology unless it is recommended by others.

Figure 3. Segment of "Conventionalist"

Jittery

Advisor

Reviewer

Enthralled

Brunt

Bewildered

Endorse

The "Conventionalist" segment exhibits the following features/personality traits (Figure 5) :

- ✥ They value honesty.
- ✥ They are eager to help others at any cost.
- ✥ They are optimists.
- ✥ They like to socialize with people on various occasions.
- ✥ They like to party with colleagues and friends.

Figure 4. Segment of "Techi"

Jittery

Advisor

Reviewer

Brunt

Enthralled

Bewildered

Endorse

Figure 5. Personality Traits - Segment Wise

I am an extrovert.
I am eager to help others at any cost.
I am an optimist.
I bargain hard.
Winning is what matters to me.
I am open to debates and arguments.
I am aggressive.
I like to party with colleagues and friends.
I like to invite people at my place.
Honesty does not pay nowadays.
I value honesty.
I consume alcohol.
I smoke cigarettes.
I go to the gym/exercise regularly.
I am a workaholic.
I am conscious about my health and lead a balanced life.
I eat a healthy and balanced diet.
I like to socialize with people on various occasions.
I am fond of travelling and exploring new places.
I am adventuresome/risk-taking.

4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00

Overall ── Conventionalist ── Techi

The "Techi" segment exhibits the following features/personality traits (Figure 5) :

ᗑ They are extroverts.

ᗑ They are risk takers.

ᗑ They are aggressive.

ᗑ They are fond of travelling and exploring new places.

ᗑ They like to party with colleagues and friends.

↳ They like to invite people at their place.

↳ They are fitness freaks.

↳ They are workaholic.

Discussion and Conclusion

Behavioural segmentation parameters applied to the subscribers in the research study lead to the identification/emergence of two behavioural segments or clusters. These are "Conventionalist" and "Techie." The conventionalists value honesty, are eager to help others at any cost, are optimist, like to socialize with people on various occasions, and like to party with colleagues and friends. The techis are extroverts, risk takers, aggressive, fond of travelling and exploring new places, like to party with colleagues and friends, like to invite people at their place, are fitness freaks, and are workaholics.

Vodafone subscribers were more of conventionalists vis-à-vis Aircel subscribers who were more of techi types. Conventionalists spent more money on recharge/bill as against techis. Techis spent more time on SMS, Internet, and social media as compared to conventionalists. On the contrary, conventionalists spent more time making and receiving calls on their mobile/smart phones. The segment of techis had a better experience with schemes/tariffs of service providers in comparison to the segment of conventionalists. The segment of conventionalists seemed to be having an overall better experience with billing/recharge vis-à-vis the segment of techis. The segment of techis appeared to be more satisfied with value added services (VAS) of various network service providers. Techis had an excellent overall experience with their mobile connection service providers. However, conventionalists found their overall experience with mobile connection service providers as very good. A greater percentage of conventionalists were influenced by advertisements of their network service providers as compared to techis. However, techis were highly influenced by the presence of celebrity endorsers in promotions. Conventionalists had a mixed response.

Rational association plays a much more important role for brands/service providers as compared to emotional associations in both segments of conventionalists and techis. The conventionalists showed a greater propensity to recommend their service providers to others as compared to the techis. This implies that techies are stricter and tougher customers and will not recommend so easily.

Hence, it can be safely concluded that in the contemporary marketing warfare between mobile telecommunication service provider companies, those companies will emerge winners who are able to hold back a substantial number of loyal customers. These loyal customers must not only remain with the service provider, but also provide a source of decent revenue to the firm. In other words, lifetime customer retention and average revenue per user would be the deciding factors in the game of thrones for mobile telecommunication service providers. Service providers who are able to stick to their fundamental/core delivery of the benefit/promise, have nicely designed marketing strategies, appropriate pricing, good customer care, and a plethora of apps/VAS are likely to emerge as market leaders among the modern-day mobile telecommunication service providers. All of the above would be greatly helped and assisted by proper identification and profiling of market segments.

Managerial Implications

The study provides meaningful insights into the buyer behavior of consumers with respect to mobile telecommunication services. The study will be useful for managers, decision makers, and academicians in the sense that it provides an in-depth analysis of consumer decision making process and consumer choice criteria for the purchase of mobile telecommunication services. It focuses on the aspect of behavioural segmentation in its own unique way. The discussion on segment wise personality traits provides critical inputs for managers and

decision makers. The identification, analysis, and carving out of the two segments, that is, "Conventionalist" and "Techie" has been done keeping in mind the relevance of the same for proper identification and targeting of consumers. It is assumed that a proper identification and definition of telecom consumers would lead to better segmentation, targeting, and positioning (STP) of the telecom market. A head on comparison of the two segments reveals their buying intentions which can be linked to their personality types and corresponding traits. This study will be helpful for managerial decision making in the backdrop of understanding consumer decision process and the factors affecting the same with respect to mobile telecommunication services.

Limitations of the Study

The research study conducted suffers from the following limitations :

- The research has been conducted within the geographical boundary of Delhi/NCR.
- The research has a limited sample size.
- Accuracy of response, although ensured and tested, cannot be 100%.
- Constraints of time and energy affect the research process.

Due to the above limitations, extreme care and caution should be taken while projecting/extrapolating the results of this research study to other similar/different research studies.

Scope for Further Research

This study has been able to identify and profile two segments of telecom consumers, that is, "Conventionalist" and "Techie." Further studies could be undertaken to identify more segments and define them appropriately. Behavioural segmentation has been applied here. However, future studies can be initiated based on other parameters / bases of segmentation. The present study has been done in Delhi and NCR. Similar studies could be undertaken in other metropolitan / cosmopolitan cities, tier 2 and tier 3 cities of India.

Author's Contribution

The author, Dr. Md. Shahnawaz Abdin, conceptualized the research paper, provided a suitable title to the same, framed research objectives including the research design, gathered and analyzed relevant data, tabulated the findings, and ultimately provided a meaningful conclusion for the discussion. The author effectively applies the notion of behavioural segmentation and in the process, identifies realistic and implementable consumer segments. As a consequence, the paper also identifies personality types and derives personality traits of consumers in the mobile telecommunication services market.

Conflict of Interest

The author certifies that he has no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter, or materials discussed in this manuscript.

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