Online Activities, Interests and Opinions of Internet Users in India

Vivek Singh Tomar[1], Bandana Chadha[2] and Kalyan Kumar De[3]

[1] Research Scholar, Amity Business School- Noida, Amity University – Uttar Pradesh
[2] Assistant Professor, Amity Business School- Noida, Amity University – Uttar Pradesh
[3] Professor, Amity Business School- Noida, Amity University – Uttar Pradesh

Abstract: Over the last two decades, the internet has not only seen phenomenal growth in terms of usage and penetration, it has also emerged as a crucial, indispensable and incredibly popular marketing tool. This has compelled companies to exploit the full potential of the internet to capture the attention of their prospective consumers and use it productively to optimize commercial benefits. Understanding the online consumer behavior has become crucial for developing more focused strategies for harnessing full potential of online users. One major task of marketers is to understand the similarities and differences between internet users inorder to devise effective online targeting strategies. This is possible only through the knowledge of distinctive segments of internet users. In order to target consumers, it is therefore, imperative to understand and profile online users. The pattern and profile of internet users varies vastly from country to country. Since pertinent research on profiling of Indian internet users are few and wide, this research intends to fill the gap. This paper attempts to segment and profile internet users of India on the basis of lifestyle differences. Lifestyle profiling of internet users was conducted to identify segments of internet users based on demographics, internet usage and online activities, interests and opinions (AIO) of internet users. The study will help companies interested in using focused marketing strategies for targeting distinctively specific segment of internet users.

Keywords: Online Activities, Online Interests, Online Opinions, Psychographics, Lifestyles, Segmentation, Internet User Profiles, Indian online users

INTRODUCTION

Internet has brought substantial and distinctively visible changes in the world since its commercial launch. No country in the world remained immune of its adoption due to its wide commercial and social applications. Not only internet technology has benefitted its individual users in terms of ease of information access, it has also helped businesses to reach and interact with consumers by eliminating geographical barriers[1]. Within six months of the launch of the internet in India in 1995 by Videsh Sanchar Nigam Limited, company could gather only around 10,000 internet users at an exorbitant price of INR25,000 for a 250 hour TCP/IP account for commercial organizations at 9.6 kbps speed. By the end of 2016, the number of internet users in India had reached an astounding figure of over 4.6 million users, which is about 34.8% of India's population and accounts for 13.5% share of global internet users. India has progressed significantly but the Indian internet penetration

rate of 34.8% is still behind the global penetration rate of 50.1% [2]. Internet usage prices has drastically reduced in India since its launch.Technology has also improved tremendously leading to faster internet speed with the global average rate being6.3 mbps (Indian average 3.5 mbps), and the growth of mobile internet users has added great prospects to usage of the internet in India and the world [3, 4].

Online access has enabled people from all walks of life to bring entire libraries, entertainment, post offices, banks, financial markets, shopping, services, vendors, and practically everything to a laptop, desktop or mobile. The internet has become a crucial, indispensable and hugely popular marketing tool. This has compelled companies to exploit the potential of the internet in order to capture the attention of prospective consumers and use internet productively to optimize their commercial interests.. Understanding the online consumer behavior has become crucial for developing more focused strategies for harnessing full potential of online users. One of the major tasks among marketers is to understand the similarities and differences between internet users. This is possible only through distinctive segmentation of internet users for better adoption of targeting strategies. In order to target consumers, it is, therefore, imperative to understand and profile online users. The pattern and profile of internet users varies vastly from country to country[5]. The current paper is an attempt to segment and profile internet users of India on the basis of differences in their online lifestyles.

AIM & OBJECTIVES

An in-depth literature reviewrevealed that while demographics determines consumers' needs for products and their ability to buy them, psychographics (also known as lifestyles) explains buyers purchase decisions and the choices they make within the buying options available to them.Demographic variables help marketers locate their target market and psychographic variables provide the marketer with more insight about the segment [6].The aim of this study is to identify the demographic and psychographic profile of internet users in India and to segment them on the basis ofonline activities, interests and opinions.It is also intended to profile the identified lifestyle segments by highlighting the similarities within segments and differences among segments.

Specifically, this research addresses the following issues:

(1)   What is the demographic profile of internet users in India?

(2)   What is the internet usage profile of Indians?

(3)   In how many clusters can internet users in India be classified on the basis oflifestyle variables like online activities, interests and opinions?

(4)   What are the characteristics of lifestyle segments among internet users in India?

LITERATURE REVIEW

Customer segmentation is one of the most important concepts in marketing and can be divided into four distinct types: socioeconomic, geographic, product-related and psychographic.Psychographics is a term first introduced by Emanuel Demby, which brings together "psychology" and "demographics" [7]. It is also known as lifestyle-based segmentation. Psychographic research is rooted in and equated to lifestyle [8].Lifestyle refers to a person's particular way of living, and has been used primarily toexamine the living patterns and mobility of various social classes[9]. Gunter and Furnham(1992) defined lifestyles as "patterns in which people live and spend their time and money". Lifestyle has been long considered an important determinant and a better predictor than demographic information [10].Using lifestyle to segment markets began in the 1960s and Plummer was the first to use lifestyle information to classify consumers into specific segments [11]. Lifestyle is often used to determine the relationship between demographic variables and behavioral patterns for technology-enabled services and products [12]. Its use as a moderator is not a new concept [13]. Its application can be found in many research studies[14]. Lifestyle perspective offer marketers a useful basis for marketing and designing services for their customers [15]. Lifestyle

is an important variable that influences consumers' use of the internet for a variety of activities and profile of internet users were found to encompass more demographic and lifestyle diversities [16].

In order to facilitates understanding the attitudes, motives, needs and perception, the commonly used AIO dimensions are:

Table 1
Activities, Interests and Opinions

Activities	Interests	Opinions
Work	Family	Themselves
Hobbies	Home	Social Issues
Social Events	Job	Politics
Vacations	Community	Business
Entertainment	Recreation	Economics
Club Membership	Fashion	Education
Community	Food	Products
Shopping	Media	Future
Sports	Achievements	Culture

Source: William D. Wells and Douglas J. Tigert, "Activities, Interests and Opinions", Journal of Advertising Research 11(August, 1971): 27-35

Using AIO based psychographic analysis has several advantages. It helps to find commonalities, segment and target the market beyond simple demographic, creates a new view of the existing market, helps in better positioning products, helps communicate better with the customer, improves product strategy development and becomes important in political campaigns and policy making [6].

RESEARCH METHOD

Many approaches are available to the study of psychographic variables. One of the ways is to study the lifestyle variables by an AIO inventory[17, 18] for use in segmenting, targeting and positioning. Lifestyles, consists of activities, interests and opinions i.e. AIO's. A psychographic study consists of a long list of statements designed to capture relevant aspects of a consumer, like personality, hinting motives, interests, attitudes, beliefs and values.The demographic and AIO analysis are highly complementary and work best together[6].

The current study used a structured self-administered questionnaire designed from a psychographic inventory of the AIO model accompanied by a 5 point Likert scale on which respondents indicated their level of agreement or disagreement with 35online life style statements. The questionnaire additionally captured 6 demographic and 3 internet usage information of each of the 300 respondents. In constructing the questionnaire of lifestyle statements, literature review was done and research studies which reveal online user's needs, reflections and experiences were used. Focus-group and panel discussion with users and scholars were conducted to refine the questionnaire and verify the research structure. Data was collected from internet users in India from the Nation Capital Region of Delhi with the help of structured questionnaire administered through face to face interview. Purposive sampling technique was employed and appropriate care has been taken to include representative and proportionate representation of Indian internet user population in the sample.

Life styles characteristics were measured by the respondent's activities, interests and opinions (AIO) scores. A demographic and lifestyle profile of online users was created and segmentation of online users was based on the result of the survey of eleven online activities, eleven online interests and thirteen online opinionsof the 300 user respondents. Cluster analysis was used to identify the homogeneous group based on online lifestyles. The

identified segments were later cross tabulated on demographic and internet usage variables to further refine the profiles of internet users.

ANALYSIS & RESULTS

Data collected from sample respondents was summarized and tabulate. The pattern of respondents profile was investigated to study diversity pattern of internet users in India.

Demographic Profile

The demographic profile of respondents presented in Table 2 given below revealed that number of males was proportionally more as compared to females. The data was collected only from Indian adults above the age of 18 years and was found to be positively skewed in terms of distribution. Proportionally higher number of young respondents in the age group of 18-25 years (60%) participatedin the study, while very few (9.3%) only were above the age of 45 years. This skewed distribution was found rationally correct as the majority of internet users in Inidaare youths[19]. Majority of respondents were post graduate (58%) followed by graduates (22%) which confirms that majority of internet users have higher education beyond basic schooling in India. on the basis of occupation, respondents were mostly students (55.8%), followed by salaried private sector employees (28.5%), a fact corroborated through previous studies[20, 21, 22,37]. Income wise distribution appears to cover all the income groups equally, with majority of respondents from the income group above INR 150,000 per annum (30.3%) which was expected as most of the internet users in India are urban, educated, young and relatively high incomed [23, 20, 24]. Most of the repsondentswere "Single" (65.3%), followed by "Married with kids" (26.7%).

Table 2
Demographic profile of respondents

Gender		
	Frequency	*Percent*
Male	160	53.3
Female	140	46.7
Age		
	Frequency	*Percent*
18-25 Years	180	60.0
25-35 Years	51	17.0
35-45 Years	41	13.7
Above 45 Years	28	9.3
Education		
	Frequency	*Percent*
High school	6	2.0
Intermediate	40	13.3
Graduate	66	22.0
Post Graduate	174	58.0
Ph.D.	14	4.7
Occupation		

	Frequency	Percent
Self Employed	13	7.9
Salaried (Private)	47	28.5
Salaried (Government)	6	3.6
Student	92	55.8
Housewife	5	3.0
Unemployed	2	1.2

Annual Household Income		
	Frequency	Percent
Below INR 5 Lac	82	27.3
INR 5-10 Lac	64	21.3
INR 10-15 Lac	63	21.0
Above INR 15 Lac	91	30.3

Marital Status		
	Frequency	Percent
Single	196	65.3
Married (Without Kids)	24	8.0
Married (With Kids)	80	26.7

Internet Usage Profile

Internet usage profile of the respondents is presented below in Table 3 which highlights the internet usage profile elements like internet usage experience(since how many years the user is using the internet), internet usage frequency (how often therespondentuses the internet in a typical week), and internet usage duration(for how long the user remains hooked to internet during a typical internet usage). Analysis of data in Table 3 reveals that, a big majority (57.7%) of adult internet users in India are experienced users and have been using the internet for more than seven years as of the time of the study. This indicates that the internet in India has passed its nascent stage of early adoption which started in 1995 and in the last two decades, a vast majority of urban, educated and moderate to high incomed Indians have attained maturity in terms of internet usage experience. A large proportion of internet users in India (82.3%) were found to be daily internet users, onceagain confirmingthe high penetration and adoption of the internet in India. The modal conventional usage duration was found to be between one to three hours daily, indicated by the number of hours internet users remained hooked to the internet during a typical day.

Online AIO Inventory

Exploratory literature review offered some insight into the online activities, interests and opinions of Indian internet users, which was substantiated by focus group findings. Three focus groups of mixed respondents were conducted inthe presence of a trained group moderator and observer. The transcripts of the focus group studies were recorded and analyzed further to reveal meaningful insight. Finally 11 items were identified as major online activities that primarily Indian internet users indulge in while being online. 11 online interests were identified and included in the study, and after aggregating various positive and negative opinions on the internet, a total 13 opinionswere identified for the study. The survey instrument thus involved a total of 35 items (11 activities, 11 interests and 13 opinions) to study the online lifestyle of Indians. The scale so constructed to quantify the online lifestyle activities of Indians was tested for face validity by an expert panel of three judges,

Table 3
Internet Usage profile of respondents

Internet Usage Experience		
	Frequency	*Percent*
Less than 1 Year	2	0.7
1-3 Years	24	8.0
3-5 Years	42	14.0
5-7 Years	59	19.7
More than 7 Years	173	57.6
Internet Usage Frequency		
	Frequency	*Percent*
Once a week	8	2.7
1-3 Days	18	6.0
3-5 Days	27	9.0
Daily	247	82.3
Duration per Usage		
	Frequency	*Percent*
Less than 30 Minutes	25	8.3
30 Minutes - 1 Hour	67	22.3
1-3 Hours	89	29.7
3-5 Hours	55	18.3
More than 5 Hours	64	21.4

and after conducting a pilot test on 50 respondents, the reliability of construct was tested through Cronbach's Alpha. The alpha value for the 35 items in the online lifestyle measurement scale was found to be 0.877, which indicate scale items have relatively high internal consistency [25]. The online activities were coded AC1 to AC11, online interests were coded I1 to I11 and online opinions were coded O1 to O13 as tabulated and presented below in Table 4. The mean values in Table 4 represent the average rating given by 300 respondents on a five point scale (1-Least Likely, 5-Most Likely for Activities and Interests; 1- Strongly Disagree, 5-Strongly Agree for Opinions) for all 35 inventory items depicting online AIO.

Table 4
Inventory of Online Activities, Interests and Opinions

Variable Code	*Variable Label*	*Variable Short Code*	*Mean Value*
A1	I use internet for social media	Social Media	4.09
A2	I use internet for learning purpose	Learning	4.16
A3	I use internet for movie tickets/shows	Movie tickets/shows	3.70
A4	I use internet for phone calls/video calls	Phone calls/video calls	3.64
A5	I use internet for information search	Information search	4.48
A6	I use internet for banking activities	Banking activities	3.59

cont. table 4

Variable Code	Variable Label	Variable Short Code	Mean Value
A7	I use internet for travel bookings	Travel bookings	3.77
A8	I use internet for entertainment	Entertainment	4.23
A9	I use internet for product/services search & reviews	Product/services search & reviews	4.21
A10	I use internet for online shopping	Online shopping	3.85
A11	I use internet for emailing	Emailing	4.44
I1	I like watching sports online	Watching sports	2.82
I2	I like watching/downloading adult contents online	Watching/downloading adult contents	2.64
I3	I like online news and information updates	Online news and information update	3.96
I4	I like to watch/ download movies	Watch/ download movies	3.75
I5	I like streaming/ downloading music	Streaming/ downloading music	3.97
I6	I like playing online games	Playing online games	2.92
I7	I like to watch videos online	Watch videos online	3.98
I8	I like making new friends on social sites	Making new friends on social sites	2.85
I9	I like to share my viewpoint on online blogs / forums/ groups	Share my viewpoint on online blogs / forums/ groups	2.89
I10	I like to stay connected with people I know	Stay connected with people I know	4.03
I11	I like to research and read articles for knowledge gain	Research and read articles for knowledge gain	3.93
O1	I think that life is impossible without internet	Life is impossible without internet	3.74
O2	I think that internet is not good for health	Internet is not good for health	2.77
O3	I think that children should be kept away from internet	Children should be kept away from internet	2.95
O4	I think that there is nothing real in this virtual world	There is nothing real in this virtual world	2.92
O5	I think that internet has made my life very easy	Internet has made my life very easy	4.18
O6	I think there is no excitement in life without internet	There is no excitement in life without internet	3.49
O7	I think that internet has brought the world closer	Internet has brought the world closer	4.27
O8	I think that one should spend more time offline with real people	One should spend more time offline with real people	4.08
O9	I think that internet is a waste of time	Internet is a waste of time	2.49
O10	I think that internet is the best and fastest way to express oneself	Internet is the best and fastest way to express oneself	3.39
O11	I think that the fast way to name and fame is through internet only	The fast way to name and fame is through internet only	3.03
O12	I think that non internet users are as good as illiterate	Non internet users are as good as illiterate	2.42
O13	I think that in future, all buying and selling will happen online only	In future, all buying and selling will happen online only	3.43

By looking at the mean values in Table 4 we could interpret that information search is the most popular online activity. To stay connected with known people is the major online interest, while the most popular opinion regarding internet in India is that; internet has brought the world closer. Though there are other significant AIOs but looking at the highest score of category items, we could understand that like the rest of the world, Indian

internet users toogive highest importance to the most basic features which internet technology has to offer, i.e., connectivity and information sharing [26, 27, 28, 29].

Cluster Analysis

Cluster analysis was used for dividing, grouping, identifying and profiling Indian internet users on the basis of their online activities, interests and opinions. Cluster analysis is a convenient multivariate method for identifying homogenous groups ofobjects called clusters. Objects (or cases, observations) in a specific cluster share many characteristics, but are very dissimilar to objects not belonging to that cluster[30]. Online activities variables A1 to A11, online interest variable I1 to I11 and online opinion variables O1 to O13 (refer to Table 3) were chosen as input variables for clustering. The first confronting question was to decide the number of clusters into which the population could be divided. Hierarchical Clustering procedure was used with Ward's method and Squared Euclidian distance interval measure to achieve this. The resulting Agglomeration Schedule, Scree Plot based on the Agglomeration Schedule and Dendrogram Plot, so obtained as the result of statistical analysis is presented below in Table 5.

Table 5
Agglomeration Schedule (Hierarchical Cluster Analysis)

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	286	289	0	0	0	2
2	285	286	0	0	1	278
3	263	264	0	0	0	175
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
293	3	24	10210.9	286	282	297
294	2	6	10477.01	292	291	295
295	2	57	10822.16	294	276	298
296	5	25	11178.97	289	270	297
297	3	5	11656.68	293	296	299
298	1	2	12319.21	290	295	299
299	1	3	14533.72	298	297	0

The Agglomeration Schedule in Table 5 above provides information on the objects being combined at each stage of the clustering process. A total of 299 (n-1 =299) stages were observed. The distance coefficient values in the 'coefficients' column were observed. It was ascertained from the agglomeration schedule in the Table5 that the difference between the value in the 'coefficients' column grow suddenly high between stage 295 (five clusters) and 296 (four clusters). The above analysis indicates possibility of three to six broad clusters.

For determining the right estimate of possible homogeneous clusters, a Scree Plot (Figure 1) was created by plotting the distances (Coefficients column in Table 5) against the number of clusters, using a Microsoft Excel spreadsheet program. The distinct break (elbow) generally indicates the solution regarding where an additional combination of two objects or clusters would occur at a greatly increased distance. Thus, the number of clusters prior to this merger is the most probable solution. The scree plot in Fig. 1 shows such a distinct break at x=5. Therefore, a five cluster solution was considered as the most suitable solution.
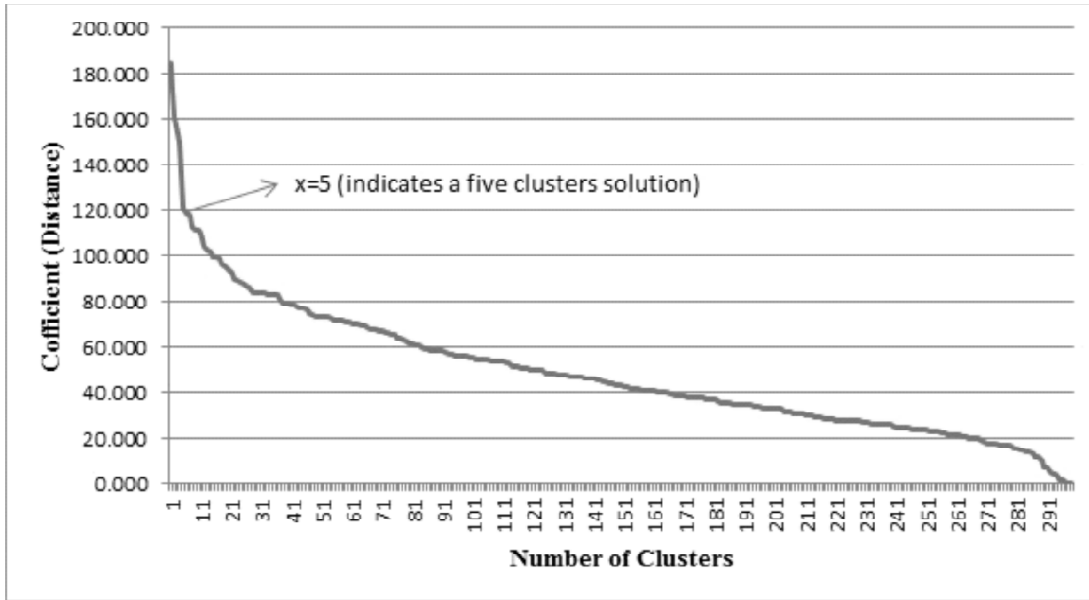
Figure 1: Scree plot to determine number of clusters

A further look into the Dendrogram Plot (Figure 2) reconfirms rescaled distance of 5 distinct clusters combine. The five distinct nodes where similar cases combine are distinctly marked in Figure 2 below.
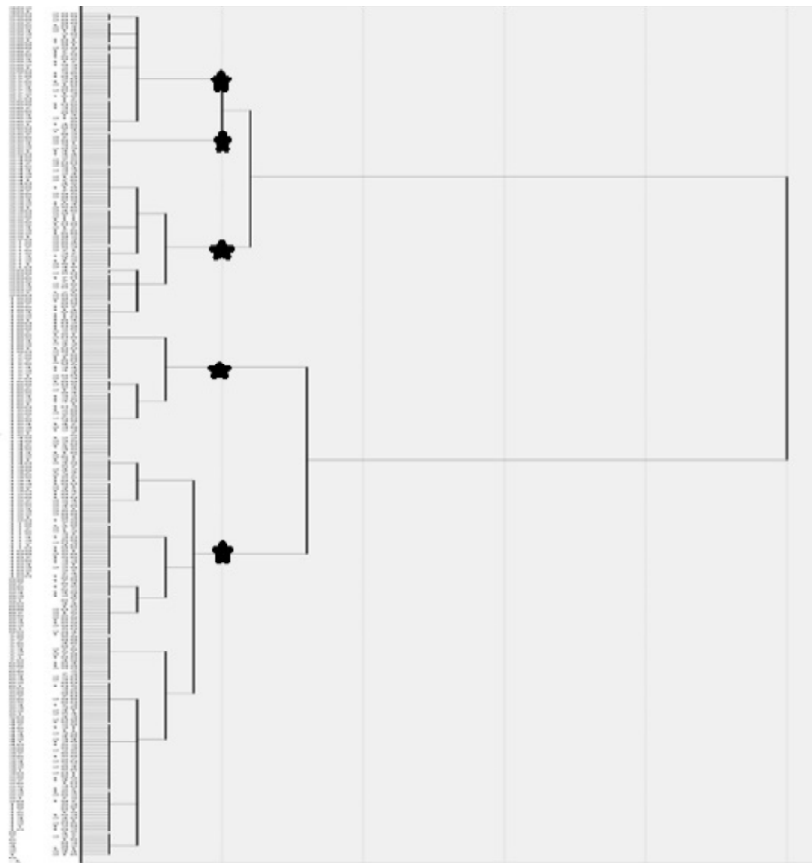

Figure 2: Dendrogram Plot using Ward Linkage (Rescale Distance Cluster Combined)

12000

Thus a five cluster solution was confirmed through above analysis and we could finally conclude that the clustering of data on the basis of online AIOs lead to five distinct lifestyle segments of Indian internet users. The frequency distribution of the identified clusters of 300 respondents is mentioned below in Table 6.

Table 6
Cluster Distribution

Cluster	Frequency	Percent
1	47	15.7
2	141	47.0
3	57	19.0
4	43	14.3
5	12	4.0
Total	300	100

Lifestyle Segments Profiling

Scale values for item O2, O3, O4, O8, O9 and O12 were reversed to maintain uni-directionality of online opinion measurement (refer to Table 4). Composite average score for online activities, interests and opinions was calculated for each cluster by splitting the data file on the basis of clusters and then finding the average for each segment (refer to Table 4 for variable codes). The overall average A Score, I Score and O Score was also calculated. Overall online lifestyle score and individual cluster scores for online lifestyle (LS Score) was also calculated and compared with individual cluster scores.

$$A\ Score = \frac{(\Sigma_{i=1}^{i=11} A_i)}{Nc}; I\ Score = \frac{(\Sigma_{i=1}^{i=11} I_i)}{Nc}; O\ Score = \frac{(\Sigma_{i=1}^{i=13} O_i)}{Nc}$$

Where, Nc= Number of cases in each cluster (refer to Table 6)

LS Score = A Score + I Score + O Score

Table 7
Average AIO Scores for Clusters

	A Score (44.17)	I Score(37.73)	O Score(43.91)	LS Score (125.81)
Cluster 1	45.94	46.98	40.87	133.79
Cluster 2	48.34	41.80	47.04	137.18
Cluster 3	42.95	27.35	43.14	113.44
Cluster 4	35.32	33.16	40.56	109.05
Cluster 5	25.75	19.42	34.75	79.92
No. of Cases of	55	55	65	175

Based on analysis of scores from Table 7 we could conclude that:

Cluster 1: This cluster is characterized by (1st rank in online interests; 2nd rank in online activities and overall online lifestyle; 3rd rank in online opinions) and above average in online activities, interests and overall online lifestyle, but below average in online opinion.

Cluster 2: This cluster is characterized by (1st rank in online activities, opinions and overall lifestyle; 2nd rank in online interests) and above average in online activities, interests, opinions and overall online lifestyle.

Cluster 3: This cluster is characterized by (2nd rank in online opinions; 3rd rank in online activities and overall online lifestyle; 4th rank in online interests) and below average in online activities, interests, opinions and overall online lifestyle.

Cluster 4: This cluster is characterized by (3rd rank in online interests; 4th rank in online activities, online opinions and overall online lifestyle) and below average in online activities, interests, opinions and overall online lifestyle.

Cluster 5: This cluster is characterized by (5th rank in online activities, online interests, online opinions and overall online lifestyle) and below average in online activities, interests, opinions and overall online lifestyle.

For a deeper insight, radar charts were created using Microsoft Excel for analyzing the cluster wise differences in online activities, online interests and online opinions (refer figure 3, 4 and 5 below)
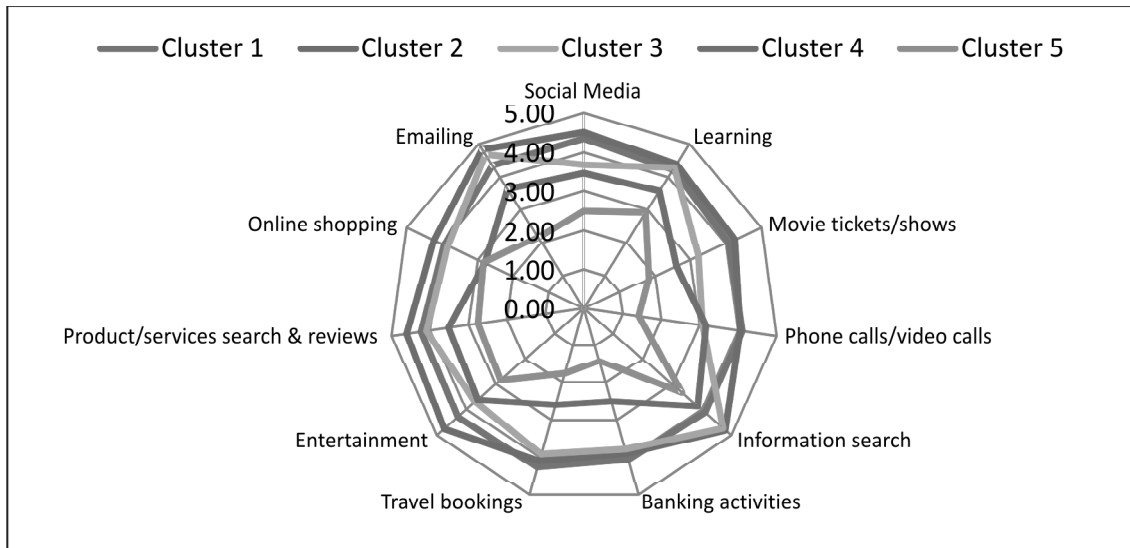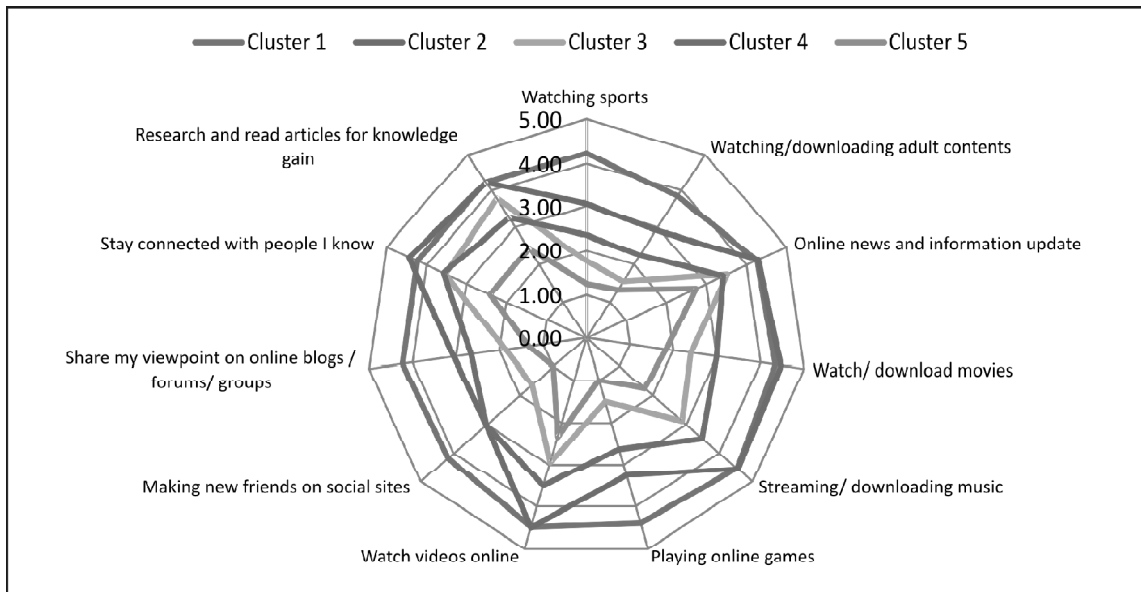

Figure 3: Online activities among clusters
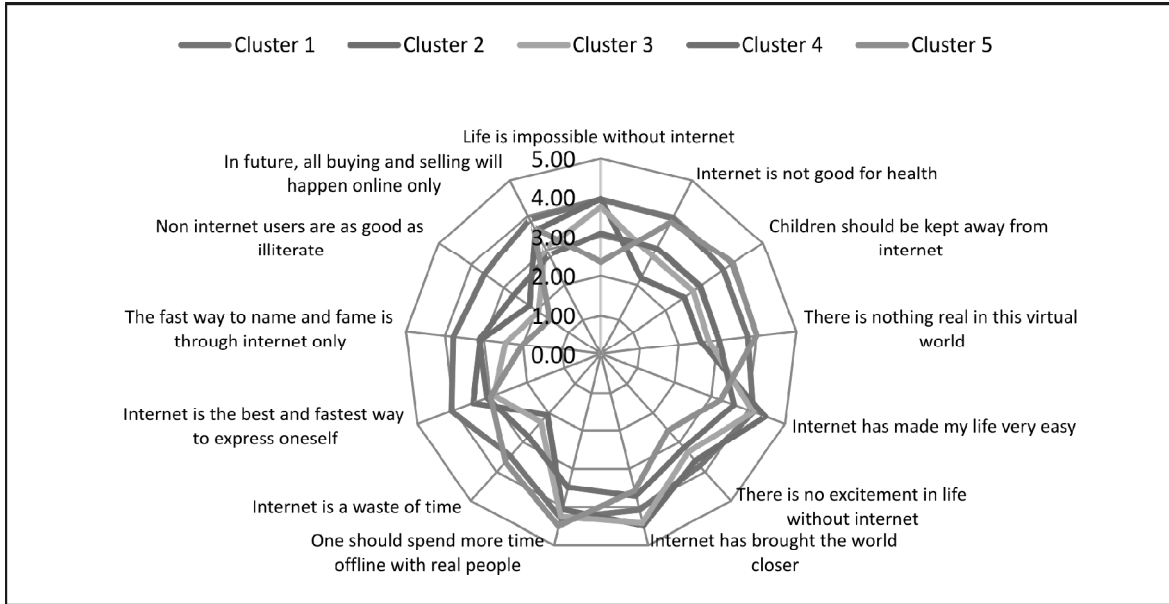

Figure 4: Online interests among clusters

Figure 5: Online opinions among clusters

The analytical summery of above Figures 3,4 and 5 is presented in tabular form below (Table8), for quicker understanding of online lifestyles and lifestyle differences among various identified clusters of internet users.

Based on the characteristics of the identified clusters built on Table 7 and Table 8, the clusters could be named as Cluster 1- Recreational users, Cluster 2 - Productive users, Cluster 3 – Balanced users, Cluster 4 – Utility users and Cluster 5 – Incidental users.

Table 8
Summery profiles of AIO clusters

Cluster No.	Online Activities	Online Interests	Online Opinions
Cluster 1 (Recreational users)	Typically characterized by highest activityin online Banking, followed by online Travel Booking and using internet for phone calls/video calls.	This cluster was found interested mostly in entertainment and social explorations on the internet. On top were interest areas like watching sports, followed by watching/ downloading adult contents, playing online games, making friends on social sites and sharing viewpoints on blogs/forums/ groups. This group wasfound almost close to Cluster 2 in terms of watching online videos and downloading movies & music.	This cluster has many positive beliefs about internet and emotional high connect. As this group believes most strongly that there is no excitement in life without internet, all buying/selling in future would be online, better way to expression, name and fame is online. This group thinks very strongly that non internet users are as good as illiterate. But they also feel that internet is not good for health and their belief is close to Cluster 5. They are also close to Cluster 2 in their opinion that life is impossible without internet.
Cluster 2 (Productive users)	Most active amongst all online activities except few activities where Cluster 1 is most active.	This Cluster is most interested in knowledge utility of the internet, followed by reading research articles, online news and information, staying connected	This group being most active on the internet also holds positive opinions most strongly like, life is impossible without internet, internet has brought the world closer, and internet has made

contd. table 8

Cluster No.	Online Activities	Online Interests	Online Opinions
		with known people and watching online videos, watching/downloading movies.	user'slife easy. This cluster also stand second to Cluster 1 in believing that the internet is the fastest way to express.
Cluster 3 (Balanced Users)	More active than Cluster 1 in emailing, online information Search and online learning where this cluster is almost close to Cluster 2. Very close in online shopping to Cluster 1.	Low in all online interests as compared to Cluster 1 and 2, but higher than Cluster 4 in interests like online reading of articles and researches for information gain and online news and information update.	This cluster holds quite a balanced view about the internet.Theyare close to Cluster 1 & 2 in their belief that the internet has made their life easy, and life is impossible without internet. But they also hold certain opinion almost close to Cluster 5 where they believe that one should spend more time offline with real friends while they don't think that internet non users are as good as illiterate.
Cluster 4 (Utility users)	More active than Cluster 3 in online Phone Calls/Video Calls and very close to Cluster 5 in Online Shopping.	This group is almost close to Cluster 2 in making new friends online. For rest of the interest areas, this cluster falls between Cluster 2 and 3.	This cluster is found close to neutral in terms of most opinions. Similar to Cluster 3 & 5, this group does not feel that non internet users are as good as illiterate.
Cluster 5 (Incidental users)	Least involved and active in any online activities.	Least interested in all online interests.	Because of low involvement and low interest, this group is found to have mostly negative opinion about the internetlike, they feel that internet is waste of time, there is nothing real in virtual world, one should spend more time offline, children to be kept away from internet and also feel that internet is not good for health. They keep a strong contrary view on the statement that internet users are as good as illiterate.

Segment profiling on Demographics and Internet usage pattern

To understand the association between the groupings of identified AIO segments with demographic and internet usage variables, cross tabulation analysis with non-parametric Chi Square test with Cramer's V value was estimated to test the following hypothesis:

H1: Online AIO Clusters are independent of Gender

H2: Online AIO Clusters are independent of Age

H3: Online AIO Clusters are independent of Education

H4: Online AIO Clusters are independent of Occupation

H5: Online AIO Clusters are independent of Income

H6: Online AIO Clusters are independent of Marital Status

H7: Online AIO Clusters are independent of Internet Usage Experience

H8: Online AIO Clusters are independent of Frequency of Internet Usage

H9: Online AIO Clusters are independent of Usage Duration

Table 9
Chi square analysis for demographic variables across AIO clusters

Cross Tab	Chi Square	df	Cramer's V	Asymp. Sig	Remarks
Gender*Clusters	9.59	4	0.179	0.048	H1 not accepted; weak and minimally acceptable association
Age* Clusters	66.694	12	0.272	0.000	H2 not accepted; desired and moderately strong association
Education*Clusters	45.780[a]	16	0.195	0.000	H3 not accepted; weak and minimally acceptable association
Occupation* Clusters	71.250[a]	20	0.244	0.000	H4 not accepted; moderate and acceptable association
Income*Clusters	18.298[a]	12	0.143	0.107	H5 accepted
Marital Status*Clusters	64.207[a]	8	0.327	0.000	H6 not accepted; very strong and extremely desirable association

Table 10
Chi square analysis for internet usage variables across AIO clusters

Crosstab	Chi Square	df	Cramer's V	Asymp. Sig	Remarks
Internet Usage Experience*Clusters	57.66	16	0.219	0.000	H7 not accepted; moderate and acceptable association
Frequency of usage *Clusters	55.816[a]	12	0.249	0.000	H8 not accepted; moderate and acceptable association
Duration per usage *Clusters	33.050[a]	16	.332	.007	H9 not accepted; very strong and extremely desirable association

Table 9 and 10 above were analyzed and Chi Square value and its significance (p value) were used to ascertainthepossibility of any association between the AIO clusters and Demographic or Internet Usage variables. Cramer's V value was used to ascertain the strength of association.

Based on p value which is less than 0.05 in all the cases except "Income", all the hypotheses are not accepted except H5. Hence it is concluded that Cluster membership is dependent on demographic variables as well as internet usage variables except income where the association was found independent.

Further the post-hoc analysis of the cross tabulations revealed the associations between AIO cluster memberships and demographic/ internet usage variables. The results are summarized and listed below in Table 11.

CONCLUSION

The study visibly identified five different segments of internet users in India based on online lifestyles of internet users in India. Differences in lifestyle were highlighted in terms of online users dissimilar activities, interests and opinions towards the internet and its usage.On the basis of similarities in lifestyle, Indian internet users were grouped and labelled as Recreational users, Productive users, Balanced users, Utility users and Incidental users. Productive users were found to be the biggest segment,followed by segments of Balanced users, Recreational users, Utility users, and Incidental users. Based on which segment is being targeted, marketers can decide their marketing strategy. Aside from the size of the segments, a detailed profiling of the segments based on the intensity and involvement with the internet was also ascertained. Productive users and Recreational users were found to have the most involved lifestyle as compared to Utility users and Incidental users. Balanced users, as the name suggests, were found in between the five lifestyle segments in terms of their involved online lifestyle.

Table 11
Cluster associations with demographics and internet usage

Cluster 1(Recreational users)	Male Majority; Close representation of all age groups; mostly high school and intermediates; Mostly unemployed and students; Mostly Singles; Mostly with either less than 1 year or more than 7 years of experience of internet usage; Mostly daily users of internet; Mostly 1-3 hrs. of internet usage per day
Cluster 2(Productive users)	Male Majority; Mostly 18-35 age group; Mostly Intermediates, Graduates and Post Graduates; Mostly Self-employed, students, private salaried and unemployed; Mostly Singles and Married without kids; mostly 5-7 years and above 7 years of internet usage experience; Mostly daily users of internet; Mostly 3-5 hrs. and more than 5 hrs. of internet usage per day
Cluster 3(Balanced Users)	Female Majority; Mostly of 35-45 age group; Mostly Post Graduates and PhDs; Mostly Government Salaried; Mostly married with kids; Mostly daily usage of internet; Mostly more than 5 hrs. of internet usage
Cluster 4(Utility users)	Female Majority; Mostly mix of 18-25 & 35-45 age groups; Mostly post graduates and Intermediates; Mostly students and unemployed; Mostly singles; Mostly daily or once in 3-5 days of internet usage; Mostly 1-3 hrs. of internet usage per day
Cluster 5(Incidental users)	Female Majority; Mostly above 45; Mostly Intermediates and Graduates; Mostly Housewives; Mostly married with kids; Mostly once in a week internet usage; Mostly 30 min to 1 hr. of internet usage per day.

All demographic variables like age, gender, occupation, education and marital status were found to have association and showed dependency on online lifestyle segments, except income which was found independent of online lifestyle. Marital status was found to have the highest association with lifestyle, followed by age, occupation, education and gender respectively. Internet usage profile variables like internet usage experience, frequency of usage and duration per usage were also found to be dependent on online lifestyle segments. Duration per usage or the amount of time a user remained hooked to the internet during a typical usage was found to be most dependent on online lifestyle segments.

The cluster associations of demographic and internet usage profile clearly distinguishes between various online lifestyle segments that exist in India. The classification and profiling of Internet users in India may help companies interested in targeting internet users through more focused marketing strategies intended for specific individual segment of interne user. Businesses like Internet Service Providers (ISPs), Online Selling, Online promotions and Digital Marketing may find the results of the current study quite useful in formulating their targeting strategies like multi segment targeting or concentrated/ niche marketing. Based on an understanding of online lifestyle differences, online marketers may be able to position themselves better and devise more effective strategies.

REFERENCES

[1] Bagga, T., & Manas, B. (2013). A Study of Intrinsic and Extrinsic Factors Influencing Consumer Buying Behaviour Online. *Asia-Pacific Journal of Management Research and Innovation, 9*(1), 77-90.

[2] "India Internet Users," 2016. [Online]. Available: http://www.internetlivestats.com/internet-users/india/. [Accessed 12 January 2017].

[3] "Fastmetrics," [Online]. Available: https://www.fastmetrics.com/internet-connection-speed-by-country.php. [Accessed 12 January 2017].

[4] I. Mehta, "India's Average Internet Speed Is 3.5 Mbps," 15 July 2016. [Online]. Available: http://www.huffingtonpost.in/2016/07/01/indias-average-internet-speed-is-3-5-mbps/.

[5] N. Donthu and A. Garcia, "The Internet Shopper," *Journal of Advertising Research,* vol. 39, no. 3, pp. 52-58, 1999.

[6] S. Satish and A. Dr. Rajamohan, "Consumer Behaviour and Lifestyle Marketing," *International Journal of Marketing, Financial Services & Management Research,* vol. Vol.1 Issue 10, October 2012.

[7] E. Demby, "Psychographics: Who, What, Why,When, Where and How,," *American Marketing Association,* pp. 196-199, 1971.

[8] L. Kahle, R. Liu and H. Watkins, "Psychographic Variation across Geographic Regions," *Advances in Consumer Research,* vol. 19, pp. 346-352, 1992.

[9] L. Lin, H. Shih and S. L. Lin, "The influence of lifestyle and money attitude on purchase decisions: The moderating effect of marketing stimulation and," *International Journal of Advanced Scientific Research and Technology 2(2),* pp. 442-470, 2012.

[10] W. Jih and S. Lee, "An exploratory analysis of relationships between," *Journal of Computer Information System,* vol. 44, no. 2, pp. 65-73, 2003.

[11] J. Plummer, "The concept and application of life style segmentation," *Journalk of Marketing 38(1),* pp. 33-37, 1974.

[12] H. Lee, H. Lim, L. Jolly and J. Lee, "Consumer lifestyles and adoption of high-technology products: A case of South Korea," *Journal of International Consumer Marketing 21(3),* pp. 153-167, 2009.

[13] T. Chen and Q. He, "Applying decision tree techniques to segmentation bases for e-marketing," *Management Science Research 3(1),* pp. 1-25, 2006.

[14] K. Matzler, J. Fuller and F. R., "Customer satisfaction and loyalty to Alpine ski resorts: The moderating effect of lifestyle, spending and customers' skiing skills," *International Journal of Tourism Research 9(6),* pp. 409-421, 2007.

[15] C. Yu, "Construction and validation of an e-lifestyle instrument," *Internet Research 21(3),* pp. 214-235, 2011.

[16] L. Schiffman, E. Sherman and M. Long, "Toward a better understanding of the interplay of personal values and the Internet," *Psychology & Marketing,* vol. 20, no. 2, pp. 169-186, 2003.

[17] J. T. Plummer, "Life Style Patterns and Commercial Bank Credit Card Usage," *Journal of Marketing,* vol. 35, no. 2, pp. 35-41, 1971.

[18] Wells, W. D. Tigert and J. Douglas, "Activities, Interests and Opinions," *Journal of Advertising Research,* vol. 11, 1971.

[19] "Distribution of internet users in India as of September 2013, by age group," 2013. [Online]. Available: https://www.statista.com/statistics/272394/age-distribution-of-internet-users-in-india/.

[20] P. G. Ipeirotis, "Demographics of Mechanical Turk," *NYU Working Paper; CEDER-10-01,* 2010.

[21] M. Fusilier and S. Durlabhji, "An exploration of student internet use in India: the technology acceptance model and the theory of planned behaviour," *Campus-Wide Information Systems,* vol. 22, no. 4, pp. 233-246, 2005.

[22] M. S. Khan and S. S. Mahapatra, "Service quality evaluation in internet banking: an empirical study in India," *International Journal of Indian Culture and Business Management,* vol. 2, no. 1, pp. 30-46, 2009.

[23] S. Khanna, A. Ratan, J. Davis and W. Thies, "Evaluating and improving the usability of Mechanical Turk for low-income workers in India," in *ACM DEV '10 Proceedings of the First ACM Symposium on Computing for Development*, London, 2010.

[24] L. Press, W. Foster, P. Wolcott and W. McHenry, "The Internet in India and China," *First Monday,* vol. 7, no. 10, 2002.

[25] E. G. Carmines and R. A. Zeller, Reliability and Validity Assessment, California: Sage Publications, 1979.

[26] L. Leung and P. S. Lee, "Multiple determinents of life quality: the roles of internet activities, use of new media, social support, and leisure activities," *Telematics and Informatics,* pp. 161-180, 2005.

[27] I. Slevin, "The internet and society," in *Sociology: Introductory readings.*, Polity Press, 2001.

[28] T.-P. Liang and H.-J. Lai, "Discovering user interests from Web browsing behavior: an application to Internet news services," in *System Sciences, 2002. HICSS. Proceedings of the 35th Annual Hawaii International Conference*, 2002.

[29] C. M. Cheung, M. K. Lee and N. Rabjohn, "The impact of electronic word of mouth: The adoption of online opinions in online customer communities," *Internet Research,* pp. 229-247, 2008.

[30] E. Mooi and M. Sarstedt, A Concise Guide to Market Research, Verlag: Springer, 2011.

[31] Internet World Stats, "World Internet Users and 2016 Population Stats," 30 June 2016. [Online]. Available: http://www.internetworldstats.com/stats.htm. [Accessed 29 Dec 2016].

[32]   L. Schiffman, L. Kanuk and S. R. Kumar, Consumer Behavior, 10th edition ed., Noida: Pearson Education, 2013.

[33]   D. William and J. T. Douglas, "Activities, Interests and Opinions," *Journal of Advertising Research,* pp. 27-35, 1971.

[34]   B. Gunter and A. Furnham, Consumer Profiles: An Introduction to Psychographics, London: Routledge, 1992.

[35]   W. Wells and D. Tigerts, "Activities, Interests and Opinions," *Journal of Advertising Research 11,* pp. 27-35, August 1971.

[36]   D. Moray, "20 years of Internet in India: On August 15, 1995 public Internet access was launched in India," 15 August 2015. [Online]. Available: http://www.news18.com/news/tech/20-years-of-internet-in-india-on-august-15-1995-public-internet-access-was-launched-in-india-1039859.html. [Accessed 12 January 2017].

[37]   Bagga, T., & Chouhan, R. (2013). Factors Influencing the Effectiveness of C2C Websites in Delhi-NCR. In K. Reena, & A. Rashmi, *Interdisciplinary Perspectives on Business Convergence, Computing, and Legality* (pp. 121-131). USA: IGI Global.