Value Creation of Mobile Usage amongst Generation Z in Delhi and Pune

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1. Introduction:

A mobile gadget in hand is no more merely a simple device used for communication today but it has become an extension of every individual personality and lifestyle. These wireless gadgets have multi-purpose use such as for telephonic interactions, for expressing ones opinions, beliefs, emotions, for self-entertainment, for online shopping, for online banking transactions, travel bookings etc. Mobile phones are not merely a fad but its transforming the way millions of people do business or use it as a tool to enhance their market reach.

As per Indian Brand Equity Foundation Report (IBEF), the Indian Telecom Industry with total 110.01 million connections is the fifth largest in the world and is growing rapidly. Metropolitan areas constitute major share of the telecom subscriptions at 60 percent and the balance being at the rural level. Whether population is living in rural or urban settlements, educated or not educated, demographics across varied age groups are reliant on mobile phones and cannot seek their existence without the same. With the government fair and proactive regulatory framework, low – priced handsets, aggressive marketing strategies, telecom services have been made available to the masses at much reasonable prices. Telecom Industry is the highest employment generator in the country. Penetration of these wireless broadband services has further extended the reach of the internet across geographical boundaries. India is experiencing a transition from desktop internet access to an "on-the-go" experience. The emerging wave in the Indian Telecom Industry is the Third Generation and Fourth Generation technology. The technology is intended for Smartphones which is a multimedia phone handset with a high density screen resolution that is an upgrade over the computer with plentiful features and applications that are driving the mobile industry such as camera, audio – video, internet surfing, voice calls, messaging, emails, microsoft office and other mobile applications. The name "Smartphone" refers to improvements in the speed, ease and convenience in data transfer over the Internet, portability and wireless connectivity that has led to the popularity of such portable hand devices.

According to The Statistics Portal (2019), the market size of smart wireless gadgets is around 300 million (2017) and is likely to reach 382 million by year 2018 in India. It is further predicted to rise by 33.3 per cent from the present subscribers by the year 2021. Based on Nielsen Informate Report (2019), people use this technology mostly for social networking, socialising, entertainment, and other online shopping and banking transactions. Hence, as per Mackenzie (2006), today most of the activities have a smartphone application for it be it online shopping for grocery, food, clothing etc.

With India being the evolving superpower, the smartphone market has evolved from conventional mobile phones to smartphone/ multimedia devices. Nevertheless, the trend of smartphone is catching up especially among the younger generation and is now being considered as an essential part of human personal and business life. It is considered as an extension of an individual's personality. A significant chunk of student's population carries smartphones along with them. Mobile phones usage is not merely only for socialising but for being on the social platform twenty four hours a day, for entertainment, for shopping online, for travel plans etc. Marketers are also targeting the Indian youth by creating cool ring tones, games, screen savers, notifications etc.

E-commerce has further given a boost to the Telecom industry with high penetration of Internet Communication Tools (ICT) in the retail segment. International brands are now showcasing their products and services extensively on E-tailing channels like Flipkart, Snapdeal, and Amazon in India to rapidly expand their presence. Today, young Indians are a huge target market for goods and services. They want clothes, shoes, cell phones, accessories, music, games, entertainment all at the snap of their finger with much ease and convenience and without the botheration of shopping and bargain hunting at the retail outlets.

India remains the target market for international players of mobile phones. Demographics factors like improved disposable incomes, changing consumer mind-set, value seekers, low inflation levels and a much younger population etc. have all contributed to the rise in the usage of mobile phone technologies. The PLC (Product Life Cycle) of smartphones in India is 12 to 24 months. Such a short Product Life Cycle explains the fact that Indian consumers are biggest spenders on lifestyle consumer products. Mobile industry is the fastest growing industry and is evolving at the same time with new products and features. The millennial are the most intense users of this technology. Hence considering the above, the researcher was intimidated to conduct research study in this arena.

2. Literature Review

According to Balakrishnan & Raj (2012), smart phones are gaining popularity among the young generation, as they enjoy being socially connected and it also provided a sense of security at times of emergency and to overcome loneliness.

According to Richard Kipkemoi Ronoh, (2014), mobile phones are not only used as a simple communication device but this technology is being used today for ample of purposes basis the individual lifestyle and needs.

As per Bianchi and Phillips (2005), Self-esteem of owning a mobile phone is the prime factor among the young population. They are the vivid users of technology and its varied features and applications. Casey (2012), through his research study expressed that isolation, inhibition are significantly associated with excessive usage of smart phones. More the usage of smart phone signified less face to face communication.

Rendering to Krithika M. and Dr. S. Vasantha (2013), smart phone usage among the young generation was strongly integrated into the individual's behaviour and societal attitude.

Naveenta Gupta, Sonia Garg, Khushdeep Arora (2015), through their research work observed that today's young generation misused their handsets like they communicate over the phones while driving or in the classrooms etc. and generally gave undue preference to these gadgets over their general well-being and studies.

According to Vimala Balakrishnan, Ram Gopal Raj (2011), Mobile phones had become an ever-present consumer element primarily used for socializing, networking and entertainment. The significant attributes that the consumer considers while purchasing a mobile phone are brand, lifestyle and price. However there are few inappropriate behavioural issues among the youth which is a raising cause of concern. Even with respect to gender diversity in the usage pattern, for females mobile phones are mostly used to communicate, socialise and as a safety device while the men used this device more for gaming and entertainment purposes.

Referring to Muhammed Mujahid Khan (2008), research paper wherein the researcher stated that these wireless gadgets though an essential part of our life however excess use of the same impacts psychology, health and has harmful effects.

Speaking from the data gathered from Walsh SP, White KM, Young RM (2008) research work, wherein the researchers explored the association between the youth and their mobile handsets using thematic data analysis. They stated through their research work that the Generation Z users seek more emotional benefits in using a mobile phone and considered it as an intrinsic part of youth lifestyle.

Doaa M. Abdel-Salman et al. (2019) expressed through their research work that it had become a major concern globally with the Generation Z being so habituated to their wireless gadgets and internet. The research analysis showed unfavourable effects of extensive usage of this technology leading to loneliness, solitude, lack of focus, inattentiveness and disturbance in the sleeping patterns etc.

According to Walsh et al. (2008, 2010) youth showed both signs of cognitive salience and behavioural salience, wherein students thought about their phones and constantly checked upon them even when they were not using them for making calls.

As per Balakrishnan & Raj, (2012) through their "Uses and Gratification Theory Framework, stated that today individuals switch to such technological gadgets for satisfying their community and emotional needs such as networking, privacy, safety and status. Behavioural issues such as addiction, using mobile phone in class, while driving etc. were also considered. The findings of the study also highlighted upon the factors that influenced the purchase behaviour of the consumers while purchasing mobile phones. The most prominent influencing factors being brand, price, features etc. Students today used mobile handsets extensively for socialising with friends and family members irrespective of time and distance. Smartphones are also more of a status symbol or a fashion item for most of the young population.

As per Auter (2007); Ogunyemi (2010), who through their research work highlighted the most significant motives for students' to use mobile phones which was to communicate for inclusion (feeling of belonginess), control (feeling of security) and affection (feeling of love and affection).

2. Objectives and Rationale of the Study

As per Indian Brand Equity Report (2019), the Central Government initiative of setting up unrestricted high-speed Wi-Fi in 2,500 cities and towns across the country is likely to have 700 million internet users by the year 2025.

Basis review of literature and other readings, it was observed that not much extensive research work was conducted in understanding the usage pattern of this wireless technology with respect to the Indian market by way of its changing demographics and mobile phone evolution among generation Z.

The researcher especially targeted the university students being the prime focus of this study due to the phenomenal dynamics of this cohort group, which still needed to be explored.

The rationale of the research study aimed at understanding the prevalent common practices of smartphone usage among the youth, functionality of smartphone and how this generation exploits the same, varied patterns of mobile usage across cultures and demographics. It was also very imperative to acknowledge the cultural background as they can influence the way technology was being observed, adopted and utilized by the millennial today. The research study also highlighted the behavioural characteristics such as emotions, feelings while using mobile phone, number of times one looked into the mobile phone, purpose of usage, how mobile phone usage influenced one's lifestyle, brand influence on social acceptance, price consideration while purchasing etc.

Therefore, the objectives of this paper are:

1. To assess and envisage generation Z user's frequently-used applications and habitual patterns.

2. To categorize the mobile usage pattern of generation Z with respect to heart share and mind share and to understand most common practices of mobile phones amongst the youth, functionality of the mobile phones, and "share of mind" , " share of value" and "share of heart" inferences on individuals mind and emotions so as to comprehend their behavioural traits.

3. To analyse the effect of mobile usage on quality of life share of youngsters achieved through mind share, heart share and value share.

3. Research Methodology

Research Design and Study

The researcher applied the mixed-method approach i.e. use of both the qualitative and quantitative measures for data collection and analysis. The study was conducted in two phases. Initially, an in-depth interview was conducted with 80 university students (15 - 30 years) in Delhi. Following that, further in-depth survey was conducted with 186 university students (15 - 30 years) in Pune. The study was descriptive in nature.

Both primary and secondary sources of information and data collection were used for the groundwork of research study. Both Qualitative and quantitative measures were implemented to collate and analyse the data. On the basis of primary research four factors were identified such as mobile phones used primarily for social and entertainment needs, mobile phones have made life more convenient for shopping and travel fulfilments, mobile phones have made life simple, better and more fun and enjoyable thereby leading to an overall enhancement in quality of life. A detailed questionnaire was implemented addressing all the influencing determinants and was circulated among the sample respondents within the age profile of 15 – 30 years. SPSS 21 software was used for data analysis. Other numerical techniques were also performed to analyse and interpret the data collated. Later, the outcome of the research work was matched with the hypothesis and the objectives of the study to draw relevant conclusions.

Questionnaire Development

The questionnaire was divided into four sections basis a well- defined research problem, objectives, hypothesis and profile of respondents to be interviewed. Section A – Demographics which included age, education, profession etc., Section B – Mobile Usage Pattern in terms of hours spent on mobile, frequency of usage, purpose of usage, Section C- Expenditure on mobile services, money spent on buying a new phone, Section D – Negative impact of using a mobile phone. Multiple choice questions gave a more

practical approach to the survey as it was easy and quick to gather information from the respondents. The questionnaire was unambiguous, written in clear, precise and layman language.

The survey was developed on the basis of past studies, earlier research publications, and basis the current scenario in the mobile industry. For each determining factor for mobile usage, there were multiple choices for attaining responses from the target audience. For example, for understanding the mobile usage, the respondents were asked to respond to varied multiple options like education related, business related, friends related, shopping related etc. SPSS 21 software was used for data analysis. Primarily, descriptive statistics (value share, mind share, heart share) were used for describing the data on different attributes obtained from the questionnaire.

Research Technique

Research technique used for analysis was Factor Analysis to find the correlation between demographics, behaviour, opinions and attitudes of university students with regard to their usage of mobile phones for social and entertainment needs for convenience of shopping and travel fulfilments, making life simple, better and more fun and enjoyable thereby leading to an overall enhancement in quality of life .Based on eigenvalue attribute constructs greater than one were selected for analysis. For the sample adequacy of the present research study Kaiser Meyer –Oklin test was conducted followed by Cronbach's alpha test to check the validity of four constructs of value share, mind share, heart share and quality of life share. Through regression analysis the impact of mobile usage on generation Z quality of life has been analysed by considering heart share, mind share and value share as dependent variables and quality of life share as predictor variables.

4. Data Analysis

i)   Kaiser-Meyer-Olkin Measure of Sampling Adequacy

Kaiser-Meyer-Olkin Measure of Sampling Adequacy stated that when we get the derived values nearby 1.0, then it authenticates the data collated for factor analysis. If the derived value is less than 0.50, then factor analysis would be inappropriate and insignificant. In the present research study, the result of the

KMO Measure of Sampling Adequacy is 0.803, which is more than the minimum value of 0.5 and hence validates a good factor analysis.

The researcher also applied Bartlett's test of sphericity and the results were as follows:

Chi-Square =1657.137, df 120 with a significance of 0.

TABLE i: Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.803
Bartlett's Test of Sphericity	Approx. Chi-Square	1657.137
	df	120
	Sig.	.000

ii)   **Principal Component Analysis**

The outcome of the Principal Component Analysis was four factors explaining 62.566% of total variation. Attributes which had eigenvalue greater than one were considered for analysis. Below is the outcome of the Principal Component Analysis summarised as follows:
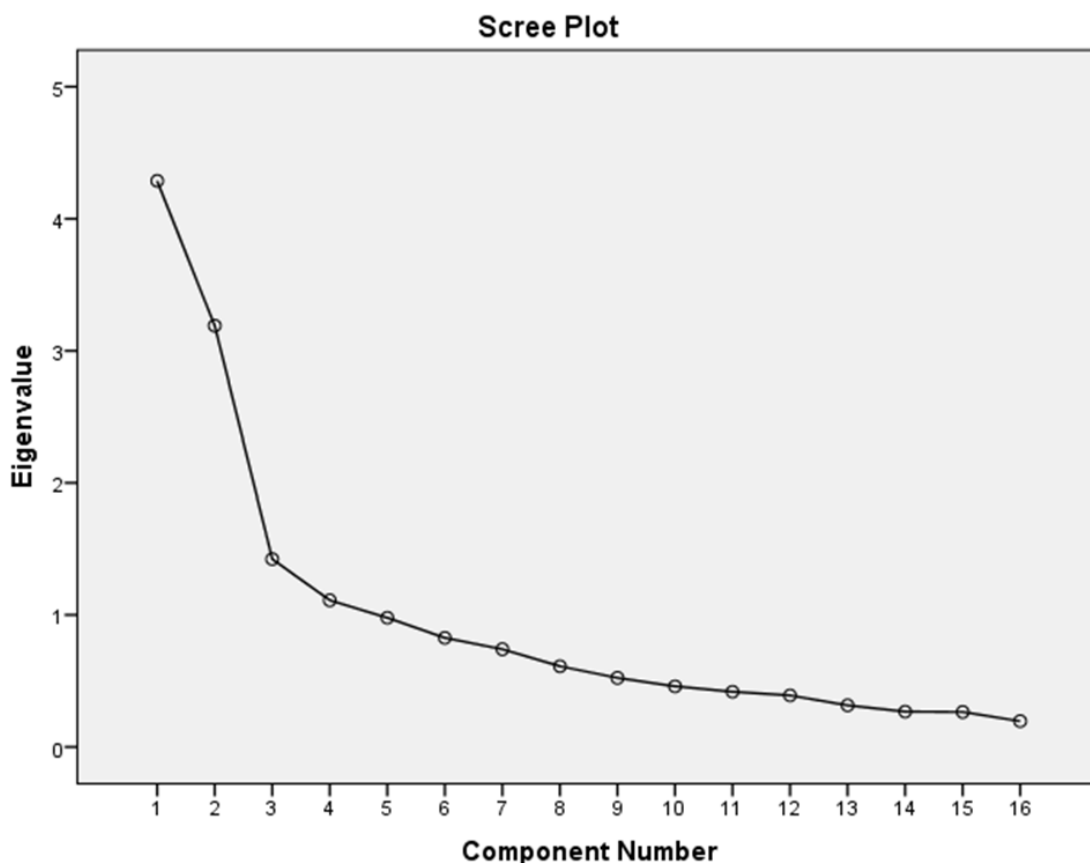
Principal Component Analysis

TABLE ii: Principal Component Analysis

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.287	26.792	26.792	4.287	26.792	26.792	3.699	23.120	23.120
2	3.190	19.940	46.732	3.190	19.940	46.732	2.661	16.633	39.753
3	1.422	8.890	55.622	1.422	8.890	55.622	2.336	14.601	54.354
4	1.111	6.944	62.566	1.111	6.944	62.566	1.314	8.212	62.566

iii)   Scree Plot

Exhibit iii: Scree Plot

The Scree plot is a pictorial demonstration that showed the variance of each component in the dataset. It stated that four components out of sixteen attributes taken for the study should be retained in order to explain a high percentage of the variation in the data. The variance of each component was calculated using the following formula: $\lambda i \sum i=1n\lambda i$ where λi was the ith eigenvalue and $\sum i=1n\lambda i$ was the sum of all of the eigenvalues. The "Scree test" stated that one should plot the eigenvalues of the correlation matrix in descending order, and then use a number of factors equal to the number of eigenvalues that appeared preceding to the last major drop in eigenvalue magnitude. Here, the scree plot indicated the first major drop

in Eigenvalue after the fourth factor. So it was concluded that, considering both Kaiser criterion and scree plot, the above analysis can be carried on with four factors.

The Rotated Component Matrix showed the factor loadings (correlation between the factors and the attributes).Factor loadings described the strength of relationship between the factors and the attributes grouped under that factor. Any factor loading more than 0.5 was considered to be of high correlation and was taken for grouping purposes.

For example: Social engagement (0.829), Entertainment Needs (0.853) has a correlation more than 0.5, hence they belonged to the first factor; Heart Share.

The second factor constituted the behavioral traits, many respondents had felt that life had become more simple with the use of mobile phones (0.793), life was better (0.875), and fun (0.847) which all belonged to the second factor; value share.

Quality of life (0.770) belonged to the third factor; Quality of life share

Shopping Convenience (0.728), Online Food Apps for delivery (0.709) and Online Travel bookings (0.803) belonged to the fourth factor; Mind Share.

iv)   Rotated Component Matrix

TABLE IV: Rotated Component Matrix

Rotated Component Matrix[a]				
	Component			
	Mind Share	Heart Share	Value Share	Wholesome Value
Useful for getting	.178	.438	.077	.536
Useful for	.581	-.469	.006	.312
Very useful to be in	.168	.829	.273	.069
Easy to shop	.728	.200	.157	-.168
Easy to order	.709	.316	.043	-.151
Travel visit can be	.803	.029	.006	.104
Useful for getting	.628	-.111	-.008	.351
Ease of getting	.586	-.538	-.063	.338
Good source	.079	.853	.229	.034
Ease of	.685	.125	-.048	.160
Love to take	.433	.508	.188	-.024
Enjoy to play	.459	.054	.151	-.033
Life is	.046	.279	.793	-.022
Life is Better	.073	.168	.875	.044
Life is Fun	.066	.081	.847	-.026
Quality of life	-.019	-.062	-.032	.770

Extraction Method: Principal Component Analysis.

a. Rotation converged in 7 iterations.

Four most important factors were the primary results of the factor analysis:

Heart Share - Social Engagement with close family and peer groups; Entertainment needs was the utmost factor explaining 26.792% of the total variance.

Value Share - In terms of behavioral traits, many respondents had felt that life has become more simple, fun and enjoyable with the inclusion of technology thereby explaining 19.940% of the total variance.

Quality of Life Share – Quality of life belonged to the third factor explaining 8.890% of the total variance.

Mind Share – Mobile phones being used for online shopping, food ordering with convenient delivery options and online travel bookings and reservations was the last but yet another explaining 6.944% of the total variance.

The effect of mobile usage on enhancement of quality of life share with predictors, heart share, mind share and value share had been analysed through regression analysis.

TABLE V: Regression Model Specifications

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.999^a	.999	.999	.29324	.999	64986.324	3	254	0.000	2.235
a. Predictors: (Constant), Heart Share, Mind Share, Value Share										
b. Dependent Variable: Quality of life share										

The regression analysis model with R and R squared value of 0.999 with the significance value of less than 5 percent depicts 99 percent of variance in quality of life by mobile usage among youngsters in Delhi and Pune and can be representative of the population with the Durbin Watson value of greater than 2.235.

TABLE VI: Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	23.368	.018		1280.018	0.000
Mind Share	4.878	.018	.604	266.691	0.000
Heart Share	4.658	.018	.576	254.661	.000
Value Share	4.442	.018	.550	242.863	.000

a. Dependent Variable: Quality of life share

Quality of Life = α + β₁Mind Share + β₂ Heart Share + β ₃Value Share

Quality of life Share = 23.368 + 0.604(.00)* Mind Share + 0.576 (.00)* Heart Share + 0.550 (.00)* Value share

*values in parentheses depict 5 percent level of significance

The regression analysis results depicted that all three factors of mind share, heart share and value share had significant contributory factor in enhancing quality of life of the management students of Delhi and Pune cities. The contribution of mind share in terms of buying online and utilizing time was 60.4 percent followed by social engagement, entertainment i.e.; mind share at 57.6 percent and 55 percent contribution of Value share making life more enjoyable and fun loving.

Descriptive Findings

This research was a descriptive quantitative study which aimed to examine the cross-cultural habitual patterns of mobile phones on the basis of following individual aspects such as demographics, behaviour, opinions and attitudes of the respondents.

a) Demographics

Demographics of the respondent such as age, education, profession were gathered. Millennial are the young owners of smartphone today and mostly smartphone ownership was high within the age group of 16 – 25 years.

A.1 Mobile Usage Pattern (Hours per day)

In this research survey respondents were asked questions with respect to approximate hours of mobile phone usage, number of times user saw the phone for any updates in an hour, when was the last time user didn't use their mobile phones etc. The questions were all multiple choice based questions.

TABLE a.1: Mobile Usage Pattern (Hours per day)

Hours	No of Responses
1hr to 2hr	30
2hr to 3hr	48
3hr to 4hr	35
4hr to 5hr	46
5hr to 6hr	40
6hr to 10hr	36
Less then 1hr	5
Whole day	26
Grand Total	**266**

With reference to the table above, approximately 230 out of 266 respondents spend total 10 hours on usage of their mobile phones per day and in one hour the user checked their phones at least once or twice for any updates or notifications. This definitely indicated an increase in the usage of such wireless portable devices by young adults.

A.2 Number of times user saw the phone for any updates in an hour

TABLE a.2: Number of times user saw the phone for any updates in an hour

Particulars	No of Responses
1-2times	54
2-4times	49
4-6times	42
6-8times	34
8-10times	25
10-20 times	29
more than 20 times	33
Grand Total	**266**

A.3 Last time user did not use their mobile handsets

TABLE a.3: Last time user didn't use their mobile phones

Particulars	No of Responses
never	141
one day	36
two days	29
two - four days	12
four days - one week	11
one week - two week	10
two week - one month	4
one month - three month	6
more than three months	17
Grand Total	**266**

Matter of fact and today's reality was that this wireless gadget has turned out to be an extension of our existence and an individual's identity. It was impossible to segregate the two now.

A.4 Ownership Status

TABLE a.4: Ownership Status

Particulars	No of Responses
any one else	19
boss	1
friend	95
no one	80
parents	34
sibblings	22
spouse	15
Grand Total	**266**

As per the table above and other qualitative responses respondents shared phones with mostly close family members like spouse, siblings and parents.

b) Purchasing factors

Here, the respondents were asked more purchase related questions such as expenditure on mobile services in a month by the user, expenditure on procurement of a new mobile handset by the user, frequency of change in mobile phones by the respondents etc. The questions were all multiple choice based questions.

b.1 Expenditure on mobile services in a month by the user (in INR)

TABLE b.1: Expenditure on mobile services in a month by the user (in INR)

Particulars	No of Responses
less than 250	122
250 - 500	107
500 -1000	25
1000 - 1500	7
1500 - 2500	3
more than 5000	2
Grand Total	266

Approximately 85 percent of the respondents prefer to spend between Rupees two hundred and fifty to Rupees five hundred on mobile phone services.

B.2 Expenditure on procurement of a new mobile handset by the user (in INR)

TABLE b.2: Expenditure on procurement of a new mobile handset by the user (in INR)

Particulars	No of Responses
less than 2000	5
2000 - 4000	2
4000 - 10000	37
10000 - 20000	140
20000 - 30000	37
30000 - 50000	25
50000 - 80000	10
more than 80000	10
Grand Total	266

About 53 percent of the respondents spend between Rupees ten thousand to Rupees twenty thousand on purchase of new mobile phones.

B.3 Lifecycle of mobile phones by the respondents

TABLE b.3: Lifecycle of mobile phones by the respondents

Particulars	No of Responses
never	21
within 3 months	6
2 - 5 years	118
1 - 2 years	75
more than 5 years	33
3 - 6 months	3
6 months - 1 year	10
Grand Total	**266**

As per the data collated, the lifespan of a mobile handset was two to five years which was in sync with the product life cycle of the mobile phones in general.

c) Purpose of Mobile Phone Usage

Qualitative data was captured to understand the usage of this technology in our hands be it for entertainment, privacy, safety, socializing, or as a status symbol etc.

TABLE c.1: Purpose of Mobile Phone Usage

Ranking	Particulars
1	Entertainment
2	Games
3	Social
4	Investments
5	Camera/ Photography

Factor 1: Social Engagement with close community and peer groups, Entertainment needs explaining 26.792% of the total variance.

The foremost outcome of the factor analysis was social engagement (0.829), entertainment needs (0.853) which are also justified by the descriptive results as stated above. Communication or interaction with close community and peer groups was the focal drive of using the mobile phones. With a smartphone in hand one felt the excitement of "staying connected', all the time irrespective of time and distances.

Apart from social needs, students also accessed internet for entertainment needs, gaming, listening to music, etc. as today's generation belonged to the Web 2.0 technology era which was social networking, mobility, podcasting, geo-location, connectivity, etc.

Cronbach Alpha Reliability Test to calculate Mind Share

TABLE c.2 Cronbachs Alpha Reliability Test

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.825	.828	3

Cronbach Alpha Reliability Test was implemented and an adequate level of data uniformity with a value of 0.825 was traced. This indicated that most of the respondents gave consistent response to the purpose of usage of mobile phones which was social and entertainment needs.

d) **Behaviour related issues.**

TABLE d.1: Behaviour Related Responses

Particulars	Ranking
Life is more simple and easy	1
Life has become better	2
Life is more fun and enjoyable	3
Life has become difficult	4
Life is more busy and accountable	5

Factor 2 In terms of behavioral traits, many respondents had felt that life had become more simple, fun and enjoyable with the inclusion of technology thereby explaining 19.940% of the total variance.

According to Ogunyemi (2010) and Hong et al (2012), there existed an affirmative relationship between students' angst, mobile handset dependence and conduct.

Factor 3 – Quality of life belongs to the fourth factor explaining 6.944% of the total variance.

Cronbach Alpha Reliability Test to calculate Heart Share

TABLE d.2 Cronbachs Alpha Reliability Test

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.869	.869	2

Cronbach Alpha Reliability Test was implemented and an adequate level of data uniformity with a value of 0.869 was traced. This indicated that most of the respondents gave consistent response to the positive impact of mobile phones in their life in terms of quality improvement, life being more simple, fun and enjoyable and phones now being considered as man's best friend.

Factor 4 – Mobile phones being used for online shopping, food ordering with convenient delivery options and online travel bookings and reservations was the last but yet another critical factor explaining 6.944% of the total variance.

Shopping online was an extension of our behaviour and reflects similar consumer attitude as compared to an offline mode. While shopping at brick and mortar shops a consumer was likely to consider the following attributes: store location, convenience, staff behaviour towards customers, product display, hygiene factor, physical ambience of the store etc. Similarly, while shopping online, a consumer in his/ her sub-conscious mind was looking for the same attributes and also at time saving, less effort and convenience. Online shopping augmented the shopping experience and created an optimistic motion.

Cronbach Alpha Reliability Test to calculate Value Share

TABLE d.3 Cronbachs Alpha Reliability Test

	Reliability Statistics	
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.825	.828	3

Cronbach Alpha Reliability Test was implemented and an adequate level of data uniformity with a value of 0.825 was traced. This indicated that most of the respondents gave consistent response to the usability and worthiness of mobile phones in today's day to day life.

5. **Conclusion**

Mobile phone invention has been a boon to mankind. Penetration of mobile phones has transformed the way individuals communicate among themselves and operate in their daily lives. The above research study collated demographic, behavioural, opinions, attitude and other qualitative information.

The first and foremost objective of this research work was to assess and envisage generation Z user's frequently-used applications and habitual patterns to which the researcher basis the quantitative analysis of the data had identified communication, social and entertainment needs as being the highly ranked motives behind mobile phone usage among the youth.

The second research question was to categorize the mobile usage pattern of generation Z with respect to heart share and mind share and to understand most common practices of mobile phones amongst the youth, functionality of the mobile phones, and "share of mind", "share of value" and "share of heart" inferences on individuals mind and emotions so as to comprehend their behavioural traits. Basis this research work, the researcher stated that mobile phones are being used for online shopping, food ordering with convenient delivery options and online travel bookings and reservations etc. Also the patterns of mobile phone usage across cultures and demographics of the users depicted that 87% of the smartphone users spend total 10 hours on usage of their mobile phones per day and in one hour the user checked their phones at least once or twice for any updates or notifications. This definitely indicated an increase in the usage of such wireless

portable devices by young adults. It's no surprise that today these wireless gadgets had become an extension of our general habit and an individual's identity. Further through this research, it was found that respondents shared usage of phones with mostly close family members like spouse, siblings and parents.

The last objective of the research work was to analyse the effect of mobile usage on quality of life share of youngsters achieved through mind share, heart share and value share. Basis the factor analysis done it was stated that in terms of behavioral traits, many respondents had felt that life has become simpler, fun and more enjoyable thereby enhancing the overall quality of life. The regression analysis results depicted that all three factors of mind share, heart share and value share had significant contributory factor in enhancing quality of life of the management students of Delhi and Pune cities. The contribution of mind share in terms of buying online and utilizing time was 60.4 percent followed by social engagement, entertainment i.e. Mind share at 57.6 percent and 55 percent contribution of Value share making life more enjoyable and fun loving.

6. Limitation

Bias in gathering data as responses were collated basis convenience sampling method. The researcher could have taken a larger sample of the population. The mobile phone industry is rapidly changing, hence reliability of this study in context of its usage, demographics and attitudinal traits could be an issue. Participants being young students may not be fully honest in answering the questions or their responses may not be representative of their actual behaviour.

7. Future Scope

This research study can be groundwork for further studies which can attempt to study a larger more representative sampling population.

References

Auter, P. J. (2007). Portable Social Groups: Willingness to communicate, interpersonal communication gratifications, and cell phone use among young adults. *International Journal of Mobile Communications*, 5(2), 139–155

Balakrishnan, V., & Raj, R. G. (2012). Exploring the relationship between urbanized Malaysian youth and their mobile phones: A quantitative approach. *Telematics and Informatics*, 29(3), 263–272

Field, A. (2000). Discovering Statistics using SPSS for Windows, *Sage Publications*., Thousand Oaks, London, ISBN: 0761957553

H.F. Kaiser and J.Rice. (1974) Little Jiffy, Mark IV. *Educational and Psychological Measurement*, 34(1):111–117.

Hong, F.-Y., Chiu, S.-I., & Huang, D.-H. (2012). A model of the relationship between psychological characteristics, mobile phone addiction and use of mobile phones by Taiwanese university female students. *Computers in Human Behaviour*, 28(6), 2152–2159.

Hutcheson, G., & Sofroniou, N. (1999). *The Multivariate Social Scientist*. London: Sage, ISBN 10: 0761952012/ ISBN 13: 9780761952015

India Brand Equity Foundation Report (2019), *Telecom Industry in India*, retrieved from https://www.ibef.org/industry/telecommunications.aspx

International Data Corporation (IDC) Report 2015.

Joseph F. Hair Jr., William C Black, Barry J. Babin, Rolph E Anderson. (2010). *Multivariate Data Analysis*, 7/E. ISBN-10: 0138132631, ISBN 13: 9780138132637

Mackenzie (2006*), International Journal of World Research*, Vol: I Issue XXIV, December 2015, ISSN: 2347-937X

Nielsen Insights (2012), *Smartphone: The Emerging Gadget of Choice for the Urban India,* retrieved from https://www.nielsen.com/wp-content/uploads/sites/3/2019/04/FI-Smartphone-Incidence.pdf

Ogunyemi, O. (2010). Consumption and (in) appropriate use of mobile phone among teenage Africans in the UK. Lincolnshire, England

Rietveld, T. & Van Hout, R. (1993). Statistical Techniques for the Study of Language and Language Behaviour. Berlin – New York: Mouton de Gruyter, ISBN 3110136635 9783110136630, pg. 292

The Statistics Portal Report (2019), Number of smartphone users in India from 2015 to 2022 (in millions), retrieved from https://www.statista.com/statistics/467163/forecast-of-smartphone-users-in-india/

Walsh, S., White, K., & Young, R. (2008). Over-connected? A qualitative exploration of the relationship between Australian youth and their mobile phones. *Journal of Adolescence*, 31(1), 77–92.

Walsh, S., White, K., & Young, R. (2010). Needing to connect: The effect of self and others on young people's involvement with their mobile phones. *Australian Journal of Psychology*, 62(4), 194–203.