

SMARTPHONE PREFERENCES AND USAGE PATTERNS AMONG GENERATION VUCA CUSTOMERS IN HYDERABAD AND SECUNDERABAD TWIN CITIES

Abstract

The study on the mobile phone preferences and usage patterns of the VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) generation has revealed a dynamic and evolving landscape. This generation primarily consists of young adults who need for customized marketing strategies and products targeting this age group. The study also thrown a light on varying daily usage patterns and monthly expenditure ranges, underscoring the central role of mobile technology in the daily lives of young adults. Finally, the motivations behind changing mobile phones, such as the desire for new features and a passion for technology, provide valuable information for manufacturers and service providers. For the present research an on line survey has been conducted using Google forms, 16 to 26 ages male and female participants participated in the survey, thus 164 participants form the sample. Pie charts, bar graphs and simple percentages calculated to interpret the data. In conclusion, these findings provide essential guidance for businesses, educators, and policymakers looking to engage effectively with the VUCA generation in the ever-evolving landscape of mobile technology.

Keywords: Gen VUCA, Mobile Phones, Smart Phone, Usage of Smart Phones.

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I. INTRODUCTION

The 21st century has seen technology usage become an inevitable part of life. According to a report by the Group Special Mobile Association (GSMA) (2015), half of the world's population has a mobile subscription, and Smart phone adoption has already reached critical mass in developed markets. Smart phones are now responsible for 60% of Internet connections worldwide (GSMA, 2015). This form of technology has advanced, with simple call and text messaging functions being replaced by features such as Internet access, email, camera applications, and multimedia services (Lefebvre, 2009). In her qualitative study, Jubien (2013) concluded that graduate students combine their personal lives with their student lives, influenced by the use of smart phones.

The possible influence of mobile devices on higher education and their impact on lifelong learning opportunities is still unclear and remains an evolving field of study (Kukulska-Hulme, 2007). It is not surprising that educators have considered using mobile devices such as smart phones in education, given their affordability, popularity, and practical functions (Ismail, Bokhare, Azizan, & Azman, 2013; Pullen, Swabey, Abadoo, & Sing, 2015). The development of mobile phones and technologies has a long history of innovation and advancements driven by dynamic changes in consumers' needs and preferences. Among these developments, mobile phone devices have experienced one of the fastest household adoption rates of any technology in the world's modern history (Comer and Wikle, 2008). Nowadays, mobile handsets have become an integral part of daily life and personal communication worldwide.

Xiaomi became the number one brand in India, surpassing Samsung, which had led for the past 24 straight quarters. The number of smart phone users in India is expected to more than double in four years. By 2022, there will be 829 million smart phone users in India, accounting for 60% of the population, according to Cisco's 13th annual Visual Networking Index (VNI).

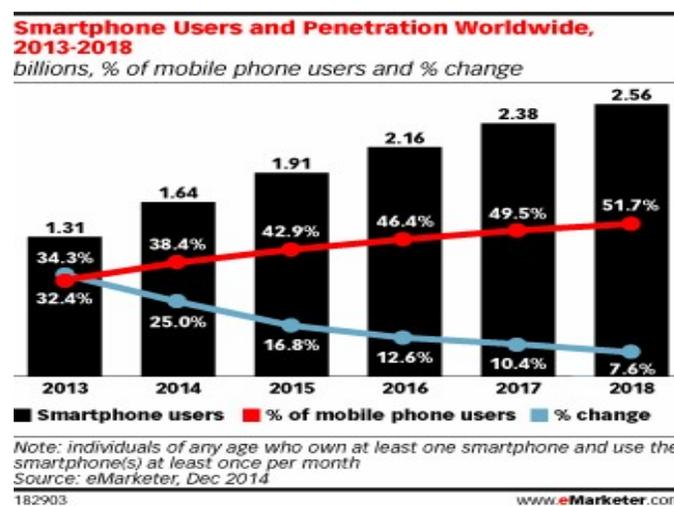


Figure 1: Smart Phone Users and Penetration Worldwide, 2013-2018

Table1: Top 10 Cell Phone Usage Worldwide, by Country

Sl.No	Country	Total population	Smartphone users	Smartphone penetration
1	China	1.43B	974.69M	68.40%
2	India	1.42B	659.00M	46.50%
3	USA	338.29M	276.14M	81.60%
4	Indonesia	275.50M	187.70M	68.10%
5	Brazil	215.31M	143.43M	66.60%
6	Russia	144.71M	106.44M	73.60%
7	Japan	123.95M	97.44M	78.60%
8	Nigeria	218.54M	83.34M	38.10%
9	Mexico	127.50M	78.37M	61.50%
10	Pakistan	235.82M	72.99M	31%

Source: Newzoo's Global Mobile Market Report

The data presented reveals the smart phone landscape in the top 10 countries and regions up to 2021. China leads with a massive population of 1.43 billion, boasting 974.69 million smart phone users, resulting in a penetration rate of 68.40%. India, with a population of 1.42 billion, follows closely with 659 million smart phone users, although its penetration rate is lower at 46.50%. The United States stands out with a high penetration rate of 81.60%, driven by 276.14 million Smart phone users in its population of 338.29 million. Indonesia, Brazil, and Russia also exhibit significant smart phone penetration, while Japan showcases an impressive 78.60% penetration rate. In contrast, Nigeria and Pakistan are still in the process of expanding Smart phone usage among their populations, with penetration rates of 38.10% and 31%, respectively. These figures underline the varying degrees of smart phone adoption and penetration worldwide, reflecting the pivotal role of smartphones in modern life.

II. SIGNIFICANCE OF STUDY

Numerous research studies have been conducted to identify factors affecting consumers' choice of mobile phones. These studies have indicated a range of items as determinant factors influencing purchase decisions. These factors include price, features, quality, brand name, durability, social factors, and more (Li, 2010; Zheng, 2007; Zhang, 2006; Huang, 2004). Young students have turned out to be the 'most prolific users of most services.' In the present research, the sample is referred to as VUCA. According to Bennis and Nanus (1985), VUCA is an acronym that stands for volatility, uncertainty, complexity, and ambiguity. It represents a combination of qualities that collectively characterize the nature of challenging conditions and situations. Volatility refers to the quality of being subject to frequent, rapid, and significant change. The acronym VUCA was first used at the U.S. Army War College in 1987 and was publicly published in 1991 by Herbert Barber. The method was developed based on the concepts presented by Warren Bennis and Burt Nanus in their book "Leaders: The Strategies for Taking Charge" (Bennis and Nanus, 1985). The

VUCA concept has long been used to describe the volatility that has become the norm in the business world.

The number of mobile internet users in India is estimated to reach 478 million by June 2018, buoyed by cheaper smartphones, faster connectivity, and affordable services, according to an IAMAI report. Mobile phone acquisition is gaining status and popularity among young students. Mobiles offer the most support to the youth in their educational and personal lives. In a relatively short period, smartphones have brought countless technological advancement, such as photography, internet browsing, video games, text messaging, email, multimedia messaging, video chatting, video calling, voice communication, and Bluetooth. These are helpful for students (Hossain et al., 2022). The number of mobile internet users stood at 456 million in December 2017, over 17 percent higher than in December 2016, as stated in the report titled 'Mobile Internet in India 2017,' which also identified young students as the most prolific consumers of such services.

III.METHODOLOGY

As per the review of literature, there is no adequate research has been conducted to study mobile usage patterns, brand selection, network preferences, and the use of mobile applications. Therefore, the present research study aims to address the following objectives:

1. To explain the effective mobile usage style of current generation.
2. To study consumer attitude towards applications of mobile.
3. To identify the frequency of purchasing their mobiles.
4. To understand the brands widely used by present generation people.
5. To examine the importance of mobile for present generation.
6. To analyze the time they spend with mobiles.

In this study, data collection was conducted using Google Forms as the primary tool. The research sample comprises 164 students, both male and female, enrolled in various academic levels, including intermediate, degree, and post-graduation, with diverse specializations. Specifically, 103 male and 61 female students make up the sample, all of whom possess proficiency in the English language and computer skills. To gather this data, a purposive sampling technique was employed. Additionally, to ensure comprehensive data collection, a research questionnaire was developed after an extensive review of related literature. This questionnaire consists of a mix of open and closed-ended questions, with the former addressing demographic and background variables, such as name, age, gender, and educational qualifications, among others.

IV. DATA ANALYSIS

The data analysis of the VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) generation's mobile phone preferences and usage patterns has yielded several valuable outcomes that have implications for various stakeholders, including businesses, marketers, educators, and policymakers.

Table 2: Age Wise Sample Distribution

S.No	Age group	Age %	Persons
1	16-19	16.5	27
2	20-22	57.9	95
3	23-26	25.5	42

The data presented in the table 2 reveals the age distribution within the VUCA generation. Among the participants, 16.5%, equivalent to 27 individuals, fall within the 16-19 age group. Notably, the largest segment of this generation lies in the 20-22 age range, constituting 57.9% of the sample, with a substantial 95 members falling into this category. Furthermore, 25.5% of participants, totaling 42 individuals, belong to the 23-26 age group. This data provides valuable insights into the composition of the VUCA generation within the study's sample, highlighting the prevalence of young adults aged 20-22 as the dominant demographic, while also acknowledging the presence of individuals in the 16-19 and 23-26 age brackets.

Table 3: Gender Wise Sample Distribution

S.No	Gender	Total	Percentage (%)
1	Male	103	62.8
2	Female	61	37.2

The provided data in table 3 offers insights into the gender distribution among the participants in the study. Notably, the majority of participants, constituting 62.8% of the total, are male, representing a substantial portion of the sample with a count of 103 individuals. In contrast, the female participants make up 37.2% of the sample, with a total of 61 individuals. This data underscores a notable gender disparity within the study, highlighting a significant male presence compared to the female demographic.

Table 4: Educational Wise Sample Distribution

S.No	Educational Qualification	Total	Percentage (%)
1	Under Graduate	70	42.7
2	Graduate	47	28.7
3	Post Graduate	47	28.7

Table 4 provides valuable insights into the educational qualifications of the participants in the study. The data reveals a diverse representation of educational backgrounds among the participants. Notably, a substantial portion, comprising 42.7% of the total, consists of undergraduates, with 70 participants holding this qualification. Equally noteworthy is the fact that both graduate and postgraduate participants are equally represented, each contributing 28.7% to the study. Specifically, 47 participants hold a graduate degree, while another 47 have postgraduate qualifications. This balance highlights the engagement of individuals with various educational backgrounds in the research study, underlining the significance of this diversity within the sample.

Table 5: Frequency of Changing Mobile Sets

S.No	Months	Total	Percentage (%)
1	06	13	7.9
2	12	50	30.5
3	24	101	61.6

Table 5 offers an insight into the patterns of mobile phone replacement among the study participants. The data underscores distinct preferences when it comes to the frequency of changing mobile devices. Notably, the majority, constituting 61.6% of the sample, gravitates toward a 2-year upgrade cycle, with 101 participants opting for this timeframe. A substantial segment, comprising 30.5% of the total, prefers annual upgrades, accounting for 50 individuals. Interestingly, a smaller yet significant group, representing 7.9% of the sample, chooses to change their mobile phones every 6 months, totaling 13 participants. These findings shed light on consumer behaviors within the context of mobile device replacement, highlighting diverse preferences that range from longer-term usage to more frequent changes in mobile technology.

Table 6: Preferable Brands of VUCA Generation

S.No	Brand	Total	Percentage (%)
1	Nokia	07	4.3
2	Samsung	26	15.9
3	Mi	53	32.3
4	Oppo	12	7.3
5	Vivo	12	7.3
6	Mac	10	6.1
7	Honor	11	6.7
8	Realme	02	1.2
9	Others	49	29.9

Table 6 provides valuable insights into the mobile phone brand preferences of the VUCA generation participants. Notably, MI (Xiaomi) emerges as the most favored brand, with a substantial 32.3% of the participants, totaling 53 individuals, choosing MI as their preferred mobile phone brand. Another noteworthy finding is the diversity in brand preferences, with 29.9% of participants favoring other brands not explicitly listed in the table. Samsung follows as the third most preferred brand, chosen by 15.9% of the sample (26 participants). Additionally, Oppo and Vivo each garner 7.3% of participants, Mac (Apple) secures 6.1%, Honor attracts 6.7%, and Realme is the choice of 1.2% of participants. These findings provide valuable insights into the brand landscape of mobile phones within the VUCA generation, showcasing the diverse array of brand choices that this demographic embraces.

Table 7: Purpose of usage of Mobile phone

S.No	Mobile Usage	Total	Percentage (%)
1	Call	50	30.5

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2	SMS	5	3
3	Internet	70	42.7
4	Online Shopping	-	-
5	Banking	3	1.8
6	Mailing	1	0.6
7	Entertainment	35	21.3

Table 7 offers valuable insights into the primary purposes for which participants of the VUCA generation utilize their mobile phones. Notably, the majority of respondents, constituting 42.7% of the total, rely on their mobile devices primarily for internet access, totaling 70 individuals. Following closely, 30.5% of participants, or 50 individuals, use their mobile phones predominantly for voice calls, highlighting the continued significance of traditional communication. Furthermore, a notable 21.3% of the sample, comprising 35 participants, prefer their mobile phones for entertainment purposes, such as multimedia consumption and gaming. Interestingly, a small but significant proportion uses mobile phones for banking services (1.8%), while even fewer utilize them for mailing (0.6%). Surprisingly, no participants in the sample reported using their mobile phones for online shopping, suggesting potential shifts in consumer behavior or untapped opportunities in this regard. These findings provide a comprehensive understanding of the diverse mobile phone usage patterns within the VUCA generation.

Table 8: Time Spent on Mobile Phones per Day

S.No	Time Spent (Hours)	Total	Percentage (%)
1	1-2	33	20.1
2	2-4	62	37.8
3	4-6	33	20.1
4	More	36	22

Table 8 provides valuable insights into the daily mobile phone usage habits of the VUCA generation participants. Notably, the majority, constituting 37.8% of the total, spend 2 to 4 hours daily on their mobile phones, with 62 participants falling into this category. An additional 20.1% of participants, totaling 33 individuals, allocate 4 to 6 hours each day to their mobile devices, while an equally sized segment dedicates 1 to 2 hours daily. What's particularly significant is the 22% of participants, or 36 individuals, who spend more than 6 hours daily on their mobile phones, signifying a substantial portion with extended daily mobile engagement. These findings reveal the diverse range of daily mobile phone usage patterns within the VUCA generation, reflecting the significance of mobile technology in their daily lives.

Table 9: Money Spent on Mobile per Month

S.No	Money Spent	Total	Percentage (%)
1	100-200	75	45.7
2	200-300	46	28
3	300-400	24	14.6
4	More	19	11.6

Table 9 reveals diverse monthly spending habits among the VUCA generation for mobile phone recharges. The majority, constituting 45.7% of the participants, spends between 100 and 200 units of currency each month, making this the most prevalent expenditure range. The next significant group, at 28%, budgets between 200 and 300 units, while a smaller yet noteworthy segment (14.6%) allocates 300 to 400 units monthly. Additionally, 11.6% of participants spend more than 400 units monthly. These findings provide a comprehensive understanding of the financial dynamics surrounding mobile phone usage within this demographic, showcasing a range of expenditure patterns.

Table 10: Which Information Generally Consumer looks while Purchasing Mobile

S.No	Based On	Total	Percentage (%)
1	Brand	74	45.4
2	Reviews	39	23.9
3	Price	46	28.2
4	Features	105	64.4
5	Others	3	0.18

Table 10 provides valuable insights into the factors that influence the purchasing decisions of the VUCA generation when it comes to mobile phones. Notably, the majority of participants, comprising 64.4% of the total or 105 individuals, prioritize features when selecting a new mobile device, underlining the significance of technical capabilities and functionalities in their decision-making process. Brand reputation also holds substantial weight, with 45.4% of participants, totaling 74 individuals, considering it a pivotal factor. Price is another key consideration for 28.2% of participants, involving 46 individuals, indicating a balanced approach between budget and device quality. Reviews and recommendations play a crucial role for 23.9% of the sample, or 39 participants, guiding their purchasing choices. Additionally, a small fraction of participants cited "other" factors beyond the listed options as influential in their decision-making process. These findings provide valuable insights into the diverse priorities and considerations that shape mobile phone purchases within the VUCA generation, highlighting the paramount importance of features.

Table 11: Reason to Change Mobile Sets

S.No	Reasons	Total	Percentage
1	New Features	80	48.8
2	Passionate	18	11
3	If Any Problem	81	49.4

Table 11 elucidates the driving factors behind mobile phone changes among the VUCA generation. Notably, the introduction of new features emerges as the primary motivator, with 48.8% of participants (80 individuals) eager to stay current with the latest technological advancements. Additionally, nearly half of the respondents (49.4% or 81 individuals) opt for a new phone when faced with problems or issues with their existing device, underscoring the significance of device reliability. Lastly, 11% of the sample (18 participants) change phones driven by sheer passion for mobile technology, viewing their devices as more than just tools but as integral components of their lifestyle and interests.

These findings offer a concise glimpse into the diverse motivations that shape mobile phone replacement decisions within this demographic.

V. CONCLUSION

The study of the VUCA generation's mobile phone preferences and usage patterns reveals a dynamic landscape marked by distinct trends and preferences. particularly, this generation is predominantly composed of young adults aged 20 to 22, emphasizing the need for tailored products and marketing strategies to cater to their specific preferences. However, a notable gender disparity exists, with a significant male majority, urging businesses and policymakers to address potential gender-based technology disparities. The diverse educational backgrounds of the participants underline the importance of flexible and inclusive educational approaches. Moreover, the preference for a 2-year mobile replacement cycle and Xiaomi's dominance as the preferred brand signify key market trends. Internet access, voice calls, and entertainment are the primary mobile phone usages, but the absence of mobile shopping suggests untapped opportunities in e-commerce. Varying daily usage patterns and monthly expenditure ranges highlight the significance of mobile technology in the daily lives of young adults. Features, brand reputation, and reviews significantly influence purchase decisions, guiding marketing strategies, and product development. Lastly, motivations for changing mobile phones, such as new features and passion for technology, offer insights for manufacturers and service providers. Overall, these data outcomes provide valuable guidance for businesses, educators, and policymakers seeking to engage effectively with the VUCA generation in the mobile technology landscape.

REFERENCES

- [1] Bennis, Warren; Nanus, Burt (1985). *Leaders: Strategies for Taking Charge*.
- [2] Erin Stewart, November 25, 2013: Does cell phone use really affect our communication skills?
- [3] Comer and T. A. Wikle (2008), *Worldwide diffusion of the cellular telephone, (1995-2005)*. The
- [4] *Professional Geographer*, 60(2), 252-269.
- [5] Group Special Mobile Association GSMA(2015).
- [6] Hossain R, Hasan Md Rakibul, Sharmin Mst. Mahfuza. (2022). A Short Review on the History of Mobile Phones. *Journal of Android, IOS Development and Testing* Volume 7 Issue 2.
- [7] <https://money.cnn.com/2017/09/26/technology/india-mobile-congress-market-numbers/index.html>
- [8] <https://www.infoplease.com/science-health/cellphone-use/cell-phone-usage-worldwide-country>
- [9] <http://www.ukessays.com/essays/english-language/the-impact-of-smart-phones-on-society-english-language-essay.php>
- [10] <http://dx.doi.org/10.1177/1524839909342849>
- [11] <http://journal.acce.edu.au/index.php/AEC/article/view/55>
- [12] <http://www.thejeo.com/Archives/Volume10Number1/Ismail.pdf>
- [13] <http://www.irrodl.org/index.php/irrodl/article/viewArticle/356>
- [14] <http://theithacan.org/news/smart-phone-technology-affects-social-and-academic-lives-of-students/>
- [15] IAMAI (2018) : Internet and Mobile Association of India (IAMAI) and KANTAR-IMRB.March 29 2018.
- [16] Ismail, I., Bokhare, S. F., Azizan, S. N., & Azman, N. (2013). Teaching via mobile phone: A case study on Malaysian teachers' technology acceptance and readiness. *Journal of Educators Online*, 2(1).
- [17] Kayla Dwyer, Shakirah Ray (2014) : Smart phone technology affects social and academic lives of students.
- [18] Kukulska-Hulme, A. (2007). Mobile usability in educational contexts: What have we learnt? *International Review of Research in Open and Distance Learning*, 8(2).
- [19] Lefebvre, C. (2009). Integrating cell phones and mobile technologies into public health practice: A social marketing perspective: *Social marketing and health communication*. *Health Promotion Practice*, 10(4), 490-494.

- [20] Li, S., & Li, Y. (2010). An Exploration of the Psychological Factors Influencing College Students' Consumption of Mobile Phone in West China. *International Journal of Business and Management*, 5(9), P132.
- [21] Jubien, P, "Shape Shifting Smart phones: Riding the Waves in Education," *Canadian Journal of Learning and Technology*, vol. 39, p. n2, 2013.
- [22] Pullen, D., J-F J-F, Swabey, K., Abadoo, M., & Sing, T. (2015). Malaysian university students' use of mobile phones for study. *Australian Educational Computing*, 30(1).
- [23] www.emarketer.com
- [24] www.gsma.com
- [25] Zheng, N, (2007). Chinese Consumer Behavior in the Mobile Phone Market: Nokia Case (Doctoral dissertation, Gotland University)