
A PERCEPTUAL STUDY TOWARDS SMARTPHONE APPS. WITH SPECIAL REFERENCE TO INDORE CITY

Dr.Kalpana Agrawal
Asst.Professor

Prestige Institute of Management and Research,Indore

ABSTRACT:

Various mobile apps can be used for personal, educational, business, travelling entertainment, navigation, banking and a plethora of other purposes other than voice call and messaging and hence proliferation of smartphone devices is rising. One of the features that make smartphones very popular amongst youth is the inclusion of social media apps such as Facebook, facebook's Instagram, Snapchat, Youtube, Twitter, etc. Smartphones'apps can perhaps be considered as the most ubiquitous technology amongst the youth as it allows users to connect to one another socially and help in navigation, entertainment,food ordering tremendously. So this study purposes to investigate the perception of respondents towards Smartphone apps focusing on young consumers or youth. The statistical analysis showed twenty two percent of respondents used apps for shopping purpose and nineteen percent used for social networking, fourteen percent for entertainment,etc. 75% people download free apps and remaining 25% download paid ones.As 74% of the respondents liked to download trendy apps than novel apps so these aspects should be further boosted by providers by informing consumers about the benefits and possibilities of apps those who look for trendy apps. Futher from the chi-square it was found that no relationship was observed between personal factors and perception towards smartphone apps but a significant relationship was observed between gender and tendency of respondents to download free or paid mobile apps.

Introduction

Smartphone apps have become globally prevalent,which apps are available on one's smartphone depends on brand and model of smartphone; some apps are universal while others are specific to certain brands. Smartphone offer much more than the capacity to make calls and messaging. They are equipped with advanced computing capabilities and connectivity options provided through applications (henceforth, apps) that extend Smartphone functionality (Soikkeli et al., 2011). Apps define the differences between Smartphone and feature phones and bring the former much closer to being mobile computers. Apps are thus crucial to Smartphone, as data from Nielsen's (2014) March 2014 Cross-Platform report demonstrated.

Market research by eMarketer (2014) indicates that global Smartphone usage surpassed one billion U.S. dollars in 2012 and will total 1.75 billion in 2014; thus, about one-quarter of the world's population will use a Smartphone apps in 2014 was already predicted. The Smartphone apps' adoption rate is even higher in the exclusive context of developed countries: 58 percent of Americans use Smartphone, according to a 2013 Pew Research Center Internet & American Life Project survey (Pew Research,2014). In urban India, the Internet user base grew by 7% to 263 million for year-on-year period ended October 2016, which must be somewhere 275-285 million by June 2017. For the same annual period ending October 2016, rural India's Internet user base grew by 22% between to 157 million and was forecasted to reach 170-180 million by June 2017.Searching application stores on their phones is the preferred way for discovering new apps for users of feature phones and smartphones alike (57% and 40%, respectively). The next most popular "preferred" form of app will disrupt which industry everyone is keen to know and presently for existing apps this discovery is through the recommendation of a family member or friend. Ordering food or drink on a mobile device through apps is rising day by day. Around 26% of people said that they had bought food over the phone through apps, an increase of 15% since the MEF last studied the mobile money market just over two years ago. As the number of dedicated

food ordering apps has increased, the convenience of being able to see a range of food options in one place is a plausible reason. Still digital purchases have not followed the path of their physical counterparts, in the last two years, overall spend on mobile shopping for digital content has dropped from 37% to 30%, although people are willing to pay for mobile apps. The report said that 33% of people had paid for a mobile app in the last six months, a rise of 17% since 2014.

The Top three app growth categories in India

The mostly used mobile apps in India are Music, Media and Entertainment, Navigation, travelling followed by Business and Finance apps, and Utilities and Productivity apps. Music, Media and Entertainment applications saw the biggest usage increase at 188% YOY, which can be attributed to rise of phablet devices and better Internet connectivity in India. Business and Finance apps grew 176% YoY. Utilities and Productivity apps grew 99% YoY.

Developing a mobile strategy has never been more important to companies than today. According to a report from Kleiner Perkins, mobile applications now account for 15% of all Internet traffic, which represents 1.5 billion users worldwide; a Pew Internet survey in May 2013 concluded that 91% of American adults own a cell phone and 56% of American adults own a smart phone; and in 2014, mobile Internet usage surpassed desktop Internet usage. Whether one is a brick-and-mortar store or one is an Internet-based business, the need to go on mobile app has become must in today's dog-eat-dog competition. Much attention is given to coolest consumer apps.

The Pew survey also revealed that social networking is growing in popularity among users in developing nations. "Majorities of adult internet users in almost every emerging and developing nation surveyed say that they use social networking sites such as Facebook and Twitter," through mobile apps. The report added that across the 40 countries it surveyed, a median of 76% of Internet users said that they used social networking sites on their mobile phones. Interestingly, the survey said that social networking was most prevalent among online adults in Jordan (90% of Internet users), Indonesia (89%), the Philippines (88%), Venezuela (88%) and Turkey (88%). In comparison, 62% of Indian Internet users (or smartphone owners) said they used social networking sites. Among those, 69% respondents were millennial users, while 48% were aged 35 and above.

Literature Review

Globally, the typical smartphone user uses 30 apps every month but according to a report Gaming continued to be the biggest driver of downloads and revenue and one of the biggest headlines of 2016 was the phenomenal success of Pokémon GO, the latest mobile game offering from Niantic Inc., a company owned by Alphabet Inc. (formerly Google). "Despite launching in July, it remained in the top five apps for worldwide revenue in the last week of the year. And the year ended with the release of the much anticipated Super Mario Run, which became the #1 app in 148 countries," the report said.

Video streaming apps too saw a sharp growth in revenue. India has witnessed a dramatic shift in this segment over the past 6 months. Total time spent on the top 10 video streaming apps including Hotstar and Netflix on Android phones in India increased 600% between July and December 2016 compared to the same period a year ago, the report stated.

Among those surveyed in 2015, more than one in three (34%) Indian millennial users (aged between 18 and 34) said they use the Internet occasionally or own a smartphone, compared with 12% of older users (aged 35 and above). In contrast, millennial respondents from Canada, Italy, Spain, South Korea and Australia reported 100% Internet usage or smartphone ownership.

The digital divide also includes education levels and income. In India, only 9% of those with lower education levels are online, as compared with 38% who have higher education levels. Similarly, the income gap, too, is reflected in the survey. Eleven per cent of Indians with lower income reported that they used the Internet occasionally or owned a smartphone, in contrast to 28% of those with higher income. Following are some of the relevant pieces of references pertinent to research in question. India overtook the US as the second largest smartphone market in the world, with its user base increasing by 220 million by the end of last year.

Putzer & Park (2010) indicated that behavioural intention to use a smartphone was largely influenced by perceived usefulness and attitude towards using a smartphone apps. Compatibility, observability of apps has a positive effect and were significant predictors of users' intention towards using a smartphone. According to Davis et al. (1989), TAM was developed to understand acceptance of computing technologies based on external variables, user perception, attitudes, and subsequent intentions. TAM, as an authoritative model, comprises two concepts: PU and PEU, which are influenced by external variables.

"India's phenomenal progress over the past two years is even more impressive when considering its potential for further gains. In 2016, India surpassed the US as the second largest smartphone market due in large part to a rise in domestically produced smartphones. According to the report India's smartphone penetration is still below 30% and its overall economy is poised for massive growth, China became the largest market in terms of iOS App Store revenue. And while mature markets experienced strong growth in 2016, emerging markets, including India, Indonesia, Mexico and Brazil, saw even more impressive gains. The total time spent on apps rose significantly, especially in emerging markets, which accounted for four of the top five countries by total time spent in 2016. "In particular, India and Brazil stood out for their staggering growth in engagement. These increases stemmed from a combination of exploding user bases and increases in time spent per user (the latter of which also occurred in developed markets)."

What Makes Users Buy Paid Smartphone Applications?

Given that so many free and paid smartphone apps are now available, the following several questions require answers: Why do users keep buying paid apps? What are the key determinants of users' intention to purchase paid apps? In the case of paid smartphone apps, however, vendor or brand awareness is less important than the other factors since most paid apps are game, entertainment, and social networking apps and users pay little attention to who the provider is (Xu et al., 2011). Therefore it is assumed that only perceived usefulness and perceived price of paid apps influence users' attitude toward and intention to purchase paid apps. Davis (1989) found that users who believe an information system to be useful are more likely to have a better attitude toward it.

Objectives of the Study

1. To find out what percentage of population uses Smartphone's apps.
2. To find out how often people use Smartphone apps.
3. To find out which Smartphone Applications are often downloaded.
4. To study the sources of awareness of consumers towards the latest Smartphone apps

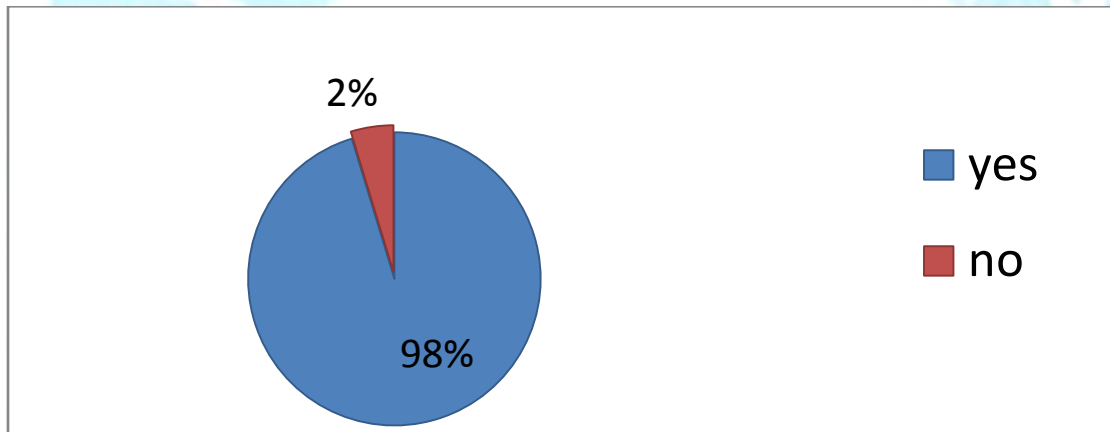
5. To know the perception of respondents towards Smartphone's apps.
6. To study the relationship between demographic factors and tendency of respondents to download free or paid mobile apps.

Data and Methodology

Data for this study were obtained from primary sources and collected by structured questionnaire in Indore City. The respondents were selected non-probabilistically as per the 'judgment sampling'. Table1 shows the general profile of the respondents. In the survey, appropriate data were obtained from 200 respondents. The collected data were analyzed through descriptive statistical tools such as percentage analysis which has been used to analyse the preference of consumers, their awareness and preference for the apps etc. The chi-square test has been used to test the association between the two characteristics i.e. the relationship between demographic factors and tendency of respondent to download free or paid mobile apps. For this study author has used statistical software SPSS (Statistical Package for Social Sciences) for the estimation of the chi-square value.

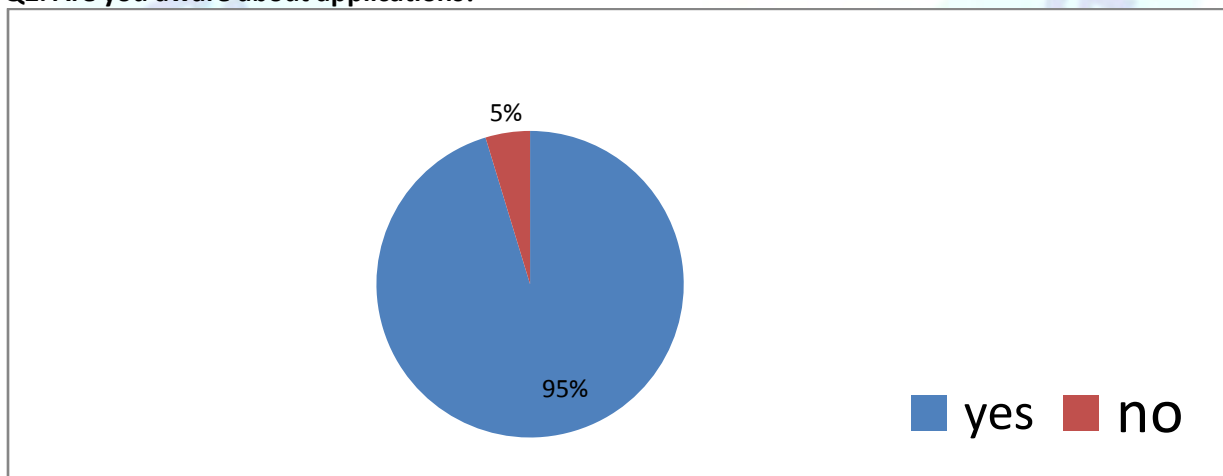
Results

Q1. Do you have a Smartphone?



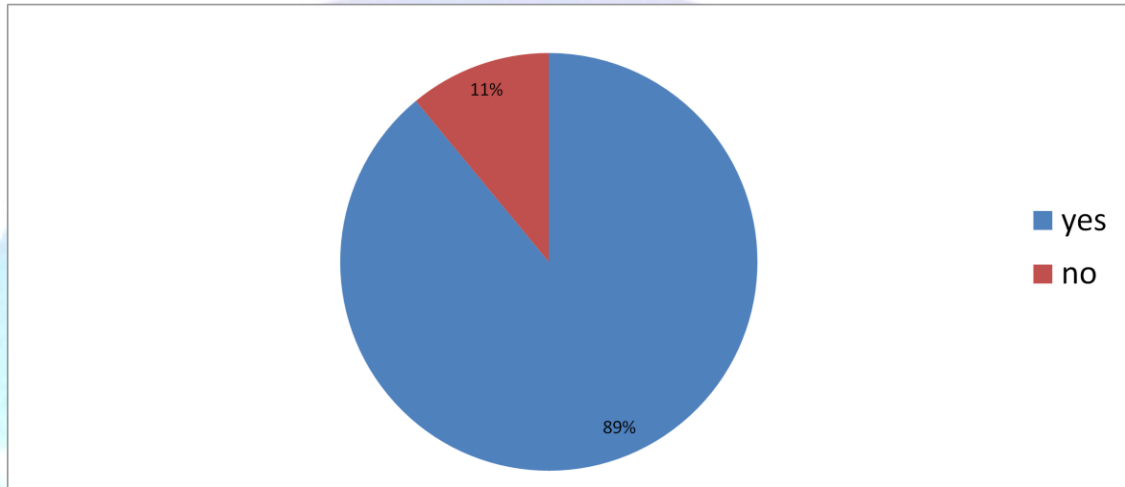
The above Pie chart shows that 98% of people have Smartphone and 2% do not have.

Q2. Are you aware about applications?



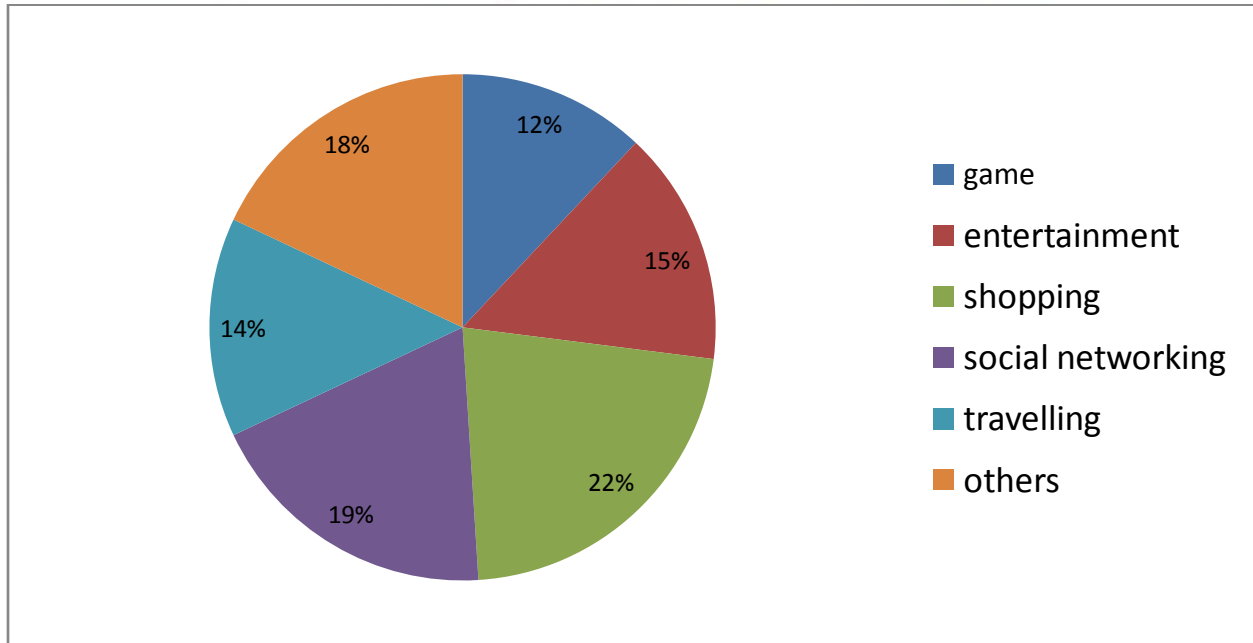
Above pie chart shows that most of the people i.e 95% are aware about Smartphone's applications (mobile apps).

Q3. Do you download the applications?



Above chart shows that 89% people download Smartphone applications and remaining 11% do not download.

Q3. If you have answered yes to the above question then which category of application you are using most?

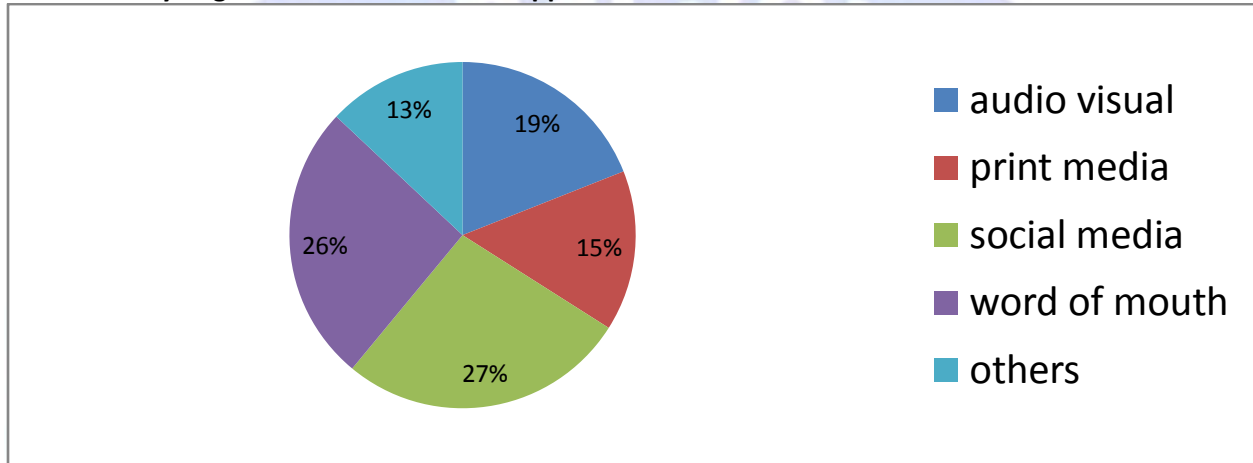


Above pie chart shows that 22% people use mobile applications(apps) for shopping purpose, 19% people use for social networking in which facebook is the leading app , 15% people use for entertainment , 14% people use for travelling ,12% of the people use gaming applications, and remaining 18% use for different suitable purpose like banking, navigation, weather etc. The above result is also supported by a report by the Mobile Ecosystem Forum which stated that 78% of people have made at least one

purchase on a mobile device in the last six months. That includes buying through apps, mobile websites or using the phone as a payment device in a store. According to the recent MEF Mobile Money Report, physical goods are the most common item purchased, with 36% of people using their smartphone to buy an object—a rise of 12% since 2014.

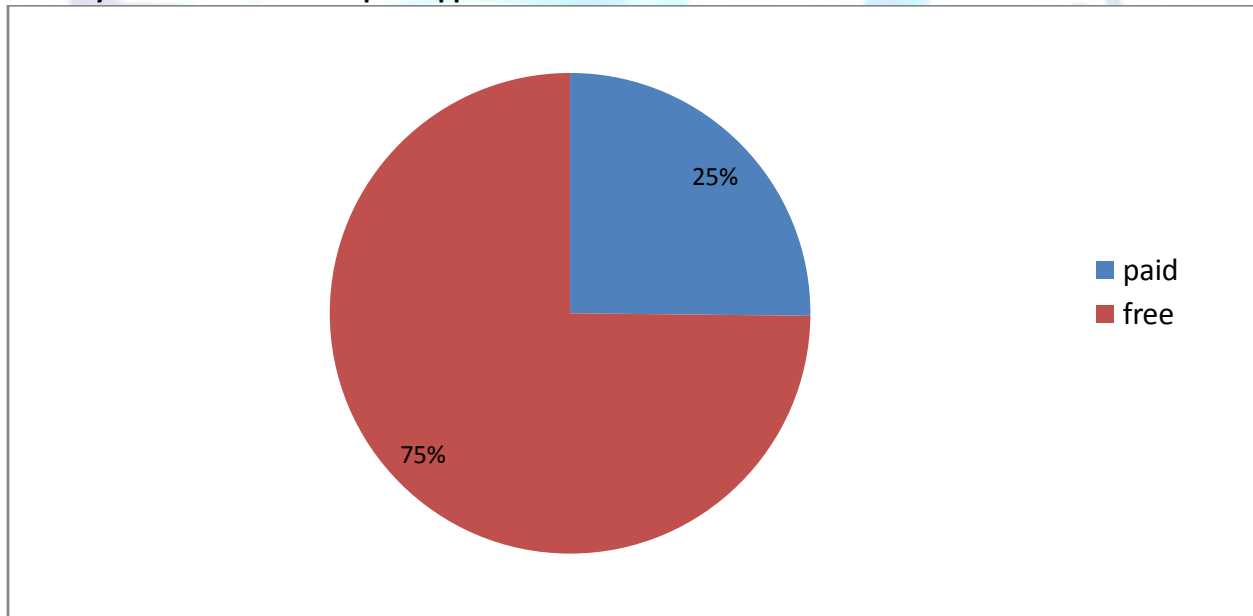
For Games application also supported by Neilsen white paper which reported games continue to be the most popular category of apps for both feature phone and smartphone users alike. Sixty-one percent of smartphone owners and 52% of feature phone owners report using a game app in the past 30 days. Weather apps are the next most popular category.

Q4. How did you get to know about these applications?

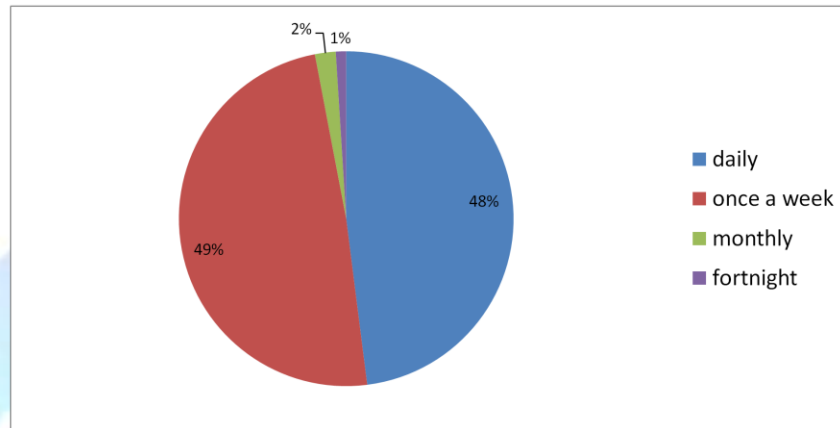


The above pie chart shows most of the people i.e. 27% came to know about these applications through social media and 26% got to know through word of mouth and 19% people came to know through audio visual media & 15% people came to know by print media and remaining 13% had no idea.

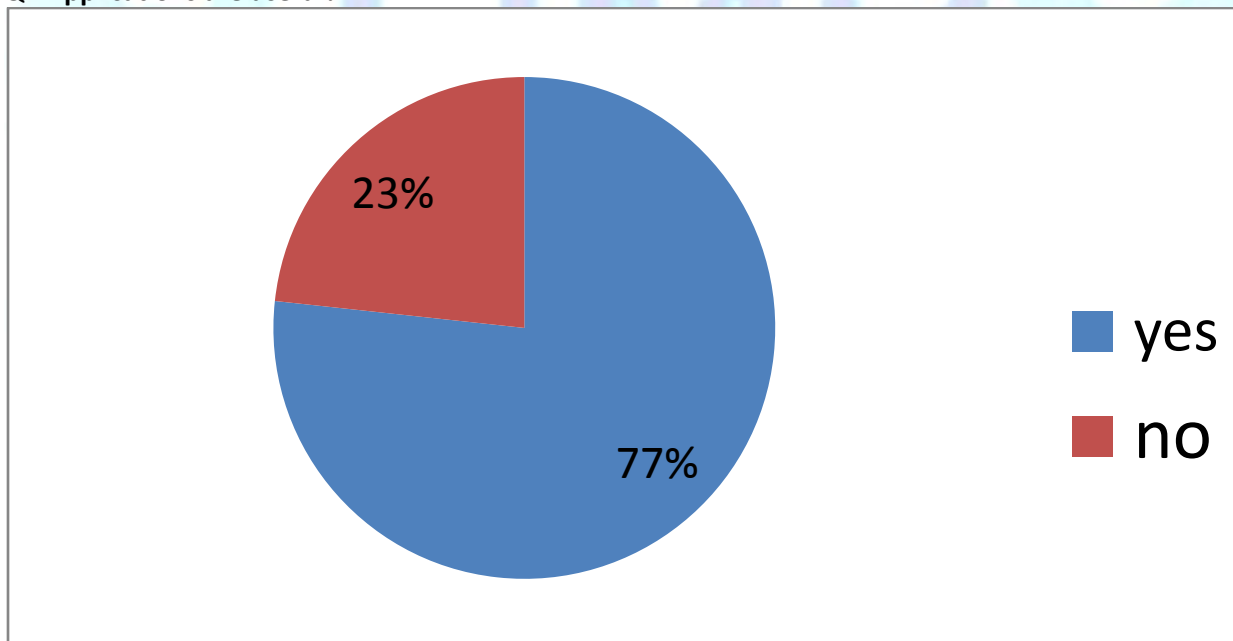
Q5. Do you download free or paid apps?



This pie chart shows that most of the people i.e. 75% people download free apps and remaining 25% download paid ones.

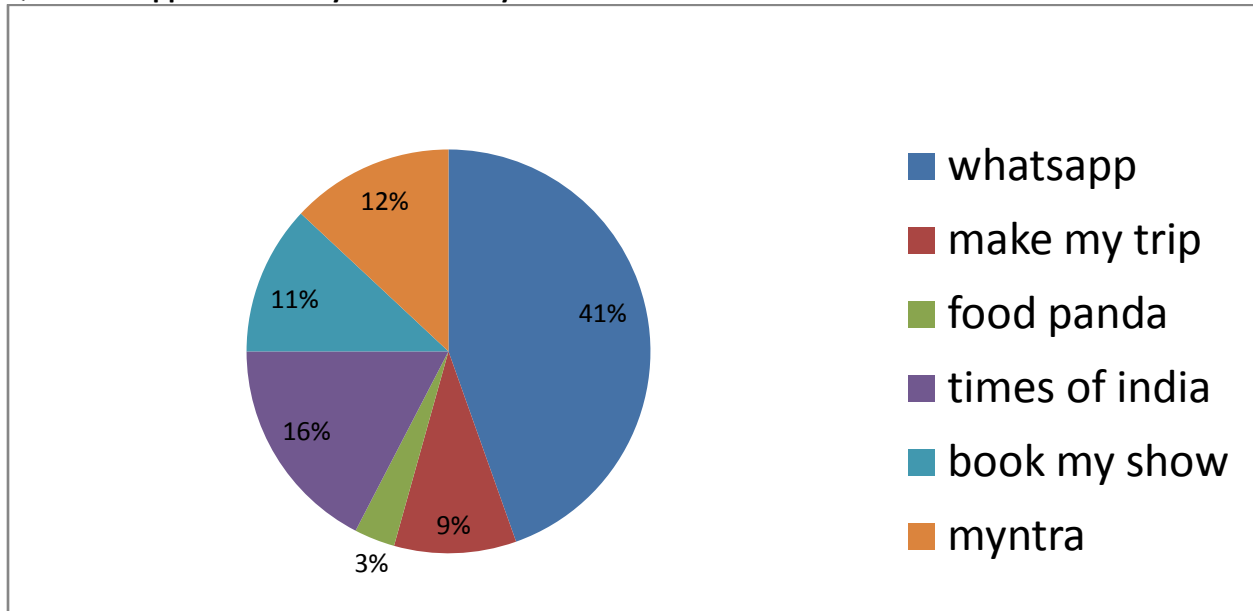
Q6. How often do you use these applications?

The above pie chart shows 49% of respondents use this application once a week, 48% people use this application daily and & and remaining 2% people use monthly and 1% people use it fortnightly.

Q7. Applications are useful?

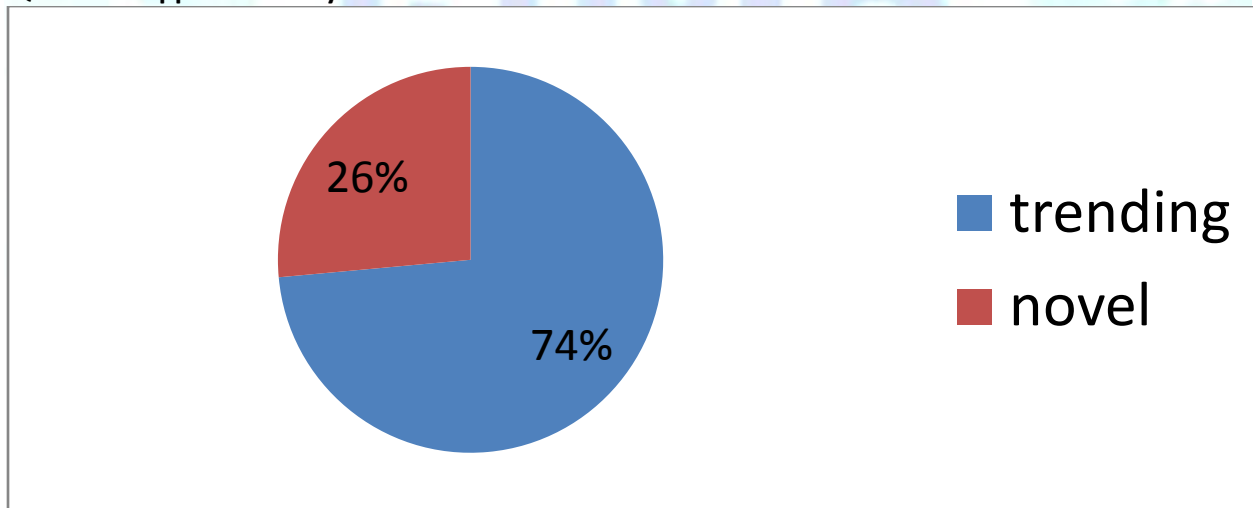
Most of the people i.e 77% people find these applications useful and 23% do not.

Q8. Which applications do you use mostly?



Respondents were found using Whatsapp application maximum, it has dominated the market by 41% share, 16% by times of India mobile application which is second most used by consumer and 12% by Myntra, 11% by Book my show, 9% by make my trip and remaining 3% by food panda.

Q9. Which application do you download often?



The Above pie chart shows most people download trending applications i.e 74% and remaining 26% downloads novel apps

CHI – SQUARE ANALYSIS (Q6)

Ho: There is no relationship between personal factors and paid and free apps downloads

Demographic factor	Values	Degree of freedom	Level of sig. value	Result
Gender	4.152	1	.042`	rejected
Age	2.427	2	.297	Accepted

A significant relationship was observed from the above table between Gender and tendency of respondents to download free or paid mobile apps.

Q10:

Ho: There is no relationship between demographic factors and perception towards usefulness of Apps.

Demographic factor	Values	Degree of freedom	Level of sig. values	Results
Gender	1.06	1	.293	accepted
Age	5.350	2	.069	accepted

INTERPRETATION: The above both gender and age hypothesis is accepted as from the above table it can be observed that no relation was found between demographic factors & perception towards usefulness of apps.

Q15:

Ho: There is no relationship between demographic factors and preference for download of trendy and Novel Apps.

Demographic factor	Values	Degree of freedom	Level of sig. values	Results
Gender	3.042	1	.789	accepted
Age	.083	2	.959	accepted

INTERPRETATION: The above both age and gender hypothesis is accepted as there is no significant difference between the mean values.

Conclusion

App developers are pushing the envelope on a daily basis and trying to improve and enhance their smartphone and tablet experiences. In fact, so many Android apps come out every day that it's difficult to keep track of them all. It's difficult to usurp the best of the best but still they need to innovate and enhance the user experience.

From the study it was concluded , as per the various results related about the questions like how many have smartphones, how many are aware about smartphones applications, how people get aware about applications, what kind of applications people download, which application people use mostly has been depicted above and for what purpose people use apps most, so in this connection respondents were found using shopping apps most. The need to go on mobile app has become must in today's dog-eat-dog competition. More attention is required for coolest consumer apps. Apps those help in doing business better is arguably much better,youngsters keep exploring such apps which can make them rockstar, also from this study it was found that marketers need to even generate awareness in them as they were found unaware of various mobile apps.

Further from the above it was found that after shopping apps and nineteen percent used mobile apps for social networking.Clearly, the migration from desktop to mobile is accelerating like anything, as smartphone becomes more powerful with every new release and so new new apps through which lot of business gets generated said Wirecard's executive vice product of global product strategy Christian Von Hammel-Bonten. So his message to all businesses around the world is: if one neglect to offer services

and products through the mobile app channel, one will lose not only their customers but also their business.

The above chi-square results showed that no relationship exist between personal factor (like age and gender) and perception towards smartphone apps but a significant relationship was observed between gender and tendency of respondents to download free or paid mobile apps. So mobile app developers must study a large data of respondents of male and female both and should focus on that gender more who is ready to pay for their mobile applications. Marketers need to introduce host of new features to further improve the user experience in paid apps as compared to free apps as they are on boom and they need to come up with new free apps as people get bored too soon.

Future research

All are excited to see what smartphone application developers do next and to which industry they will disrupt so further research can be done on kids app, government apps, GST apps. Impact of demonetization which gave a boost to digital and mobile transactions, so apps which are playing a crucial role can be studied further, generating awareness about business apps, usage of mobile apps in rural area can also be researched upon.

References:

- <http://www.livemint.com/Industry/QWzIOYEsfQJknXhC3HiuVI/Number-of-Internet-users-in-India-could-cross-450-million-by.html><https://arc.applause.com/2017/01/31/mobile-payments-global-adoption/>
- <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=3367&context=libphilprac>
- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4434066/>
- http://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1005&context=gscis_etd
- <http://www.jespk.net/publications/207.pdf>
- <http://www.icommercentral.com/open-access/what-makes-users-buy-paid-smartphone-applications-examining-app-personal-and-social-influences.pdf>
- <http://www.livemint.com/Consumer/yT14OgtSC7dyywWSynWOKN/Only-17-Indians-own-smartphones-survey.html>
- <https://www.google.co.in/search?q=how+many+people+use+smartphone+in+India&oq=how+many+people+use+smartphone+in+India&aqs=chrome..69i57.19635j0j8&sourceid=chrome&ie=UTF-8#q=mobile+app+usage+in+India+2017>
- <https://techcrunch.com/2015/06/22/consumers-spend-85-of-time-on-smartphones-in-apps-but-only-5-apps-see-heavy-use/>
- <https://www.emarketer.com/Article/eMarketer-Unveils-New-Estimates-Mobile-App-Usage/1015611>
- <https://www.emarketer.com/Article/How-Many-Apps-Do-Smartphone-Owners-Use/1013309>
- <http://www.livemint.com/Consumer/IXEa9IR07ZAx7yROaRcarK/India-beats-US-in-2016-mobile-app-market-growth-sees-most-G.html>
- <http://blog.himanshusheth.net/2017/03/24/flurry-state-of-the-app-nation-in-india-2017-report-findings/>