A STUDY ON CUSTOMER AWARENESS AND SATISFACTION USING MOBILE INSTANT MESSAGING SERVICE PROVIDER AT HYDERABAD, TELANGANA STATE

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Abstract: According to a spring 2015 survey 800 million monthly active of smart phone owners whatsApp is the most popular mobile messaging app worldwide. Face book Messenger is ranked second with 700 million fallowed by Line,Hike,Viber, Skype. Mobile messaging apps have become a strong force in the mobile app sector, offering users an alternative to SMS based texting paired with social media elements and enhanced futures such as group chats and photo sharing, files sharing. According to e-Marketers 1.4 billion consumers used Mobile phone messaging apps in 2015. Some of the key drivers of mobile messaging s growth identified include consumers growing interest in intimate forums of social sharing, multiple modes of communication offered by messaging apps and the growing number of features offered including peer-to-peer payments and M-commerce. The study indicates that the awareness and satisfaction of mobile instant messaging services providing by service providers.

Key Words: Mobile Application, Social Messaging, Social Media, Mobile Media, Customer Satisfaction.

1. INTRODUCTION:

In their early years mobile phone services were limited to the high end users who could afford expensive handsets and even more expensive subscription services. Advancement in technology reduced the cost of mobile phone handsets significantly. Most of the mobile companies realized the importance of affordable subscription plans to take advantage of economic of scale. In a point of view the engineers and scientists made internet usage possible on mobile phones. The internet on mobile phones changed the face of text messaging forever, social appropriateness, cost and ease are cited as reasons for its popular.

Impact of Mobile Instant Messaging: Despite text messaging being widely used the medium was considered to be slow, cumbersome and expensive for a large section of mobile phone users. the arrival of smart phones led to the explosion of the so called "mobile instant messaging" applications, affordable data plans, real time feel, linkage through mobile numbers made MIM applications popular.

The combination of an explosion in mobile devices and spread of the internet through telecommunications technologies has overnight created billion dollar enterprises (whatsapp, line ,wechat , others)and billionaires, who, intern ,have changed the face of interpersonal communication forever. Social messaging applications have done the same for mobiles what email and internet did for computers.

The international telecommunication union stated that nearly 40% of the world population used the internet in some form (device) or the other. This means that almost 3 billion people had access to the internet by the end of the 2013.the World Bank stated that 75% of the world's population had access to the mobile phones, which meant that almost 5 billion people access to the same. The spread of information and communication seems to have entered a new era. Over 30 billion mobile applications were downloaded in the year 2011 according to an organization called information and communication development (international telecommunication union, 2010).

Usage pattern of MIM: Multiple research studies have been undertaken across geographic to understand the usage pattern of mobile instant messaging services. Some of them have focused on analyzing the content, some have studied gender differences, and some have concentrated on the comparison of SMS with MIM. The study of usage pattern served two main purposes for social scientists, it provided an insight into the changing nature of relationships and communication. For marketers, it provides an insight into usage of a ever popular and growing services in the mobile space. Studies have indicated that text messages, over the years, have taken the shape of online chat conversations.

Research gap

Most of the studies have been conducted understand the role of gender in text messaging and gender differences in text messaging. I also analyzed gender differences in social network structure by comparing face-face and mobile phone –text-messaging based social structures. Studies have indicated that individuals gender, age, occupation differ in terms of their usage of MIM. Research studies were undertaken in the U.K. to analyze the content and character of text messaging studies were also undertaken in Germany, Norway, Japan, and Finland to analyze differences in text messaging usage. Although usage of mobile and text messaging has been prevalent in India for a decade or more no

significant studies have been undertaken to explore the age, occupation, educational qualification differences in usage of mobile instant messaging. The present study aims to fill this gap.

2. REVIEW OF LITERATURE:

Debrand and Johnson(2008) examined gender differences with respect to the usage and perceived usefulness of instant messaging amongst men and women. Their study concluded that men and women used instant messaging in similar degrees. The authors shared that men and women have similar perception towards usefulness of instant messaging services. The study highlighted that women used instant messaging more than they wanted to communicate with someone who was geographic ally away from them.

Economides and Grousopoulou (2008) stated that men and women Greek students that women participants made more calls than the men participants. The authors mentioned that women participants also tended to receive and send more text messages from and to friends. The study revealed that women tended to talk k to their boyfriends than to others. Men are tended to talk to their friends than to their girlfriends and family.

Lee (n.d.) affirmed that men and women used instant messaging distinctly. In her study conducted at the university of Stanford amongst students, the author revealed that cars, computers, and video games formed the major content of topics(on instant messaging) discussed by men participants; whereas, emotional support and shared interests were topics popular amongst women students. She also explained that women participant's used smiley's (emoticons/symbols of facial expressions) more often than men participants (ratio-40 women; 9 men)

Christine said that men participants rendered to ignore greetings and goodbyes; and women tended to more polite at the start of the conversation and ended their conversations with pleasantries. The study also exhibited that instant messaging encouraged to switch topics of conversations .she concluded that instant messaging had a greater influence on men's behaviour than women's behaviour.

Igarashi, Takai and Yoshida (2010) conducted a longitudinal study of gender differences in social networking development through mobile text messaging. The authors stated that women tended to have larger social networks developed through face to face interactions as compared to their male counterparts. The women participants revealed that their friendships on social networks that had developed through face to face interactions were more important and intimate and the male participants perceived otherwise. The study revealed that the frequency of contact, intimacy, and importance of friendship developed through mobile text messaging was not influenced by the gender. Women had more stable relationships than men within the social networks developed through mobile text messaging. The study also revealed that as compared to the male participants, women participants expanded their networks more and were popular on social networks developed on mobile text messaging.

Battestini ,setlur and sohn(2010) undertook an extensive study of 70 university students over a 4 month period with regards to their usage of text messaging. The authors analyzed approximately 60,000 text messaging through custom logging tools on the participant's mobile phones. Their study indicated that participants indulged in conversations with multiple contacts simultaneously. Their study also revealed that friends and classmates formed the two biggest categories with whom participants conversed using text messages. Their study, however, did not find any gender differences in terms of the number of messages and length of the messages. The differences between the usages of mobile phones and applications were studied by Baron and Campbell (2012) across five countries. The authors attempted to understand the role of gender and culture on mobile phone usage pattern, the authors felt that despite changes in technology ,gender distinction in terms of usage were likely to remain. The authors said that women were more likely to talk on a mobile phone than men to avoid talking to acquaintances, the study revealed that more women were likely to text as they desired to hear the voice of the interlocutor.

Ceccucci, Peslak, Kruck and Sendall(2013) stated that gender had no conclusive role to play in term of the difference in usage of a text messaging services. The author, however, shared that some emotional differences did exist between genders (text messaging usage) which warranted further research. The study showed that women participants appeared to be more pleased, satisfied, contended, and delighted with their usage of their text messages than their men participants.

Church and Oliveira (2013) undertook a study to compare behavioural differences in the usage of (MIM) mobile instant messaging and traditional (SMS) short messaging service. Their study revealed that social influence was the primary factor due to which individuals migrated from SMS to MIM. The authors concluded that the nature of messages on MIM tended to be social, informal, and conversational. Their study found that SMSes tend to have more privacy, are formal, and reliability oriented. The study also exhibited that whatsapp was used more with partners than with any other communities, the authors could not established any conclusive relationship between cost and usage of

whatsapp or SMS. The authors concluded that whatsapp was considered more real time and community/ group based communication tool vis-a-vis SMS. The results of the study highlighted that younger adults used WHATSAPP for a long time than did their older counterparts. The authors also shared that participants had concerns with regards to privacy with respect to whatspp "online status" and "delivery notifications through two ticks".

Sravan rungta (2015) conducted a exploratory study on whatsapp usage differences amongst genders. The author stated that the study is providing some insights into the usage of whatsapp both genders. The study indicates that women tend to use more emotional, spend more active time and a part of lesser number of groups on whatsapp.

The review of selected and relevant literature indicated that there existed a gap in terms of research undertaken in India for MIM(Mobile instant messaging) .although ,such research could have included multiple dimensions and angles, this study focussed on the differences that existed in the usage of Whatsapp(the more popular in India) between the two genders(men and women) .the insights generated from the study could be useful for marketers /advertisers targeting highly evolved digital consumers. The findings could give them inputs to design better campaigns to communicate and sell products and services online.

3. OBJECTIVES OF THE STUDY:

- 1. To know the awareness of the Mobile Instant Message Services of Service providers.
- 2. To know the impact of factors using Mobile Instant Message Services of service providers.
- 3. To analyze the satisfaction level of Mobile Instant Message Services of service providers
- 4. To offer suggestions to improve the MIMS of service Providers

4. RESEARCH METHODOLOGY:

The study is based on primary data. The primary data was collected by using structured questionnaire with sample size of 150 respondents. To test the hypothesis the statistical tools was used such as chi square and ANOVA with software's of MS-Excel SPSS.

4.1: Hypothesis:

- H1: There is no impact of gender on satisfaction level of MIMS of service providers
- H2: There is no impact of age on satisfaction level of MIMS of service providers
- H3: There is no impact of educational qualifications on satisfaction level of MIMS of service providers
- H4: There is no impact of Occupation on satisfaction level of MIMS of service providers
- H5: There is no significant difference age on satisfaction level of MIMS of service providers
- H6: There is no significant difference educational qualification on satisfaction level of MIMS of service providers
- H7: There is no significant difference occupation satisfaction level of MIMS of service providers.

5.0: DATA ANALYSIS AND INTERPRETATION:

Table-1								
Gender		Frequency	Percent	Valid Percent	Cumulative			
					Percent			
	Male	129	86.0	86.0	86.0			
Valid	Female	21	14.0	14.0	100.0			
	Total	150	100.0	100.0				

Table -1: the above table revealed that 129 (86%) of the respondents are Male and 21(14%) respondents of Female. Hence the results indicate that most of respondents are male.

Table-2								
Age		Frequency	Percent	Valid Percent	Cumulative			
					Percent			
	18-25	42	28.0	28.0	28.0			
V-1: 4	25-35	66	44.0	44.0	72.0			
Valid	35-45	42	28.0	28.0	100.0			
	Total	150	100.0	100.0				

Table-2: the above table revealed that the no. of respondents belongs to 18-25 are 45(28%), respondents 25-35 are 66(44%), and the respondents 35-45 are 42(28%). The results shows that the most of respondents age group is 25-35.

Table-3						
Occupation		Frequency	Percent Valid Percen		Cumulative	
•					Percent	
Valid	Student	56	37.3	37.3	37.3	

Business	24	16.0	16.0	53.3
Private Service	e 28	18.7	18.7	72.0
Govt. Service	42	28.0	28.0	100.0
Total	150	100.0	100.0	

Table-3: the above table revealed that the no. of respondents of students are 56(37.3%), respondents from Business people are 24(16%), respondents form private services are 28(18.7), respondents form Govt. Service are 42(28%). Hence the result shows that the maximum no. of respondents are Students.

	Table-4								
Educat	ion	Frequency	Percent	Valid Percent	Cumulative				
Qualification					Percent				
	SSC	24	16.0	16.0	16.0				
	Graduate	42	28.0	28.0	44.0				
Valid	Post Graduate	63	42.0	42.0	86.0				
	Others	21	14.0	14.0	100.0				
	Total	150	100.0	100.0					

Table-4: the above table revealed that the education qualification of respondents SSC is 24(16%), respondents form graduation is 42(28%), respondents form Post graduation is 63(42%), and rest of respondents are others.

),	Table-5							
which o	f you aware	Frequency	Percent	Valid Percent	Cumulative			
of MIMS					Percent			
	We chat	3	2.0	2.0	2.0			
	viber	14	9.3	9.3	11.3			
Valid	Kitwall	14	9.3	9.3	20.7			
vand	Telegram	2	1.3	1.3	22.0			
	All	117	78.0	78.0	100.0			
	Total	150	100.0	100.0				

Table-5: the above table revealed that the respondents are aware of MIMS Service Providers is 3(2%) we chat, respondents 14(9.3%) are aware of Viber, respondents 14 (9.3%) Kitwall, the respondents of 2 (1.3%) are aware of Telegram and 117 (78%) are aware of all service providers.

	Table-6								
what do	you prefer more	Frequency	Percent	Valid Percent	Cumulative				
for stay	ing in touch with				Percent				
people o	on your phone								
	Social Messaging	98	65.3	65.3	65.3				
Valid	Voice call	52	34.7	34.7	100.0				
	Total	150	100.0	100.0					

Table-6: the above table revealed that the respondents are prefer more for staying in touch with people on Social Messaging is 98(65%), and 52(34.7%) are Voice call. It clear tht the most of the respondents using app for social messaging.

	Table-7								
What fa	actor influent to use	Frequency	Percent	Valid Percent	Cumulative				
of mobi	le app				Percent				
	Chatting	27	18.0	18.0	18.0				
Valid	Posting Large Files	67	44.7	44.7	62.7				
vana	Free Mobile Call	56	37.3	37.3	100.0				
	Total	150	100.0	100.0					

Table-7: the above table revealed that the respondents responded to the factors influent chatting to use of MIMS is 27(18%), respondents responded to Posting large files 67(44.7%), and respondents responded to Free Mobile Call is 56(37.3%). Form the results it is known that the maximum respondents using for posting large files.

	Table-8							
Which social		Frequency	Percent	Valid Percent	Cumulative			
Messaging app do					Percent			
you use	:							
Volid	Wechat	4	2.7	2.7	2.7			
Valid	viber	43	28.7	28.7	31.3			

Whatsapp	71	47.3	47.3	78.7
Kitwall	32	21.3	21.3	100.0
Total	150	100.0	100.0	

Table-9: the above table revealed that the respondents using social messaging apps, we chat is 4(2.7%), respondents using social messaging app Whatsapp is 71(47.3%), and respondents using social messaging app Kitwall is 32(21.3%). It is known that the maximum respondents using whatsapp.

Table-9								
Which app do you		Frequency	Percent	Valid Percent	Cumulative			
feel safe and					Percent			
security of MIMS								
	Viber	7	4.7	4.7	4.7			
Valid	Whatsapp	38	25.3	25.3	30.0			
vand	Kitwall	105	70.0	70.0	100.0			
	Total	150	100.0	100.0				

Table-9: the above table revealed that the respondents 7(4.7%) feeling the safe and security of MIMS is viber, respondents 38(25.3%) are feeling that safe and security of MIMS is Whatsapp, respondents 105(70%) are feeling that safe and security of MIMS is Kitwall. Form the analysis it concludes that Kitwall is more save and secure the MIMS.

Table-10							
Most of messages sending to groups in app	Frequency	Percent	Valid Percent	Cumulative Percent			
Friends	27	18.0	18.0	18.7			
Colleagues	4	2.7	2.7	21.3			
Organisation	49	32.7	32.7	54.0			
Family	70	46.7	46.7	100.0			
Total	150	100.0	100.0				

Table-10: the above table revealed that the respondents 27(18%) are messages sending to Friends , the respondents 4(2.7%) are messages sending to Colleagues, respondents 49(32.7%) are messages sending to Organization and respondents 70(46.7%) responded to messages sending to Family. It is clear from the analysis most of the respondents sending messages to family.

Table-11									
Do you	use MIMS on	Frequency	Percent	Valid Percent	Cumulative				
an active basis					Percent				
Valid	Some Times	4	2.7	2.7	2.7				
	Not At all	52	34.7	34.7	37.3				
	All the Time	94	62.7	62.7	100.0				
	Total	150	100.0	100.0					

Table-11: above table revealed that the respondents 4(2.7%) are use MIMS on an active basis is sometimes, respondents 52(34.7%) are responded to not at all, and 94(62.7%) are responded to all the time, it is clear that most of the respondents using MIMS all the time.

6. TESTING OF HYPOTHESIS:

H1: There is no impact of gender on satisfaction level of MIMS of service providers

is no impact of gender on satisfaction level of winvis of service providers								
Table-12 (Chi-Square Tests)								
Overall Satisfaction your using mobile app Gender	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)			
Pearson Chi-Square	.801 ^a	1	.371					
Continuity Correction ^b	.425	1	.514					
Likelihood Ratio	.828	1	.363					
Fisher's Exact Test				.469	.261			

N of Valid Cases	150						
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.84.							
b. Computed only for a 2x2 table							

Table-12: From the above table it is known that the chi-square value is 0.801which is significant at degrees of freedom 1 the p-value 0.469 is greater than the 0.05. The Chi square test represents that the satisfaction level on gender is not impacting the MIMS of service providers.

H2: There is no impact of age on satisfaction level of MIMS of service providers

Table-13(Chi-Square Tests)							
Overall Satisfaction your using mobile	Value	df	Asymp. Sig. (2-				
app Age			sided)				
Pearson Chi-Square	1.010^{a}	2	.604				
Likelihood Ratio	1.007	2	.604				
Linear-by-Linear Association	.202	1	.653				
N of Valid Cases 150							
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 15.68.							

Table-13: From the above table it is known that the chi-square value is 1.010 which is significant at degrees of freedom 1 the p-value 0.604 is greater than the 0.05. The Chi square test represents that the satisfaction level on Age is not impacting the MIMS of service providers.

H3: There is no impact of educational qualifications on satisfaction level of MIMS of service providers

Table-14(Chi-Square Tests)							
Overall Satisfaction your using mobile	Value	df	Asymp. Sig. (2-				
app Education level			sided)				
Pearson Chi-Square	15.122 ^a	3	.002				
Likelihood Ratio	22.170	3	.000				
Linear-by-Linear Association	8.799	1	.003				
N of Valid Cases	150						
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.84.							

H4: There is no impact of Occupation on satisfaction level of MIMS of service providers

Table-14: From the above table it is known that the chi-square value is 15.122which is significant at degrees of freedom 1 the p-value 0.002 is less than the 0.05. The Chi square test represents that the satisfaction level on Education is impacting the MIMS of service providers.

Table-15(Chi-Square Tests)							
Overall Satisfaction your using mobile	Value	df	Asymp. Sig. (2-sided)				
app Occupation							
Pearson Chi-Square	38.130^{a}	3	.000				
Likelihood Ratio	43.297	3	.000				
Linear-by-Linear Association	31.025	1	.000				
N of Valid Cases	150						
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.96.							

Table-15: From the above table it is known that the chi-square value is 38.130 which is significant at degrees of freedom 1 the p-value 0.000 is less than the 0.05. The Chi square test represents that the satisfaction level on Occupation is not impacting the MIMS of service providers.

7. ANALYSIS OF VARIANCE: (ANOVA)

H5: There is no significant difference on satisfaction level of MIMS of service providers Age.

H6: There is no significant difference on satisfaction level of MIMS of service providers Educational qualification

H7: There is no significant difference on satisfaction level of MIMS of service providers Occupation.

Tale-16(ANOVA Test)							
Sum of df Mean Square F Sig.							
	Squares						

Age	Between Groups	.114	1	.114	0.201	.654
	Within Groups	83.886	148	.567		
	Total	84.000	149			
Occupatio	Between Groups	48.119	1	48.119	38.922	.000
Occupatio	Within Groups	182.974	148	1.236		
n	Total	231.093	149			
Education	Between Groups	7.515	1	7.515	9.289	.003
	Within Groups	119.745	148	.809		
	Total	127.260	149			·

Table-16: The above table reveals that age and overall satisfaction of respondents the F-Value is 0.201at the significance value is 0.654 is greater than the 0.05, hence there is no significant difference satisfaction level on age. Table reveals that Occupation and overall satisfaction of respondents the F-Value is 38.922 at the significance value is 0.00 is less than the 0.05, hence there is a significant difference satisfaction level on Occupation and the table reveals that age and overall satisfaction of respondents the F-Value is 9.289 at the significance value is 0.03 is less than the 0.05, hence there is a significant difference satisfaction level on education qualification.

8. DISCUSSION OF FINDINGS:

The analysis revealed that 129 (86%) of the respondents are Male and 21(14%) respondents of Female. Hence the results indicate that most of respondents are male. The no. of respondents belongs to 18-25 are 45(28%), respondents 25-35 are 66(44%), and the respondents 35-45 are 42(28%). The results show that the most of respondent's age group is 25-35. The no. of respondents of students are 56(37.3%), respondents from Business people are 24(16%), respondents form private services are 28(18.7), respondents form Govt. Service are 42(28%). Hence the result shows that the maximum no. of respondents are Students. The education qualification of respondents SSC is 24(16%), respondents form graduation is 42(28%), respondents form Post graduation is 63(42%), and rest of respondents are others.

The respondents are aware of MIMS Service Providers is 3(2%) wechat, respondents 14(9.3%) are aware of Viber, respondents 14 (9.3%) Kitwall, the respondents of 2 (1.3%) are aware of Telegram and 117 (78%) are aware of all service providers. The respondents are prefer more for staying in touch with people on Social Messaging is 98(65%), and 52(34.7%) are Voice call. It clear that the most of the respondents using app for social messaging. the respondents responded to the factors influent chatting to use of MIMS is 27(18%), respondents responded to Posting large files 67(44.7%), and respondents responded to Free Mobile Call is 56(37.3%). Form the results it is known that the maximum respondents using for posting large files, the respondents using social messaging app Wechat is 4(2.7%), respondents using social messaging app Whatsapp is 71(47.3%), and respondents using social messaging app Kitwall is 32(21.3%). It is known that the maximum respondents using whatsapp.

The respondents 7(4.7%) feeling the safe and security of MIMS is viber, respondents 38(25.3%) are feeling that safe and security of MIMS is Whatsapp, respondents 105(70%) are feeling that safe and security of MIMS is Kitwall. Form the analysis it concludes that Kitwall is more save and secure the MIMS. The respondents 27(18%) are messages sending to Friends, the respondents 4(2.7%) are messages sending to Colleagues, respondents 49(32.7%) are messages sending to Organization and respondents 70(46.7%) responded to messages sending to Family. It is clear from the analysis most of the respondents sending messages to family. The respondents 4(2.7%) are use MIMS on an active basis is sometimes, respondents 52(34.7%) are responded to not at all, and 94(62.7%) are responded to all the time, it is clear that most of the respondents using MIMS all the time.

The hypothesis shows that the chi-square value is 0.801which is significant at degrees of freedom 1 the p-value 0.469 is greater than the 0.05. The Chi square test represents that the satisfaction level on gender is not impacting the MIMS of service providers.

The chi-square value is 1.010 which is significant at degrees of freedom 1 the p-value 0.604 is greater than the 0.05. The Chi square test represents that the satisfaction level on Age is not impacting the MIMS of service providers.

The chi-square value is 15.122 which is significant at degrees of freedom 1 the p-value 0.002 is less than the 0.05. The Chi square test represents that the satisfaction level on Education is impacting the MIMS of service providers.

The chi-square value is 38.130 which is significant at degrees of freedom 1 the p-value 0.000 is less than the 0.05. The Chi square test represents that the satisfaction level on Occupation is not impacting the MIMS of service providers.

From the analysis of variance it reveals that age and overall satisfaction of respondents the F-Value is 0.201at the significance value is 0.654 is greater than the 0.05, hence there is no significant difference satisfaction level on age.

Table reveals that Occupation and overall satisfaction of respondents the F-Value is 38.922 at the significance value is 0.00 is less than the 0.05, hence there is a significant difference satisfaction level on Occupation and the table reveals that age and overall satisfaction of respondents the F-Value is 9.289 at the significance value is 0.03 is less than the 0.05, hence there is a significant difference satisfaction level on education qualification.

9. CONCLUSION:

Over all the study it provides some insights in to the usage of mobile MIMS apps whatsapp is more no of respondents of gender males are using. The study shows that the satisfaction level of mobile app all is satisfied with their using apps. It is concluded that kitwall and whats app is safer and secure the data usages. And more no of respondents using this apps for social messages and they are posting messages to family as well as organizations. The hypothesis concludes that there is no significant deference between satisfaction level of Age and occupation, and there is a significant deference between satisfactions of education levels.

REFERENCES:

- 1. Ahmed,R.Z.(2002,Decmeber4), UK hails 10th birthday of SMS. The Times of India. Retrieved from http://timesof.india.indiatiems.com/world/UK-hails-10th-birthday-of-SMS/articleshow/30216466.cmsA
- 2. Baron, N.S., & Campbell, E.M. (2012). Gender and moble phones in cross-national context, Language Sciences 34(1),13-27.
- 3. Battestini, ASetlur, V, & Sohan, T. (2010). A large scale study of text messaging use(pp.229-238). Proceedings of the 12th international conference on human computer interaction with mobile devices and services, doi>10.1145/1851600.1851638.
- 4. ceccucci, W., Pesalak, A., Kruck, S.E.,& Sendall, P.(2013). Does gender play a role in text messaging? Issues in Information System ,14(2), 186-194.
- 5. Chruch, K., & Oliveria, R.D.(2013). What'sup with WhatsApp? Comparing mobile instant messaging behaviours with traditional SMS. Mobile HCI 2013 –Collaboration and communication. August 30,2013, Munich, Germany.Retrieved From http://www.ic.unicamp.br/~Oliveria/doc/MHCI2013 Whats-up-with -Whatsapp.pdf
- 6. Debrand, C.C.,&Johnson, J.J.(2008).Gender differences in email and instant messaging: A study of undergraduate business information systems students. Journal Of computer Information System. Retrieved From http://iacis.org/jcis/articles/ Debrand_Johnson_ 2008_48_3. pdf
- 7. Economides, A. A., & Grousopoulou, A. (2008). Use of mobiles phones by male and female Greek Students ,International journal of mobile Communication, 6(6), 729-749. Doi>10.1504/IJMC.2008.019822
- 8. Igarashi, T.,& Yoshida, T.(2010).Gender difference in social networking development via mobile phones text messaging: A longitudinal study. Journal of social and personal Realtionalships,22(5),691-713. Doi:10.1177//0265407505056492
- 9. Internation Telecommunication Union.(2010).World telecommunication/ICT development report 2010.Monitoring the WSIS Targets: A mid-term review. Retrieved from http://www.uis.unesco.org/Communication/Documentation/WTDR2010_e.pdf
- 10. Shravan Rungta: "Whatsapp Using Differences Amongst Genders: An Exploratory Study" Indian Journal of Marketing May, 2015, page 27-37.
- 11. The mercury project for instant messaging studies: How does instant messaging affect interaction between the genders? Retrieved from http://web.stanford.edu/class/pwr3-25/group2/pdfs/IM Genders.pdf
- 12.Texting turns twenty (2012, December 3). The Economist. Retrieved from http://www.economist.com/blogs/graphicdetail/2012/12/daily-chart