

# Social Computing: A critical study to analyze current scenario of Social Networking sites in India

Rachna Agarwal, YMCA University of Science & Technology, Faridabad, Haryana  
Munish Nagar, Aravali College of Engineering and Management, Faridabad, Haryana

**Abstract**— Social Networking sites are the fastest growing media for all the corporate as well as users to interact with each other. The popularity of Social Networking sites in India spread with popularity of Orkut. Recently Facebook emerged as the most popular networking site in India with 50 million users. There are also Indian social networking sites like Bharatstudent, Indyarock, and Bigadda etc. A look at the Indian social networking space clearly shows that the most popular sites are all established global players. It would not be an overstatement if we say that the Indian counterparts have failed to make an impact comparatively. Across the globe, social networking sites operate under different revenue models. Most of them rely on advertising as their major source of revenue. But the Indian users have different psychology which makes it difficult for social networking sites to earn added revenues. This research is to identify the gaps in the current social networking sites and the prospective segments of users which can be targeted to gain more visibility. The effectiveness is determined with the help of survey from people who use these sites, and the content of three social networking sites is analyzed. It is observed that Indian users are noticing the in-site advertisements but are not motivated to click it, the other models like Value Added Services, special paid In-Games items and features, to design applications and sell based on shared revenue basis on social networking sites are also not effective. Proposed revenue models were highly accepted. Hence these models are would be highly effective if implemented in the revenue model for the social networking sites.

**Key Words:** Social Networking Sites, Revenue Model, Social Media.

## I. INTRODUCTION

Social networking site is used to describe any Web site that enables users to create public profiles within that Web site and form relationships with other users of the same Web site who access their profile. Social networking sites can be used to describe community-based Web sites, online discussions forums, chat-rooms and other social spaces online. Experian Hit wise, the global information services company, has conducted an international study on just how much time people living in different countries spend on social networks. Brazil, Singapore, USA, India, New Zealand, France, Australia and the UK were a part of the study. As per this study, India ranks 4th and has 14 per cent market share for social networks and forums. Facebook,

YouTube and Twitter continue to be the top three social networking websites in India. India with its large population has millions of users accessing Facebook, there are 60 million people using Facebook in India. That is 5.17% of total population. It is estimated that within a year India will have at least 80 million Facebook users.

## II. SOCIAL NETWORKING SITES IN INDIA

The popularity of Social Networking sites spread with popularity of [Orkut](#). Facebook, Twitter, Orkut, LinkedIn are few of the biggest social networking sites in India. Rediff.com, a popular portal in India launched its own version, Yaari, Minglebox, Hi5 and dozens of other sites are attracting their own fan base. Online video and music sites are also doing reasonably well. However, one of the major competitors of SNS is the Indian Television and Cinema industry, which still has a grasp on a big share of the user attention. With respect to online music, due to the popularity of Bit torrent in India, most users prefer to download their music rather than listen to it online.

## III. LITREATURE REVIEW

1. (Manjoo, 2012) It may be from these weak ties – the old friend who profile you rarely visit, or the former colleague you rarely see in person - that the greatest potential lies for establishing the sort of ties that will help to break down divisions and debunk myths about other groups in society.
2. (Techcrunch, 2012) In a bid to retain a share of the entertainment market in the face of increased competition from online TV options, there will be a significant upsurge in “social TV”.
3. (ONS, 2011) In the UK, in 2011, 19 million households had access to the internet – about 77% of the population. The other households gave various reasons for not having a connection, including the expense of equipment necessary to get online (19%) or lack of skills (21%). But over half of those without a

connection said they didn't have one because they "don't need the internet.

providing them access to a more globalized yet unfixed conversation about their community histories.”

4. (Bartlett and Littler, 2011) By surveying nearly 1300 people who claimed an association with the EDL on Facebook, researchers were able to find out more about the depth of commitment that lay behind their Facebook allegiance. The result suggested that the EDL's capacity to mobilize was a fraction of its perceived strength on Facebook.
5. (Edelman 2011) Twitter usage varies more significantly across Europe, although figures for the whole of Europe are harder to obtain, not least because of people accessing the site through mobiles and via alternative platforms, such as Tweet deck. But Twitter usage continues to grow rapidly in a range of European countries according to the latest figures, including 151% growth in users in Spain in the last 12 months.
6. (Toma and Hancock, 2010) Huge online platform games, most notably Second Life, have built this with great success. (www.secondlife.com) other research indicates that being sparing with the truth on online dating sites, for instance, is extremely common.
7. (Zhang, 2010) The research conducted in-depth analysis of the words that people used in status updates, using a standardized word categorization system that differentiates the function (e.g. pronoun, noun), theme (e.g. work, school) tone (e.g. positive, negative) and character (e.g. emotional) of words.
8. (Appelius, 2009) Research seems to confirm that mass media can have a powerful role to play in developing people's ideas about other groups within society, especially minority groups.
9. (Plouffe, 2009) The Obama campaign used video content, email and social networking platforms to get the message of their candidate across. One the day of the election, there was a global “donate your status” action on Facebook that attracted a huge response. They worked effectively within the medium, allowing the “memes” of the campaign (for example, the visually striking Shepherd Fairy campaign.
10. (Byrne, 2007) social networking activity can support young people belonging to a minority in embracing their own identity, by giving them additional opportunities for “strengthening their cultural identities, for teaching them how to navigate both public and private dimensions of their racial lives, and for
11. (Rainie et al, 2006). There is a little doubt that any organization aiming to shape or challenge the way that people behave and think needs to attend to the possibilities created by what we tend to refer to as “social media”, as it plays an ever-more central role in our everyday lives
12. (Richards,2005) Now, the upsurge in interactivity associated with the emergence of Web 2.0 has created a further shift away. In traditional media, editors, journalists and channel commissioners still make the overwhelming majority of decision of what makes its way into the public realm.
13. (Gerstenfeld, 2003) Research examining the Italian far right also showed the extent to which these sites are closely networked between themselves. Jarvenpaa and Leidner, 1998, Meyerson, 1996, Coppola, Hiltz, and Rotter, 2004) Trust is also important for successful online interactions.
14. (Metzger, 2004).High trust would lead to a perception of low cost, and vice versa. Studies of interpersonal exchange situations confirm that trust is a precondition for self disclosure, because it reduces perceived risks involved in revealing private information.
15. (Lessig, 1998) Millions of people have joined social networking sites, adding profiles that reveal personal information. Social networking sites record all interactions, and retain them for potential use in social data mining. Offline, most social transactions leave behind no trace. This lack of a record is a passive enabler of social privacy.

#### IV.OBJECTIVES OF THE STUDY

- The main objective of the study was to understand the current scenario of the social networking sites in India in terms of usage, awareness, like, dislike and other factors.
- To understand the efficiency of the current revenue models and proposed revenue models in accordance with social networking sites.

#### V.RESEARCH METHODOLOGY

The entire research was a combination of qualitative and quantitative research.

- The data collected was based on both exploratory and descriptive designs.

- Qualitative data was collected through in-depth interviews.
- Quantitative data was collected during online research through customer assisted questionnaire based feedbacks. Google survey was used to prepare the questionnaire.
- The research was initiated with a pilot questionnaire which helped to draft the final questionnaire.

Kardam			found them irrelevant to his profile hence don't click on it except for LIKEDIN which relevant ads according to the group joined.
--------	--	--	---

## VII. RESULTS AND ANALYSIS OF THE SURVEY

### *Sampling Design*

- The sample consists of current and prospective users of social networking sites.
- The quantitative research was conducted in the sample of 89 respondents.
- While the qualitative data collection was done using in-depth interviews of 4 respondents
- Sampling design was simple random sampling.

## VI. RESULT OF QUALITATIVE SURVEY

Table 1

Name of respondent	Occupation	Age	Response
Mr. Praveen Saini	Service (ACEM)		<ul style="list-style-type: none"> <li>Advertisements not catchy and noticeable.</li> <li>Game becomes monotonous and boring after a certain level and user feels it's a waste of time</li> </ul>
Dr. Bupendra Kumar	Teaching (AMS)		<ul style="list-style-type: none"> <li>Credit card penetration in India is very low hence usage is also low</li> <li>Least knowledge for application development in India, hence good support software is required</li> </ul>
Mr. Sanjay Singh	Student at (ACEM)		<ul style="list-style-type: none"> <li>But would consider spending if one can earn revenue on the social networking site.</li> <li>Do not know how to develop applications as tools are not user friendly.</li> </ul>
Mr. Devilal			<ul style="list-style-type: none"> <li>as noticed ads but</li> </ul>

### a. Overall demographics

Chart 1

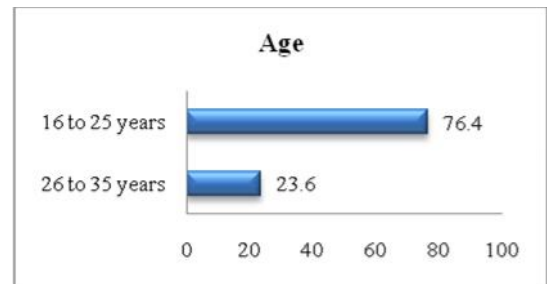


Chart 2



Chart 3



- Here we can observe that the average age of the 89 respondent is 22.89 years and the average monthly family income is INR 43061
- Students formed the major percentage of the respondent, followed by the service category.

Chart 4

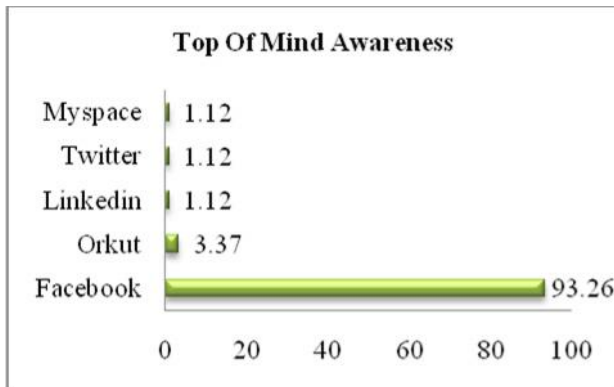
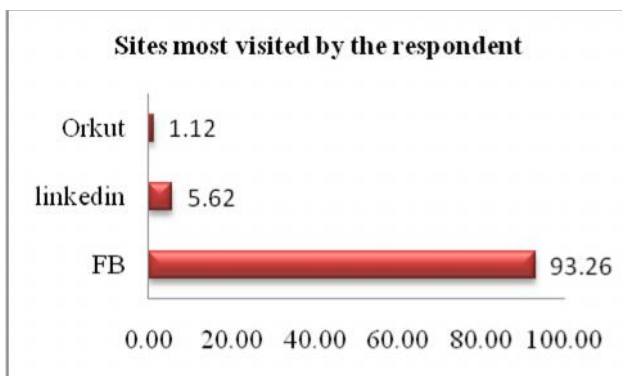


CHART 5



The most liked parameter for above mentioned sites

Table 2

Most Like (%)							
Parameter	Facebook	Twitter	LinkedIn	Orkut	Bharat student	Indy arock	Bigadda
Ease of Navigation	46.07	16.85	7.87	29.21	15.73	17.98	14.61
Sharing and Networking	43.82	31.46	41.57	21.35	14.61	13.48	11.24
Privacy	6.74	7.87	13.48	10.1	8.99	2.25	5.62

				1			
Speed	1.12	19.10	5.62	5.62	1.12	4.49	4.49
Gaming	1.12	1.12	2.25	6.74	6.74	10.11	14.61
No response	1.12	23.60	29.21	26.97	52.81	51.69	49.44

Comments:

- The Top of Mind Recall for FACEBOOK is highest with 93.26% followed by meager percentage of 3.3 for ORKUT.
- Among the seven social networking sites listed, FACEBOOK is the most visited site with 93.26% followed by LINKEDIN with 5.62%

The most liked parameter for the following sites are as follows:

- FACEBOOK: Ease of navigation/User friendly (46.07%)
- TWITTER: Sharing and Networking (31.46%)
- LINKEDIN: Sharing and Networking (41.57%)
- ORKUT: Ease of navigation/User friendly (29.21%)
- BHARATSTUDENT.COM, INDYAROCKS
- BIGADDA : majority of the respondents couldn't respond for these sites

The most disliked parameter for above mentioned sites

Most Dislike (%)							
Parameter	Facebook	Twitter	LinkedIn	Orkut	Bharat student	Indy arock	Bigadda
Ease of Navigation	8.99	12.36	11.24	4.49	5.62	3.37	4.49
Sharing and Networking	3.37	3.37	2.25	4.49	7.87	6.74	10.11
Privacy	29.21	12.36	15.73	<b>26.97</b>	<b>12.36</b>	11.24	<b>11.24</b>
Speed	26.97	15.73	<b>17.98</b>	13.48	10.11	<b>14.61</b>	<b>11.24</b>
Gaming	23.60	<b>17.98</b>	14.61	16.85	8.99	8.99	6.74
No response	7.87	38.20	38.20	33.71	55.06	55.06	56.18

Table 3

*Comments*

- FACEBOOK: Privacy (29.21%)
- TWITTER: Gaming (17.98%)
- LINKEDIN: Speed (17.98%)
- ORKUT: Privacy (26.97%)
- BHARATSTUDENT.COM: Privacy (12.36%)
- INDYAROCKS: Speed (14.61%)
- BIGADDA: Privacy and Speed share the same percentage (11.24%)

	Importance = i (Mean)	Satisfaction = s (Mean)	i-s [If i-s is negative consider it as 0]	Opportunity score = i+(i-s)
Ease of navigation	4.12	3.76	0.36	<b>4.48</b>
Speed	4.2	3.63	0.57	<b>4.77</b>
Privacy	<b>4.42</b>	<b>3.7</b>	<b>0.72</b>	<b>5.14</b>
Networking and Chatting	4	3.97	0.03	4.03
Sharing	3.84	3.9	0	3.84
Applications	3.12	3.45	0	3.12
Information visibility	3.64	3.54	0.1	3.74
Earning in monetary terms	2.89	2.97	0	2.89
Online shopping	2.58	2.92	0	2.58
Gaming	2.6	3.12	0	2.6
Downloading	3.31	3.35	0	3.31
Ease of payment	3.08	3.12	0	3.08

*Opportunity Score Matrix*

Table 4

- In the *Opportunity Score Matrix* amongst all the other parameter, **PRIVACY** scored the highest with the **score of 5.14**. This is due to the *higher IMPORTANCE* given with *lower SATISFACTION* level which shows the *gap between the expectation and actual experience of the user*.

These parameters were followed by:

- SPEED : Opportunity score 4.77
- EASE OF NAVIGATION/USER FRIENDLY: Opportunity score 4.48

Responses received for Current and Proposed Model

Chart -6

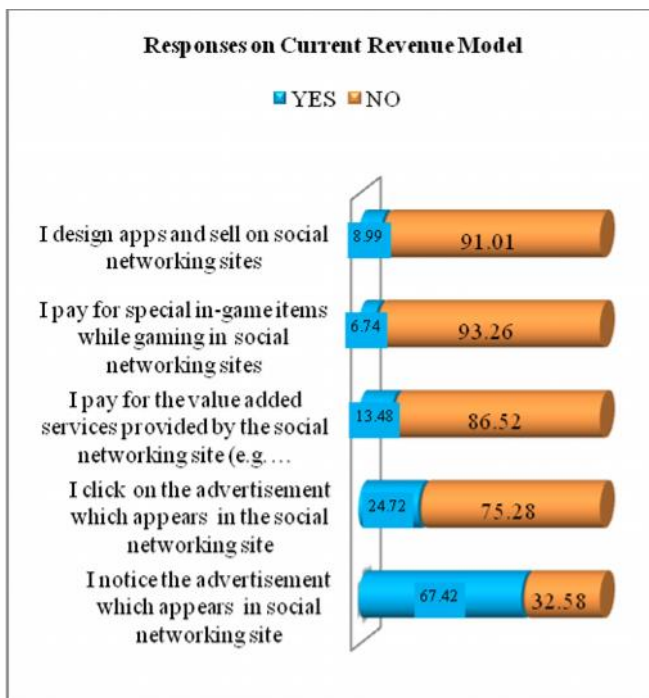


Chart 7



#### Comments on Current Revenue Model

- The efficiency of revenue generation through *in-site advertisements* is very low as many of the users are noticing the advertisements but are not motivated to click the advertisements.
- The current revenue models of the social networking sites are *not very strong* such as:
  - Value Added Services
  - Special paid In-Games items and features
  - To design applications and sell based on shared revenue basis on social networking sites.

#### Comments on Proposed Revenue Model

- The acceptance for both the models is *very high* as in comparison with the currents model as seen above.

#### Verifying relation between Age V/s Proposed Revenue Model

Table 5

	Age	Proposed Model No.1			Total
			yes	no	
	26 to 35 years	Count	14	7	21
		% of Total	<b>15.7%</b>	7.9%	23.6%
	16 to 25 years	Count	46	22	68
		% of Total	<b>51.7%</b>	24.7%	76.4%
Total		Count	60	29	89
		% of Total	67.4%	32.6%	100.0%

Table 6

	Age	Proposed Model No.2			Total
			yes	no	
	26 to 35 years	Count	13	8	21
		% of Total	14.6%	9.0%	23.6%
	16 to 25 years	Count	43	25	68
		% of Total	48.3%	28.1%	76.4%
Total		Count	56	33	89
		% of Total	62.9%	37.1%	100.0%

#### Comments

- From the first table it can be seen that 51.7% of the total respondent are belonging to age group of



16 to 25 years and are in favor of proposed model 1 (which provides scope to earn revenue and spent them in online shopping)

*OCCUPATION V/s PROPOSED REVENUE MODEL*

Table 7

	Occupation	Proposed Model No.1			Total
			yes	no	
	Professional	Count	5	3	8
		% of Total	5.6%	3.4%	9.0%
	Self employed	Count	3	1	4
		% of Total	3.4%	1.1%	4.5%
	Service	Count	12	6	18
		% of Total	<b>13.5%</b>	6.7%	20.2%
	Student	Count	40	19	59
		% of Total	<b>44.9%</b>	21.3%	66.3%
Total		Count	60	29	89
		% of Total	67.4%	32.6%	100.0%

Table 8

	Occupation	Proposed Model No.2			Total
			yes	no	
	Professional	Count	3	5	8
		% of Total	3.4%	5.6%	9.0%
	Self employed	Count	2	2	4
		% of Total	2.2%	2.2%	4.5%
	Service	Count	14	4	18
		% of Total	15.7%	4.5%	20.2%
	Student	Count	37	22	59
		% of Total	41.6%	24.7%	66.3%
Total		Count	56	33	89
		% of Total	62.9%	37.1%	100.0%

**Comments:**

From the first table it can be seen that 51.7% of the total respondent are belonging to age group of 16 to 25 years and are

in favor of proposed model 1 (which provides scope to earn revenue and spent them in online shopping)

- Similarly it can be observed from the second table that 48.3% of the total respondent are belonging to the age group of 16 to 25 years are in favor of proposed model 2 (which enables the user to use the earnings from model 1 for legally watching latest released movies i.e. to inhibit piracy on social networking sites)

*INCOME V/s PROPOSED REVENUE MODEL*

Table 9

	Monthly income	Proposed Model No.1			Total
			yes	no	
	above 60000 INR	Count	19	9	28
		% of Total	21.3%	10.1%	31.5%
	45001 to 60000 INR	Count	13	2	15
		% of Total	14.6%	2.2%	16.9%
	30001 to 45000 INR	Count	13	10	23
		% of Total	14.6%	11.2%	25.8%
	15001 to 30000 INR	Count	15	8	23
		% of Total	16.9%	9.0%	25.8%
Total		Count	60	29	89
		% of Total	67.4%	32.6%	100.0%

Table 10

**Comments:**

21.3% of the total respondent belong to the monthly income group of above 60000 INR who are in favor of the model 1 (which provides scope to earn revenue and spent them in online shopping) followed by the monthly income group of 150001 to 30000 INR who account for 16.9%

From the 8th table 18.0% of the total respondent belong to the monthly income group of above 60000 INR followed by 15.7% belonging to the monthly income group of 30001 to 45000 INR in favor of model 2 (which enables the user to use the earnings from model 1 for legally watching latest released movies i.e. to inhibit piracy on social networking sites)

*Verifying dependence between OCCUPATION V/s CURRENT REVENUE MODEL*

Table 11

Crosstab					
			I pay for special in game items while gaming		Total
			yes	no	
Occupation	Professional	Count	2	6	8
		% of Total	2.2%	6.7%	9.0%
	Self employed	Count	1	3	4
		% of Total	1.1%	3.4%	4.5%
	Service	Count	0	18	18
		% of Total	.0%	20.2%	20.2%
	Student	Count	3	56	59
		% of Total	3.4%	62.9%	66.3%
Total		Count	6	83	89
		% of Total	6.7%	93.3%	100.0%

	Monthly income	Proposed Model No.1			Total
			yes	no	
	above 60000 INR	Count	19	9	28
		% of Total	21.3%	10.1%	31.5%
	45001 to 60000 INR	Count	13	2	15
		% of Total	14.6%	2.2%	16.9%
	30001 to 45000 INR	Count	13	10	23
		% of Total	14.6%	11.2%	25.8%
	15001 to 30000 INR	Count	15	8	23
		% of Total	16.9%	9.0%	25.8%
Total		Count	60	29	89
		% of Total	67.4%	32.6%	100.0%

**CHI- SQUARE TEST**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.922 <sup>a</sup>	3	.048
Likelihood Ratio	6.734	3	.081
Linear-by-Linear Association	4.326	1	.038
N of Valid Cases	89		
a. 5 cells (62.5%) have expected count less than 5. The minimum expected count is .27.			

*Hypothesis Testing*

H<sub>0</sub>: Occupation of the respondent is independent of the current revenue model.

H<sub>1</sub>: Occupation of the respondent is dependent of the current revenue model.



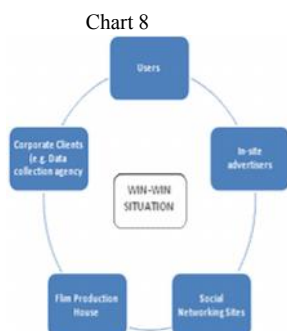
As Pearson Chi-Square value = 0.048 is less than  $\alpha = 0.05$  at Following are some of the limitations of the study  
 95% Confidence Interval, we reject  $H_0$  and accept  $H_1$

Hence Occupation of the respondent is dependent of the current revenue model.

## VIII. FINDINGS& SUGGESTIONS

Key findings of the research are as follows:

- Privacy is having the highest opportunity score followed by Speed and Ease of navigation respectively.
- It is observed that Indian users are noticing the in-site advertisements but are not motivated to click it, the other models like Value Added Services, special paid In-Games items and features, to design applications and sell based on shared revenue basis on social networking sites are also not effective
- Proposed revenue models were highly accepted. Hence these models are would be highly effective if implemented in the revenue model for the social networking sites.
- From these observations we can propose that these models would be highly effective in these segments.
- The proposed revenue models are designed in such a way that it would benefit all the stake holders of Social Networking Media.
  - Users: Mode of earning
  - In-site advertisers: Enabling users to click on the in-site advertisements and motivating them to buy using the earnings.
  - Film house production: Reducing piracy and increasing the viewership which will increase the revenues
  - Corporate clients: Applications could be build from crowd sourcing, data can be collected etc
  - Social Networking Sites: Adding to the revenue through the above mentioned statements.



## IX. LIMITATIONS

- As the quantitative research was conducted using online surveys and questionnaires there was minimal control over the composition of the respondents in total sample.
- As many of the homemakers and senior citizens have not responded to the survey, the results of the research will not be applicable to them.
- Low Contextual understanding level of respondents to questions.

## X. CONCLUSION

- From the most LIKED parameters where the Global networking sites score on Ease of navigation/User friendly and Sharing and networking, Indian social networking sites need to gear up on these fronts as they score very less in comparison to their Global counterparts.
- On the other hand where Global social networking sites are lagging behind on parameters like Privacy and Speed, Indian counterparts can build their strong positioning statements and infrastructure on these parameters.
- In the Opportunity Score Matrix on all the other parameter, Privacy is having the highest opportunity score followed by Speed and Ease of navigation respectively. Hence ant new social networking site can position themselves on the above mentioned parameters.
- It is observed that Indian users are noticing the in-site advertisements but are not motivated to click on it which is big road block according to the current revenue model.
- The current revenue models of the social networking sites are not very strong such as:
  - Value Added Services because very few people don't like to spend money in the social networking sites when its form their own pocket
  - Special paid In-Games items and features because as games become monotonous after certain period of time and users feels it's not worth to spend time and money on it\
  - To design applications and sell based on shared revenue basis on social networking sites because as many of the users are unaware about the tools and are lacking the skills to develop applications on their own
- It was observed that there is a high acceptance for the proposed model no.1 that a user would visit the social networking sites which are providing earning options through paid surveys, application development etc. which can be redeemed in online shopping (e.g. Live streaming, Video downloading, mobile recharge etc)
- Also a high acceptance for the proposed model no.2 that a user would you like to use these earnings for legally

watching latest released movies (i.e. to inhibit piracy) on social networking sites.

- Hence these models are would be highly effective if implemented in the revenue model for the social networking sites.
- From different cross tabulations, it was observed that the proposed models no.1 & 2 were readily accepted by the age group of 16 to 25 years and also by the Students.
- It was observed that the proposed model no.1 & 2 are having higher acceptance in the income group of INR 60000 and above.

#### REFERENCES

- [1] Ahn, June. (2012). Teenagers' experiences with social network sites: Relationships to bridging and bonding social capital. *The Information Society*, 28(2), 99-109.
- [2] Dobson, Amy Shields. (2012). 'Individuality is everything': 'autonomous' femininity in MySpace mottos and self-descriptions. *Continuum: Journal of Media & Cultural Studies*, 3 (26), 371-383.
- [3] Martin Gneiser, Julia Heidemann, Mathias Klier, Andrea Landherr, and Florian Probst. (2012). Valuation of Online Social Networks Taking into Account Users' Interconnectedness. *Information Systems and e-Business Management*, 10 (1), 61 - 84.
- [4] Towner, Terri, and Munoz, Caroline Lego . (2012). Comparison. In Catheryn Cheal, John Coughlin, and Shaun Moore (Eds.), *Transformation in Teaching: Social Media Strategies in Higher Education*. (pp. 343-272). Santa Rosa, C.A.: Informing Science Institute.
- [5] Towner, Terri, and Dulio, David. (2012). New Media and Political Marketing in the United States: 2012 and Beyond. *The Journal of Political Marketing*, 11 (1-2), 95-119.
- [6] Vander Velden, Maja, and El Emam, Khaled. (2012). "Not all my friends need to know": a qualitative study of teenage patients, privacy, and social media. *Journal of the American Medical Informatics Association*, 0. (Online first: doi:10.1136/amiajnl-2012-000949)
- [7] Witten, Kim. (2012). Sociophonetic Variation in an Internet Place Name. *Names: A Journal of on mastics*, 60 (4), 220-230.
- [8] Catanese, S., De Meo, P., Ferrara, E., Fiumara, G., and Provetti, A. (2011). Crawling Facebook for Social Network Analysis Purposes. *Proceedings of the International Conference on Web Intelligence, Mining and Semantics*. (pp. 52:1-8).
- [9] Dobson, Amy Shields. (2011). The representation of female friendships on young women's MySpace profiles: the all-female world and the feminine 'other'. *Youth Culture and Net Culture: Online Social Practices*. (pp. 126-152).
- [10] Young, K. (2011). Social Ties, Social Networks and the Facebook Experience. *International Journal of Emerging Technologies and Society*, 9(1), 20-34.
- [11] Towner, Terri, and Munoz, Caroline Lego. (2011). Facebook and Education: A Classroom Connection. In Charles Wankel (Eds.), *Educating Educators with Social Media*. (pp. 33-57). Bingley, U.K.: Emerald Publishing.
- [12] Georgalou, Mariza. (2010). sites". In Rotimi Taiwo (Eds.), *The Handbook of Research on Discourse Behavior and Digital Communication: Language Structures and Social Interaction*. (pp. 39-65). Pennsylvania: IGI Global.
- [13] Greenhow, Christine. (2010). The role of youth as cultural producers in a niche social network site. . *New Directions in Youth Development: Theory, Research & Practice*, 128, 55-64.
- [14] Wilkinson, D, and Thelwall, M. (2010). Social network site changes over time: The case of MySpace. *Journal of the American Society for Information Science and Technology*, 61(11), 2311–2323.
- [15] Weiwu, Zhang, Johnson, Thomas J., Seltzer, Trent, and Bichard, Shannon. (2010). The Revolution Will be networked: The Influence of Social Networking Sites on Political Attitudes and Behavior. *Social Science Computer Review*, 28, 75-92.
- [16] Agarwal, S., and Mital, M. (2009). Focus on Business Practices: An Exploratory Study of Indian University Students' Use of Social Networking Web Sites: Implications for the Workplace. *Business Communication Quarterly*.
- [17] DeKay, S. H. (2009). Focus on Business Practices: Are Business-Oriented Social Networking Web Sites Useful Resources for Locating Passive Jobseekers? Results of a Recent Survey. *Business Communication Quarterly*.
- [18] Markus Huber, Stewart Kowalski, Marcus Nohlberg, and Simon Tjoa. (2009). Towards Automating Social Engineering Using Social Networking Sites. *Computational Science and Engineering, IEEE International Conference on*, 3, 117--124. <http://asebot.nysos.net>.
- [19] West, Anne, Lewis, Jane, and Currie, Peter. (2009). Students' Facebook 'friends': public and private spheres. *Journal of Youth Studies*, 12(6), 615-627.

- [20] Aleksandra Korolova, Rajeev Motwani, Shubha U. Nabar, and Ying Xu. (2008). Link privacy in social networks. Proceedings of the 17th ACM conference on Information and Knowledge Management (CIKM'08). (pp. 289-298). ACM.
- [21] Gregg, Melissa. (2008). testing the Friendship: Feminism and the limits of online social networks. *Feminist Media Studies*, 8 (2), 206 - 209.
- [22] Selwyn, N. (2008). A Safe Haven for Misbehaving. An Investigation of Online Misbehavior among University Students. *Social Science Computer Review*, 26 (4), 446 - 465.
- [23] Williams, B. (2008). 'What South Park Character Are You?': Popular Culture, Literacy, and Online Performances of Identity. *Computers and Composition*, 25(1), 24-39.
- [24] Tufekci, Zeynep. (2008). Grooming, Gossip, Facebook and MySpace: What Can We Learn About These Sites From Those Who Won't Assimilate?. *Information, Communication, and Society*, 11 (4), 544 – 564.
- [25] DiMicco, J. M., and Millen, D. R. (2007). Identity management: multiple presentations of self in facebook. In *GROUP '07: Proceedings of the 2007 international ACM conference on supporting group work*. (pp. 383 - 386). New York, NY, USA.
- [26] Haddon, Leslie, and Kim, Shin Dong. (2007). Mobile phones and web-based social networking - Emerging practices in Korea with Cyworld. *Journal of the Communications Network*, 6, 5-12.
- [27] Yardi, S. (2007). Whispers in the Classroom. In McPherson, T. (Eds.), *The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning*. (pp. 143-164). MIT Press.
- [28] Valkenburg, Patti M., Peter, Jochen, and Schouten, Alexander P. (2006). Friend Networking Sites and Their Relationship to Adolescents' Well-Being and Social Self-Esteem. *Cyber psychology & Behavior*, 9 (5), 584 – 590
- [29] Siibak, Andra. (2006). Romeo and Juliet of the Virtual World: Visual Gender Identity of the Most Remarkable Youngsters in Estonian Dating Website Rate. In Sudweeks, F. and Hrachovec, H. and Ess, C. (Eds.), *Cultural Attitudes towards Technology and Communication 2006*. (pp. 580 - 592).
- [30] Andrejevic, Mark. (2005). The work of watching one another: Lateral surveillance, risk and governance. *Surveillance & Society*, 2 (4), 479-497.
- [31] Boyd, danah. (2004). Friendster and Publicly Articulated Social Networks. *Proceedings of ACM Conference on Human Factors in Computing Systems (CHI 2004)*. (pp. 1279 - 1282). ACM Press. Vienna, April 24-29.
- [32] Adamic, Lada, Buyukkokten, Orkut, and Eytan Adar. (2003). A social network caught in the Web. *First Monday*, 8 (6).