

Trend of Facebook Usage Behavior and Impacts on the Attitudes Amongst Friends in Social Network Circle of Thai Youths: Case Study on College Students

Pajaree Liengpradit

Sukree Sinthupinyo

Pongpun Anuntavoranich

Pajaree Liengpradit: Techopreneurship and Innovation Management Program, Graduate school, Chulalongkorn University, Bangkok, Thailand.

Sukree Sinthupinyo: Department of Computer Engineering, Faculty of Engineering, Chulalongkorn University, Bangkok, Thailand

Pongpun Anuntavoranich: Faculty of Architecture, Chulalongkorn University, Bangkok, Thailand

Abstract

At the present, there is growing popularity for social network marketing for products and services. However, in order for the advertisements to reach the right target group, the creator must understand the behavior of the consumers well. Bangkok, the capital of Thailand, is one of the cities with the most Facebook users in the world. Therefore it is interesting to explore how the impacts of social network uses affect the behavior of friends in the network, especially for youths aged between 17-22 years. This age group was selected based on the frequency of use which has been increasing while the duration of use is less and the topics of interest are limited to 3-4 topics only. The interactions in the social network are based mainly on personal interest and then there's the tendency to change their behavior and follow their friends' after receiving their information. For example, there's the tendency to follow friends' movements after seeing what they've been doing on their status, from their uploaded pictures or videos, from tags and check-ins at restaurants and even from tags or status updates about movies they are watching.

Keywords: Facebook, Behavior, Motivation, Influencer

Introduction

In this highly competitive era, product and service innovations that see through to the heart of the consumers give a definite edge against other business competitors. At the same time, the power of communication cannot be ignored, information on products and services must be readily available and made to reach consumers as far out as possible. Therefore, in today's business world, investments in IT systems are just as essential and necessary as in the products' and services' quality itself. Furthermore, the IT system or technology used must comply with and support the needs of the marketing or business plan. This is to ensure real and accurate data are collected which can be used for further analysis and plan development of the product or service at hand. As a result, the information can be used to create a marketing strategy that puts the business a step ahead of its competitors.

Nowadays, electronic gadgets such as smart phones, tablets and notebooks are quite cheap and accessible by the general public. With the 3G service introduced in Thailand in mid-2013, the number of internet users sky-rocketed and is still increasing consistently. Over the 12 year period from 2001 to 2013, there was an increase of internet hour usage per week by 76.3% where 9.0% of the users use as high as 105 hours/week (ETDA., 2013). The intensity of internet usage stated resulted in an increase of information transferred in the forms of messages, pictures, sounds and videos targeted both for internal purposes and public communications. This is the consequences of photography trends, VDO recording and sharing of the obtained information through various social networks such as Facebook, Twitter, Instagram, Line and You Tube. These social networks have become powerful tools for modern marketing, especially with the growing popularity of internet use. The 3 most popular social network channels in Thailand are Facebook, Google+ and Line (ETDA., 2013). In Bangkok alone, the number of Facebook users is ranked as one of the top cities in the world (IIR, 2013). All these information can be linked and used to support information gathered from inside an organization systematically to help increase accuracy in analysis of consumers' behaviors and requirements. It was found that 90% of the information was generated in the past 2 – 3 years globally and there's a tendency that it will increase by 50 times by the end of this decade (Doyle, 2007).

Based on these preliminary information, consumer behavior can be further analyzed and used for product and services development that answers to the requirements of the targeted customers.

Related Work

The expansion of digital system applications is an opportunity to change the perspective on the methodology used in exploring and taking care of customers' needs and requirements to become more precise (Wyner, 2000). Companies that are able to mainstream IT and internet systems into their implementation strategy will have increased capacity. It should be noted that internet communications have become an important communication channel in our daily lives for over 10 years (Subrahmanyam et al., 2008).

The emergence of new marketing disciplines focuses mainly on social network platforms and influential individuals. This leads to an online social network analysis result which can be applied in marketing aspects of business implementation. It can be used to for segmentation and target identification and especially for explaining the roles of the influencer to others in the social (Doyle, 2007, Chailom and Kaiwinit, 2011). Social networking sites are tools used for online communications which allows users to create their own profile (Boyd and Ellison, 2007). Numerous

information found on various websites created a challenge for studies on customers' behavior and interests. Other than that, social media websites are useful for viral marketing and increases the potential of online marketing because it is cheap and efficient.

The characteristics of connections through social network are not homogeneous. Social network platforms are humongous and they deal with numerous individuals. The relationships between these connections can be explored and classified into many categories such as family ties, friends from schools, co-workers and person in relationship with or even new friends found through the online network. Some relationships is beneficial for behavioral analysis and some are not (Nagendramma and Reddy, 2012). These relationships are not presented clearly through online social media channels therefore after understanding the behavior of online users, collective behavior prediction studies should also be performed. This is so that the information can be used to create a marketing strategy that directly serves the interest of each product or service target group.

Studies on human behavior will show that individual behavior is always impacted by their friend's behavior both directly and indirectly at different degrees. This is because people generally like to exchange ideas with others who think alike in one way or (Singla and Richardson, 2008). These behaviors explains the characteristics of the users in the complex network and how there is still a channel for influence and transfer of ideas within this complexity. For example, in terms of marketing, it is evident that if an individual sees that many of their friends buy a certain product it is likely that that individual will decide to buy or use the same product (McPherson et al., 2001). This is especially evident in late adolescence or youths in the age range of 17 – 22 years. This age group is quite vulnerable because their intellects are still in-between, not childish but not yet adults, so emotional development is more dominant as compared to physical development and this together with the technical knowledge and philosophies of life that they are accumulating will be a deciding factor.

Many studies show that there is an understanding of the concepts of leaders of thoughts and the influences of these leaders in their social network are dominant (Kratzer and Lettl, 2009, Lee et al., 2010). However, there are limitations to these studies as they focus only on adults or children. Researchers had overlooked the power to buy of adolescents, a segment that should be considered (Hansen and Hansen, 2005, Kratzer and Lettl, 2009, Kurt et al., 2011). Meanwhile, besides the power to buy, many and emerging adults are likely to give valuable opinions that are useful for the products, brands and stores development that comes from their own experiences (Goodrich and Mangleburg, 2010). Adolescents are sensitive to the influences from their surroundings, both people and environment, and it is evident through their behavior (Kurt et al., 2011).

Method

Two rounds of surveys were conducted in April 2011 and April 2013. The information from the survey was then analyzed in results interpreted into suggestions for further application.

Participants

Target interviewees are undergraduate students aged 17-22 years. In the first round of interviews during April 2011, a total of 441 persons were interviewed being 294 females and 14 males. In the second round of interviews during April 2013, a total of 452 persons were interviewed being 313 females and 139 males.

Materials

The questionnaire used for both sessions of interviews were the same with two sections of questions as shown in Appendix A. Part I of the questionnaire inquires about the general and basic information of the interviewees. This part contains 5 questions. The Part II of the questionnaire focuses on the behavior and specific characteristics of the interviewees' use for Facebook. This part contains 9 questions. Two questions of these 9 questions, namely number 6 and number 7 had 11 and 3 more additional detailed questions respectively. This makes a total of 22 questions in total for part II of the questionnaire. The questionnaire includes questions on the frequency of use of Facebook, the duration of use per session and the interests on friends' movements within Facebook such as do they follow only the topics that they are interested in from their best friends, or anything on their best friend's feeds or only their personal interest, doesn't matter from who or everything from anyone. Other than that, information on how many topics that are available on Facebook are they interested in and what are they, what type of movements interests them; wall posts, photo/VDO uploads, tagging, comments, profile change, profile picture change, are also a factor. Last but not least, the way the individuals response to their friends movements or expresses their interests is also taken into account through the questionnaire whether it's response by pressing like, giving comments or sharing the issues. The six-point system scale ranging system is used to weight the responses from questions numbers 6-9 where 0 means not interested/no response and 5 means highest interest/most likely response.

Results

1. Frequency and Duration of Facebook Visits

From the survey in 2011, results showed that a large portion of individuals visits their Facebook page several times a day with a count of 58% followed by visiting when there's a notification at 26.3% and once a day at 10.9%. Whereas results from 2013 showed that 71% logs in when there's a notification, 24.8% visits several times a day and only 3.8 % visits Facebook once a day.

The results show that there is a change in the trend of use and that there is more log ins due to notifications as shown in Table 1.

Table 1. Frequency of access to social network; Facebook

Frequency of Facebook log-in	Round 1 (April '11)		Round 2 (April '13)	
	Count	Percent	Count	Percent
Every time there's a notification	116	26.3%	321	71.0%
Several times a day	256	58.0%	112	24.8%
Once a day	48	10.9%	17	3.8%
2-3 times a day	15	3.4%	2	0.4%
4-5 times a day	3	0.7%	0	0.0%
Once a week	3	0.7%	0	0.0%
Total	441	100%	452	100%

In terms of duration per session in Facebook, for 2011 most people spend ½ - 1 hour/session on Facebook followed by spending a few minutes per session at 50.3 and 24.5 % respectively. However, in 2013, the characteristic of use changed and the duration of use also changed to being a few minutes per session and ½ - 1 hour/sessions at 72.8 and 20.8 % respectively.

The behavior of use is switched in the two years as shown in Table 2.

Table 2. Average time spent per log-in session on Facebook

Average time per session	Round 1 (April '11)		Round 2 (April '13)	
	Count	Percent	Count	Percent
A few minutes	108	24.5%	329	72.8%
½ to 1 hour	222	50.3%	94	20.8%
2-3 hours	56	12.7%	19	4.2%
4-5 hours	37	8.4%	9	2.0%
More than 5 hours	18	4.1%	1	0.2%
Total	441	100%	452	100%

From the behaviors above, a summary behavior on the use of Facebook can be drawn as follows.

In 2011, 49% of Facebook users will visit their Facebook page several times a day and will stay logged in for ½ - 1 hour per session. The second group of users, 24%, are users who visits when there is a notification and will stay logged in for only a few minutes each time. Users who visits their Facebook page once a day or less will stay logged in for more than 1 hour per session, this accounts for 14.5% of the users. Whereas in 2013, most users, 71%, will pay short visits to Facebook upon notifications received and 19.7% of users will spend ½ - 1 hour on each log in several times a day. This shows that there is a reverse in behavior in the two years of study. The percentage of the number of users who visits once a day or less at sessions longer than 1 hour have also decreased to 3.1% as shown in Table 3.

Table 3. Format of use of social network; Facebook

			Round 1 (April '11)				Round 2 (April '13)			
			FB Log-in frequency				FB Log-in frequency			
			Every time there's a Notification	Several times a day	Once a day or less	Total	Every time there's a Notification	Several times a day	Once a day or less	Total
Duration per session	A few minutes	Count	106	2	0	108	321	8	0	329
		% of Total	24%	0.5%	0%	24.5%	71%	1.8%	0%	72.8%
	½ to 1 hour	Count	1	216	5	222	0	89	5	94
		% of Total	0.2%	49%	1.1%	50.3%	0%	19.7%	1.1%	20.8%
>1 hour	Count	9	38	64	111	0	15	14	29	
	% of Total	2%	8.6%	14.5%	25.2%	0%	3.3%	3.1%	6.4%	
Total	Count	116	256	48	441	321	112	19	452	
	% of Total	26.3%	58%	15.6%	100%	71%	24.8%	4.2%	100%	

This shows that the frequency of Facebook visits and the duration of the visits are interlinked. The results showed that the higher the frequency of visits, the lesser the length of the visit duration. Furthermore, there is a tendency that there will be a change in the numbers of visits from several times a day at a duration of ½ - 1 hour to being every time there is a notification but only for a few minutes visits.

2. Interests in Following Friend's Movements

Results for both 2011 and 2013 show that 51.7 and 60 % of the sample group respectively, choose to follow only what they are interested in and only from their best friends' pages. The second choice to follow is on what they are interested in from any friends' feed at 29.7 and 30.3 % for 2011 and 2013 respectively. Whereas, 13.4 and 7.3 % will follow every feed from their best friend and 5.2 and 2.4 % will follow anything from any friends' page for 2011 and 2013 respectively. This summary is as shown in Table 4.

Table 4. Form of interest in following friends' movement

Interest in following friends' movement	Round 1 (April '11)		Round 2 (April '13)	
	Count	Percent	Count	Percent
Only issues of interests from best friends' page	228	51.7%	271	60.0%
Every feed from best friends' page	59	13.4%	33	7.3%
Only issues of interests from any friends' page	131	29.7%	137	30.3%
Every feed from any friends' page	23	5.2%	11	2.4%
Total	441	100%	452	100.0%

3. Topics of Interests for Users

Most users in 2011, 39.2%, feels that they are interested in about 4 topics that are available on Facebook. 36.7 % expressed that they are interested in 5 topics and 16.8% said that they are interested in 3 topics. In 2013, there was a bit of change and 43.4% said that they are interested in 4 topics, 37.2 % said that they are interested in 3 topics and 14.4% are for 5 topics. This means that users have scoped down their topics of interests from 4-5 in 2011 to 3-4 in 2013 as shown in Table 5.

Table 5. Number of topics of interest on social network through Facebook

Number of topics of interest	Round 1 (April '11)		Round 2 (April '13)	
	Count	Percent	Count	Percent
1 topic	0	0.0%	0	0.0%
2 topics	2	0.5%	7	1.5%
3 topics	74	16.8%	168	37.2%
4 topics	173	39.2%	196	43.4%
5 topics	162	36.7%	65	14.4%
6 topics	23	5.2%	12	2.7%
7 topics	6	1.4%	4	0.9%
8 topics	1	0.2%	0	0.0%
Total	441	100%	452	100.0%

The five topics with highest interests in 2011 were celebrities/famous people, fashion (cloths and cosmetics), food (restaurants/how to cook), games and music/movies/series respectively. In 2013, there was a change in trend and the top 5 most popular topics from most to least were food (restaurants/how to cook), fashion (cloths and cosmetics), music/movies/series, politics and celebrities/famous people respectively.

4. Responses and Interests in Friends' Movements

In 2011, the interest in friends' photo/VDO uploads received the highest score of 4.21 and friends' status change came in second at 4.07 points. The average score for showing interests when friends change their profile information received the lowest score at 2.84 points. The 2013 results are similar to 2011 results where the interest in friends' photo/VDO uploads received the highest

score of 4.71 and friends' status change came in second at 4.31 points and the average score for showing interests when friends change their profile information is 2.36 points as shown in Table 6.

Table 6. Interests in friends' movements via different methods

Interested in friends' movement from...	Round 1 (April '11)		Round 2 (April '13)	
	Mean	SD	Mean	SD
Wall posts	4.07	0.70	4.31	0.64
Photo/VDO uploads	4.21	0.68	4.71	0.55
Tags	3.63	0.77	3.60	1.10
Comments	3.98	0.84	3.84	1.07
Profile changes	2.84	1.09	2.36	0.96
Profile picture changes	3.32	0.89	3.49	1.12
What your friend press 'like' on.	3.82	0.81	3.47	1.12

The trend for responses and expressions of interests in friends' movements are similar for both 2011 and 2013 in that it is shown mostly by pressing like followed by giving comments with the least popular method being sharing the information. At the same time, data from 2013 interviews showed that there is more responses were given to show and express interests in friends' movements in all three methods as shown in Table 7.

Table 7. How interests in specific topics are expressed

Interests in friends movements are expressed by....	Round 1 (April '11)		Round 2 (April '13)	
	Mean	SD	Mean	SD
Pressing 'Like'	4.31	0.71	4.66	0.62
Giving comments	3.76	1.00	4.08	0.77
Sharing posts	2.08	1.14	2.60	1.14

5. Overall Interests and Urge to Follow Friends' Movements

The interview result shows that the overall interests on friends' movements increased from 2011 to 2013. At the same time the urge to follow what their friends do have also increased. That is, following friends' movements on Facebook is in relations with the triggers interests which urges the decision to follow them, in other words, they degree of influence is higher in sense. This relationship is shown in Table 8.

Table 8. Overall interests and urge to follow friends' activities

Overall interests and urge to follow friends' activities	Round 1 (April '11)		Round 2 (April '13)	
	Mean	SD	Mean	SD
Overall interests in friend's movements and activities	3.99	0.62	4.19	0.63
Overall urge to follow friends' activities	3.27	0.73	3.55	0.74

Conclusions

Thai adolescents' Facebook usage behavior has changed from logging in several times a day to every time there is a notification. This means that there is much higher frequency of log ins, however less time is spent per log in session. In other words, the relationship between the frequency of log in sessions and the time spent per sessions on Facebook is proportional to each other. But if the time is accumulated, it will show that more time is spent on Facebook per day.

The information on the behavior obtained above shows that most users in 2011 prefers to visit Facebook several times a day at duration of $\frac{1}{2}$ - 1 hour per session. In contrast, in 2013, users tend to visit Facebook every time they receive a notification and will spend only a few minutes to check per session. The relationships show that the higher the frequency of Facebook visits, the less time spent per visit and the log in behavior will change from several visits per day at $\frac{1}{2}$ - 1 hour per session to log in for every notification for a few minutes instead.

The format of interest in friends' movements is similar for 2011 and 2013. That is, the interest begins with individual interests and then moves on to close friends with same interests. Most of the interviewees (more than 70%) narrowed their topics of interest from 4-5 topics in 2011 to 3-4 topics in 2013. The top 5 topics of interests remained similar with slight change in priorities and games being replaced by politics in 2013. The top topics of interests for 2011 from high to low were celebrities/famous people, fashion (cloths and cosmetics), food (restaurants/how to cook), games and music/movies/series respectively. For 2013, the top 5 topics from most to least were food (restaurants/how to cook), fashion (cloths and cosmetics), music/movies/series, politics and celebrities/famous people respectively.

The interests in friends' movements in 2011 and 2013 are also similar with most interest being in photo/VDO uploads and followed by status updates. The way the interest is shown or expresses is that individuals will most likely press like on their friends' activity, make a comment and share their activity as the last option. All three responses have shown a tendency for increase, meaning that for the same behavior in 2011 there is more active response in 2013. Likewise, there is more tendencies for individuals to follow their friends' behavior/actions/movements based on their responses to their friends' movement and the urge generated by their interest. In other word, friends' behavior/actions/movements followed through social media network, namely Facebook, have gained more impact on individuals' choice or decision making process.

Discussion

The results of the research showed that Thai adolescent usage of Facebook have changed from several long log ins to multiple short log ins. This could be the result of the change in electronic gadgets from desktops or notebooks to Smartphones and tablets since these mobile devices have become cheaper and easily accessible in the market, affordable to youths. Another

factor that enables this behavior is the ease of access to internet on the 3G network which allows the Thai youths to access Facebook anytime and anywhere. The interests of each individual is still prioritized as the main choice of access and the 5 most popular topics are still similar with 4 of 5 being the same including; food (restaurants/how to cook), fashion (cloths and cosmetics), music/movies/series and celebrities/famous people. Game, a popular topic in 2011 was replaced by politics in 2013. This could have been influenced by the fact that there are game applications on smartphones and tablets that can be downloaded for free and does not need to be played online, especially from App Store and Google Play. This alternative along with the intensity of the political situation in Thailand from 2012-2013 have most likely shifted the interested of the users from online games to politics in the years studied. The overflow of media and information has also triggered interests in youths in such high intensity that it is no longer just adults who are interested in news and politics. Thai adolescents who are growing into adults have are also redirecting their interests in these issues.

Furthermore, the research results also found that friends are highly influential individuals and will trigger automatic follow-on responses. Therefore, highly influential individuals on line are a highly effective market branding tool, a must have for any business. These individuals are to be used as the medium of communication with consumers on line, specifically in the social network that is highly popular amongst Thai adolescents. It is essential to come to an understanding of the behavior of these adolescent consumers in order to mobilize and market products or services that meets their needs, requirements and interests. The advertisement must be to the point and concise because each individual will only be interested in 3-4 topics. Also, in order to achieve the goal of the word-of-mouth marketing, the influential members should be targeted in the form of viral networking. This is to enable dissemination of information and also receive recommendations by their friends [32]. The information from this research can also be used as data for developing a tool or accurately identifying the influential individual for each topic of interest in the future. The results will offer essential information for social network marketing strategies and directed for specific target groups with highest efficiency.

Acknowledgments

The author's wishes to thank the Graduate School, Chulalongkorn University for providing the grant "CU. Graduate School Thesis Grant" to carry out this research.

Appendix

Questionnaire

Topic: Influence on the Concept of Thinking between Social Media Network Case Study: Facebook

Note: 1. This questionnaire is part of a research on the impacts from social media network.

2. There is no right and wrong answer for this questionnaire and the results will not affect the interviewee in any way. Therefore, you can feel free to answer the questions as you wish and as truthful as can be.

Part 1. General Information

1. Gender Male Female
2. Age.....years
3. Level of education (Studying/Completed)
 Elementary School High School/Vocational School
 Higher Vocational/Diploma Bachelor's Degree
 Master's Degree PhD
 Other.....
4. Average monthly salary (THB)
 < 5,000 5,001-10,000
 10,001-15,000 15,001-20,000
 20,001-40,000 40,001-60,000
 60,001-80,000 80,001-100,000
 > 100,000
5. Occupation
 Student Civil Servant Officer/ Governmental Enterprise Employee
 Private company employee
 Business owner Other.....



Part 2 Information on the nature of use of Facebook

Note: *Friend means everyone that appears in your friend list on Facebook*

1. Do you have a Facebook account? (Account: Username/Password)
 Yes No (End of question, Thank you)
2. How often do you check your Facebook?
 Every time there's a Notification Multiple times per day
 Once a day 2-3 time/day
 4-5 day/time Once a week
 2-3 weeks/time Once a month
 Less frequent than once a month
3. How long do you stay in Facebook per session on the average?
 A few minutes ½ - 1 hr.
 2-3 hrs. 4-5 hrs.
 More than 5 hrs.
4. What is the information or movement that you follow your friends on Facebook?
 Only issues of interests from best friends' page
 Every feed from best friends' page
 Only issues of interests from any friends' page
 Every feed from any friends' page

5. What are the types of topics on Facebook that you are interested in? (Can choose more than 1 answer)

- | | |
|---|--|
| <input type="checkbox"/> Games | <input type="checkbox"/> Photography (camera/lens/how to) |
| <input type="checkbox"/> Relationships | <input type="checkbox"/> Food (restaurant/how to cook) |
| <input type="checkbox"/> Travel (Place) | <input type="checkbox"/> Pets (dogs, cats, fish, birds, etc.) |
| <input type="checkbox"/> Music/movies/TV series | <input type="checkbox"/> Collectibles (stamps/coins/etc.) |
| <input type="checkbox"/> Celebrities | <input type="checkbox"/> Gardening (planting/ nursery/shop) |
| <input type="checkbox"/> Horoscope/Astrology | <input type="checkbox"/> Fashion (clothes/cosmetics) |
| <input type="checkbox"/> Politics | <input type="checkbox"/> Culture (architecture/old buildings/ancient cities) |
| <input type="checkbox"/> Knowledge (books/academic papers/tutoring academy) | |
| <input type="checkbox"/> Technology information (computer/mobile phones/etc.) | |
| <input type="checkbox"/> Social functions (wedding/religious ceremony/birthdays/reunions) | |
| <input type="checkbox"/> Others please specify:..... | |

Interest in friend's movements	Most	Interest	Somewhat interest	Little interest	Very low interest	No interest
	5	4	3	2	1	0
6. How interested are you in each of your friend's movements?						
6.1 Wall posts						
6.2 Photo/VDO uploads						
6.3 Tags						
6.4 Comments						
6.5 Profile change						
6.6 Profile Picture change						
6.7 What your friend likes ()						
7. From # 6 How do your show your interests towards your friends movements online?						
7.1 Hit like ()						
7.2 Comment						
7.3 Share posts						
8. <u>In the overall picture, how interested are you in your friend's movements after you've read them?</u> ie. Eating out at restaurants, going to movies, travelling to places or buying something, etc.						
9. <u>In general, after you've read your friend's activity, how much do you want try the same thing?</u> ie. Eating out at restaurants, going to movies, travelling to places or buying something, etc.						

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