

# Product Recommendations over Facebook: The Roles of Influencing Factors to Induce Online Shopping

Senthil Kumar S.<sup>1</sup>, Ramachandran T.<sup>1</sup> & Panboli S.<sup>2</sup>

<sup>1</sup> School of Management, SRM University, Chennai, India

<sup>2</sup> Crescent Business School, B. S. Abdur Rahman University, Chennai, India

Correspondence: Senthil Kumar S., School of Management, SRM University, Chennai, 603203, India. Tel: 91-97-9092-5613. E-mail: danikapan@yahoo.co.in

Received: September 1, 2014 Accepted: October 2, 2014 Online Published: December 20, 2014

doi:10.5539/ass.v11n2p202

URL: <http://dx.doi.org/10.5539/ass.v11n2p202>

## Abstract

Facebook being the most popular social media platform in India, its prevalence among consumers, brand companies, and their growth through e-commerce needs to be studied to prove if word-of-mouth interactions among friends on Facebook induce one to shop online. A sample of 395 Facebook users who also buy online was studied to understand the interactions among technology acceptance factors, knowledge sharing factors and social influence factors upon the attitude towards Facebook as a source for online buying and the intention to use Facebook as a means for online shopping using structural equation modelling. As for TAM Factors, perceived enjoyment had insignificant role in sharing information on products among Facebook friends, and other factors did not induce one to indulge in WOM sharing. Among the knowledge sharing factors, the reputation of the recommender of product information and expected reciprocal benefit among Facebook users had less significant effect only, whereas altruism towards fellow Facebook users, trust in recommendations, expected relationships had no direct influence upon the attitude towards Facebook as a source for online buying. Among the social influence factors, brand social network based word of mouth communication, perceived social acceptance among friends in Facebook, and group and community identification among Facebook members did not induce one to use Facebook as means for shopping online. Whereas the need for online social connection was partly responsible for the intention to use Facebook as a means for online shopping ( $\beta=0.145$ ) connotes that Facebook as a platform for keeping in touch with friends overrides the purpose of using Facebook as a means for product information sharing.

**Keywords:** Facebook, word of mouth communication, factors influencing intention to shop online

## 1. Introduction

Social networks have become increasingly popular among people who are active on the web as they made their way into mainstream society mainly due to the ability of the user to communicate in both real-time and asynchronously with a wide group of people of their choice. Using the tools of social networks a single person can develop a personal brand or stimulate a following for a social issue that starts as buzz but gain momentum to become a mass movement later. Social networks change micro phenomena into a major sensation overnight by commoners who become influencers to several followers who trust them as valuable resources for information. These groups can have a direct impact on the ability to integrate a brand's marketing efforts around its prospects and customers online and building a strong fan base. Members in Facebook chat among their friends about a purchase, or a store or a promotional offer, or a proposed shopping list to share, comment, recommend, discourage, or discontinue. These chat room sharing is useful to businesses which listen them to know the sentiments of the users. The volume of information shared by Facebook's 500 million fans rendered it a mass media status among the digital advertisers who turn to promote their businesses online. Due to its popularity, Facebook in India commands a lion's share among the pack of brand companies vying a share in the digital sphere of consumer connectivity.

Being present in Facebook (social media), organisations tend to connect more with their customers to serve them better, create leads, research on customer trends, draw feedback in order to perform better than competition. By immersing into social media, e-commerce sites are staggering to effectively use advertising on social media to drive their transactions. Though advertising spends on digital media keeps rising in tune with the annual growth

rate of 15-18 percent, but the revenue accrued through the social media advertising stills hovers in single digits. Unless they increase the engagement with consumers through innovations these e-commerce players would lose to their traditional marketers. Looking into the popularity of Facebook among consumers, as also among brand companies, the growth of e-commerce industry in India and their advertising spends in digital media, it is necessary to know if word-of-mouth interactions among friends on Facebook play any role in the growth of e-commerce vis-a-vis online shopping.

Attitude towards Facebook for sharing or receiving information relevant to brands and products may be influenced by several factors. Adoption of a newer medium for information search or evaluation or dissemination is explained by technology acceptance factors. Besides, sharing one's knowledge whether prompted or not over an open virtual medium is influenced by many factors. Hence, knowledge sharing factors' action upon Facebook fans' attitude towards Facebook as a means for buying from Facebook's brand page is studied. In a virtual society no one lives in isolation. Everyone needs approval and acceptance for their actions from online members of the society. Hence the influence exerted among online friends (social influence) and behavioural intention towards an action is examined to know if social influence factors could induce someone to intentionally use Facebook as a means for buying online. By studying the mediating role of attitude towards Facebook as a source for buying from Facebook's brand page on the intent to use Facebook as a means for buying online we could prove the validity of theory of reasoned action. The research findings would throw light on the prospects of Facebook brand page advertising being the most effective medium to get connected with its users.

## **2. Literature Review**

### *2.1 Theories Relevant to the Study*

Ajzen and Fishbein (1980) studied the interaction of one's attitude upon an action and the intention to do so and proposed the theory of reasoned action (TRA). While studying the purchase intention of emu fashion products by Generation Y consumers, Belleau et al., (2007) inferred that intention to buy them was influenced significantly by the attitude rather than the subjective norm or other exogenous variables. Bagozzi et al., (2006), showed how subjective norms and attitude influenced shopping coupon usage. Ajzen and Fishbein (1980) with the addition of perceived behavioural control modified their previous model into theory of planned behaviour (TPB) which predicts deliberate behaviour. While fast food restaurant patronage decisions across samples from four different countries was studied through the theory of planned behaviour, Americans differed greatly from Italians, Chinese or Japanese with more explained variance occurring between western and eastern cultures (Bagozzi et al., 2006). Pookulankara et al. (2011) concluded that utilitarian motives were instrumental to understand attitude in choosing between traditional, catalogues and online stores. Hansen et al. (2004) averred that the Theory of Planned Behavior is superior to TRA, while studying the intention to buy grocery online.

In this study, the influence of word of mouth communication of product purchase by Facebook friends upon the attitude towards using Facebook as a source for buying from brand's page which leads to the intention to use Facebook as a means for buying online from Facebook's brand page is being studied.

### *2.2 Technology Acceptance and Related Studies*

In the initial model Davis (1985, 1989) included perceived ease of use towards technology based products and perceived usefulness towards technology based products as the main factors, whereas Childers et al.,(2001) modified it to include enjoyment to technology to explain its influence upon the attitude to shop online. Celik et al., (2011), explained how consumer acceptance of e-shopping was affected by trust, information quality, service quality, and enjoyment and system quality through extending the technology acceptance model. Whereas in a study on Chinese consumers Yaobin & Tao, (2007) integrated initial trust with TAM to explain online shopping behavior which demonstrated the significant effect of perceived usefulness, consumers' trust propensity, website security and vendor reputation on initial trust. Zhu et al., (2009) proved that besides perceived usefulness and ease of use, perceived risk when integrated with trust have significant impact on purchase intentions. Yang et al., (2004) concluded that affective attitude did not play a mediating role for cognitive attitude to induce information system use. The causal relationship between the online shopping capacity of consumers, perceived trust, perceived risk, perceived benefit, perceived cost and perceived value and consumer online purchasing behavior were confirmed using confirmatory factor analysis by Zhang et al., (2006). Kefi et al., (2010) concluded that, without any gender bias, attitude besides behavioural control influenced the intention to continue usage of Facebook but gender effects seemed to be significant in shaping the attitude towards Facebook for shy people. Di Pietro et al., (2012) investigated to what extent Facebook influences consumers' purchase decision and confirmed that enjoyment is a key determinant of Facebook usage as a tool for supporting the purchase decision. Lee & Paris (2013) proposed that the influence of trust, strength of relationships, and perceived enjoyment had

significantly affected the users' acceptance of Facebook and their intentions to attend an event. In tune with the above studies, how technology acceptance factors are affecting the attitude towards Facebook as a source for buying online from Facebook's brand page is studied in the present research.

### 2.3 Knowledge Sharing and Related Studies

Social media's basic premise is to enable its users to post contents with the intention to encourage interaction. The ability to publish and distribute material such as videos and photos by individuals to share their experience with friends and online social communities promote sharing knowledge. Members of social sites who share information with other members and friends are the best targets for participation in viral marketing. Pi et al., (2013) summarized that source credibility, feeling of self-worth, social gain and subjective norm are responsible for knowledge sharing attitude. Facebook participation activities mainly focus on information sharing on knowledge and opinions, so to encourage individual's participation in social media the company can strategise its goals so as to relate their sense of togetherness and being responsible to their fans in order to induce them to actively participate and share freely (Heinonen & Kristina, 2011). Knowledge sharing is reciprocal, but not evaluative on the strength and weight of the knowledge itself. Reputation feedback rather than economic incentives influenced mostly the measure of knowledge sharing (Hung et al., 2011). Among the three knowledge sharing factors studied, trust and reciprocity showed a significant effect toward satisfaction, but reputation and vendor creativity do not have a significant effect on satisfaction (Shiau, Wen-Lung, Luo, & Meiling, 2012). According to Cheung, et al., (2012), the intention to share consumers' insight online did not have a significant connection with tie-strength, knowledge self-efficacy and ethical obligation. Hence, in this study, the influence of altruism, expected relationships, and reputation of the recommenders on Facebook, trust on the recommendations of friends on Facebook, and expected reciprocal relationships on the attitude towards Facebook as a source for buying online from Facebook's brand page is studied.

### 2.4 Social Influence and Related Studies

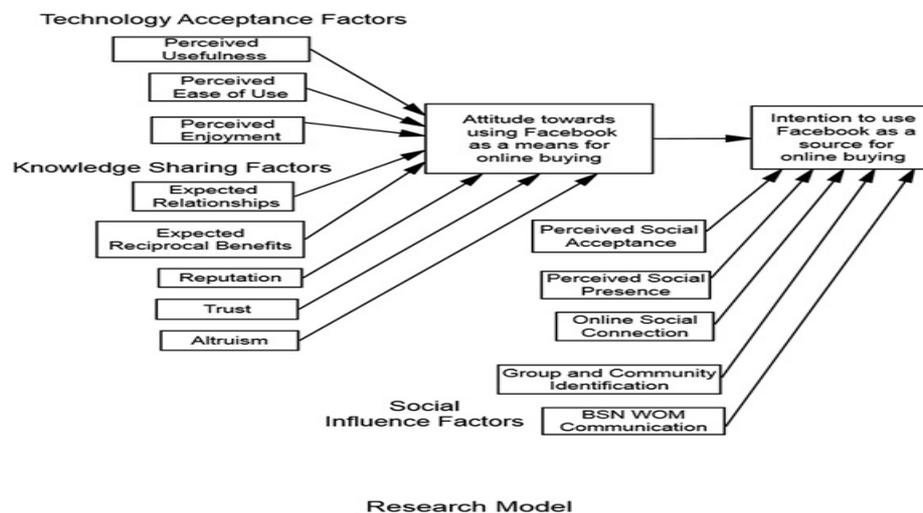


Figure 1. Hypotheses research model

Social influence is the extent of importance one adds to others' belief of him using a newer system (Lu et al., 2005), cited in Nikou, S., Bowman, H. (2013). According to Chu, et al., (2011) SNS user's total eWOM behaviour is positively influenced by expected reciprocal benefit, influence (informational & normative) and trust but negatively by homophily. Onnela et al., (2010) established that adoption intention of wireless mobile technology is influenced by the cause and effect relationship of technology acceptance factors and social influences and personal innovativeness. It is highly assertive that user's behavioural intention towards using mobile SNSs is strongly determined by social influence, mobility, habitual behaviour and critical mass in the research by Lin (2007). Yang & Kenneth (2011) found through hierarchical regression analysis, that social influence factors are consistent predictors of blog advertising use, which accounted for 31% of variance in explaining consumer's blog advertising use. The intention to be in Facebook is influenced by social factors, according to the empirical research conducted among a sample of students by Cheung et al., (2011). Chia Ying (2013) established the interaction between persuasive messages and social influence, and the resultant of

behaviour intention due to affective and cognitive responses. The researches on the interaction of social influence, perceived usefulness, and behavioural intent by Venkatesh & Davis, (2000) and Venkatesh et al., (2003), proved the significant role of individuals' need to do so upon the users than the influence of reference group with reference to financial services. Terzis et al., (2011) parallels with Wang et al., (2009) to establish that men when compared with women have more positive association between perceived usefulness and social influence in the context of behavioural intent towards a CBA. Drawing from the above, in this study, the effect of brand social network word of mouth communication in FB's brand page, perceived social presence, online social connection, perceived social acceptance, and the group and community identification of FB users on the intention to use Facebook as a means for online buying is studied.

### 3. Hypotheses Research Model

Partly replicating work done by Hsu & Lin (2007), and other relevant literature, a model is proposed in Figure 1 above. The model was tested to study the role of technology acceptance factors, knowledge sharing factors and social influence factors on the interaction of attitude towards using Facebook as a source for online shopping from Facebook's brand page upon the intention to use Facebook as a means for online buying.

#### 3.1 Technology Acceptance Factors

The extent of one's belief of enhancing job performance by the use of a specific system is termed as perceived usefulness (Davis, 1989). The extent of one's belief that seeking product recommendations on Facebook would be useful to him to shop online is studied in this work. Perceived ease of use is the extent of one's belief that using a specific system would be effort free (Davis, 1989). Hence the extent of one's belief that seeking recommendations on product in Facebook would be effortless in order to shop online is studied in this. Apart from the outcomes of using a system, the act of using a particular system is itself enjoyable according to Venkatesh V. And Bala, H., (2008) on perceived enjoyment. Hence it is studied whether fans on Facebook enjoy seeking product recommendations in order to shop online. Attitude is a consequence of past behaviour. We studied the influence of technology acceptance factors on the usage of Facebook for product recommendations from friends which would lead them to form a favourable attitude towards using Facebook as a means for buying from Facebook's brand page. Consumers shop online for personal computer is dependent on their attitude in choosing a new technology (Modahl, 2000) explains why attitude towards using Facebook as a means for online buying is studied in this. While shopping online, predisposition for technology tops over preference for product or company (Goldsmith & Bridges, 2000).

Behavioural intention is the consequence of attitude. If the attitude towards Facebook as a means for buying from Brand's page is positive, then intention to use Facebook as a source for online buying (Purchase Intention) would be the consequential behavior of the FB usage. Purchase intention refers to the anticipated behaviour of a consumer regarding a future purchase decision (Espejel et al., 2008; cited in Hodza, 2012). A purchase intention is expected outcome behaviour, and a consumer's purchase intention is strongly influenced by the opinions of friends, family, relatives or acquaintances over a social networking medium.

Hence it is hypothesized as follows:

H<sub>1a</sub>. Perceived usefulness influences positively Facebook Fans' attitude towards seeking product recommendations on Facebook.

H<sub>1b</sub>. Perceived ease of use influences positively Facebook fans' attitude towards seeking product recommendations on Facebook.

H<sub>1c</sub>. Perceived enjoyment influences positively Facebook fans' attitude towards seeking product recommendations on Facebook.

H<sub>2</sub>. Attitude towards using Facebook as a means for buying from Facebook brand's page will positively affect Facebook users' intentions to use Facebook as a source for online buying from Facebook's brand page.

#### 3.2 Knowledge Sharing Factors

Altruism towards close tie (Altruism towards fellow consumers in the context of online buying) is to care for others. People who tend to share, spend on public welfare, offer service to community, extend a helping hand to those needy, and comfort others are altruistic mostly to those in close circle than unknown (Batson, 2012). The sum of emotional makeup, closeness, reciprocity and time collectively referred by Granovetter, M. (1973) as expected reciprocal benefit (tie strength). Reputation or source credibility is the combined result of source expertise & source trustworthiness. Petty and Cacioppo, (1986) defines that the degree of believability, expertise and dependable are the source of information as perceived by the knowledge seekers reflects source credibility

(cited in Cheung et al., 2008). Trust (Perceived trust in recommendations) refers to consumers' feelings of security about product recommendations from Facebook friends that can lead to using this source to seek product recommendations. Expected relationship also known as social gain is composed of social benefits, social costs and psychological costs. The social benefit is defined as a perception of website users that may feel there is a benefit existing when they want to make a referral due to enhancing the personal recognition, social network or expressing concern about others (Chuang, 2008). The social cost is defined as a perception of website users that may feel there is a cost existing when they want to make a referral due to the social obligation, inappropriate advice and time commitment (Chuang, 2008). Psychological cost is defined as a perception of website users that may feel there is a cost existing when they want to make a referral due to self-confirmation, feeling of motivating by increasing status and power and feeling of guilt due to motivating by reward benefits (Chuang, 2008).

Accordingly, the following hypotheses were generated.

H<sub>3a</sub>. Altruism influences positively FB fans' attitude in order to seek product recommendations on Facebook.

H<sub>3b</sub>. The expected reciprocal benefit influences positively FB fans' attitude in order to seek product recommendations on Facebook.

H<sub>3c</sub>. Reputation influences positively FB fans' attitude in order to seek product recommendations on Facebook.

H<sub>3d</sub>. Trust influences positively FB fans' attitude in order to seek product recommendations on Facebook.

H<sub>3e</sub>. Expected relationships influence positively FB fans' attitudes in order to seek product recommendations on Facebook.

### 3.3 Social Influence Factors

The extent of a consumer appreciation of a brand social network to other fans amounts to e-wom & buzz creation also called as brand social network word of mouth. Consumers who are interested in a particular brand and share to some degree of social identification with others form the BSN community (Bagozzi & Dholakia, 2002; Schouten et al., 2002). Brand social network being an open social organisation, invites every one showing interest in the brand's social network page to join (Muniz & O'Quinn, 2001). Consumers are tempted to join freely brand social networks to get personal offers, competitive deals and closely follow promotional activities (Sung et al., 2010). The process of consumer brand relationship formation may get affected by the quick and convenient nature of membership formation (Ray, 2010). As people join social network brand pages based on recommendations from others, the resulting social relationships lead them to form attitudes on choosing the brand in the BSN (Park, 2011). Brown et al., (2007) proved that consumer- brand page bonding has more face validity to explain the consumer relationship among the online community. Fulk et al., (1987) states that a medium's ability to perceive the presence of others is defined as forum and discussion platform presence (perceived social presence). There is a positive relationship between perceived social presence and perceived usefulness provided the website strengthens the interaction between an online shopper and an online retailer (Hassanein & Head, 2007). If a consumer considers his interactions online is very essential for him to be socially active, then his need for social identification is said to be strong. An individual's attitude towards media and media usage behaviour leads him to the creation and interpretation of online messages which is influenced by his online social connection (Ledbetter et al., 2011). The number of times a person communicates with his friends on Facebook is dependent upon how strong is his need for online social connection and the frequency leads them to strengthen their commitment and actual participation in the Facebook (Wiertz & Ruyter, 2007). The more one engages in to community interactions, the more he is positive to brand social network as it serves as a source for his need for entertainment (Park, 2011). Adoption of social norms (Perceived social acceptance) is collectively defined by the combined effect of virtual communities, pass-along electronic messages as also off-line peer communications. Virtual communities serve as a platform for relationships building, information sharing, transacting online, and spread word of mouth communication among sellers and buyers (David, 2010)

Hence we hypothesize as below:

H<sub>4a</sub>. BSN WOM influences positively Facebook fans' intentions to use Facebook as a means for online buying.

H<sub>4b</sub>. Perceived Social Presence influences positively Facebook fans' intentions to use Facebook as a means for online buying.

H<sub>4c</sub>. The online social connection influences positively Facebook fans' intention to use Facebook as a means for online buying.

H<sub>4d</sub>. Perceived Social Acceptance influences positively Facebook fans' intentions to use Facebook as a means

for online buying.

H<sub>4e</sub>. Group & community identification influences positively Facebook fans' intentions to use Facebook as a means for online buying.

#### 4. Research Approach

##### 4.1 Sample Description

A descriptive research method was proposed in order to check the association of variables mentioned above through survey research technique. A questionnaire was framed with the help of previous work done in similar lines from sources mentioned in the appendix A. Questionnaires were circulated primarily among students selected based on a purposive sampling method which covered only those who had an active Facebook account and also shopped online. The responses from the survey were analyzed using SPSS ver. 18 package. 521 responses were received during January and February, 2014, of which 395 usable questionnaires were drawn after removing incomplete forms. Among the 395 respondents, 275 were men and 120 were women, 90% of them fall into less than 28 years of age which is prone to be highly internet savvy and Facebook lovers. Laptop and mobile phones were the preferred means for engaging in Facebook and also purchase online. The samples' demographic characteristics were illustrated in Table 1.

Table 1. Samples' demographic characteristics

Measure	Item	Frequency	Percent
Gender	Male	275	69.6
	Female	120	30.4
Age Group	18-22	235	59.5
	23-28	125	31.6
	29-34	2	.5
	35-39	20	5.1
	40-45	8	2.0
	Above 45	5	1.3
	Presently studying	Under Graduate(Technical)	185
Under Graduate (Non-Technical)		43	10.9
MBA/MA/MSc/MCom/MCA		136	34.4
MBBS		5	1.3
MD		2	.5
ME		15	3.8
Ph.D		9	2.3
Monthly Income Class	Less than Rs.20000	64	16.2
	Rs.20001-40000	120	30.4
	Rs.40001-60000	80	20.3
	Rs.60001-80000	36	9.1
	Rs.80001-100000	32	8.1
	Above 100000	63	15.9
Means For Engaging Facebook And online buying	Laptop	245	62.0
	Desktop PC	55	13.9
	Mobile Phone	86	21.8
	Tablet PC	9	2.3

##### 4.2 Measurement Development

The questionnaire was developed with the help of previously tested and researched topics in the field of Facebook usage and online shopping. Appendix A lists the items used in the questionnaire and its sources. Likert's 5 point scale was used for measuring the items. Respondents were requested to indicate their degree of agreement with the statements by choosing among strongly disagree (1), somewhat disagree (2), neither disagree

nor agree (3), somewhat agree (4) and strongly agree (5). Some of the scale items were modified to suit to the research in question.

## 5. Results of the Sample Survey

### 5.1 Descriptive Statistics Summary

By means of the analysis done using SPSS v.18, the mean and standard deviation of the constructs in this study were illustrated in Table 2. Normality test was performed to confirm that the sample drawn was normally distributed.

Table 2. Descriptive statistics

<b>n=395</b>	<b>Mean</b>	<b>Std. Deviation</b>
Perceived usefulness	3.1553	1.07269
Perceived ease of use	3.3392	1.03122
Perceived enjoyment	3.1424	1.00481
Altruism	3.1541	0.87059
Expected relationships	3.0646	0.80296
Reputation	3.0272	0.87190
Trust	3.1105	0.95108
Expected reciprocal benefit	3.1328	0.84967
Brand social network word of mouth communication	2.9367	1.02171
Perceived social presence	3.0903	1.00197
Online social connection	3.0110	0.80345
Perceived social acceptance	3.0979	1.02533
Group & community identification	3.2270	1.03435
Attitude towards using Facebook as a means for online buying from Facebook's brand page	3.2000	0.98706
Intention to use Facebook as a source for online buying from Facebook's brand page	3.2388	1.01264

### 5.2 Analytic Strategy for Assessing the Model

Structural equation modelling using AMOS v. 20 software was used to measure the association between the various constructs in the model. After items with poor loading from the exploratory factor analysis were dropped, confirmatory factor analysis was done to estimate the measurement model by testing whether the constructs had sufficient validity and reliability. Using the measurement model association between the constructs was checked to get model fit.

### 5.3 The Measurement Model

After the confirmatory factor analysis which tested the measurement model, the theoretical relationship between the various constructs proposed by the researchers was found to be satisfactory. Table 3 shows the items which were retained for the 'best fit' model. Item reliability varied from 0.913 to 0.917, which indicated acceptable value. All constructs' composite reliabilities stood above benchmark value of 0.60.

The model fit measurements are exhibited in Table 4. Accordingly, the ratio of chi-square to degrees of freedom stood at 1.341 with is less than the recommended value of 3. The Goodness of fit index (GFI) was 0.940; more than the recommended score of 0.9. Adjusted GFI measured was 0.911; more than the recommended score of 0.9. Normalized fit index stood at 0.927 more than the recommended value of 0.9. The value of CFI (comparative fit index) was 0.980 which is more than the recommended value of 0.9. The root mean square error of approximation (RMSEA) value was 0.029 which is well below the recommended value of 0.08. All the values of the model fit measures are in tune with the recommended value for the model to be deemed a best fit.

Table 3. Reliability scores of items retained in the model

Scale Item	Reliability score	Composite Reliability score
PU2	0.913	0.913
PU3	0.913	
PEU3	0.915	0.915
AL4	0.915	0.916
AL6	0.917	
SG5	0.916	0.916
SG8	0.916	
R2	0.915	0.914
R3	0.914	
T1	0.915	0.915
T3	0.915	
ERB4	0.917	0.917
ERB5	0.917	
BW2	0.914	0.914
BW4	0.915	
PSA1	0.915	0.915
PSA3	0.915	
OSC1	0.917	0.916
OSC3	0.915	
GCI1	0.917	0.916
GCI2	0.916	
A1	0.916	0.916
A2	0.916	
I1	0.916	0.916
I2	0.917	
I3	0.916	

Table 4. Overall fit index

Model Fit Index	Values of the measurement	Referral values	Referral values recommended by Authors
$\chi^2/d.f$	1.341	<3	Bentler & Bonnett (1989) *
GFI	0.940	>0.9	Hu and Bentler, 1999
AGFI	0.911	>0.8	Hair et al., 2006
NFI	0.927	>0.9	Bentler & Bonnett (1989) *
CFI	0.980	>0.9	Daire et al., 2008
RMSEA	0.029	<0.08	Hair et al., 1998

\* cited in Hsu & Lin (2007)

#### 5.4 Test of the Hypothesized Research Model

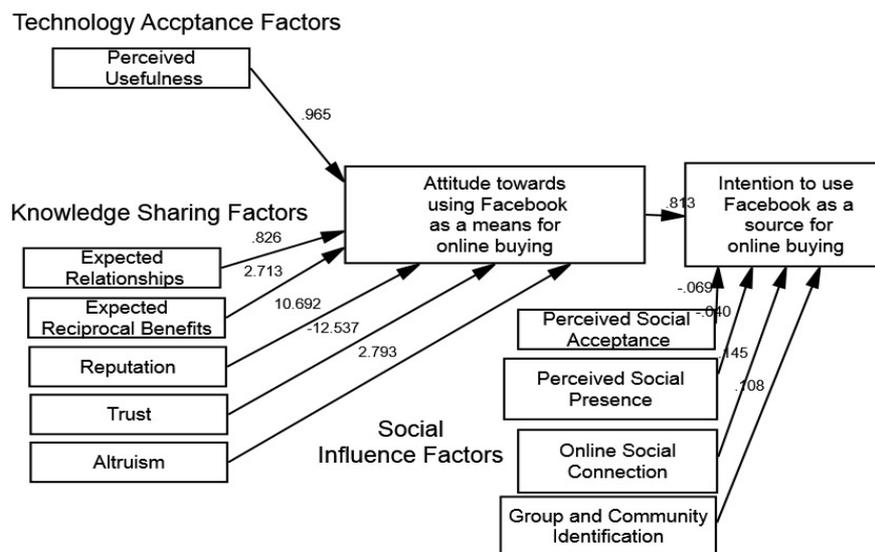
The hypothesized research model was examined after testing the assumed relationships proposed between the variables in question. As in the figure 2 below, the intention to use Facebook as a means for buying online was significantly influenced by attitude towards using Facebook as a source for online buying and online social connection. This resulted in supporting the hypothesis  $H_2$  &  $H_{4c}$  ( $\beta=0.813$ ,  $p<0.000$ ;  $\beta=0.145$ ,  $p<0.05$ ). This structural path showed a variance of 81% in the intent to use Facebook as means for online buying. None of the other constructs had any significant influence upon intention to use Facebook as a means for online buying. Some of the variables which had no significant influence upon the attitude towards using Facebook as a source for online buying are: perceived Usefulness ( $\beta=-0.965$ ,  $p>0.1$ ), altruism ( $\beta=2.93$ ,  $p>0.1$ ), reputation ( $\beta=10.992$ ,

$p > 0.1$ ), expected reciprocal benefit ( $\beta = 2.713$ ,  $p > 0.1$ ), thereby not supporting the hypotheses  $H_{1a}$ ,  $H_{3a}$ ,  $H_{3c}$ , &  $H_{3b}$ . The model exhibited 31.5% of variance in the measurement of attitude towards Facebook. Parallel to previous research findings perceived ease of use, perceived enjoyment, trust, expected relationships had no direct influence on attitude. Therefore, hypotheses  $H_{1b}$ ,  $H_{1c}$ ,  $H_{3d}$  &  $H_{3e}$  were not supported. Also the intention to use Facebook for online shopping is not influenced by, perceived social acceptance ( $\beta = -0.069$ ,  $p > 0.1$ ) and group and community identification ( $\beta = -0.108$ ,  $p > 0.1$ ), & perceived social presence ( $\beta = -0.040$ ,  $p > 0.1$ ) thus not supporting hypotheses  $H_{4d}$ ,  $H_{4e}$ ,  $H_{4b}$ , &  $H_{4c}$ . BSN WOM communication did not contribute to the model building.

### 6. Conclusion and Future Directions

The interactions among the factors (technology acceptance, knowledge sharing and social influence), upon the attitude towards Facebook as a source for online buying and the intention to use Facebook as a means for online shopping were discussed in the study. Empirically, we proved the relationships among these factors. Among the technology acceptance factors, except perceived usefulness which played not so significant role in sharing information on products among Facebook friends, perceived ease of use towards using Facebook and perceived enjoyment in using Facebook did not seem to exhibit any role in influencing Facebook users to stimulate sharing among the friends, which paralleled with most of the research findings. Among the knowledge sharing factors, the reputation of the recommender of product information and expected reciprocal benefit among Facebook users had less significant effect only, whereas altruism towards fellow Facebook users, trust in recommendations, expected relationships had no direct influence upon the attitude towards Facebook as a source for online shopping. It is inferred that Facebook as a knowledge sharing platform is still in its nascent stage among the sample currently studied.

Discussing about the social influence factors, brand social network based word of mouth communication (BSNWOM), perceived social acceptance among friends in Facebook, and group and community identification among Facebook members have no significant influence upon the behavioural intent to use Facebook as a means to online shopping. Whereas the need for online social connection was partly responsible for the intention to use Facebook as a means for online shopping ( $\beta = 0.145$ ) connotes that Facebook as a platform for keeping in touch with friends overrides the purpose of using Facebook as a means for product information sharing correlating with the findings on the favourability of Facebook brand page ads to shop online.



Results of the Structural Equation Modeling

Figure 2. Results of the structural equation modeling

Through this research work, we draw some inferences for brand page advertisers and brands on Facebook.

- 1) The attitude towards Facebook to keep in touch with friends daily is highly pronounced among the sample which is evident from their need for online social connection. Interaction among the friends on brands, knowledge sharing on product information, seeking recommendations on brands and products are not well

pronounced among the FB users. Also brand page on Facebook as a sales tool is yet to reap a good fortune for the advertisers. It is recommended to identify brand ambassadors among the FB users by observing their interactions over FB page, and induce them to spread the positive word mouth of communication on their brand experience could prove useful towards drawing more into the FB's brand page interaction.

2) Through the interaction of attitude towards Facebook as a source for online shopping on the intention to shop online is well pronounced, the conversation of purchase related sharing leading to influence future purchase is not clearly noticed.

3) In their study (Pi et al., 2013) proved that knowledge sharing among Facebook members did not contribute to the strengthening of relations with members. Facebook group members share more commonly photos, videos, and quotes and do status update more than anything else online. They predominantly chat among them, but out of which promotional chat is proportionately less.

4) Instead of advertising through mass media, marketing through social networks could build strong brand community (Krasnova, 2008). Identification of opinion leaders, cheering them to share more online, supplying them additional information to share, and rewarding them with promotional offers over a FB brand page would affect viral marketing significantly instead of mass advertising.

5) Williams (1996) inferred that most literature on knowledge sharing suggested that organizations by creating commonality or mutuality of social goals may boost member reciprocity. So, encouraging more people to 'talk' their brand experience over FB, should bring out the tendency to share information among friends, which would be witnessed by other non-participants in the FB forum leading to develop a sense of comradeship of like-minded groups.

6) In order to promote reciprocal social exchange among the community members, social networking sites shall run website campaigns, heighten community identification among its members, and honour users by awarding recognitions or rewards for continuous participation to strengthen the attachment among the users in the community (Chiu et al., 2006).

7) Heinonen & Kristina (2011) proposed that to encourage individual's participation in social media as Facebook participation activities mostly are sharing information and insights, a company could strategise its goals to encourage voluntary involvement and exchanging information among consumer.

8) Though the numbers of Facebook users especially in India is exponentially growing, the proportion of those in Facebook who buy online through Facebook's brand page is not impressive may be due to several reasons. Lack of trust in online shopping, lack of trust in recommendations, direct marketing efforts of the marketers, lack of internet connectivity, poor patronage for m-commerce among mobile users are some of the reasons for the sluggish growth in the social media platform.

9) Though Facebook brand pages help companies bond with their fans, reach out with innovative offers, induce repeat visits, encourage sharing between buddies, promote two way communications, and tailor make products for loyal customers, e-commerce industry still needs to catch up with its interactivity on the social media platform.

## 7. Limitations

This study's survey data had certain inherent limitations, so to be interpreted and accepted cautiously. The sample in this survey was selected based on a purposive sampling procedure. The survey participants should have an account in Facebook besides buy online through e-stores in order to qualify to be a sample unit. The sample units were predominantly students because due to their ready availability and easy to approach they consented to be surveyed. In order to be discreet, questions with regard to brand page experiences were posted with a dummy brand which would not have elicited true responses. Internet exposure among the sample was assumed to be uniform, though it varied between those who hail from urban and rural India and other developed countries outside India as a result of which penetration of Facebook into their social life would be delayed.

## References

- Ã, H. S., & Zhang, P. (2006). *The role of moderating factors in user technology acceptance*, 64, 53-78.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior* (Vol. 278, p. 278). Englewood Cliffs, NY Prentice Hall.
- Ali Alghamdi, M. A. (2012). *The Influence of Facebook Friends on Consumers' Purchase Decisions a Thesis submitted for the partial fulfilment of the requirements for the degree of Master of Science at the University of Otago*. Dunedin, New Zealand March 2012 A, and (March).

- Al-Majali, M., & Mat, N. K. N. (2011). "Modelling the antecedents of internet banking service adoption (IBSA) in Jordan: A structural equation modelling (SEM) approach". *Journal of Internet Banking and Commerce*, 16(1), 8-13.
- Bagozzi, R. P., & Dholakia, U. M. (2002). Intentional social action in virtual communities. *Journal of Interactive Marketing*, 16, 2-21. <http://dx.doi.org/10.1002/dir.10006>
- Bagozzi, R. P., & Dholakia, U. M. (2006). Antecedents and purchase consequences of customer participation in small group brand communities. *International Journal of Research in Marketing*, 23, 45-61. <http://dx.doi.org/10.1016/j.ijresmar.2006.01.005>
- Batson, C. D. (1994). Why act for the public goods? *Four answers, Personality and Social Psychology*, 20(5), 603-610. <http://dx.doi.org/10.1177/0146167294205016>
- Belleau, B. D., Summers, T. A., Xu, Y. J., & Pinel, R. (2007). Theory of Reasoned Action: Purchase Intention of Young Consumers. *Clothing and Textiles Research Journal*. <http://dx.doi.org/10.1177/0887302X07302768>
- Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online communities: Conceptualizing the online social network. *Journal of Interactive Marketing*, 21, 2-20. <http://dx.doi.org/10.1002/dir.20082>
- Çelik, H. E., Yilmaz, V., Celik, H. E., & Celik, H. E. (2011). Extending the Technology Acceptance Model for adoption of e-shopping by consumers in turkey. *Journal of Electronic Commerce Research*, 12, 152-164. Retrieved from <http://search.proquest.com/docview/872187200?accountid=27292><http://www.scopus.com/inward/record.url?eid=2-s2.0-84884329240&partnerID=tZOtx3y1>
- Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology*, 39(5), 752-766. <http://dx.doi.org/10.1037/0022-3514.39.5.752>
- Chaiwongkachon, B. (2008). *Understanding online word of mouth phenomenon amongst Teenagers in Thailand*. Retrieved from <http://edissertations.nottingham.ac.uk/1829/1/08MALixbc5.pdf>
- Cheung, C. M. K. K., & Lee, M. K. O. O. (2012). What drives consumers to spread electronic word of mouth in online consumer-opinion platforms. *Decision Support Systems*, 53(1), 218-225. <http://dx.doi.org/10.1016/j.dss.2012.01.015>
- Cheung, C. M. K., Chiu, P. Y., & Lee, M. K. O. (2011). Online social networks: Why do students use Facebook? *Computers in Human Behavior*. <http://dx.doi.org/10.1016/j.chb.2010.07.028>
- Cheung, C. M. K., Lee, M. K. O., & Rabjohn, N. (2008). The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities. *Internet Research*, 18(3), 229-247. <http://dx.doi.org/10.1108/10662240810883290>
- Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, 77, 511-535. [http://dx.doi.org/10.1016/S0022-4359\(01\)00056-2](http://dx.doi.org/10.1016/S0022-4359(01)00056-2)
- Chiu, C. M., Hsu, M. H., & Wang, E. T. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision support systems*, 42(3), 1872-1888. <http://dx.doi.org/10.1016/j.dss.2006.04.001>
- Chu, C. C. (2011). Viral Advertising in Social Media: Participation in Facebook Groups and Responses Among College-Aged Users. *Journal of Interactive Advertising*, 12(1), 30-43. <http://dx.doi.org/10.1080/15252019.2011.10722189>
- Chuang, C. J. (2008). *The Effect of Perceived Interactivity and Perceived Hedonic value on the Social Gain, Electronic Word of Mouth Referral Likelihood, and Attitude towards the Website*. Retrieved from [http://etdncku.lib.ncku.edu.tw/ETD-db/ETD-search/view\\_etd?URN=etd-0709108-112746](http://etdncku.lib.ncku.edu.tw/ETD-db/ETD-search/view_etd?URN=etd-0709108-112746)
- Daire, H., Joseph, C., & Michael, R. M. (2008). Structural Equation Modelling: Guidelines for determining model fit. *Electronic Journal for Business Research Methods*, 6(1), 53-60.
- Davis, F. D. (1985). *A technology acceptance model for empirically testing new end-user information systems: Theory and results*. Cambridge, MA: MIT Sloan School of Management.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13, 319-340. <http://dx.doi.org/10.2307/249008>
- Di Pietro, L., & Pantano, E. (2012). An empirical investigation of social network influence on consumer

- purchasing decision: The case of Facebook. *Journal of Direct, Data and Digital Marketing Practice*. <http://dx.doi.org/10.1057/dddmp.2012.10>
- Fulk, J., Steinfield, C. W., Schmitz, J., & Power, J. G. (1987). A Social Information Processing Model of Media Use in Organizations. *Communication Research*, 14, 529-552. <http://dx.doi.org/10.1177/009365087014005005>
- Goldsmith, R. E., & Bridges, E. (2000). E-tailing vs. retailing: Using attitudes to predict online buying behavior. *Quarterly Journal of Electronic Commerce*, 1(3), 245-253.
- Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*. <http://dx.doi.org/10.1086/225469>
- Hair, J. F., Anderson, R. E., & Tatham, R. L. B. (2006). *Multivariate Data Analysis* (10th ed.). Prentice Hall: New Jersey.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis*, Prentice-Hall, Upper Saddle River, New Jersey. In M. Pont, & L. McQuilken (Eds.), *Testing the Fit of the BANKSERV model to BANKPERF Data* (p. 865). ANZMAG Conference proceedings.
- Hansen, T., Jensen, J. M., & Solgaard, H. S. (2004). Predicting online grocery buying intention: A comparison of the theory of reasoned action and the theory of planned behavior. *International Journal of Information Management*, 24, 539-550. <http://dx.doi.org/10.1016/j.ijinfomgt.2004.08.004>
- Harvey, C. G., Stewart, D. B., & Ewing, M. T. (2011). *Forward or delete : What drives peer-to-peer message propagation across social networks ?* 365-372.
- Hassanein, K., Å, M. H., & Head, M. (2007). Manipulating perceived social presence through the web interface and its impact on attitude towards online shopping. *International Journal of Human Computer Studies*, 65, 689-708. <http://dx.doi.org/10.1016/j.ijhcs.2006.11.018>
- Heinonen, K. (2011). Consumer activity in social media: Managerial approaches to consumers' social media behavior. *Journal of Consumer Behaviour*, 10, 356-364. <http://dx.doi.org/10.1002/cb.376>
- Hsu, C. L., & Lin, J. C. C. (2008). Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. *Information & Management*, 45(1), 65-74. <http://dx.doi.org/10.1016/j.im.2007.11.001>
- <http://www.mxmindia.com/2012/08/mxm-mondays-why-do-marketers-not-spend-enough-on-digitalmedia/#sthash.5paPODMe.dpuf>
- <http://www.mxmindia.com/2013/02/e-commerce-brands-myntra-homeshop18-and-ebay-top-in-overall-social-engagement-with-consumers/#sthash.9DyKvIYO.dpuf>
- <http://www.mxmindia.com/2013/05/facebook-is-indias-most-liked-for-engaging-customersey/#sthash.2zNCF2YB.dpuf>
- Hu, L., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Model*, 6(1), 1-55. <http://dx.doi.org/10.1080/10705519909540118>
- Hung, K., Chan, K. W., & Tse, C. H. (2011). Assessing celebrity endorsement effects in China: A consumer-celebrity relational approach. *Journal of Advertising Research*, 51(4), 608-623. <http://dx.doi.org/10.2501/JAR-51-4-608-623>
- Kefi, H., Mlaiki, A., & Kalika, M. (2010). Shy People and Facebook Continuance of Usage: Does Gender Matter? *In Americas Conference on Information Systems Proceedings* (p. 27). Retrieved from <http://aisel.aisnet.org/amcis2010/27/>
- Kenneth, C. C. Y. (2011). The Effects of Social Influence on Blog Advertising Use. *Uri. edu*, 2, 131-147. Retrieved from <http://www.uri.edu/iaics/content/2011v20n2/11KennethC.C.pdf>
- Krasnova, H., Hildebrand, T., Günther, O., Kovri-gin, A., & Nowobilska, A. (2008). Why participate in an online social Network? An empirical analysis. *Proc. 16th European conference on information systems* (pp. 2124-2135). Galway
- Lam, D. N. V. (2010). *Raising the Web Conversion Rates for Online Ventures with No Name Recognition: Analytical and Empirical Studies a thesis submitted to Auckland University of Technology in fulfilment of the requirements for the degree of Doctor of Ph.*

- Ledbetter et al. (2011). Attitude toward online social connection and self-disclosure as predictors of Facebook communication and relational closeness. *Communication Research*, 38(1), 27-53. <http://dx.doi.org/10.1177/0093650210365537>
- Lee, W., & Paris, C. M. (2013). Knowledge sharing and social technology acceptance model: Promoting local events and festivals through Facebook. *Tourism Analysis*, 18, 457-469. <http://dx.doi.org/10.3727/108354213X13736372326118>
- Li, C. Y. (2013). Persuasive messages on information system acceptance: A theoretical extension of elaboration likelihood model and social influence theory. *Computers in Human Behavior*, 29(1), 264-275. <http://dx.doi.org/10.1016/j.chb.2012.09.003>
- Lin, H. F. (2007). *The role of online and offline features in sustaining virtual communities: An empirical study*. Internet Research. <http://dx.doi.org/10.1108/10662240710736997>
- Modahl, M. (2000). *Now or never*. Harper Collins: New York.
- Muniz, Jr. A. M., & O'Guinn, T. C. (2001). Brand Community. *Journal of Consumer Research*, 27(4), 412-432. <http://dx.doi.org/10.1086/319618>
- Nikou, S., & Bouwman, H. (2013). The diffusion of mobile social network service in China: The role of habit and social influence. In *Proceedings of the Annual Hawaii Inter-national Conference on System Sciences* (pp. 1073-1081).
- Onnela, J. P., & Reed-Tsochas, F. (2010). Spontaneous emergence of social influence in online systems. *Proceedings of the National Academy of Sciences of the United States of America*, 107, 18375-18380. <http://dx.doi.org/10.1073/pnas.0914572107>
- Papadopoulou, K., Pavlidou, V., & Hodza, A. (2012). *Electronic Word-of-Mouth through Social Networking Sites: How does it affect consumers?* Retrieved from <http://lnu.diva-portal.org/smash/record.jsf?pid=diva2:530710>
- Park, H. (n. d.). *The Role of Social Network Websites in Consumer-Brand Relationship*. Trace.tennessee.edu. Retrieved from [http://trace.tennessee.edu/cgi/viewcontent.cgi?article=2297&context=utk\\_graddiss](http://trace.tennessee.edu/cgi/viewcontent.cgi?article=2297&context=utk_graddiss)
- Pi, S. M., Chou, C. H., & Liao, H. L. (2013). A study of Facebook Groups members' knowledge sharing. *Computers in Human Behavior*, 29, 1971-1979. <http://dx.doi.org/10.1016/j.chb.2013.04.019>
- Pookulangara, S., Hawley, J., & Xiao, G. (2011). *Explaining multi-channel consumer's channel-migration intention using theory of reasoned action*. International Journal of Retail & Distribution Management.
- Raihan, N., & Hamid, A. (2006). *An Assessment of the Internet's Potential in Enhancing Consumer Relationships Student declaration*.
- Ray, A. (2010). *Rewarding new Facebook fans: Good business or "black hat" SEO tactic?* Forrester Blogs. Retrieved from [http://blogs.forrester.com/augie\\_ray/10-10-26rewarding\\_new\\_facebook\\_fans\\_good\\_business\\_or\\_black\\_hat\\_seo\\_tactic?cm\\_mmc=RSS--MS--913-blog\\_2586&utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+ForresterMarketing+%28The+Forrester+Blog+For+Interactive+Marketing+Professionals%29](http://blogs.forrester.com/augie_ray/10-10-26rewarding_new_facebook_fans_good_business_or_black_hat_seo_tactic?cm_mmc=RSS--MS--913-blog_2586&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+ForresterMarketing+%28The+Forrester+Blog+For+Interactive+Marketing+Professionals%29)
- Schouten, J. W., McAlexander, J. H., & Koenig, H. F. (2007). Transcendent customer experience and brand community. *Journal of the Academy of Marketing Science*, 35(3), 357-368. <http://dx.doi.org/10.1007/s11747-007-0034-4>
- Shiau, W., Meiling, M., & Luo, M. M. (2012). Factors affecting online group buying intention and satisfaction: A social exchange theory perspective. *Computers in Human Behavior*, 28(6), 2431-2444. <http://dx.doi.org/10.1016/j.chb.2012.07.030>
- Sung, Y., Kim, Y., Kwon, O., & Moon, J. (2010). An exploratory study of Korean consumer participation in virtual brand communities in social network sites. *Journal of Global Marketing*, 23(5), 430-445. <http://dx.doi.org/10.1080/08911762.2010.521115>
- Terzis, V., & Economides, A. A. (2011). Computers in Human Behavior Computer based assessment: Gender differences in perceptions and acceptance. *Computers in Human Behavior*, 27(6), 2108-2122. <http://dx.doi.org/10.1016/j.chb.2011.06.005>
- Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences*, 39, 273-315. <http://dx.doi.org/10.1111/j.1540-5915.2008.00192.x>
- Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four

- Longitudinal Field Studies. *Management Science*. <http://dx.doi.org/10.1287/mnsc.46.2.186.11926>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance Of Information Technology: Toward A Unified View. *Mis Quarterly*, 27, 425-478.
- Wang, C. C., Chen, C. A., & Jiang, J. C. (2009). The Impact of Knowledge and Trust on E-Consumers' Online Shopping Activities: An Empirical Study. *Journal of Computers*. <http://dx.doi.org/10.4304/jcp.4.1.11-18>
- Weiler Markus, W. (2007). *Antecedents of user acceptance towards weblogs: A theoretical Frame work and empirical Study*. Master Thesis for obtaining the degree of Master of Science in Information Management, Department of Marketing and Electronic Retailing, University of Koblenz-Landau.
- Wiertz, C., & de Ruyter, K. (2007). Beyond the call of duty: Why customers contribute the firm-hosted commercial online communities. *Organizational Studies*, 23(3), 347-376. <http://dx.doi.org/10.1177/0170840607076003>
- Williams, T. A. (1996). Government regulation through voluntary cooperation: A follow-up study of the strategic impact of information technology. *The Journal of Strategic Information Systems*, 5(2), 149-156. [http://dx.doi.org/10.1016/S0963-8687\(96\)80041-2](http://dx.doi.org/10.1016/S0963-8687(96)80041-2)
- Yang, H. D., & Yoo, Y. (2004). It's all about attitude: Revisiting the technology acceptance model. *Decision Support Systems*, 38, 19-31. [http://dx.doi.org/10.1016/S0167-9236\(03\)00062-9](http://dx.doi.org/10.1016/S0167-9236(03)00062-9)
- Yaobin, L., & Tao, Z. (2007). A research of consumers' initial trust in online stores in China. *Journal of Research and Practice in Information Technology*, 39, 167-180. Retrieved from <http://www.scopus.com/inward/record.url?eid=2-s2.0-34548781303&partnerID=40&md5=808f00bbba5c5cf581d46448b6dc264c>
- Zhu, D. S., O'neal, G. S., Lee, Z. C., & Chen, Y. H. (2009). The effect of trust and perceived risk on consumers' online purchase intention. In *Proceedings-12th IEEE International Conference on Computational Science and Engineering, CSE 2009* (Vol. 4, pp. 771-776).

## Appendix A

Table A1. Scaled items used in the study

<b>Perceived Usefulness (PU)</b>		
PU1	Seeking product recommendations on Facebook is useful to me.	
PU2	Seeking product recommendations on Facebook makes me more efficient. *	Davis (1989); Davis, Bagozzi and Warshaw (1989); Cha (2009); adopted from Alghamdi (2012).
PU3	Seeking product recommendations on Facebook makes my life easier. *	
<b>Perceived Ease of Use (PEU)</b>		
PEU1	Seeking product recommendations on Facebook is easy.	Davis (1989); Davis, Bagozzi and Warshaw (1989); Cha (2009); adopted from Alghamdi (2012).
PEU2	Learning how to seek product recommendations on Facebook is easy.	
PEU3	It is easy to get product recommendations on Facebook. *	
<b>Perceived Enjoyment (PE)</b>		
PE1	Seeking product recommendations on Facebook is enjoyable.	
PE2	The actual process of using Facebook to seek product recommendations is pleasant.	Davis, Bagozzi and Warshaw (1992); Cha (2009); adopted from Alghamdi (2012).
PE3	Seeking product recommendations on Facebook is fun.	
PE4	Seeking product recommendations on Facebook is interesting.	
<b>Altruism(AL)</b>		
AL1	I recommend to my contacts on products over Facebook, because I want them to get the best deal.	
AL2	I recommend to my contacts on products over Facebook, because I want to help them make better purchase decision.	Cheung et al. (2007); Mazarrol et al., (2006); adopted from Boontida (2008).
AL3	I recommend to my contacts on products over Facebook, because I want my friends to have similar taste to get good deals.	

AL4	I recommend to my contacts on products over Facebook, because I want to warn them from not going through bas experience.*		
AL5	My recommending to my contacts on products over Facebook is to respond or give opinion to other people's need as trying to be helpful.		
AL6	I recommend to my contacts on products over Facebook, because I want to warn other people not to fall into the same experience.*		
AL7	I recommend to my contacts on products over Facebook, because I try my best to help out other people with the same interest.		
<b>Expected Relationships(SG)</b>			
SG1	I want to share my information (brand experience) of FB to help others make better choice.		
SG2	I want to share my information (brand experience) of FB to express genuine concern.		
SG3	I want to share my information (brand experience) of FB to develop a good relationship with others.		
SG4	In my perception, sharing information (brand experience) is like to give others in FB a thoughtful gift.		
SG5	Providing the information of this brand experience in FB can increase my social status.*		
SG6	I want to share the information of brand experience because I feel responses from other users in FB.	Chaudhuri & Holbrook (2002); Ryu&Feick (2007) for items 1-5, Folkes (1984); Dichter (1966); Gatignon & Robertson (1986) for items 6-9, and Schneider & Bowen (1999); Gwinner & Gremler (2000); Ryu & Feick (2007) for items 10-14;adopted from Chuang (2008).	
SG7	I want to share the information of brand experience because it does not take much time to communicate with other users in FB.		
SG8	I think the information of this brand experience is appropriate to provide to other users of FB.		
SG9	Providing advice about this brand experience to my friend will improve the relationship with my friends in FB.*		
SG10	Providing advice about this brand experience information in FB will let me have feeling of anxiety and lower my self -confidence.		
SG11	Providing advice about this brand experience in FB might be considered motivated by increasing status.		
SG12	I do not want to share the information of this brand experience in FB to avoid being considered as a flaunty person.		
SG13	I do not want to share the information of brand experience in FB to avoid being considered motivated by economic benefits.		
SG14	The feeling of being selfish due to motivating by economic benefits of the brand experience might prohibit me from making a referral to other FB users.		
<b>Reputation(R)</b>			
R1	People who left comments in my Facebook page are knowledgeable in evaluating quality of products and services.		
R2	People who left comments in my Facebook page are experts in evaluating quality of products and services.*		Wu and Shaffer, (1987); adopted from Cheung.C (2008).
R3	People who lefts comments in my Facebook page are trustworthy.*		
R4	People who left comments in my Facebook page are reliable.		
<b>Trust(T)</b>			
T1	I think that product recommendations from my online friends on Facebook are credible.*	Hsiao et al., (2010); adopted from Alghamdi (2012).	
T2	I trust product recommendations from my online friends on Facebook.		
T3			

	I believe that product recommendations from my online friends on Facebook are trustworthy.*		
<b>Expected Reciprocal Benefit(ERB)</b>			
ERB1	I invest significant time into my relationship with my friends on Facebook.		
ERB2	When I do a large favour for friends on Facebook, I do not seek for them to do a large favour in return.		
ERB3	My Facebook friends would be happy to do large favour for me without expecting me to return it.	Diamantopoulos & Winklhofer, (2001); Camerena et al. (1990); Granovetter (1973); Frenzen and Davis (1990); adopted from Christopher et al. (2011).	
ERB4	I would go out of my way to help my Facebook friends.*		
ERB5	My Facebook friends are someone with whom I can share my personal views.*		
ERB6	My Facebook friends accept me no matter what I do.		
ERB7	My Facebook friends understand what I am really like.		
ERB8	My Facebook friends are important to me.		
ERB9	I am satisfied with the relationship I have with my Facebook friends.		
<b>BSN WOM Communication(BW)</b>			
BW1	I have recommended (xbrand)'s FB page to lots of people.		
BW2	I 'talk up' (xbrand)'s FB page to my friends.*	Carroll & Ahuvia (2006); adopted from Park. H (2011).	
BW3	I try to spread the good word about (xbrand)'s FB page.		
BW4	I give (xbrand)'s FB page lots of positive word-of mouth advertising.*		
<b>Perceived Social Presence(PSP)</b>			
	There is a sense of human contact on Facebook's Brand page forum.		
PSP1	There is a sense of sociability on this Facebook's Brand page forum.*	Gefen and Straub, (2003); adopted from Hassanein. K & Head. M (2007).	
PSP2	There is a sense of human warmth on this Facebook's brand page forum.*		
PSP3			
<b>Online Social Connection(OSC)</b>			
OSC1	If I couldn't communicate online, I would feel "out of loop" with my friends.*		
OSC2	If I lost Internet access, I think I would probably lose contact with many of my friends.		
OSC3	Without the Internet, my social life would be drastically different.*	Ledbetter (2009); adopted from Park. H (2011).	
OSC4	I would communicate less with my friends if I couldn't talk with them online.		
OSC5	Losing Internet access would not change my social life at all.		
OSC6	Online communication is not an important part of my social life.		
<b>Perceived Social Acceptance(PSA)</b>			
PSA1	I received much digital information about Internet sites from my online Friends before I made my decision to buy or not to buy on this e-store.*		
PSA2	I have had a great deal of experience with groups of people online who discuss about products and which Internet sites to buy them on.	David. N (2010).	
PSA3	I often talk to my offline friends about products and good Internet sites where they can be bought.*		
<b>Group and Community Identification(GCI)</b>			
GCI1	Can share/exchange information with my buddies in an online forum.*	Sands, (2003); adopted from Hamid, (2006).	
GCI2	I can trade goods with my "friends" found on the same e-store.*		

---

GCI3 I can obtain useful information about a company from the online members.

---

**Attitude towards using Facebook as a means for online buying from Facebook's brand page(A)**

---

- |    |  |  |
|----|--|--|
| A1 | I would have positive feelings towards buying a product from Facebook's brand page.* | Van der Heijden, (2003); Van der Heijden et al., (2001); adopted from Markus Weiler, (2007). |
| A2 | The thought of buying a product from Facebook's brand page is appealing to me.*      |  |
| A3 | It would be a good idea to buy a product from Facebook's brand page.                 |  |
- 

**Intention to use Facebook as a source for online buying from Facebook's brand page(I)**

---

- |    |   |  |
|----|---|--|
| I1 | The opinions I have received on Facebook from my contacts, have affected a former purchase decision of mine.*   | Wallace et al., (2009); Creyer, (1997); adopted from Hodza et al., (2012). |
| I2 | Given a choice between two products, one recommended on Facebook from my contacts and the other not, I would always choose to buy the recommended product.* |  |
| I3 | Whether a product is recommended on Facebook from my contacts is not important to me making my own decision on what to buy.*                                |  |
- 

\* shows items retained for analysis

### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).