



Cronfa - Swansea University Open Access Repository
This is an author produced version of a paper published in: Journal of Retailing and Consumer Services
Cronfa URL for this paper: http://cronfa.swan.ac.uk/Record/cronfa39537
Paper:
Shareef, M., Mukerji, B., Alryalat, M., Wright, A. & Dwivedi, Y. (2018). Advertisements on Facebook: Identifying the
persuasive elements in the development of positive attitudes in consumers. <i>Journal of Retailing and Consumer</i>
Services, 43, 258-268.
http://dx.doi.org/10.1016/j.jretconser.2018.04.006

This item is brought to you by Swansea University. Any person downloading material is agreeing to abide by the terms of the repository licence. Copies of full text items may be used or reproduced in any format or medium, without prior permission for personal research or study, educational or non-commercial purposes only. The copyright for any work remains with the original author unless otherwise specified. The full-text must not be sold in any format or medium without the formal permission of the copyright holder.

Permission for multiple reproductions should be obtained from the original author.

Authors are personally responsible for adhering to copyright and publisher restrictions when uploading content to the repository.

http://www.swansea.ac.uk/library/researchsupport/ris-support/

Advertisements on Facebook: Identifying the persuasive elements in the development of positive attitudes in consumers

Mahmud Akhter Shareef

School of Business & Economics, North South University, Bangladesh E-mail: mahmud_akh@yahoo.com

Bhasker Mukerji

Gerald Schwartz School of Business and Information Systems
St. Francis Xavier University, Canada
E-mail: bmukerji@stfx.ca

Mohammad Abdallah Ali Alryalat

Faculty of Business, Al-Balqa' Applied University, Al-Salt, Jordan Email: mohammad.alryalat@hotmail.com

Angela Wright

Senior Lecturer, Department of OPD, School of Business, CIT, Ireland E-mail: angela.wright@cit.ie

Yogesh K. Dwivedi¹

Emerging Markets Research Centre (EMaRC) School of Management, Swansea University Bay campus, Fabian Way, Swansea, SA1 8EN, UK Tel: +44 (0) 1792 602340

E-mail: ykdwivedi@gmail.com; y.k.dwivedi@swansea.ac.uk

Abstract

The main objective of this study is to develop the scale items of consumers' attitudes toward Facebook advertisements and to theorize consumers' attitudinal behaviour. To undertake this study, a research assistant was appointed, who is also an active member of Facebook, to introduce a message about the product Samsung Tab S, and to pass it to other members of their network. From this experiment, different members of their network participated in generating, passing, and receiving messages to develop a preliminary structured perception which was converted to generate scale items to

_

¹ Corresponding Author

measure attitude. Then an independent empirical study was conducted among members of a social network to verify and validate these scale items and their underlying constructs. From the findings in this study, it is identified that attitudes toward social network advertisement, i.e., any effort to communicate messages about products among network members, who are also consumers of different products, is formed and persuaded by hedonic motivation (HM), source derogation (SD), self-concept (SC), message informality (MI), and experiential messages (EM).

Keywords: Advertisement, Facebook, Facebook Marketing, Consumer Attitude, Behavioral Attitude, Social Network Advertisement

Introduction

Trying to communicate with consumers through social media is very common nowadays. Several researchers (Dwivedi et al., 2015; Kapoor et al., 2017; Shareef et al., 2017a) have attempted to understand the effectiveness of social media marketing or viral marketing. In social media, members try to communicate with or circulate personal opinion and experience about any products among their peers through their network loop. This mass communication can enhance product acceptability and create group opinion. Researchers, nowadays, termed this informal promotional function as viral marketing, i.e., social media advertisement (Chu, 2011; Shareef et al., 2017a). This research has conceptualized viral marketing or social media advertisement as the non-commercial proactive product promotion among peers through any Internet based social media network (Hayes & King, 2014).

Several researchers (Dwivedi et al., 2017abc; Kapoor et al., 2016) have explored consumers' behavioural attitudes toward viral marketing; however, they used only several technology adoption models as a theoretical framework. To identify and theorize consumers' behaviour for viral marketing, a comprehensive framework is of utmost importance which essentially should include technology adoption behaviour, marketing aspects, cognitive decision-making process, and psychological behaviour.

Therefore, the objective of this study is to develop the scale items of consumers' attitudes toward viral marketing or social media advertisements and to theorize consumers' attitudinal behaviour through a comprehensive theoretical framework. More precisely, this current research is engaged in deriving the driving forces which persuade Facebook members, who are also prospective consumers, to develop favourable attitudes toward any product. So, although the findings of this study are to reveal the critical factors which shape consumers' attitudes toward viral marketing, it also leads to an understanding of the effectiveness of viral marketing through measuring consumers' attitudes about social media advertising.

Behavioural learning theory (Bloch & Marsha, 1983; Ertmer & Newby, 1993; Nord and Peter, 1980) postulates that consumers vigorously attempt to learn from external events. As such, marketers generate advertisements to transfer their intended meaning to the prospective consumers about product promotion so that consumers will learn about the competitive advantage of the product and will be influenced to grow behavioural intention. Under this context, consumers' learning capability, scope, and habits are substantially governed by the marketers' competence to communicate with the consumers with effective advertising (Chu, 2011; Ducoffe 1995; Schulze et al., 2014; Shareef et al., 2015). Another concept of consumers' behavioural capability which is explained by cognitive learning theory (Nicosia, 1966) recommends that any intended significance of the advertisement might be not accepted by the consumers. It reflects that, while generating any product promotional advertisement, marketers may have an intention to transfer a certain concept about the product to the customers, but there is always a possibility that consumers may interpret it quite differently. Consumers may be tempted to conceive the implied meaning of any advertisement completely from a different perspective which may be subversive to the image of the product (Greenwald, 1968; Nicosia, 1966; Shareef et al., 2017b). Therefore, understanding consumers' mental ability, pattern, scope, and way of thinking is a potential tool for the marketers to develop and implement any product promotional activities. Marketers have attempted to propagate consumers' exposure, attention, and positive perception about an advertisement for intended meaning, but understanding consumers' psychological traits is a fertile area to cultivate in this context (Logan *et al.*, 2012; Pelling & White, 2009; Shareef *et al.*, 2015; Taylor *et al.*, 2011).

After receiving a product promotional message like an advertisement, consumers' response to this can be varied. Consumer response models (Greenwald, 1968; Nicosia, 1966), outline that customers may not be interested in exposure, or pay attention, and thus, may not learn from the advertisement. Another response can be characterized by exposure, attention, and learning from the intended messages from marketers, but they may not be persuaded and could actually have an entirely negative exposure perspective. Alternatively, some consumers will be willing to be exposed, attentive, and learn from the implied meaning. And thus, will be persuaded.

This variation in behavioural pattern has long been investigated by many marketing researchers (Kim & Ko, 2012; Logan et al., 2012; Pelling & White, 2009; Shareef et al, 2016); however, for recent viral marketing, i.e., social media advertisement, consumers' perceptions —their cognitive, affective, and behavioural attitudes are developed in quite different ways (Logan et al., 2012; Pietro & Pantano, 2012; Schulze et al., 2014). The scholarly articles of viral marketing or social media advertisement quite firmly acknowledged that, due to differences in emotional affiliation, patterns of interaction, social group formation, generating, sending, passing-on, and receiving of messages, and ways of thinking from a cognitive perspective — social network marketing through advertisement is substantially different from traditional advertisement in terms of consumers' exposure, attention, and persuasion. In social networks like Facebook, active members of any network loop, either professional or informal, are typically engaged in sharing their views, generating any new message, passing-on any opinion to other members of this loop, and seeking opinions which can be persuasive (Hayes & King, 2014). However, this internal brainstorming type of communication occurs in a non-commercial way which gives the impression of informal communication. This informal information sharing fundamentally develops and diffuses higher credibility as the authentication of the message (Akar & Topcu, 2011; Chu, 2011; Hayes & King, 2014; Kim & Ko, 2012). Members of Facebook

joining in a specific loop of friends and colleagues also share their views about any product from their personal experience which can be deemed to be non-commercial and real. Therefore, there is an explicit research gap in understanding how consumers develop and pursue their favourable attitude toward viral marketing. However, in social media, the information generation by any members of a network starts up a new avenue for the prospective consumers, who are basically members of that loop, to get different opinions which ultimately act as the primary source of information for them to create attitudes toward the product and ultimately, to buy (Kim & Ko, 2012; Logan et al., 2012). Investigating and conceptualizing the measuring items which are responsible for consumers' attitudinal development in viral marketing has potential importance both for practitioners and academics. The findings of this research will certainly contribute in understanding consumers' behavior for social media marketing or viral marketing which is significantly different from traditional views.

The next section describes the research design of this exploratory study which includes methodology and data collection procedures. Then, the statistical analysis section is illustrated, followed by the results and discussion section. Theory development and managerial implications are explained in the following section. Conclusions and future research concepts including the limitations of this study are finally presented.

Theoretical Background

Shedding light on the research outcome of several scholarly articles working on consumers attitude toward viral marketing (Chu, 2011; Kim & Ko, 2012; Logan et al., 2012; Pietro & Pantano, 2012; Schulze et al., 2014), it is explicitly recognized that members of any social network of a particular loop are very interested in gaining peers' opinions about any product from their consumption experience.

Distinctiveness of Viral Marketing

However, in this aspect, these members are not eager to receive any commercial views from their private network; rather they give much more priority to informal information

which is created completely non-commercially by their informal peers (Kim & Ko, 2012; Logan et al., 2012). Therefore, promotional marketing or any advertisement in Facebook created by either informal members of the network or injected by marketers, has significant differences from traditional Internet based marketing in creating exposure, attention, and attitude for persuasion. For marketers promoting products or services through Facebook, it has the potential to urge and stimulate consumers' behaviour to instigate their positive attitude towards the advertisement, then learn and be persuaded.

Theoretical base of Existing Literature

To date, all the potential research studies working on identifying consumers' attitudes towards viral marketing in social networks have attempted to formalize consumers attitudes for adoption from the basis of the traditional behavioural models like the technology adoption model (TAM) (Davis, 1989), theory of planned behaviour (TPB) (Ajzen, 1991), diffusion of innovation (DOI) theory (Rogers, 1995), unified theory of acceptance and use of technology (UTAUT) (Venkatesh et al., 2003), social cognitive theory (SCT) (Bandura, 1986), and the motivational model (MM) (Vallerand, 1997) etc.

Consumer Behavior for Social Media Members

However, Hayes & King (2014) used social exchange theory (Homans, 1958) to understand expected value in any exchange between parties for information giving and seeking. Members of social network exchange information for a particular reason (Hayes & King, 20149; Ho & Dempsey, 2010), and this exchange, as per research, should be informal. Several researchers (Chu, 2011; Kim & Ko, 2012; Shareef et al., 2017a) argued that consumers' perception, attitude, and behaviour as members of social network have substantially different patterns while giving, passing, and seeking product information. So, in the context of social network advertisement, formation of consumers' behaviour and functions of attitude should be investigated as an exploratory study, so as to enable marketers to formulate social promotional marketing, thereby modeling behaviour of brainstorming, consumers' new interaction, and

communications. Hence, the objective of this current study is to develop the scale items of consumers' attitudes toward Facebook advertisements to theorize consumers' attitudinal behaviour.

Grounded Theory for Viral Marketing

Existing researchers of viral marketing engaged in developing adoption behaviour are dependent on identifying constructs shedding light on traditional technology adoption theories. This current study, however, attempts to explore scale items of attitude to recognize the functions of attitude from the beginning. Therefore, this study is not devoted to test an established theory and postulate the behavioural constructs for pursuing attitude; rather it is experimenting to formulate any grounded theory to conceptualize the factors that may persuade consumers to generate their own attitudes towards a particular social network advertisement. Since any effect of social media advertisement might be substantially different from regular consumer behavior for a traditional product promotional effort, this study is not designed based on an established theoretical framework. Rather, the current research is attempting to explore and theorize a general concept of viral marketing reflecting consumers' opinions investigated through extensive empirical study. This research aims to encapsulate a new concept to understand epistemological and ontological paradigms of consumers' attitudes toward Facebook promotional marketing. Under this rationale, it is justified to develop a grounded theory about consumers' attitudes toward viral marketing, because, in grounded theory, we generally focus on organizing and postulating a possible concept based on collected data of respective sample's opinion (Allan, 2003).

Research Methodology

This research was designed to reveal consumers opinions through exploratory investigation. The study primarily attempts to capture social network members' opinions on how they pursue their attitudes from positive perceptions when products are promoted to them through their social network loop.

The methodology followed here is consistent with marketing research which is engaged in identifying certain plausible behaviors of consumers using exploratory methods. This methodology includes i) exploring consumers perception through a designed experiment and identifying the measuring items of their attitude, ii) Then a systematic empirical study is conducted to verify the scale items to measure the underlying constructs and theorize cause-effect relationship among the constructs of behavioral attitude. The flow chart (Figure 1) below is followed to reveal the measuring items of possible constructs which can track consumers' attitudes toward viral marketing in Facebook.

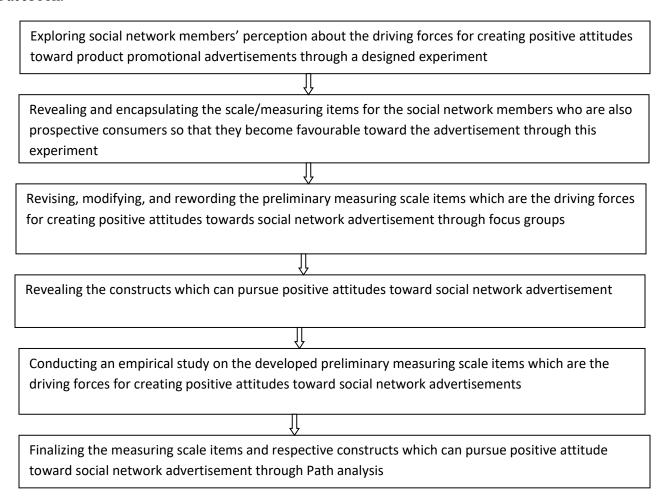


Figure 1: Flow Chart of the Research Design

This study was designed to understand and reveal the attitudes of members of a particular network loop of Facebook toward a particular promotional advertisement

who are also actual consumers. Respondents for this study were chosen from active members of Facebook for this research and are representative of the actual population. These members are also genuine prospective consumers who often use social networks as the source of information collection for any product.

Experiment and Quantitative Study

An advertisement about Samsung Galaxy Tab S was generated formally by a marketing company; however, it was introduced as an informal communication in this network through a designated research assistant(an active member of this social network) specially tasked with operationalizing this process. Since then, this research has taken the aggregate value of the responses following a similar process, while all the respondents' names, including the initiator's name, were kept anonymous. The original message was: "I bought a Samsung Galaxy Tab S last week. It is the best tablet that I have owned. It runs things smoothly. It is moderately a gaming tablet. I like how it handles Real Racing 3 and helps me with my schoolwork. It is great for watching shows and movies when I installed Kodi and Mobdro on it".

This dedicated member then passed this message to all the peers of this network pretending that it was his own opinion. This apparently self-generating, passing, and receiving of advertisements among the connected members of this Facebook network were communicated for one week. A total of 265 members proactively and reactively participated in this opinion generating process about the product, although the number of members in this social network was much higher than 265. After one week, a mail was distributed among those 265 members who participated in this message sharing the experiment through Facebook. They were asked to state five to ten reasons regarding how people may be persuaded to develop their positive attitudes toward this promotional advertisement. They were instructed to reveal the importance of those reasons in response to the effect that the advertisement had generated in their social network loop in the case of Samsung Galaxy Tab S. The members were also requested to send their perceptions to a specific email address.

From careful observation, understanding, and analysis of the statements of the 265 social network members, it was found that many respondents used several same or similar driving forces as the pursuance factor to develop an attitude towards the mentioned advertisement. They used sometimes different words to denote the same meaning or significance. To reveal similar meanings for the sake of categorization, a focus group consisting of three university professors and three managers actively involved in online marketing from Bangladesh was formed. When the sources of positive attitudes were classified, compared, and categorized by the focus group, generic characteristics and significance were considered to identify and develop preliminary scale items measuring driving forces for attitudes toward social network advertisement, viz., first order reflective indicators as dimensions of positive attitudes.

Finally, the focus group captured 54 measuring items from the conceptual meanings of the scales proposed by the respondents. With these 54 scale items, a questionnaire was prepared including five more questions to measure the dependent construct attitude toward the advertisement. These five questions about attitude were taken from published literature about advertisements (see, Homer, 1990; Huang *et al.*, 2010; Laczniak & Muehling, 1993) with revisions.

Empirical Study

From the same network loop, telephone numbers of five hundred members were collected. (From that Facebook network, 265 members participated in the experiment phase by sharing that message). These five hundred members were selected from this social network randomly. To keep cultural homogeneity, all the members who were selected are living in Bangladesh. It is worth to mention that in Bangladesh, interacting in social network like Facebook through their Smartphone is very popular (Shareef et al., 2017a). After collecting telephone numbers of the members of this social network, this newly developed questionnaire was then distributed among those five hundred members of the social network through their email with a request to respond through a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). These members of this network were asked to answer if they have seen different promotional

advertisements in their social network, perceive this informal message sharing related to product promotion positively, and are actual buyers of many products after gathering knowledge from peers of their social network. The respondents were also requested to send their perceptions to a specific email address. A total of 317 members filled out the questionnaire reflecting insights about their attitudes in response to the effect of any product promotional message generated and shared among members in their social network loop.

Concept Development through Statistical Analysis

Exploratory factor analysis (EFA) was conducted on the preliminary 54, measuring items using principal component analysis as the extraction method and varimax rotation as the rotation method. The breaks-in-Eigen values criterion (>1) was used to determine the number of factors to retain.

A series of iterations were then used, each involving elimination of items with low loadings (<.45) on all factors; high cross loadings on more than one factor; and a factor analysis of the remaining item. EFA is a strong tool for theory development based on an exploratory study and also for validity measurement (Stevens, 1996). The EFA result retained a total of 5 factors with 36 measuring items for those five constructs. To measure attitudes, the dependent variable, all the five scale items were retained. In the EFA, 18 items were removed that had a loading factor of less than .45 or cross-loaded on more than one component. Simultaneously, the correlation matrix of the 54 items were verified to understand the reason of low or cross loading. The items that are cross loaded in more than one factor are strongly correlated with items loaded under both factors. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was examined as a basis of fitness. Kaiser (1974) argued that if the KMO is less than 0.5, factor analysis is inappropriate. In this study, the KMO value was is 0.911. This indicates the acceptance of factor analysis. The Bartlett Sphericity test is also significant at the level of 0.000.

Reliability and Validity Assessment

Construct validity is very important for exploratory investigation (Bagozziet al., 1991) and examining convergent and discriminant validity for construct validity is a challenging aspect of this kind of social network study. These components have serious and confusing influences on empirical research and can yield totally misleading conclusions as the driving forces (Bagozziet al., 199; Cambell & Fiske, 1959). The reliability of all the independent and dependent variables was thoroughly verified by Cronbach's alpha (Cronbach, 1951). Since the coefficient alpha for the five independent and one dependent variables scored in the range from 0.833 to 0.964, the variables have reliability (Nunnally & Bernstein, 1994). This exploratory study has also conducted a confirmatory factor analysis (CFA) to finalize the validity and acceptance of the scale items of the respective constructs. All the five independent variables and one dependent variable with scale items showed an over-identified model and satisfied both the requirements of the CFA and were loaded on the respective constructs over 0.50 except seven measuring items of independent variables. At this point, the cut off value was set to remove any item as 0.50 (Kline, 2005). Any scale item loaded less than 0.50 is not contributing significant variance to form the construct and thus, can be removed (Kline, 2005). Therefore, those seven items were removed. Final accepted scale items of the five independent variables to form attitudes toward social network advertisement satisfied the minimum cut-off point requirements (Fornell & Larcker, 1981; Kline, 2005). In this way, convergent validity is confirmed, as the retained scale items for each construct have average variances extracted (AVE) for each factor and measuring items of at least 0.50 (Fornell & Larcker, 1981). Discriminant validity among the five constructs was also verified as the largest shared variance between these factors is lower than the least AVE value for each factor and its measures (Espinoza, 1999). So, finally, five independent constructs were selected with 29 measuring items and one dependent variable with five measuring items (Shown in Appendix A).

The focus group formed previously, examined the scale items under each construct, and then, finally, based on the collective meaningful significance of all the measuring items under each construct, provided the following names with the number of measuring items shown in Table 1. A multicollinearity problem was also verified by investigating Variance Inflation Factor (VIF) values that range from 1.33 to 2.01 (much less than 10). These values imply that there is no severe multicollinearity (Allison, 1999; Netter *et al.*, 1996).

Table 1 Construct of Attitude toward Advertisement

Construct	Number of Measuring Items
Hedonic Motivation (HM)	4
Source Derogation (SD)	5
Self-Concept (SC)	6
Message Informality (MI)	6
Experiential Message (EM)	8
Attitude Toward Advertisement (AA)	5

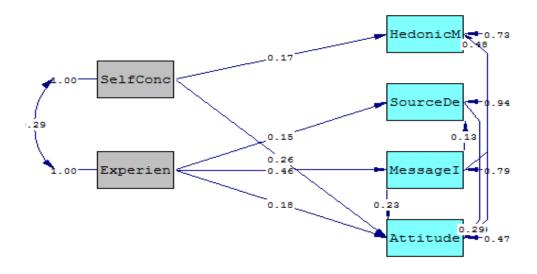
Statistical Verification of Causal Relationship by Path Analysis

This study used LISREL for the Path Analysis. As all the independent and dependent variables were measured through the Likert Scale 1-5, data gathered from this empirical study is not perfectly continuous. Therefore, a structural measurement through SEM by maximum likelihood (ML) is not appropriate for this type of data (Kline, 2005, p.219). Five independent variables to pursue attitudes toward advertisements on Facebook are revealed in this study. As an exploratory study, the research initially hypothesized direct cause and effect relations of the mentioned five independent variables, namely hedonic motivation (HM), source derogation (SD), self-concept (SC), message informality (MI), and experiential message (EM) with attitude toward advertisement (AA). Literature on marketing and consumer behaviour for accepting viral marketing

on social networks (Chu, 2011; Kim & Ko, 2012; Logan *et al.*, 2012; Pietro & Pantano, 2012; Schulze *et al.*, 2014), supports the hypothesis that message informality (MI) and experiential message (EM) have relations with source derogation (SD) in addition to their direct causal relations with attitude toward advertisements (AA). For the analysis element in this study, 6 X 6-correlation matrix is applied.

The path diagram exhibits both the unstandardized and standardized regression weights (factor loadings) of the independent variables on attitude toward advertisement (AA). Values of the unstandardized factor loadings estimate the change in the dependent variable for unit change on the respective independent variable given the effects of other independent variables are constant. After the first iteration, the research found Chi-Square statistic 6.29, df. 2, p-value 0.04301, and root mean square error of approximation (RMSEA) 0.082. Therefore, the model did not fit well with the prescribed cause-effect relations for the encapsulated data. The analysis suggested certain modification indices to improve the model fitness. In addition to the direct relations of self-concept (SC) and message informality (MI) with attitude toward advertisements (AA), they have causal effect relations with hedonic motivation (HM). Experiential message (EM) also relates to message informality (MI) in addition to its direct causal relationship with attitudes toward an advertisement (AA). From the theoretical perspective of marketing literature and behavioural theories, we deliberated over those proposed relations. This research also examined the correlations of those newly proposed relations. From both theoretical backgrounds and sample relations, this study found it was justified in adding those causal relations in the model with several error covariance. Then the model was run again. This time, all the model fitness indices are reasonably good as listed in Table 2. The standardized path coefficients, Chi-Square statistic, degree of freedom (df), p-value, and RMSEA are shown in Figure 1A (at 0.05 level) and 't' values in Figure 1B. The five significant variables combined explained 51.9% ($R^2 = 0.519$) of variances on attitude toward advertisement (AA). For an exploratory study in social science, this amount of variance explained by the independent variables is quite satisfactory (Kline, 2005).

The $\chi 2$ statistic 7.34 (df = 4), p-value 0.11901, RMSEA (.051) indicate that the null hypothesis of the model is reasonably a good fit with the sample, or at least cannot be rejected (Browne *et al.*, 1993; Hu & Bentler, 1999; Kline, 2005, pp. 133-144). Other fit measures such as comparative fit index (CFI), normed fit index (NFI), and goodness of fit index (GFI), adjusted goodness of fit index (AGFI), relative fit index (RFI), root mean square residual (RMR), and incremental fit index (IFI) indicate that the model fit compares reasonably with the literature (Churchill, 1979; Segars*et al.*, 1993; Chau, 1997; Kline, 2005, pp. 133-144). There is no single recommended fit measure for the Path analysis. The recommended values in literature and the findings are shown in Table 2.



Chi-Square=7.34, df=4, P-value=0.11901, RMSEA=0.051

Figure 1A Attitude toward Social Network Advertisement (regression values)

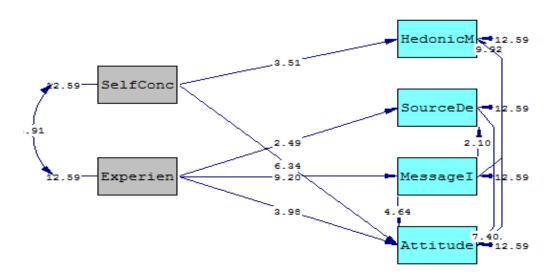


Figure 1B Attitude toward Social Network Advertisement ('t' values)

Table 2: Fit Measures from Path Analyses

Fit Measures	Recomme	Attitude toward
	nded	Advertisement
	Values	
Chi-square (χ2)	p≥0.05	7.34 (p= 0.11901)
Degree of Freedom (DF)		4
χ2/DF	≤3.0	1.835
Root Mean Square Residual	≤0.05	0.0334
(RMR)		
Comparative Fit Index (CFI)	≥.90	0.993
Goodness of Fit Index (GFI)	≥.90	0.992
Adjusted Goodness of Fit Index	≥.80	0.96
RMSEA	< 0.06	0.051
Normed Fit Index (NFI)	≥.90	0.984
Incremental Fit Index (IFI)	≥.90	0.993
Relative Fit Index (RFI)	≥.80	0.941

All of the five variables are found to have significance and to positively pursue attitudes toward advertisements. The total variances are explained in pursuing attitudes toward advertisements with a result of 51.9 percent. Therefore, this research can finally claim that these five variables are the desired driving factors for social network members to be persuaded by creating positive attitudes toward social network advertisement. Final variables and their measuring items are shown in Appendix A.

Results and Discussions

Although researchers generally agree that method bias has the potential to affect the results of a single-method study, no consensus exists about the seriousness of such biases (Malhotra *et al.*, 2006). However, to reduce the effect of method bias in the findings, the data was collected and finalized from two separate empirical studies, one to collect the scale items and another to validate the measuring items. The researchers also edited, corrected, and revised the scale items through an expert focus group which can reduce the effect of bias of participants, instrument, and procedure (Burton-Jones, 2009). According to the model, attitude toward product promotional message or information, i.e., advertisement in social network like Facebook is persuaded by the following five factors as depicted in the following equation:

Attitude = 0.190*HedonicM + 0.294*SourceDe + 0.226*MessageI + 0.259*SelfConc + 0.180*Experien

Attitude toward advertisement in social network is modeled through the following hypotheses shown in Table 3.

Table 3: Formation of Attitude: Direct and Indirect Relations

Independent	Hypothesis	Dependent	Loading
Construct		Construct	value
Hedonic	H ₁ : Hedonic motivation enhances		0.19
Motivation	consumers' perception of positive attitude		

(HM)	toward advertisement in social network		
Source	H ₂ : Source derogation enhances		0.294
Derogation	consumers' perception of positive attitude		
(SD)	toward advertisement in social network		
Self-Concept	H ₃ : Self-concept enhances consumers'		0.259
(SC)	perception of positive attitude toward		
	advertisement in social network		
			0.17
	H _{3a} : Self-concept enhances consumers'		
	perception of hedonic motivation toward		
	advertisement in social network		
Message	H ₄ : Message informality enhances	Attitude	0.226
Informality	consumers' perception of a positive	toward	
(MI)	attitude toward advertisement in social	Advertisement	
	network	(AA)	
	H _{4a} : Message informality enhances		0.479
	consumers' perception of hedonic		
	motivation toward advertisement in social		
	network		0.129
	H ₄ : Message informality enhances		
	consumers' perception of source		
	derogation toward advertisement in social		
	network		
Experiential	H ₅ : Experiential message enhances		0.18
Message (EM)	consumers' perception of positive attitude		
	toward advertisement in social network		
	H _{5a} : Experiential message enhances		0.459
	consumers' perception of message		

informality toward advertisement in social	
network	
	0.153
H _{5b} : Experiential message enhances	
consumers' perception of source	
derogation toward advertisement in social	
network	

Attitudes toward social network advertisement, i.e., any effort to communicate messages about products among network members who are also consumers of different products is formed and persuaded by hedonic motivation (HM), source derogation (SD), self-concept (SC), message informality (MI), and experiential message (EM). Values of the unstandardized factor loadings estimate the change in the dependent variable for unit change on the respective independent variable, if the effects of other factors are constant. Suppose source derogation (SD) has a loading factor equal to 0.294; a unit positive change on source derogation causes a 0.294 unit positive change on perception of attitude toward advertisements on social networks when the effects of all other four critical factors (independent variables) remain constant. Similarly, effects of other four constructs on attitudes toward advertisements (AA) can be explained.

Findings also suggested that self-concept contributes in forming hedonic motivation for attitude toward advertisements (AA). Experiential message contributes in forming message informality and source derogation for attitude toward advertisements (AA). Similarly, message informality contributes in forming hedonic motivation and source derogation for attitude toward advertisements (AA).

Theory Development

In this section, findings from empirical study will be explained and justified in light of existing literature and behavioural theories to develop grounded theory.

Hedonic Motivation

Marketing researchers (Atulkar & Kesar, 2017; Hughes & Palen, 2009; Kahn,1995; Logan *et al.*, 2012; Nisara & Prabhakar,2017; Pietro & Pantano, 2012; Shareef *et al.*, 2015) working on online consumer behaviour have showed that enjoyment or fun is a prevalent factor for consumers to accept this kind of media. However, marketers do not have agreement on the argument that consumers, while evaluating any advertisement, search for any kind of entertainment from the content and context of advertisements. On the other hand, researchers (Hughes & Palen, 2009; Logan *et al.*, 2012; Pietro & Pantano, 2012; Shareef *et al.*, 2015) working on social network promotional marketing strategy, recommended that for exposure, attention, and positive perception about viral marketing, either formal or informal, the potential priority for consumers should be entertainment or enjoyment. They also found from extensive empirical studies among different segments of consumers who are active members of social networks, that hedonic motivation is an essential prerequisite to being persuaded aboutany product's promotional message, generated and received through the social network.

This study (See Figure 1A/1B) also identified that, for social network advertisements, consumers pay attention if the message is embedded within entertainment. Without enough hedonic motivation consumers might not be exposed, pay attention, and develop positive perceptions toward the advertisement. So, for viral marketing, hedonic motivation essentially and predominantly includes fun and entertainment that social media members receive by sharing any product promotional experience with their peers. This finding is also supported by the theory of prospective gratification (LaRose *et al.* 2001). The extended concept of unified theory of acceptance and use of technology (UTAUT2) (Venkatesh *et al.* 2012) asserts that consumers are eager to avail of hedonic motivation, a view also supported by (Dwivedi *et al.*, 2016). Based on the scale items shown in Appendix A, the concept hedonic motivation (HM) can be defined here as *the degree of emotional entertainment members perceive in generating, passing, and receiving any product related information from their social network*.

Source Derogation (SD)

Cognitive learning theory suggests that consumers typically try to interpret the message sent by the marketers before making any final decision on whether they would be persuaded or not. Cognitive response models argue that, when any product advertisement is communicated with the consumers, they might learn from the implied meaning of the message proposed by the marketers or they might not learn. Even after learning, they might be persuaded to create positive attitudes toward the product or not. This entire cycle of motivation about any advertisement substantially depends on the source of message externally, i.e., who is functionally presenting the message to the prospective consumers. Several scholarly articles on promotional marketing (Bampo et al. 2008; Hinz et al. 2014; Van der Lans et al. 2010; Schulze et al., 2014) analyzing the effect of advertisement and how consumers evaluate advertisements, clearly identified that the impact of advertisements on consumers' minds potentially depends on source derogation. According to schema theory (Aronson et al., 2012; Bartlett, 1932), consumers are prompted to pursue mental orientation depending on the situational effect of the message, which is significantly controlled by source derogation. Social network researchers who conducted research on viral marketing (Logan et al., 2012; Pietro & Pantano, 2012; Schulze et al., 2014) advocate for the credibility of the source of advertisements. They revealed from empirical studies that consumers are very aware about the message initiator and presenter of the message in social networks rather than the content of the messages.

Findings of this study postulated that members of a social network become persuaded by any product promotional message in their loop if it is shared from their peers (See Figure 1A/1B). Therefore, this grounded theory reflects that source derogation, i.e. identity of the originator of the primary message about product experience is an important predictor to pursue positive attitudes toward social network advertisements. This construct reflecting the underlying concept of the corresponding measuring items can be illustrated here as the degree to which members of social network provide importance in perceiving trustworthiness to the source member in their network who is initiating the message.

Self-Concept (SC)

This dimension of personal characteristics is analyzed by several marketing researchers (Dwivedi *et al.*, 2016; Rook 1985; Sirgy, 1982) and they streamlined compatibility of personality with cognitive and affective functions of attitude. Shedding light on social cognitive theory (Bandura, 1986), consumers are tempted to observe external stimulus like advertisements of products and are tempted to replicate this behaviour according to their mental ability to perform this behaviour. This mental ability differs consumer to consumer and it is directly correlated with personal traits. Reception approach (Cunningham & Finn, 1996) of mass media theory recognizes the compatibility of personal characteristics with selection of media and its credibility perception. Theory of planned behaviour (TPB) (Ajzen, 1991) recommended that consumers develop their attitudes reflecting certain beliefs which are congruent with their ritual phenomenon. Dwivedi *et al.* (2016) revealed the importance of personal characteristics in pursuing and accepting virtual mediums which resemble close connections with social network behaviour.

Respondents in this study explicitly showed their ritual compatibility with social network advertisements and were effectively persuaded. All the members of the network loop where the message of product promotional experience was initiated did not participate in this continuous sharing and interacting process (265 members participated). So, the grounded theory of development of attitude for viral marketing essentially includes personal compatibility with social media behaviour, i.e., self-concept. Self-Concept (SC) can be conceptualized based on the measuring items shown in Appendix A as the degree to which a social network member is intrinsically motivated to evaluate congruence of their own personality-related traits with generating, passing, and receiving any product related information from the network to be persuaded.

Message Informality (MI)

According to schema theory, consumers' mental ability to evaluate any information depends on the situational cognition. For social network behaviour like Facebook

interaction, members are actively participating in generating, passing, and receiving messages from peers in that network loop. Consequently, one generic and heuristic urge of social network members in conjunction with exposure, attention, and positive perception about any product related promotional message is its informality (Akar & Topcu, 2011; Chu, 2011; Kim & Ko, 2012). Researchers who are working on viral marketing in social networks encapsulated that members of any social network are highly congruent with the credibility of the message. However, for social network consumers, behavioural attitude about credibility of message is substantially aligned with the non-commercial nature of the message as it is supposed to be generated from their informal peers (Lee *et al.*, 2011). Many prospective consumers who are engaged in social network surf their network loop to get voluntary messages from their informal references; this kind of message is highly regarded as credible to persuade them to purchase the product (Hughes & Palen, 2009; Pelling & White, 2009).

According to the findings of this study, informality of the shared message is one of the driving forces for the peers to be persuaded (See Figure 1A/1B). So in this current research, the grounded theory of development of attitude for viral marketing has captured the essence of informality of promotional messages, i.e., non-commerciality in the context and content about any product as the foundations to develop consumers' attitude and be persuaded. Message Informality (MI) concept is defined in this study reflecting the underlying measuring items shown in Appendix A as the degree of motive of the non-commerciality of the initiator to generate the product related message and communicate this with the peers of that social network.

Experiential Message (EM)

Behavioural learning theory and cognitive learning theory, although rhetorically contradictory in their foundational belief about development of consumers belief to interpret any advertisement, both agree on the issue that any product related message if it is initiated from consumers' real experience can easily pursue consumers to learn, positively evaluate, and be persuaded by the intended meaning. If we look at the theory of planned behaviour, it is quite evident that consumers' behavioural intention is highly motivated by subjective norm. Now, from the conceptual paradigm of experiential

message, any real consumption related information from the peers of a social network basically is intended to act as a subjective norm (Ajzen, 1991; Akar & Topcu, 2011; Chu, 2011; Hughes & Palen, 2009; Pelling & White, 2009). Marketing researchers have long realized that the presence of online has created an excellent avenue for them to pursue prospective consumers by communicating with the real experience of those consumers who have used the product personally. Reflecting the theoretical essence of social cognitive theory, it is quite evident that consumers' behavioural interest to replicate any observable behaviour largely depends on the credibility of the information (Ducoffe, 1995; Shareef *et al.*, 2015).

Findings of this study have revealed that, since an experiential message has that quality to easily impart the impression of replication as it is a real consumption experience from non-commercial peers, it has high power to persuade members of social networks to develop positive attitudes about the product (See Figure 1A/1B). So, the grounded theory of development of attitude for viral marketing conceptualized in this research has revealed that members of any social network are prone to accept any product related message as credible, if it is initiated and passed on to them from their peers who have practical experience of using the product. This study has conceptualized experiential message (EM) as the degree of past experience of the initiator of any product related message in the social network to buy and consume the product personally.

Now, collectively, the above mentioned five constructs, which are measured through the 29 scale items can pursue members of social network who are also prospective consumers to generate a positive attitude toward advertisements in that network loop.

Managerial Implications

If we look at the generic formation of those five constructs pursuing social network members' attitudes toward advertisements, it is explicitly evident that the potential contributor for consumers to be persuaded is not the content of the message; rather the context of the message is substantially directing and motivating them to develop positive perceptions, specifically for any promotional marketing in social networks like Facebook. Traditional marketing literature is highly congruent with the content of the message. Marketing literature focused on behavioural learning theory, observational theory, and cognitive learning theory to evaluate how consumers learn from any promotional marketing like advertisements. These theories acknowledged that consumers learn from external stimulus or based on internal capability; however, for both cases the content of the message is imperative in persuading and creating favourable attitudes toward advertisements (Akar & Topcu, 2011; Chu, 2011; Kim & Ko, 2012). For social network advertisements, members of any network who are prospective consumers can learn and be persuaded by the context of messages, especially if the essence of the message is based on the initiator generating a noncommercial image of the message reflecting the source who is generating it. However, social network members' personal image, and compatibility to learn from their networks is also prevalent in ensuring persuasion. Broadly, we have categorized three factors for perspective consumers to be persuaded in social network advertisements: i) Product related messages should be entertaining as members surf the network for emotional benefit, ii) Messages should be generated in the social network from their peers, iii) Social network members have specific personal traits which should be compatible with the structure of the message to promote the product.

Shedding light on the foundations of attitude development (Howard & Jagdish, 1969; Robertson, 1974; Roloff, 1981; Zajonc, 1968), this study reveals that, for the formation of overall attitudes toward social network advertisements, consumers are dependent on cognitive components, affective components, and behavioural components. Hedonic motivation and message informality support affective components of attitude. Source derogation and experiential messages are the driving forces for creating cognitive functions of attitudes, and Self-concept is the overarching effect of the behavioural component of attitude. Therefore, social network members can learn about any product from the network, create positive perceptions, and become persuaded in terms of

favorable attitudes in terms of the three components of generic attitude; cognitive, affective, and behavioural or conative.

Literature on social network promotional marketing or viral marketing (Chu, 2011; Kim & Ko, 2012; Logan et al., 2012; Pietro & Pantano, 2012; Schulze et al., 2014), illustrates that consumers search for intrinsic motivation related to the entertaining quality of the message while being exposed, paying attention, and finally, being persuaded. Interestingly, this entertaining component of the message does not depend on the message statement, its structure and organization; but on the fun generated and circulated by peers while they are also informally participating in receiving, modifying, editing, and passing on this message. So, here the concept lies on the paradigm that this brainstorming message is not solely claimed by any single member, but rather that all the members of the social network unanimously endorse the outcome of the final message. In this way, they are getting intrinsic motivation for this message which resembles hedonic motivation. Researchers on general social networks like Facebook, YouTube, Twitter etc. (Chatterjee, 2001; Shareefet al. 2016) and on the marketing of social network behaviour for accepting product promotional information or advertisements (Hayes & King, 2014) have acknowledged that those people, who are highly involved in social networks, are eager to collect product related information from their network loop, preferably initiated by network members. So, users of social networks have unique characteristics to learn about any product. Researchers identified that network members are more eager to be persuaded if the message is initiated by their own loop members. Therefore, accumulating the three broad conceptual paradigms of attitude development forces in social networks in a single statement, this study claims from the grounded theory (Social Media Consumer Attitude Development----SM-CAD) that social network advertisements should have noncommercial and post-consumption value:

Consumers will be willingly exposed, attentive, learn, and be persuaded if any product related message generated and circulated in the social network is

developed by any peer of the network who is without any commercial target generating and sharing this message based on post-consumption experience.

However, some other peers of that network might contribute and share their own opinion to formulate the final message and circulate it among members, so that all the members can contribute towards the concept development of any product.

This finding provides enormous benefits for marketers in terms of the future of advertising. Marketers know that following traditional methods to motivate consumers in any social network might not always be effective; sometimes, it can create irritation among network members who are also prospective consumers. If secretly they can motivate any informal member of social networks to initiate and launch any product related information, this can then be an effective strategy for social network advertisements. This grounded theory (SM-CAD) has a potential contribution to make in the existing literature of viral marketing. It has explicitly postulated how marketers can focus on shaping and pursuing consumers' favorable attitudes towards their products. This will provide them with an excellent opportunity to generate a new avenue for product promotional efforts which is significantly different from traditional ways of circulating advertisements.

However, in this case, an important tradeoff is required involving the control of the member of any social network to freely initiate any product related information after consumption, and the absolute freedom to initiate this solely from their own judgment. If it is too controlled, the message can lose its informal nature and other members of that network might not be interested to learn and be persuaded. On the other hand, if the appointed network member is provided with complete freedom, the effect can be adverse as the member can create negative concepts about the product. Therefore, the results from this study have significant implications. This grounded theory is also rooted in the conceptual discourse of social exchange theory. Consumers willingly and spontaneously accept the message in their social media network loop reflecting peers' experience about any products, if they perceive they can get genuine pre-purchase and

pre-consumption experience. In that case, they will be motivated and willingly and spontaneously share their similar experiences in future to support and develop a unified opinion to facilitate other peers' behavioral attitude. This finding of the current study is clearly supported by the phenomenon of social exchange.

Conclusions

This research aimed to identify how active social network members create their attitudes and can be persuaded by any product related advertisement displayed in their network. More precisely, this current research is engaged in deriving the driving forces which persuade Facebook members, who are also prospective consumers, to develop favorable attitudes toward any product. This study has significant importance as current research on viral marketing by capturing consumers' attitudes toward advertisements in social networks used traditional technology related behavioural theories. However, on the other hand, researchers working on social networks have acknowledged that social network members differ significantly in pursuing their behaviour and forming attitudes toward any product related message from traditional consumers who might learn and be persuaded from traditional advertisements. These researchers also asserted that social network members are frequently engaged in surfing their network page and interacting to receive product related information from their peers. Obviously, their behavioural patterns and personal compatibility to receive any advertisement and evaluate its credibility differs substantially from traditional consumer behaviour. So, investigating the behavior of consumers who are operating on Facebook may need new theory development methodology to understand consumers' behavioural attitudes and its antecedent driving forces. In this context, this research is designed as an exploratory study to reveal the driving forces which contribute in forming and pursuing consumers' favourable attitudes toward social network advertisement.

This study has designed its methodology to explore the measuring items for pursuing positive attitudes toward social network advertisements. A research assistant appointed to work on this study who is also an active member of Facebook introduced a message

about a Samsung Tab S product and passed it to other network members. Then, different members of that network participated in message generation, modification, passing, and receiving to compose a final structured opinion to develop their attitude. After this brainstorming of the product promotional message, the members of that network were communicated with through telephone and requested to respond about the driving forces which pursue them to create positive attitudes about the product promotional message in their network. Respondents showed several pursuing factors for generating favourable attitudes toward this social network advertisement, and sent information to the researcher through a specific email address. After capturing the measuring items from the Facebook members, a Focus group reviewed this. These were given generic meaning and were categorized. Thorough statistical analysis was conducted to encapsulate the final measuring items and the relevant reflective constructs. In this way, five constructs with twenty-nine measuring items were identified. These are: hedonic motivation, self-concept, source derogation, message informality, and experiential message. Members of social networks who are also prospective consumers are interested in being exposed to messages, learn about same, and finally, be persuaded to create favorable attitudes if they find intrinsic and extrinsic motivation from the five constructs outlined above in this new study.

Future Research Directions and Limitations

This research is exploratory in nature. As a result, it has several limitations which can be investigated gradually in future studies. This empirical study was conducted only in one network loop of Facebook which might have clustered characteristics. Future researchers can investigate this same study in different countries to capture opinions of different groups which might have different segmenting characteristics. The message in this study was generated by one member of the network who was artificially appointed by a marketing group. Complete voluntary service cannot be warranted by this procedure. Future research can explore the same findings following different procedures. The product advertised here in the social network is a gaming console. For different products, consumers might have significantly different behaviours and

attitudes. For instance, the level of the pursuing effect of hedonic motivation and self-concept might vary for different types of advertisements containing different information and indicating other types of products which are used completely for different purposes. It might also depend on the nature of the social group. For generalization, these issues should be examined by future researchers.

References

- Ajzen, I. "The Theory of Planned Behaviour," *Organizational Behaviour& Human Decision Processes* (50), 1991, pp. 179-211.
- Akar, E., & Topcu, B. (2011). "An examination of the factors influencing consumer's attitudes toward social media marketing". *Journal of Internet Commerce*, 1(10), 35–67.
- Allan, G.(2003), "A critique of using grounded theory as a research method," Electronic Journal of Business Research Methods, vol. 2, no. 1, pp. 1-10.
- Allison, P. D., (1999), Logistic Regression Using the SAS System, Cary, NC: SAS Institute.
- Aronson, Elliot, Timothy D. Wilson, and Robin M. Akert (2012), *Social Psychology*, 8th ed. Upper Saddle River, NJ: Pearson.
- Atulkar, S. & Kesar, B. (2017), Satisfaction, loyalty and repatronage intentions: Role of hedonic shopping values, *Journal of Retailing and Consumer Services*, 39(November), 23-34.
- Bagozzi, R. P., Yi, Y., and Philips, L.W., (1991), "Assessing Construct Validity in Organizational Research", *Administrative Science Quarterly*, 36, 421-458.
- Bampo, Mauro, Michael T. Ewing, Dineli R. Mather, David Stewart, and Mark Wallace (2008), "The Effects of the Social Structure of Digital Networks on Viral Marketing Performance," *Information Systems Research*, 19 (3), 273–90.
- Bartlett, Frederic C. (1932), Remembering: A Study in Experimental and Social Psychology. London: Cambridge University Press.
- Bandura, A., (1986), Social Foundations of Thought and Action, Englewood Cliffs, NJ: Prentice-Hall.

- Barnes, N.G. and Mattson, E. (2009), "Social media in the 2009 Inc. 500: new tools and new trends", *Journal of New Communication Research*, Vol. 4 No. 2, pp. 70-9.
- Bloch, P. H. and Marsha, L. R. (1983), "A Theoretical Model for the Study of Product Importance Perceptions," *Journal of Marketing*, 47 (Summer), 69-81.
- Burton-Jones, A. (2009), Minimizing Method Bias Through Programmatic Research. MIS Quarterly 33(3), 445-471.
- Campbell, D.T. & Fiske, D. W., (1959), Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix, *Psychological Bulletin*, 56(2, March), 81-105.
- Chatterjee, P. (2001), "Online Reviews: Do Consumers Use Them?," *Advances in Consumer Research*, 28, 129–33.
- Chau, P.Y.K., (1997), Reexamining a Model for Evaluating Information Center Success: Using a Structural Equation Modeling Approach, *Decision Sciences*, 28(2), 309-334.
- Chu, S-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.
- Churchill, G. A., (1979), A Paradigm for Developing Better Measures of Marketing Constructs, *Journal of Marketing Research*, 16(February), 64-73.
- Cronbach L. J (1951). "Coefficient alpha and the internal structure of tests". *Psychometrika* 16 (3): 297–334.
- Cunningham, S. and M. Finn (1996), "Media theory and the Internet", *Media International Australia*, 80:84–92.
- Ducoffe, R.H. (1995), "How consumers assess the value of advertising", *Journal of Current Issues and Research in Advertising*, Vol. 17 No. 1, pp. 1-18.
- Dwivedi, Y. K., Kapoor K. K. & Chen, H. (2015). Social Media Marketing and Advertising. The Marketing Review, 15(3), 289-309.
- Dwivedi, Y. K., Shareef, M. A., Simintiras, A. C., Lal, B., & Weerakkody, V. (2016), Adoption Behaviour for Mobile Health (m-Health) Service: A Cross-Country Comparison. *Government Information Quarterly*, 33(1), 174–187.

- Dwivedi YK, Rana NP, Janssen M, Lal B, Williams MD & Clement RM (2017a). An Empirical Validation of a Unified Model of Electronic Government Adoption (UMEGA). Government Information Quarterly, 34(2), 211-230.
- Dwivedi YK, Rana NP, Jeyaraj A, Clement M & Williams MD (2017b). Re-examining the Unified Theory of Acceptance and Use of Technology (UTAUT): Towards a Revised Theoretical Model. Information Systems Frontiers. Available at https://link.springer.com/article/10.1007/s10796-017-9774-y
- Dwivedi YK, Rana NP & Alryalat M (2017c). Affiliate Marketing: An Overview and Analysis of Emerging Literature. The Marketing Review, 17(1), 33-50.
- Ertmer, P. A., & Newby, T. J. (1993). Behaviourism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly*, 6(4), 59-71.
- Espinoza, M. M., (1999), Assessing the Cross-Cultural Applicability of a Service Quality Measure: A Comparative Study between Quebec and Peru, *International Journal of Service Industry Management*, 10(5), 449–468.
- Fornell, C., & Larcker, D. F., (1981), Evaluating Structural Equation Models with Unobservable Variables and Measurement Error, *Journal of Marketing Research*, 18(1), 39-50.
- Greenwald, A. G. (1968), "Cognitive Learning, Cognitive Response to Persuasion, and Attitude Change," in Psychological Foundations of Attitudes, ed. Anthony G. Greenwald *et al.*, New York: Academic Press, 147-170.
- Hayes, J. L., & King, K. W., (2014). The social exchange of viral ads: Referral and coreferral of ads among college students. *Journal of Interactive Advertising*, 14(2), 98-109.
- Ho, J. Y.C., & Dempsey, M. (2010), Viral Marketing: Motivations to Forward Online Content, *Journal of Business Research*, 63(9–10), 1000–06.
- Homans, George C. (1958). "Social Behaviour as Exchange". *American Journal of Sociology*, 63(6),597-606.
- Homer, P. M. (1990). The Mediating role of attitude toward the ad: Some attitude evidence. *Journal of Marketing Research*, 27(1), 78–86.

- Howard, J. A. and Jagdish, N. S., (1969), *The Theory of Buyer Behaviour*, New York: John Wiley.
- Hoyer, W. D., MacInnis, D. J., & Pieters, R. (2008), *Consumer Behaviour*, South-Western CENGAGE Learning, USA.
- Huang, C. Y., Chou, C. J., & Lin, P. C. (2010). Involvement theory in constructing bloggers' intention to purchase travel products. *Tourism Management*, 31(4), 513–526.
- Hughes, A. L. &Palen, L. (2009), Twitter Adoption and Use in Mass Convergence and Emergency Events. In *Proceedings of the 6th International ISCRAM Conference*, Sweden.
- Kahn, B. E. (1995), "Consumer Variety-Seeking among Goods and Service," Journal of Retailing and Consumer Services, 2(3), 139-148
- Kapoor KK, Dwivedi YK & Piercy N (2016). Pay-per-click advertising: A literature review. The Marketing Review, 16(2), 183-202.
- Kapoor, KK, Tamilmani, K, Rana, NP, Patil, P, Dwivedi, YK and Nerur, S (2017). Advances in Social Media Research: Past, Present and Future. *Information Systems Frontiers*. https://doi.org/10.1007/s10796-017-9810-y
- Kim A. J, Ko, E. (2012), Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65(10), 1480–86.
- Kline, R. B., (2005), *Principles and Practice of Structural Equation Modeling*, The Guilford Press, NY.
- Laczniak, R. N., & Muehling, D. D. (1993). Toward a better understanding of the role of advertising message involvement in ad processing. *Psychology & Marketing*, 10(4), 301–319.
- LaRose, R., Mastro, D. A., and M.S.Eastin (2001), "Understanding Internet usage: A social cognitive approach to uses and gratifications", *Social Science Computer Review*, 19, 395-413.
- Lee, D., Kim, H.S. and Kim, J.K. (2011), "The impact of online brand community type on consumer's community engagement behaviours: consumer-created vs. marketer-

- created online brand community in online social-networking web sites", *Cyber Psychology, Behaviour & Social Networking*, 14(1/2), 59-63.
- Logan, K., Bright, L. F., & Gangadharbatla, H. (2012). Facebook versus television: Advertising value perceptions among females. *Journal of Research in Interactive Marketing*, 6(3), 164–179.
- Malhotra NK, Kim SS and Patil A (2006) Common Method Variance in IS Research: A Comparison of Alternative Approaches and a Reanalysis of Past Research. *Management Science* 52(12), 1865-1883.
- Netter, J., Kutner, M. H., Nachtsheim, C. J., & Wasserman, W., (1996), *Applied Linear Regression Models*, 3rd Edition, Chicago: Irwin.
- Nicosia, F. (1966) Consumer Decision Processes, Prentice Hall, Englewood Cliffs.
- Nisara, T.M. & Prabhakar, G. (2017), What factors determine e-satisfaction and consumer spending in e-commerce retailing?, *Journal of Retailing and Consumer Services*, 39(November), 135-144.
- Nord, W. R. and Peter, J. P. (1980), A behavioural Modification Perspective on Marketing, *Journal of Marketing*, 44(Spring), 36-47.
- Nunnally, J. C. & Bernstein, I. H. (1994). *Psychometric Theory*, New York: McGraw-Hill.
- Oliver, R. L. (2015), Satisfaction: A Behavioural Perspective on the Consumer, Routledge, USA.
- Nunnally, J. C. & Bernstein, I. H., (1994), *Psychometric Theory*, New York: McGraw-Hill.
- Pelling, E. & White, K. M. (2009), The theory of planned behaviour applied to young people's use of social networking websites. *Cyberpsychology & Behaviour*, 12, pp. 755-759.
 - Pietro, L. Di & 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*, 14(1), 18-29.
- Robertson, T. S., (1974), A Critical Examination of Adoption Process Models of Consumer Behaviour, In J. N. Sheth (Ed.), Models of Buyer Behaviour.

- Roloff, Michael (1981). *Interpersonal communication: The social exchange approach*. Beverly Hills.
- Rook, D. W., (1985), The Ritual Dimension of Consumer Behaviour, *Journal of Consumer Research*, 12(3), 251-264.
- Schulze, C., Scholer, L. and Skiera, B. (2014), "Not all fun and games: viral marketing for utilitarian products", *Journal of Marketing*, Vol. 78, pp. 1-19.
- Segars, A., & Grover, V., (1993), Re-examining Perceived Ease of Use and Usefulness: A Confirmatory Factor Analysis, *MIS Quarterly*, 17(4), 517-527.
- Shareef, M. A., Dwivedi, Y. K., & Rana, N. P. (2015). Consumer Behaviour in the Context of SMS-based Marketing. *The Marketing Review*, 15(2), 135-160.
- Shareef, M. A., Dwivedi, Y. K., & Kumar, V. (2016), Exploring Multichannel: Strategy and Consumer Behavior, *The Marketing Review*, 16(3), 235-263.
- Shareef, M. A., Dwivedi, Y. K., & Kumar, V. (2016), *Mobile Marketing Channel: Mobile Phone SMS & Online Consumer Behaviour*, Springer, USA.
- Shareef, M. A., Mukerji, B., Dwivedi, Y. K., Rana, N. P., & Islam, R. (2017a), Social Media Marketing: Comparative Effect of Advertisement Sources, *Journal of Retailing and Consumer Services* (In Press). Available at https://doi.org/10.1016/j.jretconser.2017.11.001
- Shareef, M. A., Dwivedi, Y. K., Kumar, V. & Kumar U. (2017b), Content design of advertisement for consumer exposure: Mobile marketing through short messaging service, *International Journal of Information Management*, 37(4), 257–268.
- Sirgy, M. J. (1982), "Self-Concept in Consumer Behaviour: A Critical Review," *Journal of Consumer Research*, 9 (December), 287-300.
- Stevens, J. (1996). *Applied multivariate statistics for the social sciences*. Mahwah, NJ: Lawrence Erlbaum.
- Taylor, D.G., Lewin, J.E. and Strutton, D. (2011), "Friends, fans, and followers: do ads work on social networks", *Journal of Advertising Research*, Vol. 51 No. 1, pp. 258-75.
- Vallerand. R. J. (1997), Toward a Hierarchical Model of Intrinsic and Extrinsic Motivation, In Advances in Experimental Social Psychology (29), M. Zanna(ed.), Academic Press. New York, 271-360.

- Van der Lans, Ralf, Gerrit van Bruggen, Jehoshua Eliashberg, and Berend Wierenga (2010), "A Viral Branching Model for Predicting the Spread of Electronic Word-of-Mouth," *Marketing Science*, 29 (2), 348–65.
- Venkatesh, V., Morris, M. G., Davis, G. B., and Davis, F. D., (2003), User Acceptance of Information Technology: Toward a Unified View, *MIS Quarterly*, 27(3), 425-578.
- Venkatesh, V., Thong, J. Y. L., and Xu, X. (2012), Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology, MIS Quarterly, 36(1), 157-178.
- Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, 9, Monograph Suppl. No. 2, part 2, 1-27.

Questionnaire and Factor Loading of the Measurement Items from the CFA

APPENDIX A

Item	Loading
Message Informality (MI)	
MI1. I provide more priority to receive informal message related to	0.667
product from my peers than any commercial message displayed in my	
Facebook network	
MI2. I am interested in viewing any product related information if it is	0.601
initiated by my network members	
MI3. I feel more interest about any product if I receive informal	0.722
information about the product from my network members	
MI4. I like to receive informal messages about any product from my	0.555
Facebook network	
MI5. I like to view informal messages about any product from my	0.521
Facebook network	
MI6. I do not like to receive any commercial messages about any product	0.745

Item	Loading		
from my Facebook network			
Experiential Message (EM)	Experiential Message (EM)		
EM1. I like to receive any message related to a product through my	0.870		
Facebook network if it is initiated by someone who has experience to buy			
that product			
EM2. I like to receive any message related to a product through my	0.854		
Facebook network if it is initiated by someone who has experience to use			
that product			
EM3. I like to view any message related to a product through my	0.711		
Facebook network if it is initiated by someone who has experience in			
buying that product			
EM4. I like to view any message related to a product through my	0.743		
Facebook network if it is initiated by someone who has experience to use			
that product			
EM5. I feel interest about any product if I receive any information about	0.689		
the product from a peer in Facebook network if that person has real			
experience of buying the product			
EM6. I feel interest about any product if I receive any information about	0.590		
the product from a peer in Facebook network if that person has real			
experience of using the product			
EM7.Before buying any product I prefer to get information about real	0.556		
buying experiences of that product from my network members in			
Facebook			
EM8.Before buying any product I prefer to get information about real	0.512		
consumption experience of that product from my network members in			
Facebook			
Hedonic Motivation (HM)			
HM1. Receiving product related information from my Facebook network	0.842		
is fun			

Item	Loading
HM2. Passing product related information among my Facebook network	0.783
members is fun.	
HM3. I feel enjoyment if I receive any product related information from	0.798
my Facebook network members	
HM4. I feel enjoyment in viewing product related information from my	0.801
Facebook network members	
Source Derogation (SD)	
SD1. Who is first initiating the product related information in my	0.588
Facebook network is important for me to receive it	
SD2. Who is first initiating the product related information in my	0.654
Facebook network is important for me to view it	
SD3. Who is first initiating the product related information in my	0.885
Facebook network is important for me to trust it	
SD4. Source of product related information in Facebook is important for	0.712
me to be persuaded	
SD5. To believe any product related information received from my	0.801
Facebook network, I always try to identify the source of information	
Self-Concept (SC)	
SC1. I feel compatible to receive product related information from my	0.752
peers in my Facebook network	
SC2. I feel compatibleto view product related information from my peers	0.750
in my Facebook network	
SC3. I feel adherence with receiving product related information through	0.587
my Facebook network	
SC4. I feel adherence with viewing product related information through	0.519
my Facebook network	
SC5. My personal behaviour is congruent with receiving product related	0.675
information from my peers in my Facebook network	
SC6. My personal behaviour is congruent with viewing product related	0.666

Item	Loading
information from my peers in my Facebook network	
Attitude Toward Advertisement (AA)	
AA1. I like to receive product information in my Facebook	0.703
AA2. I like to view product information in my Facebook	0.743
AA3. I collect product related information from my peers in Facebook	0.743
AA4. I prefer promotional marketing in Facebook	.812
AA5. I am interested to communicate any message related to product information with my Facebook network members	0.785