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The contribution of the e-consumer in building brand awareness through social media

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Abstract:

This study aims to explain the importance of e-consumer participation in the process of building brand awareness through social media, and this study used an online questionnaire as well as an offline questionnaire to conduct experimental research, collected and analyzed the data of 394 samples through the approach of modeling structural equations (SEM) The study found that social media users who have a positive attitude towards the brand are the most contributing to building brand awareness.

Key words: social media, e-consumer, brand posts, Consumer behaviour.

JEL Classification Codes: D12, D52, M21.

Introduction:

Today in business context, Social media is achieving increasing importance as a channel for online consumer engagement. Although the term engagement still lacks clear definitions and applications, the concept of customer engagement has become commonplace among marketers. More and more resources are being invested in social media and brands from all over the world to continue to grow their online fan base. Moreover, having social media presence on the web facilitates number of advantageous platform for the brand owners relating to advertisement, product development and market intelligence by observation and analysis of the user generated content (UGC).

At present the use of social media is a need for all the businesses because it is popular, encourages two-way communication, reaches all ages and demographics, and promotes e-word of mouth, Social media marketing includes the Word of Mouth (WOM) marketing which is also known as viral marketing, buzz, and guerilla marketing and involves intentional influencing of consumer-to-consumer communication through professional marketing techniques, The advantage of this new electronic channel is that it can be used to communicate globally and to enrich marketing toward consumers at the personal level.

Through users' feedback or by observing conversations on social media, a company can learn about customers' needs, potentially leading to involvement of members of the community in the co-creation of value through the generation of ideas.

We argue that non-transactional behavior or in other word we can say personal interactions with customers lead to richer content and can help explain why customers do what they do, While transactional data is useful to identify problems and preferences, it is difficult to determine the reasons for customer decisions. With personal interactions firms can ask customers directly and have an idea of the source of problems, preferences, and needs through engagement marketing principles, Thus the terms engagement and participation became the central non-transactional constructs, used to describe the nature of participants' specific interactions and/or interactive experiences .

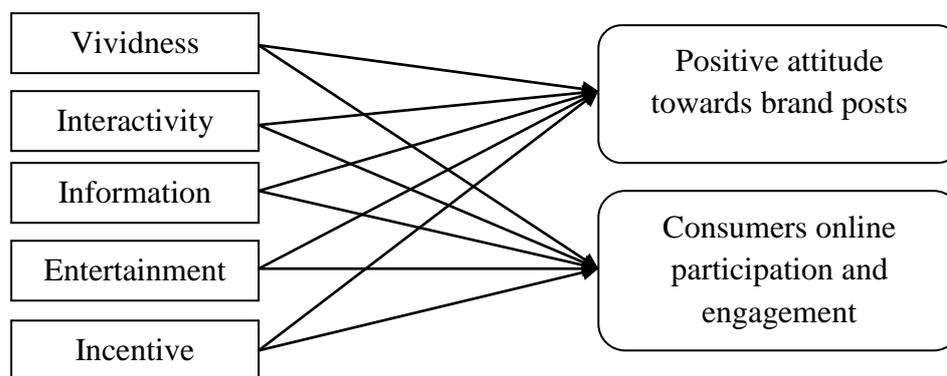
Hence this study calls for a rigorous research on the influencing factors in terms of characteristics of the content communicated by the company for consumers' participation in online brand related activities which ultimately lead to higher level of online engagement on Social Networking Sites (SNS), Further we also discuss how these factors are mediated by consumers' positive attitude towards Social Networking Advertising (SNA).

Conceptual framework of the study:

Consumers' online engagement is proposed to be influenced by brand related activities in terms of the content characteristics of SNA. Based on an extensive literature review, five important characteristics of the brand post content are identified and proposed as the main antecedents of consumers' online engagement, including vividness, interactivity, information, entertainment, and incentive, Fig. 1 depicts the conceptual model.

We argue that vividness, interactivity, information, entertainment, and incentive are related to the online engagement.

figure 1: Conceptual model for the research study



Source: Author Compilation

Further we also argue that when these factors are mediated by the consumers' positive attitude, then there is a higher level of consumers' online engagement in SNS. Each of these five factors is discussed in the following sections:

- **Vividness:** Vividness can be defined as “the representational richness of a mediated environment as defined by its formal features; that is, the way in which an environment presents information to the senses.” Vividness consists of two sub dimensions, breadth and depth i.e., the richness of the message, Breadth is the number of different senses that a medium can engage, and depth is how closely a medium can replicate parts of the human sensory system (Steuer, 2007, p. 80), The richness of the message generally termed as vividness of the online content includes videos, images, statuses, and links (Sabate, Berbegal-Mirabent, Cañabate, & Leberherz, 2014, p. 1007), Vividness can be achieved by incorporating dynamic animation, contrasting colors or pictures (Goodrich, 2011, p. 429), These mechanisms are found to stimulate different senses that increase the user's propensity to look at the content of the message and thus influence consumers' online participation, The increased level of vividness tends to lead to more positive and enduring attitudes toward the web site, stronger feelings of telepresence, and greater attitude—behavior consistency (Coyle & Thorson, 2008, p. 69), More over the previous studies reveal that in the low involvement situation or the

situation like the favorability of peripheral cues (attention getting/curiosity generating visual cues in SNA) people are more likely to click the post. Thus the preceding discussion suggests the following hypothesis:

H1a: SNA having vivid features in the content significantly influences consumers' online participation and engagement behavior.

H1b: Attitude toward SNA partially mediates the effect of vividness on consumers' online participation and engagement behavior.

- **Interactivity:** defines (Steuer, 2007, p. 82) interactivity as “the extent to which users can participate in modifying the form and content of a mediated environment in real time”, distinguish (Hoffman & Novak, 2006, p. 54) two levels of interactivity: person interactivity that occurs between humans through a medium and machine interactivity that occurs between humans and machines access hypermedia content. Interactivity in online environment is a stimulus driven variable which influences consumer participation and engagement via computer-mediated communication channels (Bucy, 2018, p. 379), From the context of this paper, interactivity refers to the extent of two-way communication between business and customers, as well as among customers. This study also suggests that the prime relationship is not between the sender and the receiver, but rather with the mediated environment with which they interact. And it is that mediated environment which is also known as Telepresence, which increases the level of both type of interactivity.

Previous studies reveal that the effect of various levels of interactivity of a message on attitudes and behavioral intentions within a web-based advertisement is influenced by social presence, involvement and arousal (Fortin & Dholakia, 2005, p. 389), The moderate effects of interactivity have direct effects on social presence, which in turn have strong effect on involvement and arousal and ultimately advertising effectiveness measures. The increased level of interactivity tends to lead to more positive and enduring attitudes toward the web site, stronger feelings of telepresence, and greater attitude—behavior consistency (Coyle & Thorson, 2008, p. 71), Thus the preceding discussion suggests the following hypothesis:

H2a: SNA having interactive features in the content significantly influences consumers' online participation and engagement behavior.

H2b: Attitude toward SNA partially mediates the effect of interactivity on consumers' online participation and engagement behavior.

- **Information:** Information seeking in the social networking sites is the key construct among the peers as they perceive or experience the product or the brand or the company useful and enjoyable (Lin & Lu, 2011, p. 1157), The previous studies reveal that the pleasure-oriented information system makes social effects and motivates to

participate and to contribute to brand communities in the social networking sites (Dholakia, Bagozzi, & Pearo, 2013, p. 247), When the brand post posted on brand fan pages that provided informational value or offered social value, consumers appeared more likely to respond favorably toward the ad stimuli themselves, Hence the brand post containing information also works as the key motivational factors to create interaction and engagement with consumers as it provides information about brand or product. Further research shows that since the consumers are provided with useful information, they tend to have positive attitudes toward informative ads on social networking sites (De Vries, Gensler, & Leeflang, 2012, p. 88), Thus the preceding discussion suggests the following hypothesis:

H3a: SNA having information in the content significantly influences consumers' online participation and engagement behavior.

H3b: Attitude toward SNA partially mediates the effect of information on consumers' online participation and engagement behavior.

- **Entertainment:** The important motivational factors for the consumer participation in social networking sites depend upon consumers' interest to experience entertaining content in the brand post, (Enginkaya & Yılmaz, 2014, p. 221) point out that entertainment factor is novel characteristics for social media brand engagement literature, The entertaining content in the brand post creates online consumer involvement with the brand and also buzz among consumers which in turn helps in seeking brand awareness, image building and leverage, Moreover the entertaining value was found to be among the main motivations for online engagement over brand-related content in the form of consumption, contribution and creation (Muntinga, Moorman, & Smit, 2011, p. 17), The content-driven characteristics of advertising message that is entertaining content has been identified as determinant influences on consumers' attitudes toward the brand post on brand fan pages (De Vries, Gensler, & Leeflang, 2012, p. 89), Thus the preceding discussion suggests the following hypothesis:

H4a: SNA having entertaining features in the content significantly influences consumers' online participation and engagement behavior.

H4b: Attitude toward SNA partially mediates the effect of entertainment on consumers' online participation and engagement behavior.

- **Incentive:** In economics one can say that an incentive is a benefit, reward, or cost that motivates an economic action. Shawn Grimsley in his lecture describes that there are two types of incentives namely intrinsic incentive and extrinsic incentive (Economic Incentives), Intrinsic incentives are psychological incentives and are internal to the person. Getting satisfaction from work is an intrinsic incentive. On the other hand,

extrinsic incentives include cash rewards, prizes, offers, discounts etc, (Wang & Fesenmaier, 2003, p. 37).

From the context of this paper, the term incentive has been used for consumers for the purpose of contribution and creation of the brand related content in SNS. Contributing to brand related content actively involves both user-to-content and user-to-user interactions about brands, People who are influenced by the remuneration tend to make contributions to brand forums, and comment on blogs, pictures, videos and any other brand-related content that others have created (Muntinga, Moorman, & Smit, 2011, p. 30), While creating brand related content actively involves writing brand-related weblogs, posting product reviews, producing and uploading branded videos, music and pictures, or writing articles on brands (Muntinga, Moorman, & Smit, 2011, p. 31), Thus the provision of incentives denotes that SNS users would expect some remuneration in return for engaging in liking, commenting and sharing activities towards brand posts. Prior studies have found various types of incentives for promoting engagement and participate in modifying the brand related content. The content driven by remunerative characteristics also influences the attitude of the consumers towards the brand post (Cvijikj & Michahelles, 2013, p. 852), Thus the preceding discussion suggests the following hypothesis:

H5a: SNA having incentive features in the content significantly influences consumers' online participation and engagement behavior.

H5b: Attitude toward SNA partially mediates the effect of incentivivity on consumers' online participation and engagement behavior.

Sample selection and data collection:

The sample frame consisted of respondents of different educational level such as undergraduate, post graduate and Ph.D. students from various location of Algeria as internet adoption and usage rate still varies across age groups with the highest penetration among young adults aged between 18 and 29 (Cheung, Chiu, & Lee, 2011, p. 1339), The potential respondents of this study are users who have followed at least one electronic accessories company especially mobile and laptop brand pages on Facebook. Each of them were asked to provide contact information of 10–20 individuals and encouraged to include individuals from all range of age groups. These individuals then were contacted and prescreened by being asked the following question: “Do you use Facebook? The respondents who answered “no” were thanked and removed from the respondent list. The respondents who answered “Yes” were asked again the following question: “Do you follow the Facebook brand page of any one of the electronic accessories company especially mobile and laptop?” The respondents who answered “no” were thanked and removed from the respondent list. The respondents

who answered “Yes” were provided with the study questionnaire and asked to complete the questionnaire over two week period and return it to their respective contact person.

Once the data were collected, the lead researcher screened the information for miscoded and suspicious-looking data entries. The total effort yielded a usable sample size of 394 survey questionnaires. The average age of respondents was 23.5 years, with 20.6 percent at 15 to 20 age group; 36.4 percent at 21 to 25 age group; 29.1 percent at 26 to 30 age group; and 13.9 percent 30 + age group. Sixty five percent of respondents were male, and 35 percent were female. The respondents indicated that they spent an average of 2–3 hours daily on Facebook activities.

Questionnaires use previous valuable material, slightly modifying items to suit the context of the mobile fan pages, Questionnaire classifies items on five-point Likert scale, ranging from “strongly disagree” to “strongly agree.”

Measurement model: AMOS version 23 performs a two-step analysis, First AMOS examines measurement model, Then AMOS examines structural model, This study uses confirmatory factor analysis (CFA) to evaluate measurement model, CFA is more appropriate than alternative statistical techniques are for exploratory factor analysis (Phillips & Bagozzi, 1982, p. 464), The four-step approach recommended by (Mulaik & Millsap, 2000, p. 41) was used as SEM, Fit statistics including chi-square, comparative fit index (CFI), Standardized Root Mean Squared Residual (SRMR), and root mean square error of approximation (RMSEA) assessed model fit, A chi-square test assesses the adequacy of a hypothesized model to reflect variance and covariance of the data, For the statistical significance of parameter estimates, t values were used, Generally fit statistics greater than or equal to .90 for CFI indicate a good model fit (Bentler & Bonnet, 1980, p. 591), Similarly RMSEA values lower than 0.05 and SRMR values lower than 0.08 indicate adequate model fit, The first step identified latent variables in the model using SPSS as an exploratory factor analysis and a principal component with varimax rotation, A minimum eigenvalue of one was used as the criterion to control the number of factors extracted.

An exploratory factor analysis revealed seven factors, vividness, interactivity, information, entertainment, incentives, attitude towards SNA, and consumers' online engagement in social networking sites which explained 78% of the variance, See Table 1.

Table 1: Factor analysis results for model constructs

Empty Cell	1	2	3	4	5	6	7
vididness1	0.879						
Vididness2	0.777						
Vididness3	0.826						
Vididness4	0.832						
Interactivity1		0.899					
Interactivity2		0.823					
Interactivity3		0.86					
Interactivity4		0.864					
Information1			0.856				
Information2			0.793				
Information3			0.828				
Information4			0.842				
Entertainment1				0.868			
Entertainment2				0.871			
Entertainment3				0.843			
Entertainment4					0.875		
Incentive1					0.887		
Incentive2					0.896		
Incentive3							
Attitude1						0.946	
Attitude2						0.931	
Attitude3						0.941	
Engagement1							0.945
Engagement2							0.945
Cronbach's Alpha	0.913	0.857	0.849	0.868	0.935	0.869	0.884

Source: Prepared by researchers based on SPSS program (V.23)

The second step was to test the fit of the measurement model by constraining or referencing the factor loading of one variable per latent construct to one, The confirmatory factor analysis supported the exploratory factor analysis, The fit of the measurement model was acceptable ($\chi^2 = 876.675$, CFI = 0.969, RMSEA = 0.047, and RMR = 0.027). Therefore, the measurement model was retained without any modifications.

According to (Hair, Black, Babin, Anderson, & Tatham, 2010, p. 632), it is absolutely necessary to establish convergent and discriminant validity, as well as

reliability, when doing a CFA, There are a few measures that are useful for establishing validity and reliability: Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV), and Average Shared Variance (ASV). The thresholds for these values are as follows:

Reliability = CR > 0.7; Convergent Validity = AVE > 0.5; Discriminant Validity = MSV < AVE, ASV < AVE; and Square root of AVE greater than inter-construct correlations.

The results of the analysis are in Table 2, Each research construct conforms to the above four criteria. Thus all necessary indices are acceptable. The convergent validity was assessed by average variance extracted (AVE) which was greater than 0.50 for all constructs. Finally, discriminant validity was assessed by Square root of AVE which were greater than inter-construct correlations, This means the indicators have more in common with the construct they are associated with than they do with other constructs. Therefore, the constructs for the model demonstrate discriminant validity.

Table 2. Convergent and discriminant validity and inter-construct correlations

	C R	A V E	M S V	A S V	Attit ude	Vivi dnes s	Intera ctivity	Infor matio n	Entertai nment	Ince ntive	Engag ement
Attitud e	0.9 36	0.8 31	0.0 05	0.0 03	0.91 2						
Vividn ess	0.9 47	0.8 19	0.0 53	0.0 13	0.06 6	0.905					
Interact ivity	0.9 06	0.7 07	0.2 2	0.0 48	0.01 2	0.231	0.841				
Informat ion	0.8 6	0.6 06	0.0 06	0.0 03	0.05 5	-0.04 5	-0.045	0.778			
Entertai nment	0.8 71	0.6 92	0.2 2	0.0 4	0.07 3	-0.00 2	0.469	-0.079	0.832		
Incenti ve	0.8 69	0.6 89	0.0 17	0.0 07	-0.0 3	-0.13 1	-0.097	0.065	0.085	0.83	
Engage ment	0.8 91	0.8 05	0.0 04	0.0 02	0.06 7	-0.03 9	0.059	-0.006	0.031	0.045	0.897

Source: Prepared by researchers based on SPSS program (V.23)

Hypothesis testing

The third step tested the fit of the structural model by adding hypothesized relationships between latent variables. The final model reveal over all acceptable fit

($\chi^2 = 876.675$, CFI = 0.969, RMSEA = 0.047, and RMR = 0.027). As the model being tested is less complex, the current studies meets the criteria of adequate sample size (i.e., $n > 200$) (MacCallum, Browne, & Sugawara, 1996, p. 134).

Since few advertising literatures support the direct relationship between content characteristics and consumers, online engagement behavior, the study followed the (Baron & Kenny, 1986) 3 steps measurement model for mediation, The first step includes whether the independent variable is a significant predictor of the dependent variable. The second step includes whether independent variable is a significant predictor of the mediator. The third step includes whether the mediator is a significant predictor of the dependent variable, while controlling for the independent variable.

From the analysis, it has been found that the first step of (Baron & Kenny, 1986) i.e., after removing the direct link from the content characteristics of SNA and consumers' online participation and engagement behavior, the model fit was still acceptable: $\chi^2 = 1058.21$, CFI = 0.932, RMSEA = 0.088, and RMR = 0.036, This suggests that the positive attitude toward SNA partially mediated the impact of content characteristics on the consumers' online participation and engagement behavior. Further the result significantly supports the relationship between content characteristics of SNA and the consumers' online participation and engagement behavior, except that of interactivity and incentive. In other words, the proposed study accepts H1a, H3a and H4a. Although H4a i.e., entertainment has very low standard coefficient estimate ($\beta = 0.004$; $p < 0.001$) but since the p value is significant we accept this hypothesis. The possible explanation can be that SNA contains content that is unrelated to the brand while social media users are interested in the brand. Hence the findings of this study is generally consistent with previous studies (Cvijikj & Michahelles, 2013) (Goodrich, 2011) (Muntinga, Moorman, & Smit, 2011) (Steuer, 2007), Interactivity ($\beta = -0.682$; $p < 0.001$) has negative impact on the consumers' online engagement behavior, whereas Incentive ($\beta = -0.535$; $p = 0.096$) shows no impact on the consumers' online engagement behaviour, The possible explanation for negative impact of interactivity can be that when users click on the link of a particular brand post then they are very less likely to return the Ad page once again. This study conforms to the early studies (De Vries, Gensler, & Leeflang, 2012) (Sabate, Berbegal-Mirabent, Cañabate, & Lebherz, 2014) , On the other hand the possible explanation for the no impact of incentive can be that the provision of incentives made users suspicious about the trust worthiness of SNA. See Table 3.

Table 3. Test Results: path coefficients

Hypothesis	Regression Weights	Standard Coefficient Estimates	P value	Results
H1a	Engagement ← Vividness	0.941	0.001	Supported
H2a	Engagement ← Interactivity	-0.682	0.001	Supported
H3a	Engagement ← Information	0.707	0.001	Supported
H4a	Engagement ← Entertainment	0.004	0.001	Supported
H5a	Engagement ← Incentive	-0.535	0.096	Not Supported

Source: Prepared by researchers based on AMOS program (V.23)

The second step of the (Baron & Kenny, 1986) also shows the significant relationship between content characteristics of SNA and the consumer's attitude toward SNA, Table 4 shows the result of (Baron & Kenny, 1986) second step for mediation, in which all the elements of content characteristics support the relationship with the consumers' attitude toward SNA. Thus the findings of this study conform to the previous studies (Muntinga, Moorman, & Smit, 2011)(Coyle & Thorson, 2008), See Table 4.

table 4. Test Results: path coefficients

Regression weights	Standard coefficient estimates	P value	Results
Attitude ← Vividness	0.382	***	Supported
Attitude ← Interactivity	0.110	0.049	Supported
Attitude ← Information	0.271	***	Supported
Attitude ← Entertainment	0.265	***	Supported
Attitude ← Incentive	0.139	0.024	Supported

Source: Prepared by researchers based on PLS program

The third step measured the mediation effect of consumer's attitude toward SNA, The results are shown in Table 5, The study has compared the direct and mediation effect of the proposed model. From the result it is clear that except interactivity and incentive, all the content related factors of SNA (vividness, information and entertainment) shows partial mediation effect as the standard estimate value of mediating path is less than the direct path. Even interactivity shows partial mediation effect on the consumers' online engagement behavior though the standard estimate value is in negative form. On the other hand, incentive shows the full mediation effect as its direct effect is not significant whereas the mediation effect is significant (Baron &

Kenny, 1986), The possible explanation for this can be that when media users develop positive attitude toward a particular brand post in SNS, they begin to trust the incentive offered by the brand through SNA, Thus the proposed study supports all hypothesis i.e. the consumers' attitude toward SNA does play the role of mediation between the content related factors of ad or the content characteristics of SNA and the consumers' online engagement behavior. Moreover the proposed conceptual model explained a substantial amount of variance for consumers' attitude ($R^2 = 0.837$) and consumers' online participation and engagement behavior ($R^2 = 0.707$) towards SNA when mediated by consumers attitude whereas in the direct effect without the mediator, the variance explained was very low for consumers' online participation and engagement behavior ($R^2 = 0.180$).

Table 5. Test results: path coefficients

Hypothesis- 1b, 2b, 3b, 4b, 5b DV ← IV+M	Direct effect without mediator		Direct effect with mediator		Mediation effect
	Standard estimate	P value	Standard estimate	P value	
Engagement ← vividness (H1b)	0.941	0.001	0.644	0.001	Partial
Engagement ← interactivity (H2b)	-0.682	0.001	-0.596	0.001	Partial
Engagement ← information (H3b)	0.707	0.001	0.496	0.001	Partial
Engagement ← entertainment (H4b)	0.004	0.001	0.202	0.007	Partial
Engagement ← incentive (H5b)	-0.535	0.096 (NS)	-0.444	0.001	Full

Source: Prepared by researchers based on PLS program

Conclusion:

This study, drawing from uses and gratifications theory, attempted to explore the influences of vividness, interactivity, information, entertainment, and incentive on various online consumer behaviors such as attitude toward SNA, consumers' online participation and engagement behavior in SNA. Particularly, consumers' participation and engagement behaviors were explored as the consequences of attitude toward the SNA, while vividness, interactivity, information, entertainment, and incentive are the antecedents of both attitude toward SNA and online participation and engagement

behaviors. Further, the research study lead to the exploration of stronger mediation effect of the consumers' positive attitude towards SNA on each antecedent of consumers' online participation and engagement behavior. This nomological model was tested with a more rigid theory testing methodology--structural equation modeling (SEM) approach.

SEM results indicated that the U&G theory explains consumers' attitude toward SNA, Social media users who perceive SNA as vividness, interactivity, information, entertainment and incentive, generally like SNA and show a positive attitude toward SNA. In addition, this study found that the social media users who have a positive attitude toward SNA are more likely to surf the Net and feel more engaged.

Here a point can be noted that although interactivity and incentive when mediated by attitude toward SNA then they show negative influence on the consumers' online participation and engagement behavior but as the p value is significant we accept the hypothesis. Thus our proposed model is well supported and the result indicated only the model with the directions hypothesized fits the data the best. Since this study has been taken for the first time, there is no ground for the other rival comparison. But this study has tried to compare the result of direct effect without mediator and the direct effect with mediator on the consumers' online participation and engagement behavior in SNA.

Referrals and references:

- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology* , 51 (6), 1170-189.
- Bentler, P. M., & Bonnet, D. C. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin* , 88 (3), 588-606.
- Bucy, E. P. (2018). Interactivity in society: Locating an elusive concept. *The information society* , 20 (5), 373-383.
- Cheung, C. M., Chiu, P. Y., & Lee, M. K. (2011). Online social networks: Why do students use Facebook? *Computers in Human Behavior* , 27 (4), 1337-1343.
- Coyle, J. R., & Thorson, E. (2008). The effects of progressive levels of interactivity and vividness in web marketing sites. *Journal of Advertising* , 30 (3), 65-77.
- Cvijikj, I. P., & Michahelles, F. (2013). Online engagement factors on Facebook brand pages. *Social Network Analysis and Mining* , 3 (4), 843-861.

- De Vries, L., Gensler, S., & Leeflang, P. S. (2012). Popularity of brand posts on brand fan pages: An investigation of the effects of social media marketing. *Journal of Interactive Marketing* , 26 (2), 83-91.
- Dholakia, U. M., Bagozzi, R. P., & Pearo, L. K. (2013). A social influence model of consumer participation in network-and small-group-based virtual communities. *International Journal of Research in Marketing* , 21 (3), 241-263.
- Enginkaya, E., & Yilmaz, H. (2014). What drives consumers to interact with brands through social media? A motivation scale development study. *Procedia-Social and Behavioral Sciences* , 148 (7), 219-226.
- Fortin, D. R., & Dholakia, R. R. (2005). Interactivity and vividness effects on social presence and involvement with a web-based advertisement. *Journal of Business Research* , 58 (3), 387-396.
- Goodrich, K. (2011). Anarchy of effects? Exploring attention to online advertising and multiple outcomes. *Psychology & Marketing* , 28 (4), 417-440.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). SEM: An introduction. Multivariate data analysis: A global perspective. *Journal of Service Management* , 7 (3), 629-689.
- Hoffman, D. L., & Novak, T. P. (2006). Marketing in hypermedia computer-mediated environments: Conceptual foundations. *The Journal of Marketing* , 60 (5), 50-68.
- Lin, K. Y., & Lu, H. P. (2011). Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior* , 27 (3), 1152-1162.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods* , 1 (2), 130-146.
- Mulaik, S. A., & Millsap, R. E. (2000). Doing the four-step right. *Structural Equation Modeling* , 7 (1), 36-73.
- Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring motivations for brand-related social media use. *International Journal of Advertising* , 30 (1), 13-46.
- Phillips, L. W., & Bagozzi, R. P. (1982). Representing and testing organizational theories: A holistic construal. *Administrative Science Quarterly* , 27 (3), 459-489.

- Sabate, F., Berbegal-Mirabent, J., Cañabate, A., & Lebherz, P. R. (2014). Factors influencing popularity of branded content in Facebook fan pages. *European Management Journal* , 32 (6), 1001-1011.
- Steuer, J. (2007). Defining virtual reality: Dimensions determining telepresence. *Journal of Communication* , 42 (4), 73-93.
- Wang, Y., & Fesenmaier, D. R. (2003). Assessing motivation of contribution in online communities: An empirical investigation of an online travel community. *Electronic markets* , 13 (1), 33-45.